



The Sizewell C Project

9.71 Responses to the ExA's Second Written Questions (ExQ2) Volume 3 - Appendices

Revision: 1.0
Applicable Regulation: Regulation 5(2)(q)
PINS Reference Number: EN010012

September 2021

Planning Act 2008
Infrastructure Planning (Applications: Prescribed
Forms and Procedure) Regulations 2009



CONTENTS

PART 2

APPENDIX 2A	RESPONSE TO EXQ2 BIO.2.11
APPENDIX 2B	FIGURE 14C2A.10 IDENTIFYING THE LOCATION OF STUDIO FIELDS COMPLEX, ST JAMES COVERT, GREAT MOUNT WALK

PART 3

APPENDIX 3A	STATUS OF NEARBY ENERGY PROJECTS
APPENDIX 3B	AGREED HOUSING FUND APPROACH

PART 4

APPENDIX 4A	RESPONSE TO SCFOE FR.2.11
APPENDIX 4B	CONCRETE DOMES – EXAMPLE PHOTOS

PART 5

APPENDIX 5A	SECTION 61 NOTICE – TILBURY 2
-------------	-------------------------------

PART 6

APPENDIX 6A	RESPONSE TO TT.2.25
-------------	---------------------



SIZEWELL C PROJECT –
RESPONSES TO EXAMINING AUTHORITY'S
WRITTEN QUESTIONS ISSUED ON 3RD AUGUST 2021

NOT PROTECTIVELY MARKED

Appendix 2A – Response to ExQ2 BIO.2.11

NOT PROTECTIVELY MARKED

CONTENTS

APPENDIX 2A	1
1 INTRODUCTION	1
1.1 ExA Questions Bio. 1.5 - 1.7	1
2 APPLICANT'S RESPONSE	2
2.1 The Duties	2
2.2 Main Development Site	3
2.3 Northern Park and Ride	8
2.4 Southern Park and Ride	11
2.5 Two Village Bypass	13
2.6 Sizewell Link Road	16
2.7 Yoxford and other Highway Improvements	18
2.8 Freight Management Facility	20
2.9 Green Rail Route	22
3 WCA RESPONSE	26
4 NERC RESPONSE	208

TABLES

Table 3-1: Summary of measures to be implemented to conserve Sizewell Marshes SSSI habitats listed in the Wildlife and Countryside Act in the Main Development Site and Associated Development Sites	27
Table 3-2: Summary of measures to be implemented to conserve Deptford Pink, listed in the Wildlife and Countryside Act, in the Main Development Site	30
Table 3-3: Summary of measures to be implemented to conserve Norfolk Hawker, listed in the Wildlife and Countryside Act, in the Main Development Site	33
Table 3-4: Summary of measures to be implemented to conserve amphibians- specifically Natterjack Toad, listed in the Wildlife and Countryside Act, in the Main Development Site and Associated Development Sites	35

Table 3-5: Summary of measures to be implemented to conserve amphibians-specifically Great Crested Newt, listed in the Wildlife and Countryside Act, in the Main Development Site and Associated Development Sites	45
Table 3-6: Summary of measures to be implemented to conserve amphibians-specifically Common Toad, listed in the Wildlife and Countryside Act, in the Main Development Site and Associated Development Sites	69
Table 3-7: Summary of measures to be implemented to conserve Reptiles – adder, grass snake, common lizard, slow worm, listed in the Wildlife and Countryside Act, in the Main Development Site and Associated Development Sites.....	72
Table 3-8: Summary of measures to be implemented to conserve all UK bat species, listed in the Wildlife and Countryside Act, in the Main Development Site and Associated Development Sites	87
Table 3-9 Summary of measures to be implemented to conserve badger, listed in the Wildlife and Countryside Act, in the Main Development Site and Associated Development Sites	147
Table 3-10: Summary of measures to be implemented to conserve Otter, listed in the Wildlife and Countryside Act, in the Main Development Site and Associated Development Sites	163
Table 3-11: Summary of measures to be implemented to conserve water vole, listed in the Wildlife and Countryside Act, in the Main Development Site and Associated Development Sites	177
Table 3-12: Summary of measures to be implemented to conserve Hedgehog, listed in the Wildlife and Countryside Act, in the Main Development Site and Associated Development Sites	189
Table 3-13: Summary of measures to be implemented to conserve brown hare, listed in the Wildlife and Countryside Act, in the Associated Development Sites	192
Table 3-14: Summary of measures to be implemented to conserve polecat, listed in the Wildlife and Countryside Act, in the Main Development Site and Associated Development Sites	195
Table 3-15: Summary of measures to be implemented to conserve Schedule 1 listed bird species, listed in the Wildlife and Countryside Act, in the Main Development Site and Associated Development Sites	197
Table 3-16: Summary of measures to be implemented to conserve species and habitats listed under Section 41 of the NERC Act in the Main Development Site and Associated Development Sites	208



SIZEWELL C PROJECT –
RESPONSES TO EXAMINING AUTHORITY'S
WRITTEN QUESTIONS ISSUED ON 3RD AUGUST 2021

NOT PROTECTIVELY MARKED

PLATES

None Provided

FIGURES

None Provided

APPENDICES

None Provided

NOT PROTECTIVELY MARKED

APPENDIX 2A

1 INTRODUCTION

1.1 ExA Questions Bio. 1.5 - 1.7

- 1.1.1 *'Bio 1.5: Please will the Applicant provide a list and concise explanatory note of the reasonable steps it proposes in the application for the SoS to take in relation to this application, consistent with the proper exercise of the SoS's functions, to further the conservation and enhancement of the flora, fauna or geological or physiographical features by reason of which the site is of special scientific interest (s.28G Wildlife and Countryside Act 1981). The note should specify the relevant flora, fauna or geological or physiographical features, where the steps are described in the application documents, where they are assessed, and how they enable the SoS to meet their duty in s.28G.*
- 1.1.2 *If the Applicant would prefer to do this in one note covering this and the next two questions that would be acceptable.*
- 1.1.3 *Bio 1.6: Please will the Applicant set out in a concise explanatory note the steps which it considers the SoS should take in relation to this application to comply with their duties in s.40 of the Natural Environment and Rural Communities Act 2006 to have regard "so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity". For the avoidance of doubt, this should include the United Nations Environmental Programme Convention on Biological Diversity of 1992.*
- 1.1.4 *Bio 1.7: Please will the Applicant set out in a concise explanatory note the steps which it considers the SoS should take in relation to this application to comply with their duties in s.41 of the Natural Environment and Rural Communities Act 2006*
- a) *to take such steps as appear to the Secretary of State to be reasonably practicable to further the conservation of the living organisms and types of habitat included in any list published under this section, or*
 - b) *to promote the taking by others of such steps. The application affects a number of such organisms and habitats. The note should deal with each such organism and habitat, explain briefly the steps and conclusion which show that the duties will have been discharged and refer the ExA to the documents and paragraphs in the ES (and other*

application material) where the supporting evidence and conclusions are to be found'.

2 APPLICANT'S RESPONSE

2.1 The Duties

- 2.1.1 s.28G of the Wildlife and Countryside Act 1981 requires the Examining Authority and Secretary of State (as section 28G authorities) to take reasonable steps, consistent with the proper exercise of its functions, to further the conservation and enhancement of the flora, fauna or geological or physiographical features by reason of which the site is of special scientific interest.
- 2.1.2 s.40 of the Natural Environment and Rural Communities Act 2006 requires the Examining Authority and Secretary of State to have regard so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity.
- 2.1.3 s.41 of the Natural Environment and Rural Communities Act 2006 requires the Secretary of State to take such steps as appear to the Secretary of State to be reasonably practicable to further the conservation of the living organisms and types of habitat included in any list published under s.41, or promote the taking of such steps by others.
- 2.1.4 The applicant has prepared a response to this question for the main development site and each of the associated development site
- 2.1.5 The Applicant's response to this question will deal with the following species/habitats:
- a) Bats
 - b) Otter
 - c) Water vole
 - d) Badger
 - e) Other mammal (hedgehog, brown hare)
 - f) Reptiles
 - g) Natterjack toad

- h) Great crested newt
- i) Birds
- j) Invertebrates (including Norfolk Hawker):
- k) S41 fish species
- l) Marine mammals (harbour porpoise and common seal):
- m) Habitats and Sizewell Marshes SSSI
- n) S41 Habitats

Each are considered in turn below.

2.2 Main Development Site

a) Bats:

- 2.2.1 Bats will be conserved by the implementation of a detailed lighting strategy in accordance with the **Lighting Management Plan** (Doc Ref. 6.3 2B(A)). A **Sizewell C Project Bat Method Statement** (Doc Ref. 9.33) has been prepared that outlines the mitigation measures required for the trees with bat roosting potential features due to be removed. Where they are to be removed, a final inspection of trees will be undertaken and felling of trees would take place outside of the maternity and hibernation periods. 16 bat boxes are required to replace the three roosts due to be lost and 224 additional roost mitigation features are proposed to compensate for the loss of high or moderate roosting features within the Main Development Site. At least half will be generated naturally or created through veteranisation within new woodland planting. A purpose built 'bat house' is proposed at Lower Abbey Farm, it will be located close to existing flight lines, surrounded by vegetation insofar as is possible and where necessary additional planting in the vicinity of the bat house, to improve habitat connectivity to the existing flight paths. The **outline Landscape and Ecology Management Plan (oLEMP)** [REP1-010] and **Terrestrial Ecology Monitoring and Mitigation Plan (TEMMP)** [REP5-088] documents outline the management and monitoring measures proposed for bats. Reasonable avoidance measures will be implemented, including toolbox talk for construction workers and avoidance of night-time working where possible. Trees with bat roost potential will be retained where possible

b) Otter:

2.2.2 At the main development site, a 30m buffer of no activity is required around the known holts or other holts identified in future surveys and in the unlikely event that an otter is found within the known holts, works within the area will not take place until the otter has left. Pre-construction surveys are being undertaken in 2021 to confirm that no natal holts are present within the construction footprint. Also, pre-construction checks, as per guidance, of each holt to confirm the presence or absence of otter. As part of the scheme design, a lighting strategy will be put in place for the construction phase to avoid light spill as far as possible, where possible. The works should comply with the measures and approaches defined in the **Lighting Management Plan** (Doc Ref. 6.3 2B(A)). An artificial holt will be created to compensate for the loss of the holt located along the Sizewell Drain to the east of Sizewell B. Further enhancement will be provided with the provision of another artificial holt to the south-east of the flood compensation/wetland creation area. Habitat creation in the north of the site will comprise dry grassland, reedbed and woodland and wet woodland creation. The increase in wetland habitat and increased connectivity and screening will be beneficial to otter in the long-term. The **oLEMP** [REP1-010] and **TEMP** [REP5-088] set out the monitoring and management of these habitat areas and species.

c) Water vole:

2.2.3 The SSSI crossing will consist of a 30m open single span bridge. This will facilitate the passage water vole through the structure. The establishment of new reedbed and ditches at Aldhurst Farm (completed in 2016) has provided replacement for the land take of these habitats within Sizewell Marshes SSSI. The **draft Water Vole Method Statement** [REP5-050] and **Appendix 14C6A - Water Vole Mitigation Strategy** [APP-252] outlines the key approaches to mitigating potential impacts to the water vole populations present. Water voles will either be displaced using vegetation removal or trapped out from the Sizewell Marshes SSSI area. Given the given the relatively low populations detected in surveys undertaken in 2020, the primary approach for water vole mitigation is likely to be via displacement. Displacement techniques and monitoring are proposed where there is a working area with maximum length of 50m (for watercourse this equates to 50m on each bank). Extensive habitat creation works have already been undertaken at Aldhurst Farm for water vole. As a result of the main development site works, it is considered that there will be an overall increase in the conservation status of water vole due to increased habitat availability. Preconstruction surveys will be undertaken to check for water vole activity prior to any vegetation clearance and, other than where displacement is

NOT PROTECTIVELY MARKED

required, any works in close proximity to water vole habitat will be designed to minimise impact and avoid interference.

d) **Badger**

- 2.2.4 The **Badger Mitigation Strategy** [APP- 256] and **Main Development Site Draft Badger Licence** [REP5-049] outline the mitigation measures proposed to conserve this species. Updated surveys will be undertaken prior to commencement of any mitigation works. Suitable stand-off zones will be implemented around retained setts to avoid damage to those setts or disturbance to badgers using them. In order to mitigate for loss of Southern and Northern Social Groups main setts / sett complexes, two artificial setts are proposed within the vicinity of the site, [REDACTED]. After completion of the proposed licensed works, a monitoring and mitigation strategy will be commenced to monitor the status of the badger populations as outline in the **TEMMP** [REP5-088]. Extensive areas of replacement habitat, including the reptile mitigation areas in the Studio Fields complex, Aldhurst Farm and the marsh harrier habitat improvement area at Great Mount Walk, have already been created and will be either further enhanced as a component of the advanced works or would diversify further over the period to construction.

e) **Other mammal (hedgehog, brown hare):**

- 2.2.5 A phased approach to site clearance and topsoil stripping will be used to discourage brown hare and hedgehogs away from site and into surrounding suitable habitat.

f) **Reptiles:**

- 2.2.6 The updated **Reptile Mitigation Strategy** (Doc Ref. 9.88 A) outlines the mitigation measures required to conserve reptile species. Reptile translocation will be undertaken into large areas of habitat created for reptiles. The receptor sites cover a larger area than the reptile habitats lost and have enhanced features for reptiles (e.g. provision of cover, management to ensure prey availability, and hibernacula). All works that have the potential to impact reptiles would be undertaken following the agreed Method Statement and would be overseen by an Ecological Clerk of Works (ECoW), any potential refugia will be inspected by an ECoW and removed before works takes place and a phased vegetation clearance process would be undertaken to displace any residual reptiles from the site, once the translocation process has been undertaken. 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

NOT PROTECTIVELY MARKED

greater than those estimated within the donor sites. The **oLEMP** [REP1-010] and **TEMMP** [REP5-088] sets out the monitoring and management of these habitat areas and species.

g) **Natterjack toad:**

- 2.2.7 Natterjack toad are present within the main development site in the vicinity of Water Management Zone 1. A draft **Natterjack Toad Protected Species Licence** [REP5-053] outlines the mitigation measures required. Preconstruction surveys and a trapping and translocation exercise will be undertaken in advance of site clearance. To compensate for the temporary loss of foraging habitat, it is proposed that four ponds would be created, comprising the reinstatement of pond N2 and the installation of a three section pond aggregation (pond N5a, b and c) and landscaping is to be undertaken to provide foraging, refuge and overwintering opportunities within Retsoms Field. In addition, the management of the terrestrial habitats in Retsoms Field will be reviewed and improved to ensure conditions are of maximum value to the population. A long-term terrestrial enhancement schedule is proposed. Breeding and resting sites will be safeguarded from the proposed works by the installation of amphibian proof fencing. The **oLEMP** [REP1-010] and **TEMMP** [REP5-088] set out the monitoring and management of these habitat areas and species. Licence conditions will also be in place as stipulated by Natural England.

h) **Great crested newt:**

- 2.2.8 A Great Crested Newt Method Statement (**Volume 2, Appendix 14C9A** [APP-252]) outlines the approach to be used to conserve this species, including the removal of vegetation and ground clearance in areas where commencement of construction activities have the potential to kill or injure Great Crested Newts during their terrestrial phase (there are no breeding ponds within the site). Reasonable avoidance methods statements will be followed, including a toolbox talk to site contractors, and the appointment of an ECoW to monitor vegetation clearance. The **oLEMP** [REP1-010] and **TEMMP** [REP5-088] set out the monitoring and management of these habitat areas and species.

i) **Birds:**

- 2.2.9 S41 and Schedule 1 listed bird species have been recorded in the main development site. New reedbed and ditches habitat at Aldhurst Farm has been created to replace the land take of these habitats within Sizewell Marshes SSSI in the main development site as well as habitat areas which have been designed to benefit marsh harrier. The removal of scrub and trees

NOT PROTECTIVELY MARKED

and ground clearance works would generally be undertaken outside of the breeding bird season. Where it is not possible to undertake these works outside of the breeding bird season, an inspection for nests would be undertaken by a suitably experienced ECoW prior to the removal of vegetation. If breeding birds are identified during this process, works in the vicinity of the nest (estimated to be a 10m standoff) would cease until the young have fledged.

j) **Invertebrates (including Norfolk Hawker):**

- 2.2.10 Permanent habitat creation (e.g. reptiles in the Studio Field complex, the compensatory foraging habitat for marsh harriers and the reedbed and ditch habitat created within Aldhurst Farm will benefit invertebrate species, including Norfolk Hawker. The **TEMMP** [\[REP5-088\]](#) provides the proposed monitoring schedule and approaches to monitoring of invertebrates. Monitoring would target invertebrate assemblages of national importance and high conservation value which are characteristic of the habitats to be lost, including populations of Norfolk Hawker, to assess the extent to which these assemblages become established in the new habitats within the site boundary and across the wider EDF Energy estate. Targeted invertebrate surveys would be undertaken in Y4, Y8 and Y12.

k) **S41 fish species:**

- 2.2.11 For the main development site, the culvert crossing of the Leiston Drain would be of sufficient dimensions to leave the bed and bank of the Leiston Drain unmodified and the proposed control structure on the realigned Sizewell Drain would incorporate a fish pass so no obstruction to migratory fish and eels is anticipated. An eel and fish rescue is proposed to be carried out. Also, best practise methods will be followed such as no piling at night.

l) **Marine-mammals (harbour porpoise and common seal):**

- 2.2.12 Piling activities associated with installation of the 18 intertidal and subtidal piles required for the permanent beach landing facility (BLF) and approximately 114 piles required to construct the BLF, related to the main development site, will conform to best environmental practice in accordance with Joint Nature Conservation Committee guidelines to mitigate effects on marine mammals.

m) **Habitats and Sizewell Marshes SSSI :**

- 2.2.13 Compensatory habitats for the Sizewell Marshes are considered below. S41 habitats (including reedbed, fen, wet woodland, shingle and sand dune

NOT PROTECTIVELY MARKED

vegetation, acid grassland, shingle and sand dune vegetation, arable field margins, ponds, hedgerow and lowland mixed deciduous woodland) will be retained where possible, or replacement habitat has been incorporated into the proposed development.

- Reedbed: establishment of new reedbed and ditches at Aldhurst Farm (completed in 2016).
- Fen meadow: a **Fen Meadow Strategy** [AS-209] has been submitted which includes three locations in Suffolk (Halesworth, Benhall and Pakenham) at which at least 4.5ha of permanent fen meadow habitat would be developed to compensate for the permanent loss of about 0.46ha of fen meadow habitat from within Sizewell Marshes SSSI.
- Wet woodland: a **Wet Woodland Strategy** [REP1-020] has been submitted which will create 0.7ha of new wet woodland on the EDF Energy estate and 2.36ha of wet woodland at the two fen meadow sites at is proposed to compensate for the loss of 3.06ha of wet woodland associated with the SSSI crossing and the diversion of the Sizewell Drain.

m) Deptford Pink

- 2.2.14 A **draft Deptford Pink Method Statement** [REP5-052] has been submitted to outline the mitigation measured proposed to conserve this species. If the species is relocated in targeted searches, the collection of both seeds and plants would be undertaken with translocation to a suitable location on the existing sea defence seaward of the Sizewell B power station that would not be directly affected by the construction of the proposed development. The receptor area will be monitored the following July/August for successful establishment. Flowering plants and non-flowering rosettes will be counted up to 1000 basal rosettes, estimates will be made beyond this number. This monitoring will be extended for 5 years following translocation. In the event that establishment has been poor or plants fail to persist, a proportion of seed stored in the Millennium Seed Bank may be grown on as plugs and transplanted to the site as previously described in an attempt to boost establishment.

2.3 Northern Park and Ride

a) Bats:

- 2.3.1 Bats will be conserved by the implementation of a detailed lighting strategy in accordance with the **Lighting Management Plan** (Doc Ref. 6.3 2B(A)), for

NOT PROTECTIVELY MARKED

example operational lighting for the proposed development would be designed to prevent light spill to Little Nursery Wood and other habitats. The woodland would be retained in its entirety, with a buffer distance of 20m between the woodland and the proposed development. There would be no direct loss of woodland habitat, and its associated species, and the buffer distance would assist in minimising impacts associated with the proposed development (such as noise, lighting and human disturbance). The **Terrestrial Ecology Monitoring and Mitigation Plan (TEMMP)** [[REP5-088](#)] outlines the monitoring measures proposed for bats. Reasonable avoidance measures will be implemented, including toolbox talk for construction workers and avoidance of night-time working where possible.

b) Badger:

- 2.3.2 Precautionary measures are recommended during the construction and operational phases to conserve badgers. The operational park and ride facilities on-site would be bounded by a 1.8m high security fence and the landscape bunds will also have badger fencing to prevent access by badgers. Fencing will be regularly checked during construction and operation. Prior to construction works commencing, a pre-construction walkover of the site would be conducted in order to identify whether there are any signs of badgers, and/or any newly established setts that may be impacted by the works. Any excavations made during construction activities would be closed at the end of the day to prevent access by badgers. Should it not be possible for excavations to be closed at night, a means of egress (i.e. a wooden plank) would be provided to ensure that any badgers that may access these excavations have a means of escape.

c) Other mammal (hedgehog, brown hare):

- 2.3.3 A phased approach to site clearance and topsoil stripping will be used to discourage brown hare and hedgehogs away from site and into surrounding suitable habitat.

d) Reptiles:

- 2.3.4 All works that have the potential to impact reptiles would be undertaken following the agreed **Volume 3, Chapter 7, Appendix 7A, Annex 7A.6B RAMS Reptiles** document [[APP-364](#)] and would be overseen by an Ecological Clerk of Works (ECoW), any potential refugia will be inspected by an ECoW and removed before works takes place and a phased vegetation clearance process would be undertaken to displace any residual reptiles from the site. Prior to commencement of the vegetation clearance works, all site contractors will be briefed by the ECoW in the form of a toolbox talk. The

NOT PROTECTIVELY MARKED

toolbox talk will stress that potential reptile refugia / hibernation features will be left undisturbed; and reptiles will not be handled by contractors. There is a declaration for those present to sign to confirm they have understood the constraints and actions presented.

e) Great Crested Newt:

- 2.3.5 The **Darsham GCN Method Statement** (Doc Ref. 6.4 7A.5(A)) outlines the mitigation measures required to conserve the great crested newt populations within the site. Ponds that support great crested newt populations will be retained () and a construction buffer of 10m will be maintained around the ponds. One-way directional newt fencing would be installed around the perimeter of the car parking areas, swales and landscape bunds, to prevent great crested newts from entering the site but allow them to leave should they accidentally gain access. Once construction is complete the site area will be restored, therefore the impacts are considered to be negligible and only for the duration of the works. Once the development is implemented the areas now considered to be of limited value for the species will be enhanced with the creation of additional refugia/resting places suitable for GCN. Reasonable avoidance methods statements will be followed, including a toolbox talk to site contractors, and the appointment of an ECoW to monitor vegetation clearance. The **oLEMP** [REP1-010] and **TEMMP** [REP5-088] set out the monitoring and management of these habitat areas and species.

f) Birds:

- 2.3.6 The following measures are recommended during the construction and operational phases to conserve S41 and Schedule 1 listed bird species. The removal of scrub and trees and ground clearance works would generally be undertaken outside of the breeding bird season. Where it is not possible to undertake these works outside of the breeding bird season, an inspection for nests would be undertaken by a suitably experienced ECoW prior to the removal of vegetation. If breeding birds are identified during this process, works in the vicinity of the nest (estimated to be a 10m standoff) would cease until the young have fledged.

g) S41 Habitats

- 2.3.7 A 10m buffer would be maintained along the north-east boundary (along the rear of the existing houses), and south-west boundary (adjacent to the railway line south of Little Nursery Wood) to provide some protection to existing hedgerows. On-site hedgerows would be retained where appropriate, with the hedgerows along the eastern and northern site boundaries supplemented with further planting to permanently infill existing

NOT PROTECTIVELY MARKED

gaps which currently do not serve a purpose (for example, access). Replacement habitat planting of a permanent hedgerow along the southern side of Willow Marsh Lane during construction would result in the planting of approximately 585m of hedgerow to compensate for the 220m lost during construction. [REDACTED] is due to be retained on site and a 10m buffer would be maintained around the pond, within which no construction works would take place other than the erection of ecological fencing.

2.4 Southern Park and Ride

a) Bats:

- 2.4.1 Bats will be conserved by the implementation of a detailed lighting strategy in accordance with the **Lighting Management Plan** (Doc Ref. 6.3 2B(A)), for example operational lighting would be designed so that light spill beyond the site boundary would be minimal (lighting levels would be less than between 1.0 lux), and there would be no substantive light spillage into adjacent habitats and woodland blocks including Whin Belt. A **Sizewell C Project Bat Method Statement** (Doc Ref. 9.33) has been prepared that outlines the mitigation measures required for the trees with bat roosting potential features due to be removed. Where they are to be removed, a final inspection of trees will be undertaken and felling of trees would take place outside of the maternity and hibernation periods. 6 bat boxes are required to replace the roosting features to be lost. The **TEMMP** [REP5-088] outlines the monitoring measures proposed for bats. Reasonable avoidance measures will be implemented, including toolbox talk for construction workers and avoidance of night-time working where possible.

b) Badger:

- 2.4.2 Precautionary measures are recommended during the construction and operational phases to conserve badgers. Landscape bunds 3m high would be located within the north-west, north-east, east and south-east boundaries of the site bounded by badger fencing which would prevent colonisation by this species. Prior to construction works commencing, a pre-construction walkover of the site would be conducted to identify any newly established setts that may be impacted by the works. Any excavations made during construction activities would be closed at the end of the day to prevent access by badgers, alternatively, a means of egress (i.e. a wooden plank) would be provided to ensure that any badgers that may access these excavations have a means of escape. There will be regular monitoring of security fencing to ensure badgers remain excluded from the site.

c) Other mammal (hedgehog, brown hare):

NOT PROTECTIVELY MARKED

- 2.4.3 A phased approach to site clearance and topsoil stripping will be used to discourage brown hare and hedgehogs away from site and into surrounding suitable habitat.

d) Reptiles:

- 2.4.4 All works that have the potential to impact reptiles would be undertaken following the agreed **Volume 4, Chapter 7, Appendix 7A, Annex 7A.5B RAMS Reptiles document [APP-395]** and would be overseen by an Ecological Clerk of Works (ECoW), any potential refugia will be inspected by an ECoW and removed before works takes place and a phased vegetation clearance process would be undertaken to displace any residual reptiles from the site. Prior to commencement of the vegetation clearance works, all site contractors will be briefed by the ECoW in the form of a toolbox talk. The toolbox talk will stress that potential reptile refugia / hibernation features will be left undisturbed; and reptiles will not be handled by contractors. There is a declaration for those present to sign to confirm they have understood the constraints and actions presented

e) Great Crested Newt:

- 2.4.5 No great crested newts were recorded during surveys, however to conserve the species, the following precautionary measures are proposed. [REDACTED] within the site boundary would be retained, and so there would be no direct loss of this habitat. This pond would be further protected by a buffer area of a minimum of 10m where, with the exception of fencing, no above ground buildings or structures will be within this buffer zone.

f) Birds:

- 2.4.6 The following measures are recommended during the construction and operational phases to conserve S41 and Schedule 1 listed bird species. The removal of scrub and trees and ground clearance works would generally be undertaken outside of the breeding bird season. Where it is not possible to undertake these works outside of the breeding bird season, an inspection for nests would be undertaken by a suitably experienced ECoW prior to the removal of vegetation. If breeding birds are identified during this process, works in the vicinity of the nest (estimated to be a 10m standoff) would cease until the young have fledged.

g) S41 Habitats

- 2.4.7 Woodland blocks on the perimeter, including Whin Belt, would be retained in their entirety, and so there would therefore be no direct loss of this habitat. A

NOT PROTECTIVELY MARKED

buffer distance of 10m between the woodland, and the proposed perimeter fence would be maintained along sections of the boundary, namely along the southern, eastern and, where adjacent to woodland blocks, the western boundaries. All boundary hedgerows would be retained other than a short section of hedgerow, approximately 40m in length, which would be lost at the location of the access road. Soft landscaping, including grassed areas, tree and shrub planting would be installed and maintained for the operation of the proposed development. There would also be temporary hedgerow planting along the access road, whilst the park and ride is operational, to replace hedgerows lost during construction, and would be re-planted along the original hedgerow line during the removal and reinstatement phase. [REDACTED] located within the site, close to the western boundary, would be retained, and so there would be no direct loss of this habitat, this pond would be further protected by a buffer area of a minimum of 10m.

2.5 Two Village Bypass

a) Bats:

2.5.1 Bats will be conserved by the implementation of a detailed lighting strategy in accordance with the **Lighting Management Plan** (Doc Ref. 6.3 2B(A)), for example the route of the proposed development would be mostly unlit, thereby maintaining a dark corridor and minimising the potential impacts to nocturnal species. To reduce the potential for incidental mortality through collisions with vehicles, the design of the proposed development includes safe crossing points for bats. A **Sizewell C Project Bat Method Statement** (Doc Ref. 9.33) has been prepared that outlines the mitigation measures required for the trees with bat roosting potential features due to be removed. Where they are to be removed, a final inspection of trees will be undertaken and felling of trees would take place outside of the maternity and hibernation periods. 56 compensatory roost mitigation features are required to mitigate for the loss of moderate or high potential roosting features. This will comprise a mixture of bat boxes and at least half will be features that are generated naturally or created through veteranisation within new woodland planting. The **LEMP** [REP5-077] and **TEMMP** [REP5-088] documents outline the management and monitoring measures proposed for bats. Reasonable avoidance measures will be implemented, including toolbox talk for construction workers and avoidance of night-time working where possible.

b) Otter:

2.5.2 The proposed crossing of the River Alde would comprise an overbridge, approximately 60m in length which would be of sufficient size to enable

NOT PROTECTIVELY MARKED

passage for otters to be maintained during construction and operation. An otter ledge would be installed on bridge abutments, if required, to allow passage at times of high flows. Otter fencing would be incorporated where appropriate to guide otters to the crossing point. Reasonable avoidance measures will be implemented, including toolbox talk for construction workers and should vegetation clearance work occur within the proximity of the River Alde, a qualified ECoW will need to carry out a pre-construction check for signs of otter and otter activity within the footprint of the works. Should otter signs be present the ECoW will demarcate and agree on site in which areas which activity is permitted. Demarcation and exclusion from holts within 30m of working areas, potentially with the use of Heras fencing.

c) Water vole:

2.5.3 Water vole have been confirmed as present at the two village bypass. The primary mitigation for two village bypass incorporates a mammal mitigation culvert would be provided on the east side of the River Alde overbridge outside of the floodplain extent (approximately 5.4m by 1.2m). Any required flood compensation areas would be designed to minimise impacts to ditches and watercourses to avoid interfering with suitable water vole habitat. A draft **Two Village Bypass Water Vole Method Statement** [\[REP5-055\]](#) has been submitted that outlines the key approaches to mitigating potential impacts to the water vole populations present within or adjacent to the site. Water voles will be displaced, and habitat creation and enhancements have been incorporated into the landscape design for water vole. Once any works which impact The River Alde are completed, these areas will be reinstated, in accordance with the two village bypass **LEMP** [\[REP5-077\]](#). The **TEMMP** [\[REP5-088\]](#) set out the monitoring and management of these habitat areas and species.

d) Badger:

2.5.4 The **Two Village Bypass Draft Badger Method Statement** [\[REP5-054\]](#) outlines the mitigation measures proposed to conserve this species. Prior to commencing any mitigation works, the status of the sett would be confirmed through an updated survey. This would usually be conducted 3- 6 months before works commence. and would confirm the presence of any new setts within the works area or immediate surrounds and if they would be affected. One known outlier badger sett within the site boundary will be closed under licence and monitored 21 days after closure at a minimum. During the works, there will be a suite of good working practices to prevent impacts to badgers, including a toolbox talk, covering or ramping of all open excavations to prevent badgers becoming entrapped, good housekeeping to prevent food waste attracting badgers to the site and site procedures and guidelines to

NOT PROTECTIVELY MARKED

limit light spill onto adjacent habitats to minimise impacts to retained foraging habitats.

e) Other mammal (hedgehog, brown hare):

2.5.5 A phased approach to site clearance and topsoil stripping will be used to discourage brown hare and hedgehogs away from site and into surrounding suitable habitat.

f) Reptiles:

2.5.6 All works that have the potential to impact reptiles would be undertaken following the agreed **Volume 5, Appendix 7A, Annex 7A-6D RAMS Reptiles** document [\[APP-426\]](#) and would be overseen by an Ecological Clerk of Works (ECoW), any potential refugia will be inspected by an ECoW and removed before works takes place and a phased vegetation clearance process would be undertaken to displace any residual reptiles from the site. Prior to commencement of the vegetation clearance works, all site contractors will be briefed by the ECoW in the form of a toolbox talk. The toolbox talk will stress that potential reptile refugia / hibernation features will be left undisturbed; and reptiles will not be handled by contractors. There is a declaration for those present to sign to confirm they have understood the constraints and actions presented.

g) Great Crested Newt:

2.5.7 Great crested newt are considered absent from the zone of influence but in order to conserve this species, if they are found during the facilitation works, the works will stop, the great crested newt will not be handled or moved from its resting place; and 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.

h) Birds:

2.5.8 The following measures are recommended during the construction and operational phases to conserve S41 and Schedule 1 listed bird species. The removal of scrub and trees and ground clearance works would generally be undertaken outside of the breeding bird season (late February to August inclusive). Where it is not possible to undertake these works outside of the breeding bird season, an inspection for nests would be undertaken by a suitably experienced ECoW prior to the removal of vegetation. If breeding birds are identified during this process, works in the vicinity of the nest (estimated to be a 10m standoff) would cease until the young have fledged.

I) S41 Habitats

2.5.9 Sustainable Drainage Systems (SuDS) infrastructure (proposed as swales and infiltration basins) would be installed along the length of the highway. SuDS would minimise surface water run-off and prevent diffuse pollution from sediment and other pollutants arising. Foxburrow Wood CWS ancient woodland will be retained in its entirety. A buffer distance of 15m from earthworks would be applied to prevent impacts to the trees on the edge of the woodland. The landscaping strategy for the site has been designed to minimise potential effects through the provision of planting native hedgerow, tree and shrub planting.

2.6 Sizewell Link Road

a) Bats:

2.6.1 Bats will be conserved by the implementation of a detailed lighting strategy in accordance with the **Lighting Management Plan** (Doc Ref. 6.3 2B(A)), for example the route of the proposed development would be mostly unlit, thereby maintaining a dark corridor and minimising the potential impacts to nocturnal species. To reduce the potential for incidental mortality through collisions with vehicles, the design of the proposed development includes safe crossing points for bats. A **Sizewell C Project Bat Method Statement** (Doc Ref. 9.33) has been prepared that outlines the mitigation measures required for the trees with bat roosting potential features due to be removed. Where they are to be removed, a final inspection of trees will be undertaken and felling of trees would take place outside of the maternity and hibernation periods. Approximately 102 compensatory roost mitigation features are required to mitigate for the loss of moderate or high potential roosting features. This will comprise a mixture of bat boxes and at least half will be features that are generated naturally or created through veteranisation within new woodland planting. The **LEMP** (Doc Ref. 8.3(B)) and **TEMMP** [[REP5-088](#)] documents outline the management and monitoring measures proposed for bats. Reasonable avoidance measures will be implemented, including toolbox talk for construction workers and avoidance of night-time working where possible.

b) Badger:

2.6.2 Precautionary measures are recommended during the construction and operational phases to conserve badgers. Prior to construction works commencing, a pre-construction walkover of the site would be conducted to identify any newly established setts that may be impacted by the works. Any excavations made during construction activities would be closed at the end

NOT PROTECTIVELY MARKED

of the day to prevent access by badgers. Should it not be possible for excavations to be closed at night, a means of egress (i.e. a wooden plank) would be provided to ensure that any badgers that may access these excavations have a means of escape. There will be regular monitoring of security fencing to ensure badgers remain excluded from the site.

c) Other mammal (hedgehog, brown hare):

2.6.3 A phased approach to site clearance and topsoil stripping will be used to discourage brown hare and hedgehogs away from site and into surrounding suitable habitat.

d) Reptiles:

2.6.4 All works that have the potential to impact reptiles would be undertaken following the agreed **Volume 6, Appendix 7A, Annex 7A-6B RAMS Reptiles** document [[APP-462](#)] and would be overseen by an Ecological Clerk of Works (ECoW), any potential refugia will be inspected by an ECoW and removed before works takes place and a phased vegetation clearance process would be undertaken to displace any residual reptiles from the site. Prior to commencement of the vegetation clearance works, all site contractors will be briefed by the ECoW in the form of a toolbox talk. The toolbox talk will stress that potential reptile refugia / hibernation features will be left undisturbed; and reptiles will not be handled by contractors. There is a declaration for those present to sign to confirm they have understood the constraints and actions presented.

e) Great Crested Newt:

2.6.5 The **Sizewell Link Road GCN Method Statement** is in preparation and will outline the key mitigation measures required for great crested newt within the site. A total of up to eight mitigation ponds would be produced to provide new breeding habitats, whilst a further six ponds are to be created which will function as an enhancement of the aquatic habitats within the site post development. Reasonable avoidance methods statements will be followed, including a toolbox talk to site contractors, and the appointment of an ECoW to monitor vegetation clearance. The **LEMP** (Doc Ref. 8.3 B(B)) and **TEMMP** [[REP5-088](#)] set out the monitoring and management measures related to great crested newt.

f) Birds:

2.6.6 The following measures are recommended during the construction and operational phases to conserve S41 and Schedule 1 listed bird species. The

NOT PROTECTIVELY MARKED

removal of scrub and trees and ground clearance works would generally be undertaken outside of the breeding bird season (late February to August inclusive). Where it is not possible to undertake these works outside of the breeding bird season, an inspection for nests would be undertaken by a suitably experienced ECoW prior to the removal of vegetation. If breeding birds are identified during this process, works in the vicinity of the nest (estimated to be a 10m standoff) would cease until the young have fledged.

g) S41 Habitats

- 2.6.7 Replacement habitat for the loss of woodland and hedgerows has been incorporated into the proposed development and would use native species only. The **LEMP** (Doc Ref. 8.3 B (B)) outlines the overall design and landscape strategy which includes reinforcing and expanding existing linear wooded corridors and creating others to provide greater long-term connectivity. Specifically, native woodland would be created east of the East Suffolk Line, in the vicinity of the existing Fordley Road, in the vicinity of Trust Farm, and linking Plumhill Covert to Pretty Road. Also, to provide replacement ponds to compensate for the temporary and permanent loss of ponds and for proposed woodland planting, hedgerow planting and grassland planting to replace lost terrestrial habitats.

2.7 Yoxford and other Highway Improvements

a) Bats:

- 2.7.1 Bats will be conserved by the implementation of a detailed lighting strategy in accordance with the **Lighting Management Plan** (Doc Ref. 6.3 2B(A)). Existing trees and hedgerows adjoining the site boundary would be retained where possible. This includes the retention of a tree belt to the north-west of the site, along the boundary of Satis House Hotel and hedgerow along the southern side of the B1122 (Middleton Road). One tree with negligible roosting potential for bats is proposed to be removed, and a final inspection of trees to be removed would undertaken as close to the timing of felling as possible to account for the regular roost-switching behaviour displaced by tree-roosting bat species. The **TEMMP** [\[REP5-088\]](#) outlines the monitoring measures proposed for bats. Reasonable avoidance measures will be implemented, including toolbox talk for construction workers and avoidance of night-time working where possible.

b) Otter:

- 2.7.2 A 5m buffer would be maintained between the proposed Yoxford roundabout and the adjacent River Yox to protect otters. Prior to works taking place

NOT PROTECTIVELY MARKED

adjacent to the River Yox, a pre-construction survey would be conducted for otter. Should an otter holt be identified that would be directly impact by the proposed works, a licence from Natural England would be obtained. Should breeding otter be recorded, then all works would cease until both adult and young otter have left the holt.

c) Water vole:

- 2.7.3 A 5m buffer would be maintained between the proposed Yoxford roundabout and the adjacent River Yox to protect water vole. Prior to works taking place adjacent to the River Yox, a pre-construction survey would be conducted for water vole. If water voles are confirmed within the footprint of works or within 3m, to inform a licence application, detailed surveys would need to be conducted.

d) Badger:

- 2.7.4 Precautionary measures are recommended during the construction phase, as there is the potential for badgers to enter the site during construction. This includes, any excavations made during construction activities would be closed at the end of the day to prevent access by badgers, alternatively, a means of egress (i.e. a wooden plank) would be provided to ensure that any badgers that may access these excavations have a means of escape.

h) Other mammal (hedgehog, brown hare):

- 2.7.5 A phased approach to site clearance and topsoil stripping will be used to discourage brown hare and hedgehogs away from site and into surrounding suitable habitat.

e) Reptiles:

- 2.7.6 All works that have the potential to impact reptiles would be undertaken following the agreed **Volume 7, Chapter 7: Terrestrial Ecology and Ornithology** document [[APP-494](#)] and would be overseen by an Ecological Clerk of Works (ECoW), any potential refugia will be inspected by an ECoW and removed before works takes place and a phased vegetation clearance process would be undertaken to displace any residual reptiles from the site. Prior to commencement of the vegetation clearance works, all site contractors will be briefed by the ECoW in the form of a toolbox talk. The toolbox talk will stress that potential reptile refugia / hibernation features will be left undisturbed; and reptiles will not be handled by contractors. There is a declaration for those present to sign to confirm they have understood the constraints and actions presented.

f) Birds:

- 2.7.7 The following measures are recommended during the construction and operational phases to conserve S41 and Schedule 1 listed bird species. The removal of scrub and trees and ground clearance works would generally be undertaken outside of the breeding bird season (late February to August inclusive). Where it is not possible to undertake these works outside of the breeding bird season, an inspection for nests would be undertaken by a suitably experienced ECoW prior to the removal of vegetation. If breeding birds are identified during this process, works in the vicinity of the nest (estimated to be a 10m standoff) would cease until the young have fledged.

g) S41 Habitats

- 2.7.8 Yoxford Roadside Nature Reserve (RNR 197) would be retained in its entirety and there would be no habitat loss to the RNR. Existing trees and hedgerows adjoining the site boundary would be retained where possible. This includes the retention of a tree belt to the north-west of the site, along the boundary of Satis House Hotel and hedgerow along the southern side of the B1122 (Middleton Road). The proposed Yoxford roundabout would include grassed areas and new tree and hedgerow planting along the eastern edge of the realigned roads and around the proposed infiltration basin south of the new roundabout. A 5m buffer would be maintained between the proposed Yoxford roundabout and the adjacent River Yox to protect the integrity of the banks.

2.8 Freight Management Facility

a) Bats:

- 2.8.1 Bats will be conserved by the implementation of a detailed lighting strategy in accordance with the **Lighting Management Plan** (Doc Ref. 6.3 2B(A)), lighting would be provided at the perimeter, and parking areas, for security and safety reasons. Lanterns would utilise LED based light fittings to ensure energy efficiency with zero-degree tilt, and lighting columns along the perimeter would use demountable shields 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 dimming of parts of the site independently from other parts as usage changes through the day. A **Sizewell C Project Bat Method Statement** (Doc Ref. 9.33)] has been prepared that outlines the mitigation measures required for the trees with bat roosting potential features due to be removed. Where they are to be removed, a final inspection of trees will be undertaken and felling of trees would take place outside of the maternity and hibernation periods. At least 1

NOT PROTECTIVELY MARKED

bat box is required to mitigate for the loss of one moderate potential roosting feature. The **oLEMP** [REP1-010] and **TEMMP** [REP5-088] documents outline the management and monitoring measures proposed for bats. Reasonable avoidance measures will be implemented, including toolbox talk for construction workers and avoidance of night-time working where possible.

b) Badger:

- 2.8.2 Precautionary measures are recommended during the construction and operational phases to conserve badgers. Security fencing and ecological fencing around the sustainable drainage system infrastructure and landscape bunds would prevent the risk of badgers establishing setts within the site boundary. There will be regular monitoring of the fencing to ensure badgers remain excluded from the site. Any excavations made during construction activities would be closed at the end of the day to prevent access by badgers, alternatively, a means of egress (i.e. a wooden plank) would be provided to ensure that any badgers that may access these excavations have a means of escape.

c) Other mammal (hedgehog, brown hare):

- 2.8.3 A phased approach to site clearance and topsoil stripping will be used to discourage brown hare and hedgehogs away from site and into surrounding suitable habitat.

d) Reptiles:

- 2.8.4 All works that have the potential to impact reptiles would be undertaken following the agreed **Volume 8, Appendix 7A, Annex 7A04A, RAMS Reptiles** document [APP-524] and would be overseen by an Ecological Clerk of Works (ECoW), any potential refugia will be inspected by an ECoW and removed before works takes place and a phased vegetation clearance process would be undertaken to displace any residual reptiles from the site. Prior to commencement of the vegetation clearance works, all site contractors will be briefed by the ECoW in the form of a toolbox talk. The toolbox talk will stress that potential reptile refugia / hibernation features will be left undisturbed; and reptiles will not be handled by contractors. There is a declaration for those present to sign to confirm they have understood the constraints and actions presented.

e) Birds:

- 2.8.5 The following measures are recommended during the construction and operational phases to conserve S41 and Schedule 1 listed bird species. The

NOT PROTECTIVELY MARKED

removal of scrub and trees and ground clearance works would generally be undertaken outside of the breeding bird season (late February to August inclusive). Where it is not possible to undertake these works outside of the breeding bird season, an inspection for nests would be undertaken by a suitably experienced ECoW prior to the removal of vegetation. If breeding birds are identified during this process, works in the vicinity of the nest (estimated to be a 10m standoff) would cease until the young have fledged.

f) S41 Habitats:

- 2.8.6 All species-rich hedgerows would be retained and planting of additional screen planting around all boundaries of the site, to supplement the existing boundary vegetation. A 10m landscaped buffer zone is proposed around the north, east and west boundaries of the site. Where possible, existing vegetation in these areas would be enhanced. Where agreed with landowners, this planting would be retained as permanent. During the removal and reinstatement phase, the screen planting which would be provided around all boundaries of the site would be left in situ, where agreed with landowners. Temporary hedgerow planting within the site would be removed and reinstated along the original hedgerow lines. A 10m buffer area would also be provided for the existing balancing pond, along the northern boundary, and also along the western and eastern boundaries.

2.9 Green Rail Route

a) Bats:

- 2.9.1 Bats will be conserved by the implementation of a detailed lighting strategy in accordance with the **Lighting Management Plan** (Doc Ref. 6.3 2B(A)), for example operational lighting would be limited to the B1122 (Abbey Road) level crossing and the level crossing at Buckleswood Road. The remaining rail route extension would be unlit. The lighting design for the proposed development would use light fittings chosen to limit stray light. A **Sizewell C Project Bat Method Statement** (Doc Ref. 9.33) has been prepared that outlines the mitigation measures required for the trees with bat roosting potential features due to be removed. Where they are to be removed, a final inspection of trees will be undertaken and felling of trees would take place outside of the maternity and hibernation periods. At least 2 bat boxes are required to mitigate for the loss of two moderate or high potential roosting feature. The **TEMMP** [\[REP5-088\]](#) outlines the monitoring measures proposed for bats. Reasonable avoidance measures will be implemented, including toolbox talk for construction workers and avoidance of night-time working where possible.

NOT PROTECTIVELY MARKED

b) Badger:

- 2.9.2 Precautionary measures are recommended during the construction and operational phases to conserve badgers. The proposed rail extension route would be bounded by security fences, with all landscape bunds within the fenced area. Safe crossing points would be established for the diversion of three public rights of way, the same crossing points would also act as safe crossing points for badgers, thereby minimising any potential fragmentation effect. Prior to construction and again prior to removal and restoration, a walkover of the proposed rail extension route would be conducted by a suitably experienced ecologist to determine the status of previously identified badger setts and to confirm if any new setts have become established within or adjacent to where works would be conducted. There will be regular monitoring of security fencing to ensure badgers remain excluded from the site.

c) Other mammal (hedgehog, brown hare):

- 2.9.3 A phased approach to site clearance and topsoil stripping will be used to discourage brown hare and hedgehogs away from site and into surrounding suitable habitat.

d) Reptiles:

- 2.9.4 All works that have the potential to impact reptiles would be undertaken following the agreed **Volume 9, Appendix 7a, Annex 7A-6B RAMS Reptiles** document [[APP-556](#)] and would be overseen by an Ecological Clerk of Works (ECoW), any potential refugia will be inspected by an ECoW and removed before works takes place and a phased vegetation clearance process would be undertaken to displace any residual reptiles from the site. Prior to commencement of the vegetation clearance works, all site contractors will be briefed by the ECoW in the form of a toolbox talk. The toolbox talk will stress that potential reptile refugia / hibernation features will be left undisturbed; and reptiles will not be handled by contractors. There is a declaration for those present to sign to confirm they have understood the constraints and actions presented.

e) Great Crested Newt:

- 2.9.5 To conserve this species, a **GRR GCN Method Statement** (Doc Ref. 6.10 7A.6A(A)) has been produced that outlines the mitigation measures required. No GCN breeding ponds will be lost or directly impacted by the planned works in the short-term (construction phase) or long-term (operational phase). However, the construction phase activities will require standard

NOT PROTECTIVELY MARKED

operations including vegetation clearance and topsoil stripping. The temporary loss of sub-optimal habitat, in the form of arable land, and suitable habitat, hedgerows, will be during the construction phase and operational phase of the railway, however this will be replaced with areas of reinstated agricultural land and hedgerows after the development has been removed. Nevertheless, in absence of mitigation there is the potential to injure/kill individual GCN and, as such, precautionary working methods are proposed. These are detailed within Great Crested Newt Method Statement for vegetation clearance in the active season, vegetation clearance in the hibernation season and approach to ground-breaking works including topsoil stripping (active season and hibernation period). The **oLEMP** [REP1-010] and **TEMMP** [REP5-088] set out the monitoring and management measures related to great crested newt. Accordingly, the proposed development is predicted to have non-significant, negligible temporary impacts on the great crested newt population.

f) Birds:

- 2.9.6 The following measures are recommended during the construction and operational phases to conserve S41 and Schedule 1 listed bird species. The removal of scrub and trees and ground clearance works would generally be undertaken outside of the breeding bird season (late February to August inclusive). Where it is not possible to undertake these works outside of the breeding bird season, an inspection for nests would be undertaken by a suitably experienced ECoW prior to the removal of vegetation. If breeding birds are identified during this process, works in the vicinity of the nest (estimated to be a 10m standoff) would cease until the young have fledged.

g) S41 Habitats

- 2.9.7 Buckle's Wood CWS and surrounding blocks of broadleaved woodland would be retained in their entirety. Most hedgerows on-site would be retained and only four small sections of defunct, species-poor hedgerow and one section of species-rich 'important' hedgerow would be removed and there would therefore be only limited direct loss of hedgerow habitat. All hedgerows removed during construction would be replanted during the removal and reinstatement phase. Also, a Dust Management Plan would be developed and implemented across the site. This would minimise impacts to neighbouring habitats, such as Buckle's Wood CWS.

The steps outlined in these measures will preserve and, in some cases, enhance the conservation of the Section 41 species and habitats within the main development site and associated development site boundaries which will allow the Examining Authority

and the Secretary of State to comply with their duties under s.40 and 41 of the Natural Environment and Rural Communities Act 2006 .

In relation to the SSSI, the measures identified above will further the conservation and enhancement of the flora, fauna or geological or physiographical features by reason of which the site is a SSSI and will also allow the Examining Authority and the Secretary of State to comply with their duties under s. 28G of the Wildlife and Countryside Act 1981.

3 WCA RESPONSE

3.2.1 This section has been prepared to summarise the duties under S28G of the WCA and covers the following:

- Sizewell Marshes SSSI (
- Table 3-1)
- Deptford Pink (Table 3-2)
- Norfolk Hawker (Table 3-3)
- Amphibians- specifically Natterjack Toad (Table 3-4)
- Amphibians- specifically Great Crested Newt (Table 3-5)
- Amphibians- specifically Common Toad (Table 3-6)
- Reptiles - adder, grass snake, common lizard, slow worm (Table 3-7)
- Bats - all UK species (Table 3-8)
- Badger (Table 3-9)

NOT PROTECTIVELY MARKED

- Otter (Table 3-10)
- Water Vole (Table 3-11)
- Hedgehog (Table 3-12)
- Brown Hare (Table 3-13)
- Polecat (Table 3-14)
- Schedule 1 listed bird species (wintering marsh harrier, barn owl, hobby, peregrine falcon, black redstart, Cetti's warbler) and all nesting bird species (Table 3-15)

Table 3-1: Summary of measures to be implemented to conserve Sizewell Marshes SSSI habitats listed in the Wildlife and Countryside Act in the Main Development Site and Associated Development Sites

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve SSSI Habitats
SSSI Habitats (Fen Meadow and Wet Woodland)	Main development site only (scoped out from other sites)	Volume 2, Chapter 14: Terrestrial Ecology and Ornithology [AS-033]	<u>Primary mitigation:</u> <ul style="list-style-type: none"> • A barrier (e.g. sheet piling) would be installed to provide separation from the main platform and Sizewell Marshes SSSI with engineered drainage installed to limit the disturbance to the hydrology and geology of Sizewell

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve SSSI Habitats
		<p>Terrestrial Ecology Monitoring and Mitigation Plan [REP5-088]</p> <p>Outline Landscape and Ecological Management Plan [REP1-010]</p> <p>Fen Meadow Strategy [AS-209]</p> <p>Wet Woodland Strategy [REP1-020]</p>	<p>Marshes SSSI (see Chapter 19: Groundwater and Surface Water of the ES (Book 6)).</p> <ul style="list-style-type: none"> The establishment of new reedbed and ditches at Aldhurst Farm (completed in 2016) has provided replacement for the land take of these habitats within Sizewell Marshes SSSI. The replacement habitats have established successfully, and mobile aquatic plant and invertebrate species would colonise over time from the adjacent areas of the Sizewell Marshes SSSI. A Fen Meadow Strategy [AS-209] has been prepared (which includes three locations in Suffolk at which permanent fen meadow habitat would be developed to compensate for the permanent loss of approximately 0.46ha of fen meadow habitat from within Sizewell Marshes SSSI, associated with the construction of the main platform and the diversion of the Sizewell Drain. <p>A Wet Woodland Strategy [REP1-020] has been prepared. This consists of a proposed area of 0.7ha of wet woodland to be created within the north of the development, adjacent to the marsh harrier habitat improvement area and a further 2.36ha would be created at the two fen meadow sites at Benhall and</p>

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve SSSI Habitats
		Plants and Habitats Synthesis Report (Volume 2, Appendix 14B1 [APP-250])	<p>Pakenham. This would provide compensatory habitat for the loss of 3.06ha of wet woodland to the development.</p> <ul style="list-style-type: none"> • The Terrestrial Ecology Monitoring and Mitigation Plan (TEMMP) [REP5-088] sets out the monitoring and management of these habitat areas. • As outlined in the Plants and Habitats Synthesis Report (Volume 2, Appendix 14B1 [APP-250]) the fen meadow habitats within the Sizewell Marshes SSSI have been subject to a long running monitoring programme undertaken on behalf of the SWT and SZC Co. During construction and operation this monitoring programme would continue, in particular recording the extent of the two sensitive plant assemblages within the Grade 1 and 2 fen meadow, namely low growing species and species indicative of nutrient poor conditions. • As at present, if monitoring indicates a measurable decline in the extent of these sensitive plant assemblages or indicates that habitat condition is deteriorating, for example due an increase in the extent and abundance of coarse grass and sedge species, then it would be appropriate to undertake additional mitigation. Additional mitigation could include

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve SSSI Habitats
			additional stock grazing or a cutting regime to remove excess vegetation.

Table 3-2: Summary of measures to be implemented to conserve Deptford Pink, listed in the Wildlife and Countryside Act, in the Main Development Site

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Deptford Pink
Deptford Pink	Main development site only (scoped out from other sites)	<p>Volume 2, Chapter 14: Terrestrial Ecology and Ornithology [AS-033]</p> <p>Main development site Draft Deptford Pink Protected Species Licence</p>	<p>A draft Deptford Pink Method Statement [REP5-052] has been submitted for Deptford Pink (<i>Dianthus armeria</i>). If the species is relocated in targeted searches, the collection of both seeds and plants would be undertaken with translocation to a suitable location on the existing sea defence seaward of the Sizewell B power station that would not be directly affected by the construction of the proposed development. The translocation would be monitored pre- and post-construction and would be conducted under licence from Natural England.</p> <p><u>Translocation:</u> <u>Plants:</u></p>

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Deptford Pink
		and associated Method Statement [REP5-052]	<p>Up to 100 non-flowering rosettes will be carefully moved from the donor site to the prepared receptor area. The plants will be dug by hand using a trowel, attempting to keep the root ball intact. They will then be wrapped in damp newspaper and placed in a plastic bag to prevent drying out before replanting in the prepared receptor area on the same day. The plants will be moved during cool damp weather in October the year of the DCO (Year 1). Plants will be watered into place.</p> <p><u>Seeds:</u> All seed heads will be collected, as the colony is to be lost in its entirety. Seeds are due to be collected in autumn 2022 and if practicable in 2021. The collection date will be during dry weather. Seed heads will be placed in paper or muslin bags. Seed heads will be stored in trays, kept cool and dry indoors until they dehisce. They will be regularly inspected to ensure they are not damp or infected with mould. Once the seeds have dehisced, they will be 'cleaned' by removing the empty capsules, debris and any pests such as weevils or caterpillars.</p>

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Deptford Pink
			<p>The following approach will be taken to seed sowing, based on the number collected:</p> <ul style="list-style-type: none"> < 100 seeds. Half to be grown on by a competent establishment as plug plants. Half to be sent for storage to the Millennium Seed Bank, Wakehurst Place (to be confirmed with Millennium Seed Bank). > 100 seeds. Fifty seeds to be grown on by a competent establishment as plug plants. Fifty seeds to be sent for storage to the Millennium Seed Bank, Wakehurst Place (to be confirmed with Millennium Seed Bank). The remainder to be sown in the prepared receptor areas during mild, damp weather in October the year of the DCO (Year 1). Seed will be scattered by hand and gently raked in. The sown areas will be photographed, their GPS location recorded and marked using a numbered cane <p><u>Monitoring:</u> The receptor area will be monitored the following July/August for successful establishment. Flowering plants and non-flowering rosettes will be counted up to 1000 basal rosettes, estimates will</p>

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Deptford Pink
			<p>be made beyond this number. This monitoring will be extended for 5 years following translocation.</p> <p>In the event that establishment has been poor or plants fail to persist, a proportion of seed stored in the Millennium Seed Bank may be grown on as plugs and transplanted to the site as previously described in an attempt to boost establishment.</p> <p>A detailed monitoring plan will be prepared and this will be reported annually.</p>

Table 3-3: Summary of measures to be implemented to conserve Norfolk Hawker, listed in the Wildlife and Countryside Act, in the Main Development Site

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Norfolk Hawker
Norfolk Hawker	Main development site only (scoped out from other sites)	Volume 2, Chapter 14: Terrestrial Ecology and Ornithology [AS-033]	<p><u>Primary:</u></p> <ul style="list-style-type: none"> Creation of reedbed and ditch habitat at Aldhurst Farm (completed in 2016) provides suitable habitat for breeding Norfolk Hawker to mitigate the loss of such habitats on site.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Norfolk Hawker
		<p>Terrestrial Ecological Monitoring and Mitigation Plan [REP5-088]</p> <p>Code of Construction Practice (CoCP) Appendix A: Freshwater Fish and Aquatic Invertebrates Mitigation Strategy [AS-275]</p>	<p><u>Tertiary:</u></p> <ul style="list-style-type: none"> A mitigation plan to recover larvae of this species along with other macro-invertebrates in the impacted lengths of the Sizewell Drain, the Leiston Drain and related ditches has been developed [AS-275] and is appended to the CoCP and thus secured via requirement. This is integrated with a 'fish rescue' for these watercourses during the relevant early construction works. <p><u>Monitoring:</u></p> <ul style="list-style-type: none"> The TEMMP [REP5-088] provides the proposed monitoring schedule and approaches to monitoring of invertebrates. Habitat monitoring and targeted invertebrate sampling would be undertaken throughout the construction phase to assess the effectiveness of the mitigation provided and to inform mitigation and management approaches. Monitoring would target invertebrate assemblages of national importance and high conservation value which are characteristic of the habitats to be lost, including populations of Norfolk Hawker, to assess the extent to

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Norfolk Hawker
			<p>which these assemblages become established in the new habitats within the site boundary and across the wider EDF Energy estate. Targeted invertebrate surveys would be undertaken in Y4, Y8 and Y12</p> <p>.</p>

Table 3-4: Summary of measures to be implemented to conserve amphibians- specifically Natterjack Toad, listed in the Wildlife and Countryside Act, in the Main Development Site and Associated Development Sites

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Natterjack Toad
Amphibians- specifically Natterjack Toad but will benefit other amphibian species.	Main development site only (Natterjack Toad scoped out from other sites).	Volume 2, Chapter 14: Terrestrial Ecology and Ornithology [AS-033]	<p><u>Tertiary mitigation:</u> A draft Natterjack Toad Protected Species Licence [REP5-053] has been prepared for the proposed development [] that outlines the key following approaches to mitigating potential impacts to the natterjack toad population present within the main development site;</p> <p><u>Mitigation measures:</u></p>

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Natterjack Toad
		<p>Appendix 14C7A – Natterjack Toad Mitigation Strategy [APP-252]</p> <p>Sizewell C Project Terrestrial Ecology Monitoring and Mitigation Plan [REP5-088]</p> <p>Natterjack Toad Method Statement [REP5-053]</p>	<ul style="list-style-type: none"> • The proposed Water Management Zone (WMZ) will avoid the rabbit warren networks that natterjack toads are known to use. • A trapping and translocation exercise using pitfall buckets will be undertaken and captured individuals from within the construction working area will be released within a safe location adjacent to the breeding pond (N1) away from the works. • Amphibian exclusion fencing (as per Figure 4 of the Great Crested Newt Mitigation Guidelines) will be installed around the perimeter of the working area of the WMZ within Retsom's Field to prevent any natterjack toads from entering the construction footprint and demarcate the trapping and translocation area. 'Permanent' type fencing is proposed as the fencing will remain in situ for c. 10 years. An amphibian proof grid will be installed at an access opening along the south of the fencing. • The trapping and translocation area will then be compartmentalised with temporary amphibian proof fencing in order to increase capture effort. Pitfall traps will be installed on the inside of perimeter fencing and both sides of

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Natterjack Toad
			<p>internal fencing to ensure a trapping density of 100 traps per hectare. Carpet tiles will also be placed between alternate pitfall traps (i.e. at a density of 50 per hectare) and adjacent to pond N1 to act as sheltering habitat that can be easily checked for translocation.</p> <ul style="list-style-type: none"> Fencing and traps will be installed by professional and experienced contractors using suitable machinery during the active season (spring – autumn). The ground along the fence line and access tracks will be prepared and hand searched prior to installation and the works will be undertaken under supervision by the licence holder or appointed agent. Pitfall traps and carpet tiles will be checked daily before 11am and fencing will also be walked at night by torchlight to search for natterjack toads; any individuals encountered will be translocated to the receptor site adjacent to N1. This approach will continue for a minimum of 30 consecutive days/nights and until five consecutive nights of 'no capture' are observed. Following which, internal fencing will be removed, and the construction works for the WMZ would proceed within the exclusion zone. With the exception of an

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Natterjack Toad
			<p>access track to the south, perimeter fencing will remain in situ for the duration of the WMZ (10 years).</p> <ul style="list-style-type: none"> During this time, it will be maintained to ensure that it remains amphibian-proof. Fence removal will be undertaken out with the hibernation period and be under the supervision of the licence holder or appointed agent. <p><u>Habitat creation:</u></p> <ul style="list-style-type: none"> To compensate for the temporary loss of foraging habitat, it is proposed that four ponds would be created, comprising the reinstatement of pond N2 and the installation of a three section pond aggregation (pond N5). Pond N2 should be re-lined in a similar manner to N1 to re-instate this waterbody which would be filled by heavy rain over the winter/early spring. Installation of netting over the waterbody, in the similar manner to N1, would reduce bird predation. This would double the available breeding habitat for the natterjack toad population in N1. New pond N5 will comprise three sections, N5a, b and c, and each section would consist of slightly different profiles to provide varying pond topography. These sections would be

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Natterjack Toad
			<p>joined by two channels approximately 3m in width. This would result in a waterbody complex of approximately 300m². The N5 pond aggregation, along with the reinstatement of pond N2 would result in four new waterbodies within Retsoms field.</p> <ul style="list-style-type: none"> • N5 would be lined with a black butyl or bentonite liner, which would create similar thermal conditions to pond N1. The west (a) and middle (b) section of pond N5 should be left with the liner exposed, closely mimicking N1 however the liner at the east (c) section should be covered in sediment, which is more similar to N3 and N4. This should provide an important transition in conditions once the natterjack toad population expands into pond N5. • A berm would be created to buffer the pond for approximately 10m and consist of a 1:10 slope, up to ground level or to the base of the proposed sand banks. This should be landscaped after the pond liner gets installed and would initially be bare sediment however management maybe needed to maintain this bare ground resource. • Landscaping is to be undertaken to provide foraging, refuge and overwintering opportunities within Retsoms Field. In

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Natterjack Toad
			<p>addition, the management of the terrestrial habitats in Retsoms Field will be reviewed and improved to ensure conditions are of maximum value to the population. A long-term terrestrial enhancement schedule is proposed which would include creation of sand banks, scrapes and heather patches. Conservation management of the vegetation within Retsoms will also be optimised to favour natterjack toads.</p> <ul style="list-style-type: none"> • Subject to agreement with Natural England and other relevant stakeholders, a series of mound features comprising sand and stone would be created adjacent to N5 that will, in the short term, increase terrestrial opportunities (resting and overwintering) and increase connectivity between N1 and N3/N4. In the long term, these features should aid rabbit warren excavation and further increase overwintering opportunities. • Two vertical sand banks are proposed (totalling approximately 160m) which run along the north and south edges of the berm. At the eastern extent, the sand banks veer away from the pond to the north and south, cut into the contours of the field gradient. These vertical sand banks would be approximately 50cm high and would provide

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Natterjack Toad
			<p>burrowing opportunities for natterjack toads with patches of uncompacted sediment being supplied by bank erosion. They would also provide attractive habitat for rabbits to dig warrens, provisioning further sheltering and hibernating opportunities for natterjack toads. The vertical nature of these banks mean vegetation colonisation would be limited and could be relatively easily scraped off through management practices.</p> <ul style="list-style-type: none"> • The creation of the ponds, berms and sand banks will generate excavated material. This material will be used to install large sand /earth piles in a corridor from N1 to N3 and in the vicinity of N5, adjacent to or outside of the berm boundary or on top of the sand banks. These would be designed with slopes of approximately 1:3 and would be an initial resource for foraging and burrowing natterjack toads. These would be ephemeral and would vegetate over and eventually would provide raised lawns of short turf for rabbits and sheep to graze, which would keep some bare ground resource. • In addition, it is intended to create some surface fixed refugia, as the originally proposed stone wall or stone linear

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Natterjack Toad
			<p>feature is not considered appropriate or in keeping with the Area of Outstanding Natural Beauty (AONB) setting, the distribution of a small number of concrete flag stones scattered on the surface of the bare sand is proposed. These would also not be as visually intrusive as a dry-stone wall arrangement and would provide suitable conditions to be exploited by the local natterjack toad population.</p> <ul style="list-style-type: none"> • There will be terrestrial habitat improvements within Retsoms Field especially in the proposed natterjack corridor running north-east from N1. This will focus on increasing heather patch creation and the diversity of the grassland, opening up the vegetation in places and creating areas of bare ground, whilst minimising risks to the existing vulnerable population. Additional enclosure fencing is likely to be required locally within the field to exclude sheep from the establishing heather patches. • Subject to agreement with the RSPB, a land bridge between N3 in Retsoms field and N4 in Minsmere would be installed. • Pre-construction checks of any potential refugia in and alongside Retsom's Field would be required, with any natterjack toads found within the footprint of the proposed

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Natterjack Toad
			<p>WMZ captured and relocated to the retained areas of Retsom's Field. Works would be undertaken outside of the hibernation season (considered to be October to April). Pre-construction checks would be completed by a licensed or accredited ecologist.</p> <p><u>Monitoring and management:</u></p> <ul style="list-style-type: none"> It is proposed that the management regime of the remainder of Retsoms Field (i.e. outside of the WMZ construction area) continues as present (i.e. sheep grazing with at least the equivalent animals per hectare as current five year mean average). In addition to sheep grazing, the continued presence of rabbit grazing will keep bare ground patches, particularly on the proposed spoil mounds. N5 will be drained down annually in late summer and allowed to fill naturally over winter (as practiced with N1). Regular checks, management and maintenance will be undertaken to check and repair the amphibian fencing and manage vegetation alongside the fencing. Assurance checks will also be undertaken to ensure quality of work. Stock proof

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Natterjack Toad
			<p>fencing will be installed in conjunction with the amphibian fencing to prevent grazing animals entering the WMZ.</p> <ul style="list-style-type: none"> The new pond N5 would be monitored annually along with N1, N2 and N3 (it is also assumed that the RSPB will continue to monitor N4) for the duration of WMZ operation (c. 10 years). The TEMMP [REP5-088] outlines the Natterjack toad monitoring scheme for the population and the habitats during the construction and operation period. Monitoring surveys will be carried out annually, between April – July (ideally in damp conditions shortly after rainfall after daylight hours) Y1-Y12 construction phase assuming 12 years worst case (inclusive).

NOT PROTECTIVELY MARKED

Table 3-5: Summary of measures to be implemented to conserve amphibians- specifically Great Crested Newt, listed in the Wildlife and Countryside Act, in the Main Development Site and Associated Development Sites

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Great Crested Newt
Amphibians- specifically Great Crested Newt but will benefit other amphibian species.	Main development site	<p>Volume 2, Chapter 14: Terrestrial Ecology and Ornithology [AS-033]</p> <p>Appendix 14C9A – Great Crested Newt Non-Licensable Method Statement [APP-252]</p>	<p><u>Tertiary mitigation:</u></p> <ul style="list-style-type: none"> A Great Crested Newt Method Statement (Volume 2, Appendix 14C9A [APP-252]) has been prepared detailing the approach to be used, including the removal of vegetation and ground clearance in areas where commencement of construction activities have the potential to kill or injure Great Crested Newts during their terrestrial phase (there are no breeding ponds within the site). <p>A RAMS method statement document has been created to outline the appropriate measures that will be undertaken to prevent any negative impacts on GCN:</p> <ul style="list-style-type: none"> 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

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Great Crested Newt
			<p>area. This area will be walked by the ECoW to identify any areas offering great crested newt sheltering opportunities prior to works commencing.</p> <ul style="list-style-type: none"> 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 will be overseen by the ecologist. Shelter features that require removal will 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 will 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

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Great Crested Newt
			<p>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.</p> <ul style="list-style-type: none"> 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.
	Northern park and ride	<p>Volume 3, Chapter 7: Terrestrial Ecology and Ornithology [APP-363]</p> <p>Terrestrial Ecology Monitoring and</p>	<p><u>Primary mitigation:</u></p> <ul style="list-style-type: none"> Pond [REDACTED] would be retained, directly protecting the known great crested newt population within the site boundary. A 10m buffer would be maintained around the pond, within which no construction works would take place other than the erection of ecological fencing. Additionally, the pond would be protected from construction and operational impacts by the landscape bund along the eastern boundary of the site. One-way directional newt fencing would be installed around the perimeter of the car parking areas, swales and landscape

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Great Crested Newt
		<p>Mitigation Plan [REP5-088]</p> <p>Darsham GCN Method Statement (Doc Ref. 6.4 7A.5(A))</p>	<p>bunds, to prevent great crested newts from entering the site but allow them to leave should they accidentally gain access.</p> <ul style="list-style-type: none"> Fencing would be sited to ensure that Pond [REDACTED] is excluded in order to maintain connectivity with existing, suitable great crested newt habitats. This approach would eliminate the need to translocate great crested newts away from the landscaped margins of the site when these areas are returned to agriculture use. This fencing would be installed at the start of the first phase of construction, maintained throughout operation, and would remain in place until the end of the site restoration works. Two small pipes or culverts would be placed beneath the new access road to allow the passage of great crested newts underneath the road. One of these would be on the north side of the landscape bund, and one would be at the point at which the new access road meets Willow Marsh Lane. Great crested newts would be directed to the culverts by one-way directional newt fencing. The planting of hedgerow along the southern side of Willow Marsh Lane with a rough, unmanaged grassland margin adjacent, and extending along the eastern and western site

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Great Crested Newt
			<p>boundaries would minimise great crested newt habitat severance and habitat loss, facilitate continued access to foraging and hibernation sites within Little Nursery Wood, and allow connectivity between Ponds [REDACTED]</p> <p><u>Tertiary mitigation:</u></p> <ul style="list-style-type: none"> • Additionally, works with the potential to affect great crested newts would be carried out under a licence from Natural England, following agreement with Natural England on an appropriate mitigation strategy, additional information from the draft Method Statement is provided below. • In addition to the primary mitigation measures identified previously, this would likely include: • Seasonal constraints to the timing of the installation of the one-way directional newt fencing described in section 7.5a of this chapter. If the timing of fence installation means there would be a risk of encountering newts as they move between their ponds and terrestrial habitat (notably in February/March), then the fencing would be combined with pitfall traps, and any trapped newts would be collected, and transferred to one of the ponds to the west of the A12 where

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Great Crested Newt
			<p>great crested newts are known to occur (e.g. Pond 078 or 101);</p> <ul style="list-style-type: none"> • If possible, the removal of hedgerow would be undertaken outside of the amphibian hibernation period (October to February inclusive). If this is not possible, vegetation would be cut to the ground (which would remove potential bird nesting habitat), but the roots would remain intact until hibernation is complete. The root system of vegetation would then be removed once the great crested newt hibernation season is over. This work would be overseen by a suitably experienced Ecological Clerk of Works (ECoW); • The habitat around Pond [REDACTED] would be improved, and tussocky grassland and scrub encouraged to grow for the benefit of great crested newts and hibernation features would be installed. This would improve the foraging habitat around Pond [REDACTED] and would provide suitable hibernation sites adjacent to the pond. In addition, this commitment would need to be agreed with the landowner. In the event of the landowner not agreeing to the above approach, alternative measures would be adopted.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Great Crested Newt
			<p><u>Monitoring:</u></p> <ul style="list-style-type: none"> • During construction, there would be regular checks of the security fence, ecological fencing and close-boarded fence to check these remain intact, and that there is no encroachment of construction activities beyond the site boundary or into the buffer areas. The newt culverts, when installed, would also be monitored to ensure these remain intact and clear of debris. • The one-way directional newt fencing would be checked regularly to ensure that this remains intact. • Throughout the operational phase, regular monitoring of the one-way directional newt fencing and newt culverts would be conducted to ensure that these remain intact and clear of debris. This would ensure the continued exclusion of newts from the operational facility on the site. • The TEMMP [REP5-088] outlines the proposed monitoring activities identified for great crested newt during the construction and operational phases.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Great Crested Newt
			<p>A draft Darsham GCN Method Statement (Doc Ref. 6.4 7A.5(A)) has been compiled that details the key approaches to mitigating potential impacts to the GCN populations present.</p> <ul style="list-style-type: none"> • Construction mitigation comprises hand searches in the areas of grassland present at the margins of the arable land prior to a staged vegetation clearance to be undertaken in these areas, in addition to installing one-way directional newt fencing around the eastern perimeter of the works (to separate these areas from the pond and habitat area to the east of the site), to prevent great crested newts from entering the development area but allow them to move into the retained areas to the east. Any GCN found during the construction phase will be moved by hand into this safeguarded area. • Fencing would be sited to ensure that Pond 078 is excluded from the site during the operational phase of the development. • This approach eliminates the need to translocate great crested newts away from the landscaped areas of the park and ride once this is returned to agricultural use (after approximately 9 years of the site being utilised as a park and ride scheme). This fencing would be installed at the start of

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Great Crested Newt
			<p>the first phase of construction, maintained throughout operation and would remain in place until the end of the site restoration works, with bi-annual checks on the fencing structure undertaken during the operational use of the site.</p> <ul style="list-style-type: none"> • If any GCN were found incidentally during the works, these will be moved by hand to the vicinity of the pond in the retained pond on site. • Accordingly, the proposed development is predicted to have non-significant, minor temporary impacts on the great crested newt population. Once construction is complete the site area will be restored, therefore the impacts are considered to be negligible and only for the duration of the works. The vast majority of the affected terrestrial habitats are considered to be of low value for great crested newts providing few refuges (managed agricultural land). Once the development is implemented the areas now considered to be of limited value for the species will be enhanced with the creation of additional refugia/resting places suitable for GCN.
	Southern park and ride	Volume 4, Chapter 7: Terrestrial	No great crested newts were recorded during surveys, however the following precautionary measures are proposed.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Great Crested Newt
		Ecology and Ornithology [APP-394]	<u>Primary mitigation:</u> Pond 59 located within the site, close to the western boundary, would be retained, and so there would be no direct loss of this habitat, and its associated species. This pond would be further protected by a buffer area of a minimum of 10m between the pond, where with the exception of fencing, no above ground buildings or structures will be within this buffer zone.
	Freight management facility	Volume 8, Chapter 7: Terrestrial Ecology and Ornithology [APP-523]	Great crested newts considered absent from the zone of influence and no further measures implemented as no significant effect is considered likely.
	Sizewell link road	Volume 6 Chapter 7: Terrestrial Ecology and Ornithology [APP-461]	<u>Primary mitigation:</u> <ul style="list-style-type: none"> The site boundary has been amended and reduced where possible to avoid direct and indirect impacts to ponds. Measures would be installed into the road design to maintain connectivity for great crested newts. The locations for crossing points will be finalised at the detailed design stage, however these would be as follows:

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Great Crested Newt
		<p>Terrestrial Ecology Monitoring and Mitigation Plan [REP5-088]</p> <p>Sizewell Link Road Landscape and Ecological Management Plan (Doc Ref. 8.3 B(B))</p> <p>Sizewell Link Road GCN Method Statement (Doc Ref. 6.7 7A.5(A))</p>	<ul style="list-style-type: none"> The preferred option, where there is minimal fragmentation, and the development is at grade, as cited by Natural England, would be to allow newts to cross over the road. These measures would be incorporated into the proposed development design such as no kerbing or features that would inhibit the movement of newts to cross the road. In the event of gully pots (which could become traps for amphibians) being identified as a requirement, the design will ensure that amphibian friendly gully pot designs are used so that a means of egress is provided to ensure that any amphibians do not get trapped within them. Replacement great crested breeding ponds are included within the design of the proposed development to compensate for the loss of existing ponds. Replacement ponds would be created prior to destruction of the original ponds and appropriate terrestrial habitat would be created around the ponds. In accordance with the Landscape and Ecological Management Plan (LEMP) (Doc Ref. 8.3 B(B)) a total of up to eight mitigation ponds would be provided to provide new breeding habitats, whilst a further six ponds are to be created

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Great Crested Newt
			<p>which will function as an enhancement of the aquatic habitats within the site post development.</p> <p>Pipes or culverts would be placed beneath the new access road to allow the passage of great crested newts underneath the road.</p> <ul style="list-style-type: none"> Further details are provided in the Sizewell Link Road GCN Draft Method Statement (Doc Ref. 6.7 7A.5(A)). <p><u>Monitoring:</u></p> <p>The TEMMP [REP5-088] outlines the proposed monitoring activities identified for great crested newt during the construction and operational phases.</p>
	Two village bypass	Volume 5, Chapter 7: Terrestrial Ecology and Ornithology [APP-425]	<p>Great crested newts are considered absent from the zone of influence and no further measures implemented as no significant effect is considered likely.</p> <p><u>Action to take if great crested newts are found:</u></p> <ul style="list-style-type: none"> 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:

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Great Crested Newt
		Volume 5, App 7A, Annex 7A-6B RAMS GCN [APP-426] TVB Landscape and Ecological Management Plan (LEMP) [REP5-077]	<ul style="list-style-type: none"> the works will stop; the great crested newt will not be handled or moved from its resting place; and 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.
	Yoxford	Volume 7, Chapter 7: Terrestrial Ecology and Ornithology [APP-494]	<ul style="list-style-type: none"> Scoped out as not present on site, no further measures implemented as no significant effect is considered likely.
	Green rail route	Volume 9, Chapter 7: Terrestrial Ecology and	<u>Tertiary mitigation:</u> <ul style="list-style-type: none"> Works with the potential to affect great crested newts would be carried out under a licence and in accordance with reasonable avoidance methods statement.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Great Crested Newt
		<p>Ornithology [APP-555]</p> <p>Volume 9, Chapter 7, Appendix 7A Annex 7A-6 RAMS GCN [APP-556]</p> <p>Terrestrial Ecology Monitoring and Mitigation Plan [REP5-088]</p> <p>Green Rail Route GCN Method Statement (Doc Ref. 6.10 7A.6A(A))</p>	<ul style="list-style-type: none"> The sections of hedgerow to be removed would be cleared outside of the amphibian hibernation period (October to February inclusive). If this is not possible, vegetation would be cut to just above ground level (to remove potential bird nesting habitat), but the roots would remain intact until the newt hibernation season is complete. The root system of vegetation would then be removed once the great crested newt hibernation season is over. This work would be overseen by a suitably experienced Ecological Clerk of Works (ECoW), under licence from Natural England. Any great crested newts encountered would be translocated to an appropriate pond within the ZOI, known to support them, with suitable adjacent terrestrial habitats. To minimise the risk of incidental mortality, all vegetation within the site boundary would be maintained in a state unsuitable for great crested newts, i.e. vegetation would be maintained to ground level, this would also support mitigation for reptiles. A suitably experienced ECoW would oversee all ground-breaking activities and would inspect all excavations, if uncovered, on a daily basis.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Great Crested Newt
			<ul style="list-style-type: none"> During the removal and reinstatement phase, the removal of the railway ballast and bunds would be conducted outside of amphibian and reptile hibernation period (October to February inclusive) where possible. Otherwise, a suitably experienced ECoW would oversee all dismantling and removals. A GRR GCN Method Statement (Doc Ref. 6.10 7A.6A(A)) has been produced that outlines the mitigation measures required for GCN. No GCN breeding ponds will be lost or directly impacted by the planned works in the short-term (construction phase) or long-term (operational phase). However, the construction phase activities will require standard operations including vegetation clearance and topsoil stripping. The temporary loss of sub-optimal habitat, in the form of arable land, and suitable habitat, hedgerows, will be during the construction phase and operational phase of the railway, however this will be replaced with areas of reinstated agricultural land and hedgerows after the development has been removed.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Great Crested Newt
			<ul style="list-style-type: none"> • Nevertheless, in absence of mitigation there is the potential to injure/kill individual GCN and, as such, precautionary working methods are proposed. • Accordingly, the proposed development is predicted to have non-significant, negligible temporary impacts on the great crested newt population. Once construction is complete the site area will be restored, therefore the impacts are considered to be negligible and only for the duration of the works. The vast majority of the affected terrestrial habitats are considered to be of low value for great crested newts providing few refuges (managed agricultural land). <p><u>GCN RAMS:</u> <u>Toolbox talk for great crested newts</u></p> <ul style="list-style-type: none"> • 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. • Site-specific toolbox talks will also be undertaken as necessary to identify the habitats present within the site that

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Great Crested Newt
			<p>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 be left undisturbed; and great crested newt should not be handled by contractors.</p> <p><u>Precautionary working methods:</u></p> <ul style="list-style-type: none"> A different precautionary working method will 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 responsible for determining the appropriate working methodology. The prescriptions of this method statement should be followed during works in any areas with potential to support great crested newts. These areas include but are not limited

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Great Crested Newt
			<p>to: tree roots, hedgerow bases, rough grassland areas, arable field margins, earth banks, log piles, rock piles and woodlands.</p> <ul style="list-style-type: none"> • 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 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. • 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: <ul style="list-style-type: none"> • Vegetation clearance in the active season. • Vegetation clearance in the hibernation season. • Ground-breaking works in the active and hibernation season. <p>Approach to vegetation clearance</p>

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Great Crested Newt
			<p>a) Vegetation clearance in the active season</p> <ul style="list-style-type: none"> • Prior to commencement of the vegetation clearance works, the ECoW will liaise with the contractor to clearly demarcate the required working area. • The precautionary working methods to safeguard great crested newt during vegetation clearance in the active season are set out below. <ul style="list-style-type: none"> • 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

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Great Crested Newt
			<p>by the ECoW. These will be dismantled by hand; this should be overseen by the ecologist.</p> <ul style="list-style-type: none"> 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 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 then be cut to as close to ground level as possible.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Great Crested Newt
			<ul style="list-style-type: none"> Vegetation cuttings are to be piled within the site so as to create additional sheltering opportunities to great crested newt within the site. <p>b) Vegetation clearance in the hibernation season</p> <ul style="list-style-type: none"> Prior to commencement of the vegetation clearance works, the ECoW will liaise with the contractor to clearly demarcate the required working area. The precautionary working methods to safeguard great crested newt during vegetation clearance in the hibernation season are set out below. <ul style="list-style-type: none"> 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

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Great Crested Newt
			<p>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.</p> <ul style="list-style-type: none"> • 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 newt within the site. <p>c) Approach to ground-breaking works including top-soil stripping (active season and hibernation period)</p> <ul style="list-style-type: none"> • 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 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.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Great Crested Newt
			<ul style="list-style-type: none"> 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. 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. The precautionary working methods to safeguard great crested newt during ground-breaking works in the active season are set out below. <ul style="list-style-type: none"> 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.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Great Crested Newt
			<ul style="list-style-type: none"> 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 topsoil will then be carefully removed using a toothed bucket (if permitted under the contractors reasonable avoidance measures method statement) under close ecological supervision by the ECoW. <p>d) Action to take if great crested newt are found</p> <ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> the works will stop; the great crested newt will not be handled or moved from its resting place; and

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Great Crested Newt
			<ul style="list-style-type: none"> 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. <p><u>Monitoring:</u> The TEMMP [REP5-088] outlines the proposed monitoring activities identified for great crested newt during the construction and operational phases.</p>

Table 3-6: Summary of measures to be implemented to conserve amphibians- specifically Common Toad, listed in the Wildlife and Countryside Act, in the Main Development Site and Associated Development Sites

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve amphibians- specifically Common Toad
Amphibians- specifically Common Toad but will benefit	Main development site	Volume 2, Chapter 14: Terrestrial Ecology and	<ul style="list-style-type: none"> There is no specific mitigation proposed for common toad, however tertiary reptile and amphibian mitigation measures will also benefit common toad.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

other amphibian species.		Ornithology [AS-033]	
	Northern park and ride	Volume 3, Chapter 7: Terrestrial Ecology and Ornithology [APP-363]	<ul style="list-style-type: none"> Common toad has been scoped out of the detailed assessment; however, mitigation measures employed to protect GCN would also protect this species.
	Southern park and ride	Volume 4, Chapter 7: Terrestrial Ecology and Ornithology [APP-394]	<ul style="list-style-type: none"> Common toad has been scoped out of the detailed assessment, no further measures implemented as no significant effect is considered likely.
	Freight management facility	Volume 8, Chapter 7: Terrestrial Ecology and Ornithology [APP-523]	<ul style="list-style-type: none"> Common toad has been scoped out of the detailed assessment, no further measures implemented as no significant effect is considered likely.
	Sizewell link road	Volume 6 Chapter 7: Terrestrial Ecology and Ornithology [APP-461]	<ul style="list-style-type: none"> Common toad has been scoped out of the detailed assessment; however, mitigation measures employed to protect GCN would also protect this species.

SIZEWELL C PROJECT –
RESPONSES TO EXAMINING AUTHORITY'S
WRITTEN QUESTIONS ISSUED ON 3RD AUGUST 2021

NOT PROTECTIVELY MARKED

	Two village bypass	Volume 5, Chapter 7: Terrestrial Ecology and Ornithology [APP-425]	<ul style="list-style-type: none"> Common toad has been scoped out of the detailed assessment, no further measures implemented as no significant effect is considered likely.
	Yoxford	Volume 7, Chapter 7: Terrestrial Ecology and Ornithology [APP-494]	<ul style="list-style-type: none"> Common toad has been scoped out of the detailed assessment, no further measures implemented as no significant effect is considered likely.
	Green rail route	Volume 9, Chapter 7: Terrestrial Ecology and Ornithology [APP-555]	<ul style="list-style-type: none"> Common toad has been scoped out of the detailed assessment; however, mitigation measures employed to protect GCN would also protect this species.

NOT PROTECTIVELY MARKED

Table 3-7: Summary of measures to be implemented to conserve Reptiles – adder, grass snake, common lizard, slow worm, listed in the Wildlife and Countryside Act, in the Main Development Site and Associated Development Sites

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve reptiles – adder, grass snake, common lizard, slow worm
Reptiles (adder, grass snake, common lizard, slow worm)	Main development site	<p>Volume 2, Chapter 14: Terrestrial Ecology and Ornithology [AS-033]</p> <p>Appendix 14C2A – Reptile Mitigation Strategy [APP-252]</p> <p>Update Reptile</p>	<p><u>Primary mitigation:</u></p> <ul style="list-style-type: none"> Large areas of habitats for reptiles have been established, in advance of construction, to enable the translocation of reptiles from the site (further detailed in the Reptile Mitigation Strategy (Volume 2, Appendix 14C2 [APP-252]). This has also created areas of sand-dominated habitat likely to be beneficial to invertebrate species such as those identified in the coastal and woodland ride habitats. <p><u>Tertiary mitigation:</u></p> <p>A Reptile Mitigation Strategy (Volume 2, Appendix 14C2 [APP-252] and Doc Ref. 9.88A) has been prepared. In summary, the proposed strategy involves:</p> <p><u>Reptile Capture and Exclusion:</u></p>

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve reptiles – adder, grass snake, common lizard, slow worm
		<p>Mitigation Strategy (Doc Ref. 9.88 A)</p> <p>Terrestrial Ecology Monitoring and Mitigation Plan [REP5-088]</p> <p>Volume 2, Chapter 14, Appendix 14C2B Sizewell C Project – Main Development Site – Reptile Method Statement [APP-252]</p>	<ul style="list-style-type: none"> • Reptile translocation would only take place during the period when reptiles are above ground and active (March to late October), and during suitable weather conditions. • Translocation will comprise compartmentalising areas to be cleared of reptiles to allow the sequential phasing of the clearance operation. • A number of survey techniques would be used to capture reptiles from the donor sites, including: <ul style="list-style-type: none"> • Laying artificial cover object (ACO's; also referred to as 'reptiles tins' or 'artificial refugia'). • Checking natural refugia and hibernacula features that are present within donor sites. • Walking pre-defined transects and attempting to hand-catch any observed reptiles (e.g. basking reptiles). • Any reptiles caught would be placed in a suitable container and moved to a receptor site. <p><u>Habitat manipulation:</u></p>

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve reptiles – adder, grass snake, common lizard, slow worm
		SZC outline Landscape and Ecology Management Plan (oLEMP) [REP1-010]	<ul style="list-style-type: none"> Habitat manipulation is proposed as a sole method for the displacement of reptiles and in conjunction with capture and translocation techniques to improve efficiency. <p><u>Vegetation removal:</u></p> <ul style="list-style-type: none"> Vegetation will be removed in two phases: <ul style="list-style-type: none"> 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. The area will then be left undisturbed for at least 24 hours during suitable weather conditions. Phase 2: Where vegetation within the mitigation area remains dense, this will be cleared to ground level, with arisings removed. The area will again be left undisturbed for at least 24 hours during suitable weather conditions. Phase 2 clearance will commence on completion of a capture and translocation exercise or in line with habitat manipulation in target areas. 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.

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve reptiles – adder, grass snake, common lizard, slow worm
			<p>Where necessary, this will be undertaken in conjunction with a secondary hand search and destructive search. The working area will be maintained free of vegetation for the duration of the works.</p> <p><u>Hand and Destructive Searches:</u></p> <ul style="list-style-type: none"> Such activities will 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 be undertaken throughout the process to aid captures. For habitat manipulation, this will 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. 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

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve reptiles – adder, grass snake, common lizard, slow worm
			<p>translocation is proposed, destructive searches will not be conducted until the translocation effort is deemed complete.</p> <ul style="list-style-type: none"> All works that have the potential to impact reptiles would be undertaken following the agreed Method Statement and would be overseen by an ECoW. <p><u>Welfare:</u></p> <ul style="list-style-type: none"> Welfare measures will be implemented to minimise stress to the animals and/or the risk of injury or death. Translocated animals would be kept in captivity only for as long as is necessary and would 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 would be transported separately from the other species to avoid the risk of predation and reduce stress. The staff responsible for undertaking the mitigation measures, and specifically the capture and translocation exercise, would 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.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve reptiles – adder, grass snake, common lizard, slow worm
			<p><u>Monitoring:</u></p> <ul style="list-style-type: none"> 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. The TEMMP [REP5-088] outlines the proposed monitoring activities identified for reptiles and their habitats during the construction and operational phases. <p><u>Management:</u></p> <ul style="list-style-type: none"> Each of the receptor sites would be actively managed to maximise their reptile population carrying capacity. This would be implemented through the production of a management plan for each receptor site to cover the construction period. <p><u>Long term landscape strategy:</u></p> <ul style="list-style-type: none"> The final restoration plans as shown in the indicative oLEMP [REP1-010] will provide a long-term gain in suitable reptile habitat and connectivity on a wider, landscape scale, as a result of the creation of dry Sandlings grassland from the

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve reptiles – adder, grass snake, common lizard, slow worm
			<p>arable fields east of Upper Abbey Farm (the marsh harrier habitat compensation area), at Aldhurst Farm and in the areas south of Sandy Lane (including Broom Covert), the 'Studio Field complex'.</p> <ul style="list-style-type: none"> Although the construction period would result in temporary habitat fragmentation across the EDF Energy estate, this would be mitigated in the long term by greater landscape-wide opportunities for 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). The Sizewell C Project – Main Development Site – Reptile Method Statement [APP-252] outlines tool box talk requirements, precautionary working methods which includes methods of vegetation clearance and the translocation methodology. This method statement will be developed in line with the construction phasing plan and all works that

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve reptiles – adder, grass snake, common lizard, slow worm
			have the potential to impact reptiles would be undertaken following the final version; such works would also be overseen by an ECoW.
	All AD Sites including: Northern park and ride	Volume 3, Chapter 7: Terrestrial Ecology and Ornithology [APP-363] Volume 3, Chapter 7, Appendix 7A, Annex 7A.6B RAMS Reptiles [APP-364]	<u>Tertiary mitigation:</u> The following measures would be undertaken prior to the commencement of construction: <ul style="list-style-type: none"> • an inspection would be undertaken by a suitably experienced ecologist of any potential reptile refugia, after which the reptiles would be removed; and • a phased vegetation clearance process would be undertaken to displace any reptiles from the site, under the supervision of a suitably experienced ecologist. Removal of vegetation and of places of shelter/hibernation features would be undertaken outside of the reptile hibernating period (October to February inclusive), during periods of warm, dry weather (with due consideration of the seasonal constraints of clearance works during breeding bird season). If this is not possible, vegetation would 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 then be removed once the reptile

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve reptiles – adder, grass snake, common lizard, slow worm
	Southern park and ride	Volume 4, Chapter 7: Terrestrial Ecology and Ornithology [APP-394]	<p>hibernation season is over. Clearing of vegetation would be undertaken under the supervision of the suitably experienced ECoW.</p> <p><u>RAMS:</u> <u>Toolbox talk:</u></p> <ul style="list-style-type: none"> Prior to commencement of the vegetation clearance 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 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.
	Two village bypass	Volume 4, Chapter 7, Appendix 7A, Annex 7A.5B RAMS Reptiles [APP-395]	
		Volume 5, Chapter 7: Terrestrial Ecology and Ornithology [APP-425]	<ul style="list-style-type: none"> The toolbox talk will stress that potential reptile refugia / hibernation features will be left undisturbed; and reptiles will not be handled by contractors. There is a declaration for those present to sign to confirm they have understood the constraints and actions presented.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve reptiles – adder, grass snake, common lizard, slow worm
	Sizewell link road	<p>Volume 5, Appendix 7A, Annex 7A-6D RAMS Reptiles [APP-426]</p> <p>Volume 6 Chapter 7: Terrestrial Ecology and Ornithology [APP-461]</p> <p>Volume 6, Appendix 7A, Annex 7A-6B RAMS Reptiles [APP-462]</p>	<p><u>Vegetation clearance:</u></p> <ul style="list-style-type: none"> 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 will 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 undertaken under the direct supervision of the Ecological Clerk of Works (ECoW), in order to reduce the suitability of the habitats within the site. Where it is necessary to undertake vegetation clearance in and around suitable reptile habitat the following precautionary measures will be put in place to avoid encountering and accidentally injuring reptiles: Vegetation clearance (below 150mm) and ground-breaking works will only be conducted in the active season (March to October inclusive seasonally)

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve reptiles – adder, grass snake, common lizard, slow worm
	Yoxford	<p>Volume 7, Chapter 7: Terrestrial Ecology and Ornithology [APP-494]</p> <p>Volume 7, Chapter 7: Terrestrial Ecology and Ornithology [APP-494]</p>	<p>dependent)1 and when the weather is suitable (i.e. it is warm, approximately 8oC should be the minimum temperature). The works will not be conducted early in the morning before reptiles have had a chance to 'warm up';</p> <ul style="list-style-type: none"> the ECoW will work with the contractor to 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 be walked by the ECoW to disturb reptiles prior to works commencing; the ECoW will 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 be given to allow for any reptiles present at the time of works to move away from the cut areas;
	Freight management facility	<p>Volume 8, Chapter 7: Terrestrial Ecology and Ornithology [APP-523]</p>	

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve reptiles – adder, grass snake, common lizard, slow worm
	Green rail route	<p>Volume 8, Appendix 7A, Annex 7A04A, RAMS Reptiles [APP-524]</p> <p>Volume 9, Chapter 7: Terrestrial Ecology and Ornithology [APP-555]</p> <p>Volume 9, Appendix 7a, Annex 7A-6B RAMS Reptiles [APP-556]</p>	<ul style="list-style-type: none"> the grassland / remaining 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 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. 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 will be overseen by the ecologist. If a reptile is found the ecologist will decide whether or not it is appropriate to relocate the animal; shelter features that require removal will 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 will be dismantled by hand and moved out of the working area, supervised by the ECoW where appropriate. Such

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve reptiles – adder, grass snake, common lizard, slow worm
			<p>materials will be lifted (not dragged) out of the working area; and</p> <ul style="list-style-type: none"> • if reptiles are found, the ECoW will move the animals out of the way to a place of safety. The exact location would 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 not be handled by contractors, as common lizards and slow worms may shed their tails if handled inappropriately. • Should any reptiles be found on site during the works when the ECoW isn't present, the ECoW will be contacted immediately for advice. • A staged vegetation clearance exercise at a suitable time of year will be undertaken in order to safeguard any reptiles present at the time of works. Such works will take place under the supervision of the ECoW. Such an approach will minimise the potential harm caused to

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve reptiles – adder, grass snake, common lizard, slow worm
			<p>reptiles within the site as it will avoid disturbing this species group during the hibernation period.</p> <ul style="list-style-type: none"> • Prior to commencement of the vegetation clearance works, the ECoW will liaise with the contractor to clearly demarcate the required working areas. • If shelter features are present (i.e. log and vegetation piles), those will be checked by the ECoW before their removal (should this be required). • If shelter features are present that require removal, those will 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 will 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. • Should works be required in winter (November to February inclusive) or in cold weather (below 8 oC overnight temperature) the ECoW will advise upon bespoke working methods. Likely to require a hand

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve reptiles – adder, grass snake, common lizard, slow worm
			<p>search and a staged vegetation clearance approach under direct supervision.</p> <ul style="list-style-type: none"> The vegetation arisings will be collected and used to create habitat piles in areas adjacent to the site (which are to be retained during the development works). The vegetation clearance contractors on site will utilise equipment specific to their clearance methods as per their reasonable avoidance measures. <p><u>Ground-breaking works:</u></p> <ul style="list-style-type: none"> 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. 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 the works take place during the reptile hibernation period (the dormancy period runs

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve reptiles – adder, grass snake, common lizard, slow worm
			<p>from November to February (inclusive) and initially will be avoided where possible), it is considered necessary for the ground-breaking works to be undertaken under direct supervision of the ECoW. Small sections of the topsoil removed and inspected by the ECoW. Hand-digging under ECoW supervision may also be required.</p> <ul style="list-style-type: none"> Contractors will utilise the equipment as per their reasonable avoidance measures method, For example: JCB 16C-I new generation 1 tonne mini digger; spade; spill kits; and Chapter 8 barrier/ Heras fencing.

Table 3-8: Summary of measures to be implemented to conserve all UK bat species, listed in the Wildlife and Countryside Act, in the Main Development Site and Associated Development Sites

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
Bats (all UK species)	Main development site	Volume 2, Chapter 14: Terrestrial	<p><u>Primary mitigation:</u></p> <ul style="list-style-type: none"> The SSSI crossing will consist of a 30m open single span bridge. This will facilitate the passage of bats through the

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
		<p>Ecology and Ornithology [AS-033]</p> <p>Appendix 14C1A – Bat Mitigation Strategy [APP-252]</p> <p>Terrestrial Ecology Monitoring and Mitigation Plan [REP5-088]</p> <p>Sizewell C Project Draft Bat Method Statement (Doc Ref. 9.92)</p>	<p>structure. Lighting measures on the crossing would be deployed to ensure the culvert is viable for use by bats.</p> <ul style="list-style-type: none"> A detailed lighting strategy would be implemented in accordance with the Lighting Management Plan (Volume 2, Appendix 2B) (Doc Ref. 6.3 2B(A)) . The strategy would comply with best practice to minimise impacts on nocturnal species such as bats that may use nearby habitats for roosts or foraging. Guidance within the latest Institution of Lighting Professionals (ILP) Guidance Note would be followed. The majority of the woodland resource within the EDF Energy estate would be retained including the line of mature broadleaved trees on the northern edge of Kenton Hills, known to support features of importance for roosting bat species and also including most of the well-developed hedgerows and mature trees along Bridleway 19, east of Upper Abbey Farm. 45 alternative roost sites (bat boxes) have been erected in advance of construction to the north and south of the site within woodland least likely to be directly affected by noise and lighting disturbance, should the proposed development displace roosting bats from woodland more directly exposed

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
			<p>to disturbance. In addition, a purpose-built 'bat house' would be constructed to provide alternative roosting opportunities for bats. Should any roost loss be confirmed, roosts would be replaced at an appropriate ratio, to be agreed with Natural England.</p> <ul style="list-style-type: none"> The oLEMP [REP1-010] outlines management actions to return existing arable land on the EDF Energy estate post-construction to Suffolk Sandlings habitat comprising dry acid grassland and with additional areas of woodland and scrub. In the operational phase of the development, this landscape-scale habitat creation approach would replace existing intensively managed arable farmland with habitats of greater biodiversity value and would increase habitat connectivity. The oLEMP includes also long-term management prescriptions and a monitoring programme for habitats created ensuring that these areas deliver the habitats proposed. <p><u>Tertiary mitigation:</u></p> <ul style="list-style-type: none"> The appointment of an Ecological Clerk of Works (ECoW) to manage ecological issues on site, undertaken or supervise

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
			<p>ongoing works in relation to protected species, supervise works in sensitive areas and undertake monitoring as required.</p> <ul style="list-style-type: none"> • Training for construction workers, in the form of tool box talks, on ecological constraints including retained habitats, designated sites and protected species considerations. • A Bat Mitigation Strategy (Volume 2, Appendix 14C1A [APP-252]) has been provided as part of the ES. • A final inspection of trees to be removed would be undertaken as close to the timing of felling as possible to take into account the regular roost switching behaviour displayed by tree-roosting bat species. Should bats (or evidence of use by bats) be identified, the mitigation strategies laid out in the licence application would be implemented (for example, the fitting of exclusion devices and/or soft-felling). The following approaches would be used: <ul style="list-style-type: none"> • To mitigate for the confirmed and potential loss of tree roosts, replacement roosts would be installed on retained trees in suitable locations within the site boundary and within the wider EDF Energy estate. This provision would primarily take the form of a

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
			<p>variety of bat boxes which would be used to support different species. However, the transfer of potential roost features, bark replacement and veteranisation of retained trees would be considered where appropriate. This is in addition to that already provided for barbastelle and detailed under primary mitigation.</p> <ul style="list-style-type: none"> • Mitigation of roosts within buildings, particularly maternity and/or hibernation roosts that may be functionally lost would require more substantial mitigation. • Where habitat features would be retained within the site during construction, measures to ensure the protection of these features would be implemented (appropriate to the habitat concerned). <p><u>Additional detail on the measures:</u></p> <ul style="list-style-type: none"> • Once construction is complete and the temporary construction area has been removed, landscape-scale habitat creation measures to create acid grasslands would have developed in accordance with the oLEMP. The general pattern of the EDF Energy estate would be maintained as an

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
			<p>open landscape with small woodland blocks but fields which are currently intensively managed as arable or improved grassland would be converted to open acid grassland that would result in a greater invertebrate prey biomass (and would establish more rapidly than woodland).</p> <ul style="list-style-type: none"> • Supplementary scrub planting and strengthening of hedgerows and woodland margins and some new woodland blocks are included within the outline landscape design proposals which would enhance connectivity for bats. The measures as a whole would provide a net biodiversity gain compared to the largely arable landscape currently present across the site. <p>The following habitat creation measures have already been undertaken by EDF Energy;</p> <ul style="list-style-type: none"> • 5ha of wetland (reedbed) has already been established at Aldhurst Farm together with approximately 60 ha of acid grassland. • 10ha of species-rich acid grassland at Broom Covert has been taken out of intensive cattle grazing and grassland and

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
			<p>scrub allowed to recover and re-establish as part of the reptile mitigation.</p> <ul style="list-style-type: none"> 40ha of acid grassland with 40% scrub planting has been established on former arable fields as part of the reptile mitigation. 40ha of grassland and scrub planting will be established to provide foraging habitat for marsh harrier. <p><u>Monitoring:</u></p> <ul style="list-style-type: none"> Monitoring the 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). The areas to which this applies are described in the Non licensed method statement. The TEMMP [REP5-088] outlines the proposed monitoring activities identified for bats during the construction and operational phases.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
			<ul style="list-style-type: none"> A draft Sizewell C Project Bat Method Statement (Doc Ref. 9.92) has been compiled that details the aforementioned key approaches to mitigating potential impacts to the bat populations present. Roosting features / roosts due to be lost will be replaced with ratios as set out below: <ul style="list-style-type: none"> 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. 16 bat boxes are required to replace the three roosts due to be lost and 224 additional roost mitigation features to compensate for the loss of high or moderate roosting features within the Main Development Site. At least half will be generated naturally or created through veteranisation within new woodland planting. The bat boxes will be mounted on suitable trees prior to works commencing. There will be approximately 1 – 3 bat boxes per tree. These boxes will remain in place and suitable

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
			<p>for bats for 15 years. This number of bat boxes ensures that all roosts lost are adequately mitigated for immediately.</p> <ul style="list-style-type: none"> • The maturation of broadleaf woodland planting through natural formation of Potential Roost Features (PRFs) in the very long-term will create at least another 191 PRFs. • A purpose built 'bat house' is proposed at Lower Abbey Farm, it will be located close to existing flight lines, surrounded by vegetation insofar as is possible and where necessary additional planting in the vicinity of the bat house, to improve habitat connectivity to the existing flight paths. • Any additional confirmed roosts discovered during bat rescue procedures will be compensated by additional bat boxes or similar mitigation features as per the ratios detailed above. <p><u>Monitoring:</u></p> <ul style="list-style-type: none"> • The bat house will be subject to inspection during the maternity season (May – July) for five years beyond the completion of construction. Hibernation roosts within the structure will be subject to inspection during the winter hibernation season (December – February).

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
			<ul style="list-style-type: none"> The bat boxes installed on the suitable retained trees will be subject to inspection. The bat boxes will be checked for usage in September by the named ecologist/accredited agent on an annual basis during the construction phase from one year after installation. Boxes would continue to be monitored for five years beyond the completion of construction. Any boxes that require maintenance/repair/replacement will only be moved once they have been inspected by the named ecologist/accredited agent to ensure no bats are disturbed. If the bat boxes are damaged or missing, they will be replaced. In the unlikely events that the mitigation is shown to be ineffective (i.e. no evidence of bats using the bat boxes) then the bat box location may be amended. The conditions of the habitats in the vicinity of the bat boxes will also be checked by the named ecologist/accredited agent and any necessary management requirements reported back to EDF.
	Northern park and ride	Volume 3, Chapter 7:	<u>Primary mitigation / design:</u>

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
		<p>Terrestrial Ecology and Ornithology [APP-363]</p> <p>Volume 3, Chapter 7, Appendix 7A Annex 7A.6A RAMS Bats [APP-364]</p> <p>Terrestrial Ecology Monitoring and Mitigation Plan [REP5-088]</p>	<ul style="list-style-type: none"> Operational lighting for the proposed development would be designed to prevent light spill to Little Nursery Wood and other habitats, and light levels would not exceed 0.1lux along the eastern side of this wood. The lighting design for the proposed development would use light fittings chosen to limit stray light. Guidance within the latest Institution of Lighting Professionals Guidance Note would 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. The woodland would be retained in its entirety, with a buffer distance of 20m between the woodland and the proposed development. There would be no direct loss of woodland habitat, and its associated species, and the buffer distance would assist in minimising impacts associated with the proposed development (such as noise, lighting and human disturbance). In addition to the previous measures, close-boarded fencing would be erected along the inside of the security fence where it is adjacent to Little Nursery Wood to provide additional mitigation for lighting impacts (including those from vehicle

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
			<p>headlights) and noise impacts. The close-boarded fencing would be retained during the operational phase to act as screen for lighting (from vehicle headlights) and noise impacts.</p> <ul style="list-style-type: none"> 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. <p><u>Tertiary mitigation:</u></p> <ul style="list-style-type: none"> Construction work would take place during Monday to Saturday 07:00 to 19:00 hours, and some lighting may be required during the winter months, dependent upon what construction activities are taking place. Outside of these hours, lighting would be required at night for site security. Temporary construction lighting would be controlled to minimise light spill on surrounding habitats. This would

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
			<p>minimise impacts on nocturnal species such as bats that may use the nearby tree lines or habitats for commuting, roosts or foraging. The lighting design would use light fittings chosen to limit stray light and minimise impacts on sensitive species. The lighting would also be designed to minimise the visibility from sensitive receptors off-site.</p> <p><u>RAMS:</u> <u>Toolbox talk:</u></p> <ul style="list-style-type: none"> • Prior to commencement of the vegetation clearance 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 bats. 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 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.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
			<p><u>Precautionary working methods:</u></p> <ul style="list-style-type: none"> • Little Nursery Wood would be retained in its entirety with a buffer distance of 20m between the woodland and the proposed development. • Close-boarded fencing where the proposed development site abuts Little Nursery woodland. • The three trees within the development site with the potential to support roosting bats would be retained. No trees will be felled as part of this scheme. • Construction lighting would be designed to prevent spill and exposure on to Little Nursery Wood. The lighting design for the proposed development would 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 would be followed as far as possible. These measures would minimise impacts on nocturnal species such as bats that may use the nearby tree lines or habitats for roosting or foraging. • 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-

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
			<p>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.</p> <ul style="list-style-type: none"> A10m buffer from the development would be maintained along the northeast, south-east and south-west borders. <p><u>Vegetation clearance:</u></p> <ul style="list-style-type: none"> 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. Works will be undertaken outside of all tree and hedgerow root protection zones that would not be removed as part of the proposed development. Tree protective fencing as described in section 6.2 of British Standard 5837:2012 will 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 will remain intact throughout the duration of the works and only be removed upon completion.

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
			Weather-proof notices will 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 and any advice provided adhered to, to secure the long-term survival of the tree/hedgerow.
	Southern park and ride	<p>Volume 4, Chapter 7: Terrestrial Ecology and Ornithology [APP-394]</p> <p>Volume 4, Chapter 7, Appendix 7A Annex 7A.5A RAMS Bats [APP-395]</p>	<p><u>Primary mitigation:</u></p> <ul style="list-style-type: none"> Operational lighting would be designed so that light spill beyond the site boundary would be minimal (lighting levels would be less than between 1.0 lux), 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 use light fittings chosen to limit stray light. Guidance within the latest Institution of Lighting Professionals Guidance Note would be followed as far as possible. These measures would minimise impacts on nocturnal species such as bats that may use the nearby tree lines or habitats for roosts or foraging.

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
		<p>Terrestrial Ecology Monitoring and Mitigation Plan [REP5-088]</p> <p>Sizewell C Project Bat Method Statement (Doc Ref. 9.92)</p>	<p><u>Tertiary mitigation:</u></p> <ul style="list-style-type: none"> Construction work would take place during Monday to Saturday 07:00–19:00 hours, and some lighting in winter may be required dependent upon what construction activities are taking place. Outside of these hours, lighting may be required at night for safety or security. Temporary construction lighting would be controlled to minimise light spill on surrounding habitats. This would minimise impacts on nocturnal species such as bats that may use the nearby tree lines, or habitats for commuting, roosts or foraging. The lighting design would use light fittings chosen to limit stray light, and minimise impacts on sensitive species. The lighting would also be designed to minimise the visibility from sensitive receptors off-site. The proposed development includes the removal of several trees including three trees identified as having the potential to support roosting bats. Management measures would likely include: <ul style="list-style-type: none"> A final inspection of these trees would be undertaken as close to the timing of felling as

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
			<p>possible to take into account the regular roost-switching behaviour displaced by tree-roosting bat species. Should bats (or evidence of use by bats) be identified, the mitigation strategies laid out in the licence application(s) would be implemented (for example, the fitting of exclusion devices).</p> <ul style="list-style-type: none"> ○ Felling of trees would generally be undertaken in September or October, to avoid both the maternity and hibernation periods during which bats are more vulnerable to disturbance (this timing also avoids the breeding bird season). <p><u>Monitoring:</u></p> <ul style="list-style-type: none"> • There would be regular checks of construction lighting to monitor and correct for any extraneous light spill into surrounding habitats. • The TEMMP [REP5-088] outlines the proposed monitoring activities identified for bats during the construction and operational phases.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
			<ul style="list-style-type: none"> A draft Sizewell C Project Bat Method Statement (Doc Ref. 9.92) has been compiled that details the key approaches to mitigating potential impacts to the bat populations present. Roosting features / roosts due to be lost will be replaced with ratios as set out below: <ul style="list-style-type: none"> 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. To mitigate for the roosting features to be lost, at least 6 bat boxes are proposed to be installed <p><u>Monitoring:</u></p> <ul style="list-style-type: none"> The bat boxes installed on the suitable retained trees will be subject to inspection. The bat boxes will be checked for usage in September by the named ecologist/accredited agent on an annual basis during the construction phase from one year after installation. Boxes would continue to be monitored for five years beyond the completion of construction.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
			<ul style="list-style-type: none"> Any boxes that require maintenance/repair/replacement will only be moved once they have been inspected by the named ecologist/accredited agent to ensure no bats are disturbed. If the bat boxes are damaged or missing, they will be replaced. In the unlikely events that the mitigation is shown to be ineffective (i.e. no evidence of bats using the bat boxes) then the bat box location may be amended. The conditions of the habitats in the vicinity of the bat boxes will also be checked by the named ecologist/accredited agent and any necessary management requirements reported back to EDF. <p><u>RAMS:</u> <u>Toolbox talk:</u></p> <ul style="list-style-type: none"> Prior to commencement of the vegetation clearance 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 bats. Site-specific toolbox talks will also be undertaken as necessary to identify the habitats present

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
			<p>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.</p> <p><u>Precautionary working methods:</u></p> <ul style="list-style-type: none"> • Construction lighting would 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 use light fittings chosen to limit stray light. Guidance within the latest Institution of Lighting Professionals Guidance Note would be followed as far as possible. These measures would minimise impacts on nocturnal species such as bats that may use the nearby tree lines or habitats for roosts or foraging. • 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

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
			<p>active. Incidental mortality associated with traffic movements would therefore not have a significant effect on the bat assemblage.</p> <ul style="list-style-type: none"> • Close-boarded fencing where the proposed development site abuts areas of woodland to provide additional protection from vehicle headlights and noise. • Initially all trees to be removed will be reassessed for bat roosting potential. • Any trees identified as having low bat roosting potential will be removed using a soft felling methodology outlined below with a suitability experienced, appropriately licensed, bat worker or bat worker assistant present. Trees will generally be removed in October, thereby avoiding the sensitive maternity (April-September) and hibernation (November-February) periods for bats. • For any trees with moderate or high roosting potential, a thorough pre works check for roosting bats will be undertaken. The methodology and required survey effort for these pre works checks will depend upon the status of the roosting features within the trees, but may include:

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
			<ul style="list-style-type: none"> • a climbed or ground based tree inspection using an endoscope and / or torch; and emergence / re-entry surveys. • 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. • Should additional emergence re-entry surveys be required these will be undertaken between April and September inclusive. If no roosts are found, the approach outlined below will be undertaken. • All trees with potential roost features for bats will be soft felled using the following precautionary measures: <ul style="list-style-type: none"> ○ trees classed as having low potential to support roosting bats, shall be felled under the watching brief of the ECoW; ○ where potential roost features for bats cannot be exhaustively checked they will be section felled, with each section carefully lowered to the ground. Cuts will be made at least 50 cm beyond the extent of the potential roost feature;

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
			<ul style="list-style-type: none"> ○ if limbs or large branches require felling, consideration will 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 will be wedged open prior to removal of the limb/branch; ○ the stems of dense ivy will 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 will 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 will 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. ● 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. ● To mitigate for the loss of the tree and potential roost resources, bat boxes would be installed on retained trees in

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
			<p>suitable locations within the site boundary, prior to felling. 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. A variety of bat boxes would be used to support different species.</p> <p><u>Facilitating work requirements</u></p> <p><u>a) Vegetation clearance methods</u></p> <ul style="list-style-type: none"> As set out above, vegetation clearance works are required in order to facilitate the development of the site. Works will be undertaken outside of all tree and hedgerow root protection zones that would not be removed as part of the proposed development. Tree protective fencing as described in section 6.2 of British Standard 5837:2012 will 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 will remain intact throughout the duration of the works and only be removed upon completion. Weather-proof notices will be attached to any protective fencing located adjacent to

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
			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 and any advice provided adhered to, to secure the long-term survival of the tree/hedgerow.
	Freight management facility	<p>Volume 8, Chapter 7: Terrestrial Ecology and Ornithology [APP-523]</p> <p>Volume 8, App 7A, Annex 7A04A RAMS Bats</p> <p>Terrestrial Ecology Monitoring and</p>	<p><u>Primary mitigation:</u></p> <ul style="list-style-type: none"> Lighting would be provided at the perimeter, and parking areas, for security and safety reasons. Lanterns would utilise LED based light fittings to ensure energy efficiency with zero-degree tilt, and lighting columns along the perimeter would use demountable shields 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 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 would be followed as far as possible. These measures would minimise impacts on

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
		<p>Mitigation Plan [REP5-088]</p> <p>Sizewell C Project Bat Method Statement (Doc Ref. 9.92)</p>	<p>nocturnal species such as bats that use the nearby tree lines or habitats for roosting or foraging.</p> <p><u>Tertiary mitigation:</u></p> <ul style="list-style-type: none"> Construction work would take place during Monday to Saturday 07:00 to 19:00 and some lighting may be required during the Winter months, dependent upon the construction activities which are taking place; however, some activities may require 24 hour working and some targeted lighting would be required for site security. Temporary construction lighting would be controlled to minimise light spill on surrounding habitats. This would minimise impacts on nocturnal species such as bats that may use the nearby tree lines or habitats for commuting, roosts or foraging. The lighting design would use light fittings chosen to limit stray light and minimise impacts on sensitive species. The lighting would also be designed to minimise the visibility from sensitive receptors off-site. The proposed development includes the removal of several trees identified as having the potential to support roosting bats. Management measures would likely include:

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
			<ul style="list-style-type: none"> ○ A final inspection of these trees would be undertaken as close to the timing of felling as possible to account for the regular roost-switching behaviour displaced by tree-roosting bat species. Should bats (or evidence of use by bats) be identified, the mitigation strategies laid out in the licence application(s) would be implemented (for example, the fitting of exclusion devices). ○ Felling would be undertaken in September/October and so would avoid the maternity and hibernation periods during which bats are more vulnerable to disturbance (this timing also avoids the breeding bird season). However, timing requirements would be confirmed following a pre-felling inspection, which could include a climbed inspection, if required. <p><u>Monitoring:</u></p> <ul style="list-style-type: none"> • There would be regular checks of construction lighting to monitor and correct for any excessive light spill into the surrounding habitats and particularly into the adjacent hedgerows and habitats.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
			<ul style="list-style-type: none"> There would be regular checks of operational lighting to monitor and correct for any excessive light spill into the surrounding habitats and particularly into the hedgerows. The TEMMP [REP5-088] outlines the proposed monitoring activities identified for bats during the construction and operational phases. A draft Sizewell C Project Bat Method Statement (Doc Ref. 9.92) has been compiled that details the key approaches to mitigating potential impacts to the bat populations present. Roosting features / roosts due to be lost will be replaced with ratios as set out below: <ul style="list-style-type: none"> 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. Only one tree with moderate value is due to be lost, therefore at least 1 bat box is proposed to be installed to mitigate this impact.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
			<p><u>Monitoring:</u></p> <ul style="list-style-type: none"> The bat box installed on the suitable retained tree will be subject to inspection. The bat box will be checked for usage in September by the named ecologist/accredited agent on an annual basis during the construction phase from one year after installation. The box would continue to be monitored for five years beyond the completion of construction. If the box requires maintenance/repair/replacement, it will only be moved once it has been inspected by the named ecologist/accredited agent to ensure no bats are disturbed. If the box is damaged or missing, it will be replaced. In the event that the mitigation is shown to be ineffective (i.e. no evidence of bats using the bat box) then the bat box location may be amended. The conditions of the habitats in the vicinity of the bat box will also be checked by the named ecologist/accredited agent and any necessary management requirements reported back to EDF.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
			<p><u>RAMS:</u></p> <p><u>Toolbox talk:</u></p> <ul style="list-style-type: none"> Prior to commencement of the vegetation clearance 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 bats. 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 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. <p><u>Precautionary working methods:</u></p> <ul style="list-style-type: none"> Lighting would be provided at the perimeter, and parking areas, for security and safety reasons. Lanterns would utilise LED based light fittings to ensure energy efficiency with zero-degree tilt, and lighting columns along the perimeter would use focused optics to reduce backward

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
			<p>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 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 would 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;</p> <ul style="list-style-type: none"> • 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. • Initially all trees to be removed will be reassessed for bat roosting potential.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
			<ul style="list-style-type: none"> Any trees identified as having low bat roosting potential will be removed using a soft felling methodology with a suitability experienced, appropriately licensed, bat worker or bat worker assistant present. This is outlined below. Trees will generally be removed in October, thereby avoiding the sensitive maternity (April-September) and hibernation (November-February) periods for bats. For any trees with moderate or high roosting potential, a pre works inspection for roosting bats will be undertaken. The methodology and required survey effort for these pre works checks will depend 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. 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.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
			<ul style="list-style-type: none"> • If no roosts are found, the approach outlined below will be undertaken. • All trees with potential roost features for bats will be soft felled using the following precautionary measures: • trees classed as having low potential to support roosting bats, shall be felled under the watching brief of the ECoW; • where potential roost features for bats cannot be exhaustively checked they will be section felled, with each section carefully lowered to the ground. Cuts will be made at least 50 cm beyond the extent of the potential roost feature; • if limbs or large branches require felling, consideration will 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 will be wedged open prior to removal of the limb/branch; • the stems of dense ivy will be cut at ground level at least 48 hours before the tree is felled; and

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
			<ul style="list-style-type: none"> once the trees have been felled the potential roost features will be checked on the ground by a suitably experienced bat ecologist. If any potential roost feature can still not be exhaustively checked that section will 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. 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. To mitigate for the loss of the tree and potential roost resources, bat boxes would 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. A variety of bat boxes would be used to support different species. <p><u>Facilitating work requirements</u> a) <u>Vegetation clearance methods</u></p>

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
			<ul style="list-style-type: none"> Works will be undertaken outside of all tree and hedgerow root protection zones that would not be removed as part of the proposed development. Tree protective fencing as described in section 6.2 of British Standard 5837:2012 will 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 will remain intact throughout the duration of the works and only be removed upon completion. Weather-proof notices will 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 and any advice provided adhered to, to secure the long-term survival of the tree/hedgerow.
	Sizewell link road	Volume 6 Chapter 7: Terrestrial	<u>Primary mitigation:</u>

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
		<p>Ecology and Ornithology [APP-461]</p> <p>Volume 6, Appendix 7A, Annex 7A-6B RAMS Bats [APP-462]</p> <p>Terrestrial Ecology Monitoring and Mitigation Plan [REP5-088]</p> <p>Sizewell C Project Bat Method Statement (Doc Ref. 9.92)</p>	<ul style="list-style-type: none"> The route of the proposed development would be mostly unlit, thereby maintaining a dark corridor, minimising the potential impacts to nocturnal species. To ensure road safety, lighting would be provided at the A12 and B1122 roundabouts. The remaining junctions would have low minor road flows and be similar to existing unlit rural junctions and would be unlit to minimise light spill. Operational lighting design would be compliant with relevant highway standards, and where possible would be chosen to limit stray light. Guidance within the latest Institution of Lighting Professionals Guidance Note: Bats and artificial lighting in the UK would be followed as far as possible. These measures would minimise impacts on nocturnal species, such as bats that may use the nearby tree lines, or habitats for roosting or foraging, and would also maximise the use of reinstated 'bat crossing points'. In accordance with the LEMP (Doc Ref. 8.3 B(B)), crossing points (bat hop-overs) to facilitate the passage of bats across the road alignment have been incorporated in the design where foraging or commuting routes have been identified, to reduce the potential for incidental

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
		Sizewell Link Road Landscape and Ecological Management Plan (Doc Ref. 8.3 B(B))	<p>mortality as a result of bats crossing the road and colliding with vehicles. These features would comprise hedgerow planting. Also, features such as oversized culverts, crop kerb, filter drains / underpasses that will benefit both bats and great crested newts will remain functional and provide safe crossing points over the course of the operational phase.</p> <ul style="list-style-type: none"> Also, in accordance with the LEMP (Doc Ref. 8.3 B(B)), existing linear wooded corridors will be reinforced and expanded and others created to provide greater long-term connectivity for bats and other species on a landscape scale. Specifically, native woodland would be created east of the East Suffolk Line, in the vicinity of the existing Fordley Road, in the vicinity of Trust Farm, and linking Plumhill Covert to Pretty Road. Landscape features and mitigation areas for nocturnal species would not be illuminated or subject to light spill and dark corridors provided. <p><u>Tertiary mitigation:</u></p>

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
			<ul style="list-style-type: none"> • Construction lighting, where required, would be provided at the minimum luminosity and would be designed, positioned and/or directed so as not to unnecessarily intrude on adjacent ecological receptors or habitats. Such measures could include (but not limited to) shielding of luminaires to reduce backward spill of light or use of sensors or timing devices to automatically switch off lighting where appropriate and provision of closed boarded fencing where the site abuts retained woodland. This would minimise impacts on nocturnal species such as bats that may use the nearby tree lines or habitats for commuting, roosting or foraging. • The proposed development includes the removal of 42 trees identified as having the potential to support roosting bats. Management measures would likely include: <ul style="list-style-type: none"> ○ final inspection of these trees would be undertaken as close to the timing of felling as possible to take into account the regular roost-switching behaviour displaced by tree-roosting bat species. Should bats (or evidence of use by bats) be identified, the mitigation strategies laid out in the licence

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
			<p>application(s) would be implemented (for example, the fitting of exclusion devices);</p> <ul style="list-style-type: none"> ○ felling of trees would generally be undertaken in September or October, to avoid both the maternity and hibernation periods during which bats are more vulnerable to disturbance (this timing also avoids the breeding bird season). <p><u>Monitoring:</u></p> <ul style="list-style-type: none"> • There would be regular checks of construction lighting to monitor and correct for any excessive light spill into the surrounding habitats and particularly into the adjacent woodland. • Operational lighting would be checked to monitor and correct for any excessive light spill into the surrounding habitats, and particularly into the adjacent woodland. • The TEMMP [REP5-088] outlines the proposed monitoring activities identified for bats during the construction and operational phases.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
			<ul style="list-style-type: none"> A draft Sizewell C Project Bat Method Statement (Doc Ref. 9.92) has been compiled that details the key approaches to mitigating potential impacts to the bat populations present. Roosting features / roosts due to be lost will be replaced with ratios as set out below: <ul style="list-style-type: none"> 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. Approximately 102 compensatory roost mitigation features are required to mitigate for the loss of moderate or high potential roosting features. This will comprise a mixture of bat boxes and at least half will be features that are generated naturally or created through veteranisation within new woodland planting. <p><u>Monitoring:</u></p> <ul style="list-style-type: none"> The bat boxes installed on the suitable retained trees will be subject to inspection. The bat boxes will be checked for usage in September by the named ecologist/accredited agent on an annual basis during the

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
			<p>construction phase from one year after installation. Boxes would continue to be monitored for five years beyond the completion of construction.</p> <ul style="list-style-type: none"> Any boxes that require maintenance/repair/replacement will only be moved once they have been inspected by the named ecologist/accredited agent to ensure no bats are disturbed. If the bat boxes are damaged or missing, they will be replaced. In the unlikely events that the mitigation is shown to be ineffective (i.e. no evidence of bats using the bat boxes) then the bat box location may be amended. The conditions of the habitats in the vicinity of the bat boxes will also be checked by the named ecologist/accredited agent and any necessary management requirements reported back to EDF. <p><u>RAMS:</u> <u>Toolbox talk:</u></p> <ul style="list-style-type: none"> Prior to commencement of the vegetation clearance works, all site contractors will be briefed by the ECoW as part of the site induction to provide them with a basic

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
			<p>overview of the life history, habitat requirements, identification and legal protection granted to bats. 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 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.</p> <p><u>Precautionary working methods:</u></p> <ul style="list-style-type: none"> • Presence of 10m buffer areas between the edge of the proposed development and lowland mixed deciduous woodland • Presence of 10m buffer areas between the edge of the proposed development and watercourses where practicable • Close-boarded fencing where the proposed development site abuts woodland. • Construction lighting would be designed to minimise light spill and the potential for light disturbance on adjacent

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
			<p>land. The lighting design for the proposed development would comply with the lighting strategy and use light fittings chosen to limit stray light. Guidance within the latest Institution of Lighting Professionals Guidance Note would be followed as far as possible. These measures would minimise impacts on nocturnal species such as bats that may use the nearby tree lines or habitats for roosting or foraging.</p> <ul style="list-style-type: none"> • 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 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. • Initially all trees to be removed will be reassessed for bat roosting potential. • Any trees identified as having low bat roosting potential will be removed using a soft felling methodology with a suitability experienced, appropriately licensed, bat worker or bat worker assistant present. This is outlined

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
			<p>below. Trees will generally be removed in October, thereby avoiding the sensitive maternity (April-September) and hibernation (November-February) periods for bats.</p> <ul style="list-style-type: none"> For any trees with moderate or high roosting potential, a pre works inspection for roosting bats will be undertaken. The methodology and required survey effort for these pre works checks will depend upon the status of the roosting features within the trees, but may include: <ol style="list-style-type: none"> a climbed or ground based tree inspection using an endoscope and / or torch; and emergence / re-entry surveys. 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. All trees with PRFs will be soft felled using the following precautionary measures:

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
			<ul style="list-style-type: none"> ○ where PRFs cannot be exhaustively checked they will be section felled, with each section carefully lowered to the ground. Cuts will be made at least 50 cm beyond the extent of the potential roost feature; ○ if limbs or large branches require felling, consideration will 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 will be wedged open prior to removal of the limb/branch; ○ the stems of dense ivy will 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 will be checked on the ground by a suitably experienced bat ecologist. If any potential roost feature can still not be exhaustively checked that section will be allowed a rest period of at least 24 hours to ensure that any individual bats that

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
			<p>may have been missed are given the opportunity to relocate.</p> <ul style="list-style-type: none"> • 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. • To mitigate for the loss of the trees and potential roost resources, bat boxes would 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. A variety of bat boxes would be used to support different species. <p><u>Facilitating work requirements</u> <u>Vegetation clearance methods:</u></p> <ul style="list-style-type: none"> • 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.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
			<ul style="list-style-type: none"> Works will be undertaken outside of all tree and hedgerow root protection zones that would not be removed as part of the proposed development. Tree protective fencing as described in section 6.2 of British Standard 5837:2012 will 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 will remain intact throughout the duration of the works and only be removed upon completion. Weather-proof notices will 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 and any advice provided adhered to, to secure the long-term survival of the tree/hedgerow.
	Two village bypass	Volume 5, Chapter 7: Terrestrial	<u>Primary mitigation:</u> <ul style="list-style-type: none"> The route of the proposed development would be mostly unlit, thereby maintaining a dark corridor and minimising the

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
		<p>Ecology and Ornithology [APP-425]</p> <p>Volume 5, App 7A, Annex 7A-6A RAMS Bats</p> <p>Terrestrial Ecology Monitoring and Mitigation Plan [REP5-088]</p> <p>Two Village Bypass Landscape and Ecological Management Plan [REP5-077]</p>	<p>potential impacts to nocturnal species. To ensure road safety lighting would be provided at the A12 western roundabout and the A12/A1094 eastern roundabout extending north to highlight the junction to approaching vehicles. The remaining junctions would have low minor road flows, and be similar to existing unlit rural junctions, and would therefore be unlit to minimise light spill. Operational lighting design would be compliant with relevant highway standards and where possible would be chosen to limit light spill. Guidance within the latest Institution of Lighting Professionals Guidance Note: Bats and artificial lighting in the UK would be followed as far as possible. These measures would minimise impacts on nocturnal species such as bats that may use the nearby tree lines or habitats for roosting or foraging.</p> <ul style="list-style-type: none"> • To reduce the potential for incidental mortality through collisions with vehicles, the design of the proposed development includes safe crossing points for bats and terrestrial mammal species such as oversized culverts as well as bat hop-over features whereby tree planting would be installed as close the carriageway edge as possible to

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
		Sizewell C Project Bat Method Statement (Doc Ref. 9.92)	<p>encourage an inter-linking canopy, that in the long-term that would keep bats at height and away from the path of vehicles using the road.</p> <ul style="list-style-type: none"> In accordance with the LEMP [REP5-077], existing linear wooded corridors will be reinforced and expanded, and others created to provide greater long-term connectivity for bats on a landscape scale. Specifically, native woodland would be created in the vicinity of Foxburrow Wood. <p><u>Tertiary mitigation:</u></p> <ul style="list-style-type: none"> Construction lighting, where required, would be provided at the minimum luminosity and would be designed, positioned and/or directed so as not to unnecessarily intrude on adjacent ecological receptors or habitats. Such measures could include (but not limited to) shielding of luminaires to reduce backward spill of light or use of sensors or timing devices to automatically switch off lighting where appropriate and provision of closed boarded fencing where the site abuts retained woodland. This would minimise impacts on nocturnal species such as bats that may use the nearby tree lines or habitats for commuting, roosting or foraging.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
			<ul style="list-style-type: none"> During the construction stage, close-boarded fencing would be erected along the side of woodland blocks, where the site abuts these (e.g. TN2, Whin Covert, Nuttery Belt, The Belt and Foxburrow Wood CWS). This would help to minimise impacts from construction lighting and noise from construction activity. The proposed development includes the removal of 56 trees identified as having the potential to support roosting bats. Management measures would likely include: <ul style="list-style-type: none"> A final inspection of these trees would be undertaken as close to the timing of felling as possible to take into account the regular roost-switching behaviour displaced by tree-roosting bat species. Should bats (or evidence of use by bats) be identified, the mitigation strategies set out in the licence application(s) would be implemented (for example, the fitting of exclusion devices). Felling would ideally be undertaken in September or October, to avoid the maternity and hibernation periods during which bats are more vulnerable to

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
			<p>disturbance (this timing also avoids the breeding bird season).</p> <p><u>Monitoring:</u></p> <ul style="list-style-type: none"> • There would be regular checks of construction lighting to monitor and correct for any excessive light spill into the surrounding habitats and particularly into the adjacent woodland, floodplain grassland and watercourses. • There would be regular operational checks of lighting to monitor and correct for any excessive light spill into the surrounding habitats, and in particular into the adjacent woodland, floodplain grassland and watercourses. • The TEMMP [REP5-088] and LEMP document [REP5-077] outlines the proposed monitoring activities identified for bats during the construction and operational phases. • A draft Sizewell C Project Bat Method Statement (Doc Ref. 9.92) has been compiled that details the key approaches to mitigating potential impacts to the bat populations present. • Roosting features / roosts due to be lost will be replaced with ratios as set out below:

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
			<ul style="list-style-type: none"> • 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. • Approximately 56 compensatory roost mitigation features are required to mitigate for the loss of moderate or high potential roosting features. This will comprise a mixture of bat boxes and at least half will be features that are generated naturally or created through veteranisation within new woodland planting. <p><u>Monitoring:</u></p> <ul style="list-style-type: none"> • The bat boxes installed on the suitable retained trees will be subject to inspection. The bat boxes will be checked for usage in September by the named ecologist/accredited agent on an annual basis during the construction phase from one year after installation. Boxes would continue to be monitored for five years beyond the completion of construction. • Any boxes that require maintenance/repair/replacement will only be moved once they have been inspected by the

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
			<p>named ecologist/accredited agent to ensure no bats are disturbed.</p> <ul style="list-style-type: none"> If the bat boxes are damaged or missing, they will be replaced. In the unlikely events that the mitigation is shown to be ineffective (i.e. no evidence of bats using the bat boxes) then the bat box location may be amended. The conditions of the habitats in the vicinity of the bat boxes will also be checked by the named ecologist/accredited agent and any necessary management requirements reported back to EDF. <p>RAMS document will be adhered to (the same RAMS as the other AD sites) with the addition of;</p> <ul style="list-style-type: none"> In order to control impacts, 15m buffer areas between the edge of the proposed development and Foxburrow Wood CWS and watercourse. Erection 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).
	Yoxford	Volume 7, Chapter 7:	<u>Primary mitigation:</u>

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
		<p>Terrestrial Ecology and Ornithology [APP-494]</p> <p>Terrestrial Ecology Monitoring and Mitigation Plan [REP5-088]</p>	<ul style="list-style-type: none"> Existing trees and hedgerows adjoining the site boundary would be retained where possible. This includes the retention of a tree belt to the north-west of the site, along the boundary of Satis House Hotel and hedgerow along the southern side of the B1122 (Middleton Road). Operational phase lighting would be designed to achieve a balance between providing lighting appropriate for all road users whilst seeking to minimise light-spill into adjacent habitats. Operational lighting design will be compliant with relevant highway standards and use light fittings chosen to limit stray light. Guidance within the latest Institution of Lighting Professionals (ILP) Guidance Note: Bats and artificial lighting in the UK would be followed as far as possible. <p><u>Tertiary mitigation:</u></p> <ul style="list-style-type: none"> Construction work would take place during Monday to Saturday 07:00 to 19:00, and there may be a requirement for lighting at night in the winter or for safety and security. In addition, there may be the need for 24-hour working and therefore would require lighting. Where temporary

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
			<p>construction lighting is required, it would be controlled to minimise light spill on surrounding habitats and minimise the visibility from sensitive receptors off-site, where reasonably practicable. This would minimise impacts on nocturnal species such as bats that may use the nearby tree lines or habitats for commuting, roosting or foraging.</p> <ul style="list-style-type: none"> • The proposed development includes the removal of one tree identified as having negligible potential to support roosting bats. Management measures are likely to include: <ul style="list-style-type: none"> ○ A final inspection of these trees to be undertaken as close to the timing of felling as possible to account for the regular roost-switching behaviour displaced by tree-roosting bat species. Should bats (or evidence of use by bats) be identified, the mitigation strategies laid out in the licence application(s) would be implemented (for example, the fitting of exclusion devices). ○ Felling would ideally be undertaken in September/October, to avoid the maternity and hibernation periods during which bats are more

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
			<p>vulnerable to disturbance (this timing also avoids the bird-nesting season).</p> <p><u>Monitoring:</u></p> <ul style="list-style-type: none"> • There would be regular checks of construction lighting to monitor and correct for any excessive light spill into the surrounding habitats and particularly into the adjacent woodland and watercourses. • There would be regular operational checks of lighting to monitor and correct for any excessive light spill into the surrounding habitats and in particular into the adjacent woodland and watercourses. • The TEMMP [REP5-088] outlines the proposed monitoring activities identified for bats during the construction and operational phases.
	Green rail route	Volume 9, Chapter 7: Terrestrial Ecology and	<p><u>Primary mitigation:</u></p> <ul style="list-style-type: none"> • Operational lighting would be limited to the B1122 (Abbey Road) level crossing and the level crossing at Buckleswood Road. The remaining rail route extension would be unlit. The lighting design for the proposed development would use light

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
		<p>Ornithology [APP-555]</p> <p>Terrestrial Ecology Monitoring and Mitigation Plan [REP5-088]</p> <p>Sizewell C Project Bat Method Statement (Doc Ref. 9.92)</p>	<p>fittings chosen to limit stray light. These measures would minimise impacts on nocturnal species such as bats that may use the nearby tree lines or habitats for roosting or foraging.</p> <p><u>Tertiary mitigation:</u></p> <ul style="list-style-type: none"> Where required, temporary construction lighting would be controlled to minimise light spill on surrounding habitats. The lighting design would use light fittings chosen to limit stray light and minimise impacts on sensitive species. The lighting would also be designed to minimise the visibility from sensitive receptors off-site. This would minimise impacts on nocturnal species such as bats that may use the nearby tree lines or habitats for commuting, roosting or foraging. The proposed vegetation clearance includes the removal of two trees with moderate or high potential to support roosting bats. A final inspection of these trees would be undertaken as close to the timing of felling as possible to take into account the regular roost-switching behaviour displaced by tree-roosting bat species. Should bats (or evidence of use by bats) be identified, the mitigation strategies laid out in the licence application(s)

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
			<p>would be implemented (for example, the fitting of exclusion devices). Should evidence of bat roosting be found, felling would ideally be undertaken under licence in September/October, to avoid the maternity and hibernation periods during which bats are more vulnerable to disturbance (this timing would also avoid the bird-nesting season).</p> <p><u>Monitoring:</u></p> <ul style="list-style-type: none"> • There would be regular checks of construction lighting to monitor and correct any excessive light spill into the surrounding habitats and particularly into the adjacent woodland. • There would be regular checks of operational lighting to monitor and correct for any excessive light spill into the surrounding habitats and particularly into the adjacent woodland. • The TEMMP [REP5-088] outlines the proposed monitoring activities identified for bats during the construction and operational phases.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
			<ul style="list-style-type: none"> A draft Sizewell C Bat Method Statement (Doc Ref. 9.92) has been compiled that details the key approaches to mitigating potential impacts to the bat populations present. Roosting features / roosts due to be lost will be replaced with ratios as set out below: <ul style="list-style-type: none"> 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. At least two bat boxes are required to mitigate for the loss of two moderate or high potential roosting features. <p><u>Monitoring:</u></p> <ul style="list-style-type: none"> The bat boxes installed on the suitable retained trees will be subject to inspection. The bat boxes will be checked for usage in September by the named ecologist/accredited agent on an annual basis during the construction phase from one year after installation. Boxes would continue to be monitored for five years beyond the completion of construction. Any boxes that require maintenance/repair/replacement will only be moved once they have been inspected by the

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve UK Bat Species
			<p>named ecologist/accredited agent to ensure no bats are disturbed.</p> <ul style="list-style-type: none"> If the bat boxes are damaged or missing, they will be replaced. In the unlikely events that the mitigation is shown to be ineffective (i.e. no evidence of bats using the bat boxes) then the bat box location may be amended. The conditions of the habitats in the vicinity of the bat boxes will also be checked by the named ecologist/accredited agent and any necessary management requirements reported back to EDF.

Table 3-9 Summary of measures to be implemented to conserve badger, listed in the Wildlife and Countryside Act, in the Main Development Site and Associated Development Sites

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve badger
Badger	Main Development Site	Volume 2, Chapter 14: Terrestrial Ecology and	An updated draft Badger Method Statement [REP5-049] has been submitted that outlines the following key approaches to mitigating potential impacts to the badger populations present

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

		<p>Ornithology [AS-033]</p> <p>Sizewell C main development site Ecology Technical Appendix 14A9 Terrestrial Mammals [APP-248]</p> <p>Badger Mitigation Strategy - Confidential (Appendix 14C3) [APP-225]</p> <p>Sizewell C Main Development Site Draft Badger Licence [REP5-049]</p>	<p>within or adjacent to the construction site for the main development site:</p> <ul style="list-style-type: none"> • Prior to commencing any mitigation works, the status of the setts will be clarified through updated surveys and searches for other setts would be undertaken. These surveys would be conducted between March and October inclusive prior to the works commencing and would be used to inform an updated appraisal of the social group dynamics. • Suitable stand-off zones will be implemented around retained setts to avoid damage to those setts or disturbance to badgers using them. • In order to mitigate for loss of Southern and Northern Social Groups main setts / sett complexes, two artificial setts are proposed within the vicinity of the site, one within Kenton Hills and one with Ash Wood. • Once these artificial setts are created, it is proposed that setts/ sett complexes 3, 4, 6, 7, 8, 10, 11, 12, 23, 27, 28 and 29 will be closed under licence, between July and November inclusive. These will be gated with one-way gates and suitable mesh. The closed setts will be monitored for 21 days after closure at a minimum. Subsequent to the setts being closed with the one-way gates for 21 days, the gates will be secured closed and then destroyed promptly after closure. • To compensate for the impacts, extensive areas of replacement habitat, including the reptile mitigation areas in
--	--	--	---

NOT PROTECTIVELY MARKED

			<p>the Studio Fields complex, Aldhurst Farm and the marsh harrier habitat improvement area at Great Mount Walk, have already been created and will be either further enhanced as a component of the advanced works or would diversify further over the period to construction.</p> <ul style="list-style-type: none"> After completion of the proposed licensed works, a monitoring and mitigation strategy will be commenced to monitor the status of the badger populations as outline in the Sizewell C TEMMP [REP5-088]. In the longer term and upon completion of construction, the habitats within the application boundary will be delivered in accordance with the oLEMP [REP1-010] submitted as part of the DCO application which would help enhance the wider EDF Energy estate for biodiversity, including badgers. <p>Monitoring:</p> <ul style="list-style-type: none"> Regular monitoring of badger activity during the exclusion of setts will take place in order to check that badgers have not regained access to the setts prior to destruction. There will also be supervision during the artificial sett creation. After completion of the proposed licensed works, a monitoring strategy will be used to monitor the status of the badger populations including the use (or otherwise) of the artificial setts and any new setts created by the badgers in response to sett closure. This is set out in the TEMMP
--	--	--	---

NOT PROTECTIVELY MARKED

			<p>[REP5-088] and includes monitoring frequently during construction (Year 1 – Year 12) and annual monitoring during initial operation (Year 13 – Year 17).</p> <p>The Badger Mitigation Strategy [APP-256] outlines further details on the mitigation measures proposed.</p>
	Northern park and ride	<p>Volume 3, Chapter 7: Terrestrial Ecology and Ornithology [APP-363]</p>	<p><u>Primary mitigation:</u></p> <ul style="list-style-type: none"> The operational park and ride facilities on-site would be bounded by a 1.8m high security fence. This security fence would prevent personnel using the proposed development from accessing the surrounding habitats. This would have the added benefit of reducing disturbance, habitat damage and littering within Little Nursery Wood which is adjacent to the site. The security fence would also be sufficient to prevent access by badgers. Badger fencing would be installed around the landscape bunds to prevent the establishment of any badger setts in these landscape bunds during operation, which would then provide an ecological constraint during removal and reinstatement. <p><u>Tertiary mitigation:</u></p> <ul style="list-style-type: none"> No evidence of badgers was recorded during the most recent surveys within the site and survey area, and the surrounding

NOT PROTECTIVELY MARKED

			<p>habitat is sub-optimal for this species; however, there is the potential for badgers to enter the site during construction. Therefore, the following measures would be undertaken during construction:</p> <ul style="list-style-type: none"> • prior to construction works commencing, a pre-construction walkover of the site would be conducted in order to identify whether there are any signs of badgers, and/or any newly established setts that may be impacted by the works. Should any setts be identified that would be disturbed by the construction works, or would require closure, then a licence from Natural England would be obtained. All licensable works would be undertaken between July to November (inclusive); and • any excavations made during construction activities would be closed at the end of the day to prevent access by badgers. Should it not be possible for excavations to be closed at night, a means of egress (i.e. a wooden plank) would be provided to ensure that any badgers that may access these excavations have a means of escape. <p><u>Monitoring:</u></p> <ul style="list-style-type: none"> • During construction and the operational phase, there would be regular checks of the security fence, ecological fencing and close-boarded fence to check these remain intact, and that there is no encroachment of construction activities
--	--	--	--

NOT PROTECTIVELY MARKED

			beyond the site boundary or into the buffer areas. This would also include checks that badgers remain excluded from the site and the landscape bunds. Should badgers have gained access and created setts within the site, this would allow time for a licence to close these setts to be obtained from Natural England in advance of the removal and reinstatement phase.
	Southern park and ride	Volume 4, Chapter 7: Terrestrial Ecology and Ornithology [APP-394]	<p><u>Primary mitigation</u></p> <ul style="list-style-type: none"> Landscape bunds 3m high would be located within the north-west, north-east, east and south-east boundaries of the site, to aid in the screening of the proposed development from the adjacent landscape and habitats features. This would also provide acoustic screening, as outlined in Chapter 4 of this volume. The landscape bunds would be bounded by badger fencing which would prevent colonisation by this species and so minimise constraints during the removal and reinstatement phase. <p><u>Tertiary mitigation:</u></p> <ul style="list-style-type: none"> There is the potential for badgers entering the proposed development site during construction, and so the following measures would be undertaken during construction: <ul style="list-style-type: none"> Prior to construction works commencing, a pre-construction walkover of the site would be conducted to identify any newly established setts that may be

NOT PROTECTIVELY MARKED

			<p>impacted by the works. Should any new setts be identified that would be disturbed by the construction works, or would require closure, then a licence from Natural England would be obtained. All licensable works would be undertaken between July to November (inclusive).</p> <ul style="list-style-type: none"> Any excavations made during construction activities would be closed at the end of the day to prevent access by badgers. Should it not be possible for excavations to be closed at night, a means of egress (i.e. a wooden plank or soil ramp) would be provided to ensure that any badgers that may access these excavations have a means of escape. <p><u>Monitoring:</u></p> <ul style="list-style-type: none"> During construction, there would be regular checks of the security fence, badger fence and close-boarded fence to check these remain intact, and that there is no encroachment of construction activities beyond the site boundary or within the buffer areas. This would also include checks that badgers remain excluded from the site, and the landscape bunds. Should badgers gain access to and create setts within the site, a licence from Natural England would be obtained to close these setts.
--	--	--	--

NOT PROTECTIVELY MARKED

			<ul style="list-style-type: none"> There would be regular checks of construction lighting to monitor and correct for any extraneous light spill into surrounding habitats. Throughout the operational phase, regular monitoring of the security fence, ecological fence and close-boarded fence would be conducted to ensure that this remains intact. This would also include checks that badgers remain excluded from the site and the landscape bunds. Should badgers gain access to and create setts within the site, a licence from Natural England would be obtained to close these setts.
	Freight management facility	Volume 8, Chapter 7: Terrestrial Ecology and Ornithology [APP-523]	<p><u>Primary mitigation:</u></p> <ul style="list-style-type: none"> In addition to the security fence, ecological fencing would be installed around the Sustainable Drainage Systems infrastructure and landscape bunds, which would help prevent the risk of badgers establishing setts within the site boundary. <p><u>Tertiary mitigation:</u></p> <ul style="list-style-type: none"> Any excavations made during construction activities would be closed at the end of the day to prevent access by badgers and other terrestrial nocturnal animals. If it is not possible for excavations to be closed at night, a means of egress (i.e. a wooden plank or soil ramp) would be provided to ensure that any animals that may access these excavations have a

NOT PROTECTIVELY MARKED

			<p>means of escape. In addition, prior to construction works commencing, a preconstruction walkover of the site would be conducted in order to identify whether there are any signs of badgers and/or any newly established setts that may be impacted by the works. If any setts are identified that would be disturbed by the construction works, or would require closures, then a licence from Natural England would be obtained. All licensable works would be undertaken between July to November (inclusive).</p> <p><u>Monitoring:</u></p> <ul style="list-style-type: none"> • During construction, there would be monitoring of the security fence to check these remain intact, and that there is no encroachment of construction activities beyond the boundary or within the buffer areas. This would also include checks that badgers are absent from the site and the landscape bunds. If badgers have gained access and created setts within the site, a licence to close these setts would be obtained from Natural England. • Throughout the operational phase, monitoring of the security fence would be conducted to ensure that this remains intact and that badgers are not present on the site and the landscape bunds. If badgers have gained access and created setts within the site, a licence to close these setts would be obtained from Natural England for the removal and
--	--	--	---

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

			reinstatement phase. There would also be an ecological watching brief of the landscape bunds to monitor for any signs of badger activity.
	Sizewell link road	Volume 6 Chapter 7: Terrestrial Ecology and Ornithology [APP-461]	<p><u>Tertiary mitigation:</u> The following measures would be implemented in relation to badgers during construction:</p> <ul style="list-style-type: none"> • Prior to construction works commencing, a pre-construction walkover of the site would be conducted in order to identify whether there are any signs of badgers and/or any newly established setts that may be impacted by the works. If any setts are identified that would be disturbed by the construction works, or would require closures, then a licence from Natural England would be obtained. All licensable works would be undertaken between July to November (inclusive). • Any construction excavations would be closed at the end of the day to prevent access by badgers (and any other nocturnal animals). Should it not be possible for excavations to be closed at night, a means of egress (i.e. a wooden plank or soil ramp) would be provided to ensure that any badgers that may access these excavations have a means of escape.
	Two village bypass	Volume 5, Chapter 7:	<u>Tertiary mitigation:</u>

NOT PROTECTIVELY MARKED

		<p>Terrestrial Ecology and Ornithology [APP-425]</p> <p>Volume 5, Chapter 7 of the ES Appendix 7A Ecology Baseline [APP-426]</p> <p>Two Village Bypass Draft Badger Method Statement [REP5-077]</p>	<ul style="list-style-type: none"> • Prior to construction works commencing, a pre-construction walkover of the site would be conducted in order to identify whether there are any signs of badgers and/or any newly established setts that may be impacted by the works. If any setts are identified that would be disturbed by the construction works, or would require closures, then a licence from Natural England would be obtained. All licensable works would be undertaken between July to November (inclusive). • Any construction excavations would be closed at the end of the day to prevent access by badgers (and any other nocturnal animals). Should it not be possible for excavations to be closed at night, a means of egress (i.e. a wooden plank or soil ramp) would be provided to ensure that any badgers that may access these excavations have a means of escape. <p>A draft Badger Method Statement [REP5-077] has been submitted that outlines the following key approaches to mitigating potential impacts to the badger populations present within or adjacent to the construction site for the main development site:</p> <ul style="list-style-type: none"> • Prior to commencing any mitigation works, the status of the sett would be confirmed through an updated survey. This would usually be conducted 3- 6 months before works commence. and would confirm the presence of any new setts
--	--	--	---

NOT PROTECTIVELY MARKED

			<p>within the works area or immediate surrounds and if they would be affected.</p> <ul style="list-style-type: none"> The known badger sett within the two village bypass site boundary would be closed under licence, between July and November inclusive. The sett will be gated with a one-way gate and suitable mesh. The closed sett will be monitored for 21 days after closure at a minimum. Subsequent to the sett being closed with the one-way gate for 21 days, the gate will be secured closed and then the sett destroyed promptly after closure. No requirement for replacement sett provision is deemed necessary. <p><u>Monitoring:</u></p> <ul style="list-style-type: none"> A pre-construction survey of the two village bypass site will be undertaken prior to the start of works, in order to ensure that badgers have not excavated any new setts or to determine any changes in the use of already identified setts will be conducted. Regular monitoring of badger activity during the exclusion of setts will take place in order to check that badgers have not regained access to the setts prior to destruction. <p><u>Good working practises:</u></p> <ul style="list-style-type: none"> During the works, there will be a suite of good working practices to prevent impacts to badgers. These will be
--	--	--	---

SIZEWELL C PROJECT –
RESPONSES TO EXAMINING AUTHORITY'S
WRITTEN QUESTIONS ISSUED ON 3RD AUGUST 2021

NOT PROTECTIVELY MARKED

			<p>communicated to the site staff through a toolbox talk. These measures will include:</p> <ul style="list-style-type: none"> • Covering or ramping of all open excavations to prevent badgers becoming entrapped; • Good housekeeping to prevent food waste attracting badgers to the site; • Site procedures and guidelines to limit light spill onto adjacent habitats to minimise impacts to retained foraging habitats.
	Yoxford	Volume 7, Chapter 7: Terrestrial Ecology and Ornithology [APP-494]	<p><u>Tertiary mitigation:</u></p> <ul style="list-style-type: none"> • No evidence of badgers was recorded during the most recent surveys within the site and wider area, and the surrounding habitat is sub-optimal for this species; however, there is the potential for badgers to enter the site during construction. Therefore, the following measures would be undertaken during construction: <ul style="list-style-type: none"> • Any construction excavations would be closed at the end of the day to prevent access by badgers (and any other nocturnal animals). Should it not be possible for excavations to be closed at night, a means of egress (i.e. a wooden plank or soil ramp) would be provided to ensure that any badgers that may access these excavations have a means of escape.
	Green Rail Route	Volume 9, Chapter 7:	<p><u>Primary mitigation:</u></p>

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

		Terrestrial Ecology and Ornithology [APP-555]	<ul style="list-style-type: none"> The proposed rail extension route would be bounded by security fences. All security fencing around the proposed rail extension route would be sufficient to resist damage by livestock and would be regularly checked and maintained in a suitable condition. Any damage to fencing would be repaired immediately. All landscape bunds would be within the fenced area. The security fence would include a buried return and would be sufficient to prevent access by badgers and so would prevent badgers establishing setts within the landscaped bunds. While the proposed rail extension route would be fenced, safe crossing points would be established for the diversion of three public rights of way. Footpath E-363/003/0 would be diverted to a safe crossing point at the Buckleswood Road level crossing, while the remaining two public rights of way (Footpaths E-363/006/0 and E-363/010/0) would be diverted to a safe crossing point at the B1122 (Abbey Road) level crossing. The same crossing points would also act as safe crossing points for badgers and other large terrestrial mammals, thereby minimising any potential fragmentation effect. <p><u>Tertiary mitigation:</u></p> <ul style="list-style-type: none"> Prior to construction and again prior to removal and restoration, a walkover of the proposed rail extension route
--	--	---	--

NOT PROTECTIVELY MARKED

			<p>would be conducted by a suitably experienced ecologist to determine the status of previously identified badger setts and to confirm if any new setts have become established within or adjacent to where works would be conducted.</p> <ul style="list-style-type: none"> • The known badger setts would be at risk of damage or destruction due to construction works and would require closure under licence from Natural England. Construction activities that may cause disturbance, damage and/or destruction to any other active badger setts recorded during the pre-construction walkover would also require a licence from Natural England. Any badger setts that require closure would be closed between 1 July and 30 November. • There is potential for badgers to enter the site during construction, or for new setts to be excavated within the bunds (prior to the installation of the security fence). During construction and operation, an ecological watching brief would be conducted of the earthworks bund to monitor for any signs of badger activity. Any excavations made during the course of construction activities would be closed at the end of the day to prevent access by badgers. Should it not be possible for excavations to be closed at night, a means of egress (i.e. a wooden plank) would be provided to ensure that any badgers that may access these excavations have a means of escape.
--	--	--	---

NOT PROTECTIVELY MARKED

			<p><u>Monitoring:</u></p> <ul style="list-style-type: none"> • During construction, there would be regular checks of the security fence to check the fence remains intact, and that there is no encroachment of construction activities beyond the site boundary or within the buffer areas. This would also include checks that badgers remain excluded from the site and the landscape bunds. Should badgers have gained access and created setts within the site, a licence would be sought from Natural England to close these setts prior to the removal and reinstatement phase. • Throughout the operational phase, there would be regular checks of the security fence to check the fence remains intact, and that there is no encroachment of construction activities beyond the site boundary or within the buffer areas. This would also include checks that badgers remain excluded from the site and the landscape bunds. Should badgers have gained access and created setts within the site, a licence would be sought from Natural England to close these setts prior to the removal and reinstatement phase.
--	--	--	---

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Table 3-10: Summary of measures to be implemented to conserve Otter, listed in the Wildlife and Countryside Act, in the Main Development Site and Associated Development Sites

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Otter
Otter	Main development site	<p>Volume 2, Chapter 14: Terrestrial Ecology and Ornithology [AS-033]</p> <p>Terrestrial Ecology Monitoring and Mitigation Plan [REP5-088]</p> <p>Draft Otter Method Statement and Supporting Information [REP5-051]</p>	<p><u>Primary mitigation:</u></p> <ul style="list-style-type: none"> A barrier (e.g. sheet piling) would be installed to provide separation from the main platform and Sizewell Marshes SSSI with engineered drainage installed to limit the disturbance to the hydrology and geology of Sizewell Marshes SSSI (see Chapter 19: Groundwater and Surface Water of the ES (Book 6). The establishment of new reedbed and ditches at Aldhurst Farm (completed in 2016) has provided replacement for the land take of these habitats within Sizewell Marshes SSSI. The replacement habitats have established successfully, and mobile aquatic plant and invertebrate species would colonise over time from the adjacent areas of the Sizewell Marshes SSSI. Otters have already been sighted in the newly created wetlands at Aldhurst Farm.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Otter
			<ul style="list-style-type: none"> The SSSI crossing will consist of a 30m open single span bridge. This will facilitate the passage of otter. Pre-construction surveys to avoid disturbance or destruction of otter holts, and habitat creation at Aldhurst Farm. Primary mitigation includes a Lighting Management Plan for Construction and Operational Sites (Volume 2, Appendix 2B (Doc Ref. 6.3 2B(A))) and boundary treatments. <p><u>Tertiary mitigation:</u></p> <ul style="list-style-type: none"> Monitoring of otter activity would take place before, during and after construction, and would include methods to assess use of the SSSI crossing culvert by otter. The TEMMP [REP5-088] outlines the proposed monitoring activities identified for otter during the construction and operational phases. An updated draft Otter Method Statement and Supporting Information [REP5-051] has been submitted that outlines the key approaches to mitigating potential impacts to the otter populations present within or adjacent to the construction site for the main development site.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Otter
			<ul style="list-style-type: none"> Pre-construction surveys are being undertaken in 2021 to confirm that no natal holts are present within the construction footprint. Also, pre-construction checks, as per guidance, of each holt to confirm the presence or absence of otter A 30m buffer of no activity is required around the known holts or other holts identified in future surveys and in the unlikely event that an otter is found within the known holts, works within the area will not take place until the otter has left. As part of the scheme design, a lighting strategy will be put in place for the construction phase to avoid light spill as far as possible, where possible. The works should comply with the measures and approaches defined in the Lighting Management Plan. <p><u>Artificial holt / habitat creation:</u></p> <ul style="list-style-type: none"> An artificial holt will be created to compensate for the loss of the holt located along the Sizewell Drain to the east of Sizewell B. Further enhancement will be provided with the provision of another artificial holt to the south-east of the flood compensation/wetland creation area.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Otter
			<ul style="list-style-type: none"> Habitat creation in the north of the site will comprise dry grassland, reedbed and woodland and wet woodland creation. The increase in wetland habitat and increased connectivity and screening will be beneficial to otter in the long-term. New otter holt construction will be in conjunction with vegetation clearance works elsewhere on site so that the materials can be salvaged and used for the holt construction. The landscape planting for the new wetland habitat will also improve general habitat and will increase the quantities of vegetation / cover available for use by otters in the long-term. The licensed ecologist and / or their accredited agents will be present on site to oversee the vegetation clearance activities / holt removal, ensure the buffer zones around retained holts are in place in place and to ensure that the content and agreed working methods are adhered to. The construction of the two artificial otter holts within the decided areas will be overseen by the licensed ecologist and / or their accredited agents and documentation provided to NE and the County

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Otter
			<p>Ecologist to confirm / demonstrate the works that have been carried out.</p> <ul style="list-style-type: none"> The site clearance / habitat creation contractor will be familiar with working alongside ecologists and following the instructions provided. Prior to any works taking place, the named ecologist will carry out a toolbox talk and inform all site personnel on the works to be carried out and the methodologies to be implemented in relation to otters (and water vole) and will also discuss field signs and behavioural characteristics of otters which are relevant to the scheme and construction phase activities. Methods and timings for monitoring otter are set out in the TEMMP [REP5-088] and includes the following: <ul style="list-style-type: none"> Artificial holts created would be monitored during the construction phase and operational phase to ensure that they remain in good condition and accessible for use by otters. Known holt and couch locations at the north-eastern extent of the site on the boundary between the marsh harrier habitat creation area and the Minsmere to

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Otter
			<p>Walberswick Heaths and Marshes SSSI would be monitored during the construction phase.</p> <ul style="list-style-type: none"> The artificial otter holts will be inspected during the operational phase, to ensure that it remains in good condition and accessible for use by otters. In the unlikely event that the otter holt has been tampered with, or destroyed, a new otter holt will be constructed. Depending upon the extent of damage, if this was to occur, a different site would be sought for the construction of a replacement holt and this would be agreed in advance with NE.
	Two village bypass	<p>Volume 5, Chapter 7: Terrestrial Ecology and Ornithology [APP-425]</p> <p>Volume 5, App 7A, Annex 7A-6C RAMS otter</p>	<p><u>Primary mitigation:</u> Proposed River Alde overbridge:</p> <ul style="list-style-type: none"> The crossing of the River Alde would comprise an overbridge, approximately 60m in length which would preserve the natural integrity of the banks of the river, bed and bankside, and minimise shading effects. This would be of sufficient size to enable passage for otters and water voles to be maintained during construction and operation. An otter ledge would be installed on bridge abutments, if required, to allow passage at times of high flows. Otter fencing would be

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Otter
		Terrestrial Ecology Monitoring and Mitigation Plan [REP5-088]	<p>incorporated where appropriate to guide otters to the crossing point.</p> <ul style="list-style-type: none"> There would be eight 5.4m long, 3m wide flood relief culverts proposed (four on either side of the River Alde overbridge). There would also be two further culverts within the embankment outside the floodplain extent; on the western side of the River Alde overbridge (approximately 200m south-east from the existing A12), the culvert would be approximately 5.4m by 3m and would allow an existing watercourse and livestock access track to pass beneath the road (on their existing alignment of an existing accommodation access track which would be diverted under the proposed bridge). A mammal mitigation culvert would be provided on the east side of the River Alde overbridge outside of the floodplain extent (approximately 5.4m by 1.2m) Field drains located at the western end of the bypass, either side of the proposed River Alde overbridge, would be diverted along the base of the embankment to the River Alde where possible with additional/excess water culverted through the embankments.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Otter
			<ul style="list-style-type: none"> Any required flood compensation areas would be designed to minimise impacts to ditches and watercourses to avoid interfering with suitable otter and water vole habitat. The banks of the River Alde and the associated ditches would be protected during construction of any flood compensation areas. It is currently not thought likely that flood compensations areas will be required. <p><u>Tertiary mitigation:</u> Prior to any works taking place in watercourses and ditches, the following approaches would be used for otter and water vole:</p> <ul style="list-style-type: none"> Otter: a pre-construction survey for otters would be conducted. If an otter lying up site or holt is recorded that would be impacted by the works, then an appropriate mitigation strategy would be developed and completed under agreement and, where necessary, licence to Natural England. <p><u>RAMS:</u> <u>Toolbox talk:</u></p> <ul style="list-style-type: none"> Prior to commencement of the vegetation clearance works, all site contractors will be briefed by the ECoW as part of the

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Otter
			<p>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 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.</p> <p><u>Precautionary working methods:</u></p> <ul style="list-style-type: none"> • Pre-construction surveys will 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.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Otter
			<ul style="list-style-type: none"> • A European Protected Species Licence application and Method Statement would be 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 provided in a method statement, based on Natural England's standing advice and guidance in relation to otter and mitigation for development projects. • 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. • Demarcation and of a 30m exclusion zone around otter holts. • Where possible, a minimum of a 20m buffer will 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. • Works compounds, storage sites and access roads must not be located between important areas of otter habitat. <p>Potential water quality issues associated with the terrestrial (i.e. non-marine) environment, would be dealt with through embedded (primary) mitigation measures.</p>

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Otter
			<ul style="list-style-type: none"> • Prior to works commencing an appropriately experienced ECoW will undertake a toolbox talk to site staff covering the Precautionary Working Methods to be adhered to. • Where works are required in areas of otter activity (but not a place of shelter) the ECoW will demarcate and agree on site in which areas which activity is permitted. • If night-time working is required, the works around the areas with suitable habitat for otter, light spill would be minimised to reduce any possible impacts to the species. • Such precautions will be put in place to avoid an offence being committed during the proposed works and subsequent development with respect to otter. <p><u>Vegetation clearance:</u></p> <ul style="list-style-type: none"> • As set out above, vegetation clearance works are required in order to facilitate the development of the site. These works have the potential to impact the local otter population. Should vegetation clearance work occur within the proximity of the River Alde, a qualified ECoW will need to carry out a pre-construction check for signs of otter and otter activity within the footprint of the works.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Otter
			<ul style="list-style-type: none"> A European Protected Species Licence application and Method Statement would be 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. Should otter signs be present the ECoW will demarcate and agree on site in which areas which activity is permitted. <p><u>Equipment:</u></p> <ul style="list-style-type: none"> The vegetation clearance contractors on site will utilise equipment specific to their clearance methods as per their RAMS. For example: <ul style="list-style-type: none"> 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. <p><u>Ground-breaking works:</u></p> <ul style="list-style-type: none"> As set out above, ground-breaking works are required in order to facilitate the development of the site. These

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Otter
			<p>works have the potential to impact the local otter population. Should ground-breaking works take occur (20m of the River Alde and within 10m of other watercourses), a qualified ECoW will need to carry out a pre-construction check for signs of otter and otter activity within the footprint of the works.</p> <ul style="list-style-type: none"> • A European Protected Species Licence application and Method Statement would be 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. • Should otter signs be present the ECoW will demarcate and agree on site in which areas which activity is permitted. Demarcation and exclusion from holts within 30m of working areas, potentially with the use of Heras fencing. • Any excavations made during construction activities would 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 be provided to ensure

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Otter
			that any animals that may access these excavations have a means of escape.
	Yoxford	Volume 7, Chapter 7: Terrestrial Ecology and Ornithology [APP-494]	<p><u>Primary mitigation:</u></p> <ul style="list-style-type: none"> A 5m buffer would be maintained between the proposed Yoxford roundabout and the adjacent River Yox to protect the integrity of the banks as well as the associated ecological features. <p><u>Tertiary mitigation:</u></p> <ul style="list-style-type: none"> Prior to works taking place adjacent to the River Yox, a pre-construction survey would be conducted for otter and water voles: Otter: a pre-construction survey would be conducted to confirm the absence/presence of any otter holt. Should an otter holt be identified that would be directly impact by the proposed works, a licence from Natural England would be obtained. Should breeding otter be recorded, then all works would cease until both adult and young otter have left the holt.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Table 3-11: Summary of measures to be implemented to conserve water vole, listed in the Wildlife and Countryside Act, in the Main Development Site and Associated Development Sites

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve water vole
Water vole	Main development site	<p>Volume 2, Chapter 14: Terrestrial Ecology and Ornithology [AS-033]</p> <p>Appendix 14C6A - Water Vole Mitigation Strategy [APP-252]</p> <p>Terrestrial Ecology Monitoring and Mitigation Plan [REP5-088]</p>	<p><u>Primary mitigation:</u></p> <ul style="list-style-type: none"> The SSSI crossing will consist of a 30m open single span bridge. This will facilitate the passage water vole through the structure. The establishment of new reedbed and ditches at Aldhurst Farm (completed in 2016) has provided replacement for the land take of these habitats within Sizewell Marshes SSSI. The replacement habitats have established successfully, and mobile aquatic plant and invertebrate species have colonised over time from the adjacent areas of the Sizewell Marshes SSSI. These new habitats are suitable for water voles and Aldhurst Farm would act as the main receptor site for water voles, if they need to be translocated from the footprint of the main development site. One of the four lagoons at Aldhurst Farm was fenced to minimise the risk of water vole colonising naturally ahead of translocation however contained a moderate population when surveyed in 2020. <p><u>Tertiary mitigation:</u></p>

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve water vole
		<p>Sizewell C Main Development Site Water Vole Method Statement [REP5-050]</p>	<ul style="list-style-type: none"> Tertiary mitigation measures are outlined in the mitigation strategy which was updated as part of the Jan 2021 submission to PINS and described in the 'Details from the mitigation strategy' section below. <p><u>Details from the mitigation strategy:</u></p> <ul style="list-style-type: none"> Displacement techniques and monitoring requirements are proposed where there is a working area with maximum length of 50m (for watercourse this equates to 50m on each bank). However, should displacement be unsuccessful (i.e. programme, season, signs continuously recorded following vegetation clearance), trapping will be undertaken within those areas. Displacement is proposed to mitigate habitat loss/disturbance within the 31m section of the east-west running drains west of Sizewell Drain by SZB that is due to be impacted. Trapping out water vole from the Sizewell Marshes SSSI crossing construction footprint will be undertaken if displacement is no longer a viable alternative i.e. water vole are recorded present in areas currently unoccupied. The

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve water vole
			<p>preference is for animals to be released directly into the receptor area at Aldhurst Farm. Should trapping be necessary and depending on the time of year, if the weather is cold (night-time temperature below freezing (0oC)) in the autumn, a contingency option for water vole captured during the 15 September to 30 November trapping is to be over-wintered in captivity. The water voles would then be released into the receptor area the following spring (between 1 March and 15 April).</p> <ul style="list-style-type: none"> As soon as water voles have been displaced/removed from the Sizewell Marshes SSSI crossing footprint, their habitat would be rendered unsuitable for re-colonisation. <p>Overall, in the long term, as a result of the proposed SZC main development site works, it is considered that there will be an overall increase in the conservation status of water vole, as a result of an increase in habitat availability.</p> <p>Monitoring:</p>

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve water vole
			<p>The TEMMP [REP5-088] outlines the proposed monitoring activities identified for water vole during the construction and operational phases.</p> <ul style="list-style-type: none"> • An updated draft Water Vole Method Statement [REP-050] has been submitted that outlines the key approaches to mitigating potential impacts to the water vole populations present within or adjacent to the construction site for the main development site. • As described in the aforementioned Water Vole Mitigation Strategy, the primary approach for water vole mitigation is likely to be via displacement, given the relatively low populations detected in surveys undertaken in 2020. Displacement techniques and monitoring are proposed where there is a working area with maximum length of 50m (for watercourse this equates to 50m on each bank). However, should displacement be unsuccessful (i.e. programme, season, signs continuously recorded following vegetation clearance) trapping will be undertaken within those areas. Displacement is proposed to mitigate habitat loss/disturbance within the 31m section of the east-west

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve water vole
			<p>running drains west of Sizewell Drain by SZB that is due to be impacted</p> <ul style="list-style-type: none"> Trapping out water vole from the Sizewell Marshes SSSI crossing construction footprint would only be undertaken if high populations are detected in a population resurvey prior to the works. Any capture and relocation works would be undertaken during spring and autumn periods as necessary. In spring, animals would be released directly into the receptor area at Aldhurst Farm. In the autumn and if the weather is cold (night-time temperature below freezing (0oC)), a contingency option for water vole captured during the 15 September to 30 November trapping is to be over-wintered in captivity. These water vole would then be released into the receptor area the following spring (between 1 March and 15 April). Trapping is proposed to mitigate habitat loss/disturbance within: <ul style="list-style-type: none"> Leiston Drain (where the SSSI crossing is to be constructed); Habitat Sizewell Marshes SSSI (where subject to land take associated with the SZC platform); and Sizewell Drain (where the ditch is being realigned).

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve water vole
			<ul style="list-style-type: none"> As soon as water voles have been removed from the areas to be impacted, their habitat would be rendered unsuitable for recolonization. Monitoring of water vole populations will occur prior to, during and after the above approach at the receptor site, the areas impacted by the works and the areas reinstated, such as the Sizewell Drain.
	Two village bypass	<p>Volume 5, Chapter 7: Terrestrial Ecology and Ornithology [APP-425]</p> <p>Sizewell C Draft Water Vole Method Statement and Supporting Information –</p>	<p><u>Primary mitigation:</u></p> <ul style="list-style-type: none"> There would be eight 5.4m long, 3m wide flood relief culverts proposed (four on either side of the River Alde overbridge). There would also be two further culverts within the embankment outside the floodplain extent; on the western side of the River Alde overbridge (approximately 200m south-east from the existing A12), the culvert would be approximately 5.4m by 3m and would allow an existing watercourse and livestock access track to pass beneath the road (on their existing alignment of an existing accommodation access track which would be diverted under the proposed bridge). A mammal mitigation culvert would be

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve water vole
		<p>Two Village Bypass [REP5-055]</p> <p>Terrestrial Ecology Monitoring and Mitigation Plan [REP5-088]</p> <p>Two Village Bypass Landscape and Ecological Management Plan [REP5-077]</p>	<p>provided on the east side of the River Alde overbridge outside of the floodplain extent (approximately 5.4m by 1.2m)</p> <ul style="list-style-type: none"> Field drains located at the western end of the bypass, either side of the proposed River Alde overbridge, would be diverted along the base of the embankment to the River Alde where possible with additional/excess water culverted through the embankments. Any required flood compensation areas would be designed to minimise impacts to ditches and watercourses to avoid interfering with suitable otter and water vole habitat. The banks of the River Alde and the associated ditches would be protected during construction of any flood compensation areas. It is currently not thought likely that flood compensations areas will be required. <p><u>Tertiary mitigation:</u></p> <ul style="list-style-type: none"> No equipment or material would be stored within 10m of a watercourse, and no materials would be stored in areas of high flood risk to avoid sediment loss during flooding. All soils would be stored away from watercourses (or potential pathways to watercourses), and any potentially

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve water vole
			<p>contaminated soil would be stored on an impermeable surface and covered to reduce leachate generation and potential migration to surface waters.</p> <p>Prior to any works taking place in watercourses and ditches, the following approaches would be used for otter and water vole:</p> <ul style="list-style-type: none"> Water voles: a pre-construction survey for water voles would be conducted. In the event of works being required that affect the banks of watercourses and ditches/ within the wetted channel and where water voles are known to be present, then a licence from Natural England would be required. All survey work would be in line with best practice guidelines. If the proposed works do not require more than 50m of vegetation clearance from either bank of the ditch, then works would be conducted under a class licence WML-CL31. If works would require vegetation clearance exceeding 50m, then a conservation licence would be required. <p><u>Monitoring:</u> The protected species licence, which will be agreed with Natural England, will detail the monitoring requirements for water vole.</p>

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve water vole
			<p>The requirement for licensing has also been noted in the TEMMP [REP5-088].</p> <ul style="list-style-type: none"> • An updated draft Water Vole Method Statement has been submitted that outlines the key approaches to mitigating potential impacts to the water vole populations present within or adjacent to the Two Village Bypass site. • The following mitigation measures are proposed under the draft method statement; <ul style="list-style-type: none"> • Preventing incidental mortality through displacement of water voles from the works areas; • Displacement techniques and monitoring requirements are proposed with a maximum working area with maximum length of 50m (for watercourse this equates to 50m on each bank). • Reinstatement of impacted areas after the works are completed. • Improving the conservation status of water voles through habitat creation;

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve water vole
			<ul style="list-style-type: none"> • Pre works, during works and post-construction monitoring of water vole populations will occur to ensure success of the mitigation approach. • Once any works which impact The River Alde are completed, these areas will be reinstated, in accordance with the two village bypass Landscape and Ecology Management Plan (LEMP) [REP5-077]. • Due to the close proximity of riparian vegetation, it is considered that the vegetation will recolonise promptly and planting of the impacted areas will not be necessary. In addition, the project will create new habitats, in accordance with the two village bypass LEMP [REP5-077], for water vole, providing a conservation gain overall. New swales are being created throughout the new two bypass development area. Although these swales will not be designed specifically to offer habitat for water vole, and will be intermittently wet, these swales will provide corridors for movement for water vole across the landscape. Also, new wetland channels would mitigate the loss of approximately 143m of ditch associated with the land take from the proposed bypass footprint.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve water vole
			<ul style="list-style-type: none"> In summary, overall the project will provide a conservation gain for water vole, through minimising impacts from the River Alde crossing and any outflows impacting upon the ditches and providing an increase in water vole habitat in the vicinity of the River Alde. <p><u>Monitoring and management:</u></p> <ul style="list-style-type: none"> A regular monitoring programme, both during and after construction, would be required to assess the effectiveness of the mitigation and provide early warning of any changes in the population so that appropriate action can be taken. A single visit, one year after the completion of the construction will be sufficient to fulfil the monitoring requirements for the impacts associated with the project. However, should any issues be identified during the monitoring visit (i.e. failure of habitats to establish, absence of water vole), additional visits should be conducted to ensure that these issues are addressed. Monitoring can cease once all Key Performance Indicators (KPIs) for the water vole licence have been achieved – i.e. the impacted areas have recovered a suitable vegetation community and

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve water vole
			<p>have been recolonised by water vole and the newly created ponds have a habitat suitable for water vole.</p> <ul style="list-style-type: none"> In accordance with the two village bypass LEMP, there will be regular checks of ditch and pond habitat during the first five years of establishment.
	Yoxford	<p>Volume 7, Chapter 7: Terrestrial Ecology and Ornithology [APP-494]</p>	<p><u>Primary mitigation:</u></p> <ul style="list-style-type: none"> A 5m buffer would be maintained between the proposed Yoxford roundabout and the adjacent River Yox to protect the integrity of the banks as well as the associated ecological features. <p><u>Tertiary mitigation:</u> Prior to works taking place adjacent to the River Yox, a pre-construction survey would be conducted for otter and water voles:</p> <ul style="list-style-type: none"> Water vole: a pre-construction survey would be undertaken the year prior to construction to determine if any water voles or features which indicate water vole are present within the footprint of the work or within 3m. If water voles are confirmed within the footprint of works or within 3m, to inform a licence application, detailed surveys would need to be

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve water vole
			conducted. The results of these surveys will inform a mitigation licence application to Natural England. Mitigation to displace water vole under licence can only take place between 15 February to 15 April. Surveys would be conducted in line with The Water Vole Mitigation Handbook.

Table 3-12: Summary of measures to be implemented to conserve Hedgehog, listed in the Wildlife and Countryside Act, in the Main Development Site and Associated Development Sites

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve hedgehog
Hedgehog	Main development site	Volume 2, Chapter 14: Terrestrial Ecology and Ornithology [AS-033]	<u>Tertiary mitigation:</u> Removal of vegetation, ground clearance and the commencement of construction activities have the potential to risk killing or injuring hedgehogs, either in summer or “day” nests or winter hibernation nests (hibernation occurs between November to April). Ground clearance works would generally be undertaken outside of the hibernation period. Prior to ground

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve hedgehog
			clearance, an inspection for hedgehog nests would be undertaken by a suitably experienced ECoW prior to the removal of vegetation; this is likely to be undertaken in parallel with removal of reptiles from the construction footprint.
	Northern park and ride, Southern park and ride, Freight management facility, Sizewell link road, Two village bypass, Yoxford, Green rail route	Volume 3, Chapter 7: Terrestrial Ecology and Ornithology [APP-363] , Volume 4, Chapter 7: Terrestrial Ecology and Ornithology [APP-394] , Volume 8, Chapter 7: Terrestrial Ecology and	<u>Tertiary mitigation:</u> The phased approach to site clearance and topsoil stripping (as described previously to safeguard reptiles) would discourage hedgehogs away from the site and into the surrounding suitable habitat.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve hedgehog
		<p>Ornithology [APP-523], Volume 6 Chapter 7: Terrestrial Ecology and Ornithology [APP-461], Volume 5, Chapter 7: Terrestrial Ecology and Ornithology [APP-425], Volume 7, Chapter 7: Terrestrial Ecology and Ornithology [APP-494], Volume 9, Chapter 7:</p>	

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve hedgehog
		Terrestrial Ecology and Ornithology [APP-555]	

Table 3-13: Summary of measures to be implemented to conserve brown hare, listed in the Wildlife and Countryside Act, in the Associated Development Sites

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
Brown Hare	Main development site, all AD sites	Volume 2, Chapter 14: Terrestrial Ecology and Ornithology [AS-033], Volume 3, Chapter 7: Terrestrial	<u>Tertiary mitigation:</u> The phased approach to site clearance and topsoil stripping (as described previously to safeguard reptiles) would discourage brown hare away from the site and into the surrounding suitable habitat.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
		Ecology and Ornithology [APP-363] , Volume 4, Chapter 7: Terrestrial Ecology and Ornithology [APP-394] , Volume 8, Chapter 7: Terrestrial Ecology and Ornithology [APP-523] , Volume 6 Chapter 7: Terrestrial Ecology and Ornithology [APP-461] ,	

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
		<p>Volume 5, Chapter 7: Terrestrial Ecology and Ornithology [APP-425]</p> <p>Volume 7, Chapter 7: Terrestrial Ecology and Ornithology [APP-494],</p> <p>Volume 9, Chapter 7: Terrestrial Ecology and Ornithology [APP-555]</p>	

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Table 3-14: Summary of measures to be implemented to conserve polecat, listed in the Wildlife and Countryside Act, in the Main Development Site and Associated Development Sites

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve polecat
Polecat	Main development site, all AD sites	Volume 2, Chapter 14: Terrestrial Ecology and Ornithology [AS-033], Volume 3, Chapter 7: Terrestrial Ecology and Ornithology [APP-363], Volume 4, Chapter 7: Terrestrial Ecology and Ornithology [APP-394], Volume 8, Chapter 7:	<ul style="list-style-type: none"> Scoped out, no further measures implemented as no significant effect is considered likely.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve polecat
		<p>Terrestrial Ecology and Ornithology [APP-523], Volume 6 Chapter 7: Terrestrial Ecology and Ornithology [APP-461], Volume 5, Chapter 7: Terrestrial Ecology and Ornithology [APP-425] Volume 7, Chapter 7: Terrestrial Ecology and Ornithology [APP-494],</p>	

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve polecat
		Volume 9, Chapter 7: Terrestrial Ecology and Ornithology [APP-555]	

Table 3-15: Summary of measures to be implemented to conserve Schedule 1 listed bird species, listed in the Wildlife and Countryside Act, in the Main Development Site and Associated Development Sites

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Schedule 1 listed bird species
Schedule 1 listed bird species (wintering marsh harrier, barn owl, hobby, peregrine)	Main development site	Volume 2, Chapter 14: Terrestrial Ecology and Ornithology [AS-033]	No species- specific measures are proposed for any of the S1 listed species. General measures that apply to all bird species are as follows. <u>Primary mitigation:</u> <ul style="list-style-type: none"> The Rights of Way and Access Strategy for the EDF Energy estate (see Chapter 15, Appendix 15I of the ES (Book 6))

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Schedule 1 listed bird species
falcon, black redstart, Cetti's warbler) and all nesting bird species.			<p>has been developed to minimise the displacement of people away from the proposed development area to nearby European (National) sites to minimise disturbance to ground-nesting bird species and trampling of vegetation at those sites. In addition, the strategy outlines a monitoring programme for recreational displacement and identify local mitigation measures, to be agreed with local land managers, which could be introduced to further reduce recreational disturbance.</p> <ul style="list-style-type: none"> • The establishment of new reedbed and ditches at Aldhurst Farm (completed in 2016) has provided replacement for the land take of these habitats within Sizewell Marshes SSSI. The replacement habitats have established successfully, and mobile aquatic plant and invertebrate species would colonise over time from the adjacent areas of the Sizewell Marshes SSSI. These new habitats also provide nesting and foraging habitat for many bird species. Marsh Harriers have already started breeding in the new wetlands. • The extensive grasslands created to provide reptile mitigation and marsh harrier compensation habitats as well as the grasslands at Aldhurst Farm already support

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Schedule 1 listed bird species
			<p>populations of ground nesting bird species which would have been present at substantially lower densities when these habitats were intensively cultivated arable fields.</p> <ul style="list-style-type: none"> Removal of vegetation, ground clearance and the commencement of construction activities have the potential to risk killing or injuring nesting birds, and to damage or destroy nests, including those of ground-nesting species, should works be undertaken during the breeding bird season. Birds and their nests are protected under the Wildlife and Countryside Act (W&CA) and the removal of scrub and trees and ground clearance works would generally be undertaken outside of the breeding bird season. Where it is not possible to undertake these works outside of the breeding bird season, an inspection for nests would be undertaken by a suitably experienced ECoW prior to the removal of vegetation. If nesting birds are identified during this process, works in the vicinity of the nest (estimated to be a 10m standoff or greater, depending upon species) would cease until the young have fledged.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Schedule 1 listed bird species
	Northern park and ride	Volume 3, Chapter 7: Terrestrial Ecology and Ornithology [APP-363]	<p><u>Tertiary mitigation:</u></p> <ul style="list-style-type: none"> The removal of vegetation, ground clearance, and the commencement of construction activities have the potential to risk killing or injuring nesting birds, and to damage or destroy nests, including those of ground-nesting species, should works be undertaken during the breeding bird season (considered to be late February to August). Birds and their nests are protected under the Wildlife and Countryside Act, and the removal of scrub and trees and ground clearance works would generally be undertaken outside of the breeding bird season. Measures could also be put in place to deter birds from nesting in any hedgerow to be removed (for example, cutting back vegetation and making the area less suitable), however, the ground would need to remain undisturbed during the reptile hibernation period. Where it is not possible to undertake these works outside of the breeding bird season, an inspection for nests would be undertaken by a suitably experienced ECoW prior to the removal of vegetation. If nesting birds are identified during this process, works in the vicinity of the nest (estimated to be a 10m standoff) would cease until the young have fledged.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Schedule 1 listed bird species
	Southern park and ride	Volume 4, Chapter 7: Terrestrial Ecology and Ornithology [APP-394]	<p><u>Tertiary mitigation:</u></p> <ul style="list-style-type: none"> Construction activities have the potential to risk killing or injuring breeding birds, and damage or destroy nests, including those of ground-nesting species, should works be undertaken during the breeding bird season (late February to August inclusive). Birds and their nests are protected under the Wildlife and Countryside Act, therefore removal of scrub and trees and ground clearance works would generally be undertaken outside of the breeding bird season. Measures could also be put in place to deter birds from nesting in any hedgerow to be removed (for example, cutting back vegetation and making the area less suitable); however, the ground would need to remain undisturbed during the reptile hibernation period. Where it is not possible to undertake these works outside of the breeding bird season, an inspection for nests would be undertaken by a suitably experienced ECoW prior to the removal of vegetation. If breeding birds are identified during this process, works in the vicinity of the nest (estimated to be a 10m standoff) would need to cease until the young have fledged.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Schedule 1 listed bird species
	Freight management facility	Volume 8, Chapter 7: Terrestrial Ecology and Ornithology [APP-523]	<p><u>Tertiary mitigation:</u></p> <ul style="list-style-type: none"> Removal of vegetation, ground clearance, and the commencement of construction activities have the potential to risk killing or injuring nesting birds and to damage or destroy nests, including those of ground-nesting species, if works are undertaken during the breeding bird season (considered to be late February to August inclusive). Birds and their nests are protected under the Wildlife and Countryside Act and the removal of scrub and trees and ground clearance works would generally be undertaken outside of the breeding bird season. Measures could also be put in place to deter birds from nesting in any hedgerow to be removed (for example, cutting back vegetation and making the area less suitable); however, the ground would need to remain undisturbed during the reptile hibernation period. Where it is not possible to undertake these works outside of the breeding bird season, an inspection for nests would be undertaken by a suitably experienced Ecological Clerk of Works (ECoW) prior to the removal of vegetation. If nesting birds are identified during this process, works in the vicinity of

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Schedule 1 listed bird species
			the nest (estimated to be a 10m standoff) would cease until the young have fledged.
	Sizewell link road	Volume 6 Chapter 7: Terrestrial Ecology and Ornithology [APP-461]	<p><u>Tertiary mitigation:</u></p> <ul style="list-style-type: none"> Construction activities have the potential to risk killing or injuring breeding birds, and damage or destroy nests, including those of ground-nesting species, should works be undertaken during the breeding bird season (late February to August inclusive). Birds and their nests are protected under the Wildlife and Countryside Act, therefore removal of scrub and trees and ground clearance works would generally be undertaken outside of the breeding bird season. Measures could also be put in place to deter birds from nesting in any hedgerow to be removed (for example, cutting back vegetation and making the area less suitable); however, the ground would need to remain undisturbed during the reptile hibernation period. Where it is not possible to undertake these works outside of the breeding bird season, an inspection for nests would be undertaken by a suitably experienced ECoW prior to the removal of vegetation. If breeding birds are identified during this process, works in the

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Schedule 1 listed bird species
			vicinity of the nest (estimated to be a 10m standoff) would need to cease until the young have fledged
	Two village bypass	Volume 5, Chapter 7: Terrestrial Ecology and Ornithology [APP-425]	<u>Tertiary mitigation:</u> <ul style="list-style-type: none"> Construction activities have the potential to risk killing or injuring breeding birds, and damage or destroy nests, including those of ground-nesting species, should works be undertaken during the breeding bird season (late February to August inclusive). Birds and their nests are protected under the Wildlife and Countryside Act, therefore removal of scrub and trees and ground clearance works would generally be undertaken outside of the breeding bird season. Measures could also be put in place to deter birds from nesting in any hedgerow to be removed (for example, cutting back vegetation and making the area less suitable); however, the ground would need to remain undisturbed during the reptile hibernation period. Where it is not possible to undertake these works outside of the breeding bird season, an inspection for nests would be undertaken by a suitably experienced ECoW prior to the removal of vegetation. If breeding birds are identified during this process, works in the

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Schedule 1 listed bird species
			vicinity of the nest (estimated to be a 10m standoff) would need to cease until the young have fledged.
	Yoxford	Volume 7, Chapter 7: Terrestrial Ecology and Ornithology [APP-494]	<u>Tertiary mitigation:</u> <ul style="list-style-type: none"> The removal of vegetation, ground clearance and the commencement of construction activities have the potential to risk killing or injuring nesting birds, and to damage or destroy nests, including those of ground-nesting species, should works be undertaken during the breeding bird season (considered to be late February to August). Birds and their nests are protected under the Wildlife and Countryside Act and the removal of scrub and trees and ground clearance works would generally be undertaken outside of the breeding bird season. Measures could also be put in place to deter birds from nesting in any hedgerow to be removed (for example, cutting back vegetation and making the area less suitable); however, the ground would need to remain undisturbed during the reptile hibernation period, after which groundworks could commence. Where it is not possible to undertake these works outside of the breeding bird season, an inspection for nests would be undertaken by a suitably experienced ECoW prior to the removal of vegetation. If

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Schedule 1 listed bird species
			nesting birds are identified during this process, works in the vicinity of the nest (estimated to be a 10m standoff) would cease until the young have fledged.
	Green rail route	Volume 9, Chapter 7: Terrestrial Ecology and Ornithology [APP-555]	<u>Tertiary mitigation:</u> <ul style="list-style-type: none"> Removal of vegetation, ground clearance and the commencement of construction activities have the potential to risk killing or injuring nesting birds, and to damage or destroy nests, including those of ground-nesting species, should works be undertaken during the breeding bird season (considered to be late February to August). Birds and their nests are protected under the Wildlife and Countryside Act and the removal of scrub and trees and ground clearance works would generally be undertaken outside of the breeding bird season. Measures could also be put in place to deter birds from nesting in any hedgerow to be removed (for example, cutting back vegetation and making the area less suitable); however, if conducted during the reptile hibernation period, the ground would need to remain undisturbed. Where it is not possible to undertake these works outside of the breeding bird season, an inspection for nests would be undertaken by a suitably experienced ECoW prior to the

NOT PROTECTIVELY MARKED

Wildlife & Countryside Act Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve Schedule 1 listed bird species
			removal of vegetation. If nesting birds are identified during this process, works in the vicinity of the nest (estimated to be a 10m standoff) would cease until the young have fledged.

NOT PROTECTIVELY MARKED

4 NERC RESPONSE

This section has been prepared to summarise the duties under Section 41 of the NERC Act and covers the following:

Table 4-1: Summary of measures to be implemented to conserve species and habitats listed under Section 41 of the NERC Act in the Main Development Site and Associated Development Sites

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
S41 bat species present: Barbastelle bat, Soprano pipistrelle, Bechstein's, Brown long eared, Horseshoe bat (greater and lesser), Noctule	Main development site	Volume 2, Chapter 14: Terrestrial Ecology and Ornithology [AS-033] Appendix 14C1A – Bat Mitigation Strategy [APP-252]	<u>Primary mitigation:</u> <ul style="list-style-type: none"> The SSSI crossing will consist of a 30m open single span bridge. This will facilitate the passage of bats through the structure. Lighting measures on the crossing would be deployed to ensure the culvert is viable for use by bats. A detailed lighting strategy would be implemented in accordance with the Lighting Management Plan (Volume 2, Appendix 2B) (Doc Ref. 6.3 2B(A)) . The strategy would comply with best practice to minimise impacts on nocturnal species such as bats that may use nearby habitats for roosts or foraging. Guidance within the latest Institution of Lighting Professionals (ILP) Guidance Note would be followed. The majority of the woodland resource within the EDF Energy estate would be retained including the line of mature

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
		<p>Terrestrial Ecology Monitoring and Mitigation Plan [REP5-088]</p> <p>Sizewell C Project Bat Method Statement (Doc Ref. 9.92)</p>	<p>broadleaved trees on the northern edge of Kenton Hills, known to support features of importance for roosting bat species and also including most of the well-developed hedgerows and mature trees along Bridleway 19, east of Upper Abbey Farm.</p> <ul style="list-style-type: none"> 45 alternative roost sites (bat boxes) have been erected in advance of construction to the north and south of the site within woodland least likely to be directly affected by noise and lighting disturbance, should the proposed development displace roosting bats from woodland more directly exposed to disturbance. In addition, a purpose-built 'bat house' would be constructed to provide alternative roosting opportunities for bats. Should any roost loss be confirmed, roosts would be replaced at an appropriate ratio, to be agreed with Natural England. The oLEMP [REP1-010] outlines management actions to return existing arable land on the EDF Energy estate post-construction to Suffolk Sandlings habitat comprising dry acid grassland and with additional areas of woodland and scrub. In the operational phase of the development, this landscape-scale habitat creation approach would replace existing intensively managed arable farmland with habitats of greater

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>biodiversity value and would increase habitat connectivity. The oLEMP includes also long-term management prescriptions and a monitoring programme for habitats created ensuring that these areas deliver the habitats proposed.</p> <p><u>Tertiary mitigation:</u></p> <ul style="list-style-type: none"> • The appointment of an Ecological Clerk of Works (ECoW) to manage ecological issues on site, undertaken or supervise ongoing works in relation to protected species, supervise works in sensitive areas and undertake monitoring as required. • Training for construction workers, in the form of tool box talks, on ecological constraints including retained habitats, designated sites and protected species considerations. • A Bat Mitigation Strategy (Volume 2, Appendix 14C1A [APP-252]) has been provided as part of the ES. • A final inspection of trees to be removed would be undertaken as close to the timing of felling as possible to take into account the regular roost switching behaviour displayed by tree-roosting bat species. Should bats (or evidence of use by bats) be identified, the mitigation

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>strategies laid out in the licence application would be implemented (for example, the fitting of exclusion devices and/or soft-felling). The following approaches would be used:</p> <ul style="list-style-type: none"> • To mitigate for the confirmed and potential loss of tree roosts, replacement roosts would be installed on retained trees in suitable locations within the site boundary and within the wider EDF Energy estate. This provision would primarily take the form of a variety of bat boxes which would be used to support different species. However, the transfer of potential roost features, bark replacement and veteranisation of retained trees would be considered where appropriate. This is in addition to that already provided for barbastelle and detailed under primary mitigation. • Mitigation of roosts within buildings, particularly maternity and/or hibernation roosts that may be functionally lost would require more substantial mitigation. • Where habitat features would be retained within the site during construction, measures to ensure the protection of these features would be implemented (appropriate to the habitat concerned).

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p><u>Additional detail on the measures:</u></p> <ul style="list-style-type: none"> Once construction is complete and the temporary construction area has been removed, landscape-scale habitat creation measures to create acid grasslands would have developed in accordance with the oLEMP. The general pattern of the EDF Energy estate would be maintained as an open landscape with small woodland blocks but fields which are currently intensively managed as arable or improved grassland would be converted to open acid grassland that would result in a greater invertebrate prey biomass (and would establish more rapidly than woodland). Supplementary scrub planting and strengthening of hedgerows and woodland margins and some new woodland blocks are included within the outline landscape design proposals which would enhance connectivity for bats. The measures as a whole would provide a net biodiversity gain compared to the largely arable landscape currently present across the site. <p>The following habitat creation measures have already been undertaken by EDF Energy;</p>

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<ul style="list-style-type: none"> 5ha of wetland (reedbed) has already been established at Aldhurst Farm together with approximately 60 ha of acid grassland. 10ha of species-rich acid grassland at Broom Covert has been taken out of intensive cattle grazing and grassland and scrub allowed to recover and re-establish as part of the reptile mitigation. 40ha of acid grassland with 40% scrub planting has been established on former arable fields as part of the reptile mitigation. 40ha of grassland and scrub planting will be established to provide foraging habitat for marsh harrier. <p><u>Monitoring:</u></p> <ul style="list-style-type: none"> Monitoring the 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). The areas to which this applies are described in the Non licensed method statement.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<ul style="list-style-type: none"> The TEMMP [REP5-088] outlines the proposed monitoring activities identified for bats during the construction and operational phases. A draft Sizewell C Project Bat Method Statement (Doc Ref. 9.92) has been compiled that details the aforementioned key approaches to mitigating potential impacts to the bat populations present. Roosting features / roosts due to be lost will be replaced with ratios as set out below: <ul style="list-style-type: none"> 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. 16 bat boxes are required to replace the three roosts due to be lost and 224 additional roost mitigation features to compensate for the loss of high or moderate roosting features within the Main Development Site. At least half will be generated naturally or created through veteranisation within new woodland planting. The bat boxes will be mounted on suitable trees prior to works commencing. There will be approximately 1 – 3 bat

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>boxes per tree. These boxes will remain in place and suitable for bats for 15 years. This number of bat boxes ensures that all roosts lost are adequately mitigated for immediately.</p> <ul style="list-style-type: none"> • The maturation of broadleaf woodland planting through natural formation of Potential Roost Features (PRFs) in the very long-term will create at least another 191 PRFs. • A purpose built 'bat house' is proposed at Lower Abbey Farm, it will be located close to existing flight lines, surrounded by vegetation insofar as is possible and where necessary additional planting in the vicinity of the bat house, to improve habitat connectivity to the existing flight paths. • Any additional confirmed roosts discovered during bat rescue procedures will be compensated by additional bat boxes or similar mitigation features as per the ratios detailed above. <p><u>Monitoring:</u></p> <ul style="list-style-type: none"> • The bat house will be subject to inspection during the maternity season (May – July) for five years beyond the completion of construction. Hibernation roosts within the structure will be subject to inspection during the winter hibernation season (December – February).

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<ul style="list-style-type: none"> The bat boxes installed on the suitable retained trees will be subject to inspection. The bat boxes will be checked for usage in September by the named ecologist/accredited agent on an annual basis during the construction phase from one year after installation. Boxes would continue to be monitored for five years beyond the completion of construction. Any boxes that require maintenance/repair/replacement will only be moved once they have been inspected by the named ecologist/accredited agent to ensure no bats are disturbed. If the bat boxes are damaged or missing, they will be replaced. In the unlikely events that the mitigation is shown to be ineffective (i.e. no evidence of bats using the bat boxes) then the bat box location may be amended. The conditions of the habitats in the vicinity of the bat boxes will also be checked by the named ecologist/accredited agent and any necessary management requirements reported back to EDF.
Species specific measures: Barbastelle	Main development site	Volume 2, Chapter 14: Terrestrial Ecology and	<ul style="list-style-type: none"> In anticipation of tree removal to facilitate the Sizewell C development, 45 bat boxes suitable for barbastelle have already been erected in the wider Sizewell estate within: Sandpytle Plantation (10); The Grove (15); St. James

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
		<p>Ornithology [AS-033]</p> <p>Appendix 14C1A – Bat Mitigation Strategy [APP-252]</p> <p>Sizewell C Project Bat Method Statement (Doc Ref. 9.92)</p>	<p>Covert (10); Reckham Pits (5) and Leiston Carr (5), as compensation.</p> <ul style="list-style-type: none"> New roosts have been erected across the site and further roosting provision would be installed. As outlined in the Draft Bat Method Statement, these would include the provision of a dedicated bat barn at Lower Abbey Farm in an area relatively remote from construction noise. The bat house has been designed to include features suitable for species found roosting at Upper Abbey Farm; barbastelle, Natterer's bat, Daubenton's bat, brown long-eared, common and soprano pipistrelle. The proposed location for the bat barn will be surrounded by retained vegetation and good quality foraging habitats. 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 barn. Hedgerows will be retained along Upper Abbey Bridleway, which has been shown to be a key existing commuting route and will provide connectivity to the bat barn. The bat barn will need to have a suitable thermal regime in order to be successful; features to help create a range of temperatures have been included within the building design.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>It will be draft free and a stable temperature environment will be created. It will be load bearing to allow for safe internal monitoring visits.</p> <ul style="list-style-type: none"> • Temperature and humidity data loggers will be placed inside the bat barn after construction to measure the environmental conditions. Data for the duration of the monitoring period will be collected and compared with the findings of the monitoring surveys. Like the bat boxes, monitoring will take place on an annual basis during the construction phase from one year after installation. Boxes would continue to be monitored for five-years beyond the completion of construction. The monitoring of these features is secured in the TEMMP [REP5-088] via way of requirement. • To mitigate for the impacts of severance on barbastelle, the SSSI crossing, linking Goose Hill to the main platform, would be designed to promote connectivity between habitats to the north and south of the construction footprint. The design of the SSSI crossing was updated as part of the ES Addendum and will now consist of a 30m open single span bridge. This will be more porous than the original proposed culvert and will facilitate the passage of fish, bats, invertebrates, reptiles, otter and water vole through the structure.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<ul style="list-style-type: none"> Alternative foraging and commuting areas are also being provided. The 'marsh harrier habitat improvement area as well as the multiple reptile receptor sites would provide extensive new areas of foraging habitat. Monitoring of known roost locations and key foraging/commuting routes during Phase 1 and 2 would be undertaken to establish the extent of any disturbance and quantify any potentially negative impacts e.g. roost abandonment and the need for any remedial measures. The monitoring is secured in the TEMMP [REP5-088] via way of requirement.
S41 bat species: noctule, soprano pipistrelle, barbastelle, brown long-eared	Northern park and ride	<p>Volume 3, Chapter 7: Terrestrial Ecology and Ornithology [APP-363]</p> <p>Volume 3, Chapter 7, Appendix 7A Annex 7A.6A</p>	<p><u>Primary mitigation / design:</u></p> <ul style="list-style-type: none"> Operational lighting for the proposed development would be designed to prevent light spill to Little Nursery Wood and other habitats, and light levels would not exceed 0.1lux along the eastern side of this wood. The lighting design for the proposed development would use light fittings chosen to limit stray light. Guidance within the latest Institution of Lighting Professionals Guidance Note would 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.

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
		RAMS Bats [APP-364] Terrestrial Ecology Monitoring and Mitigation Plan [REP5-088]	<ul style="list-style-type: none"> The woodland would be retained in its entirety, with a buffer distance of 20m between the woodland and the proposed development. There would be no direct loss of woodland habitat, and its associated species, and the buffer distance would assist in minimising impacts associated with the proposed development (such as noise, lighting and human disturbance). In addition to the previous measures, close-boarded fencing would be erected along the inside of the security fence where it is adjacent to Little Nursery Wood to provide additional mitigation for lighting impacts (including those from vehicle headlights) and noise impacts. The close-boarded fencing would be retained during the operational phase to act as screen for lighting (from vehicle headlights) and noise impacts. 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

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>support roosting bats, including the brown long-eared roost. All of these trees within the adjacent wood land are retained.</p> <p><u>Tertiary mitigation:</u></p> <ul style="list-style-type: none"> Construction work would take place during Monday to Saturday 07:00 to 19:00 hours, and some lighting may be required during the winter months, dependent upon what construction activities are taking place. Outside of these hours, lighting would be required at night for site security. Temporary construction lighting would be controlled to minimise light spill on surrounding habitats. This would minimise impacts on nocturnal species such as bats that may use the nearby tree lines or habitats for commuting, roosts or foraging. The lighting design would use light fittings chosen to limit stray light and minimise impacts on sensitive species. The lighting would also be designed to minimise the visibility from sensitive receptors off-site. <p><u>RAMS:</u></p> <p><u>Toolbox talk:</u></p> <ul style="list-style-type: none"> Prior to commencement of the vegetation clearance works, all site contractors will be briefed by the ECoW as part of the

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>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 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.</p> <p><u>Precautionary working methods:</u></p> <ul style="list-style-type: none"> • Little Nursery Wood would be retained in its entirety with a buffer distance of 20m between the woodland and the proposed development. • Close-boarded fencing where the proposed development site abuts Little Nursery woodland. • The three trees within the development site with the potential to support roosting bats would be retained. No trees will be felled as part of this scheme. • Construction lighting would be designed to prevent spill and exposure on to Little Nursery Wood. The lighting design for the proposed development would comply with the lighting

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>strategy and use light fittings chosen to limit stray light. Guidance within the latest Institution of Lighting Professionals (ILP) Guidance Note would be followed as far as possible. These measures would minimise impacts on nocturnal species such as bats that may use the nearby tree lines or habitats for roosting or foraging.</p> <ul style="list-style-type: none"> • 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. • A10m buffer from the development would be maintained along the northeast, south-east and south-west borders. <p><u>Vegetation clearance:</u></p> <ul style="list-style-type: none"> • 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.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<ul style="list-style-type: none"> Works will be undertaken outside of all tree and hedgerow root protection zones that would not be removed as part of the proposed development. Tree protective fencing as described in section 6.2 of British Standard 5837:2012 will 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 will remain intact throughout the duration of the works and only be removed upon completion. Weather-proof notices will 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 and any advice provided adhered to, to secure the long-term survival of the tree/hedgerow.
Volume 4, Chapter 7: Terrestrial Ecology and	Southern park and ride		<p><u>Primary mitigation:</u></p> <ul style="list-style-type: none"> Operational lighting would be designed so that light spill beyond the site boundary would be minimal (lighting levels would be less than between 1.0 lux), and there would be no substantive light spillage into adjacent

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
Ornithology [APP-394] Volume 4, Chapter 7, Appendix 7A Annex 7A.5A RAMS Bats [APP-395] Terrestrial Ecology Monitoring and Mitigation Plan [REP5-088] Sizewell C Project Bat Method Statement (Doc Ref. 9.92)			<p>habitats and woodland blocks including Whin Belt. The lighting design for the proposed development would use light fittings chosen to limit stray light. Guidance within the latest Institution of Lighting Professionals Guidance Note would be followed as far as possible. These measures would minimise impacts on nocturnal species such as bats that may use the nearby tree lines or habitats for roosts or foraging.</p> <p><u>Tertiary mitigation:</u></p> <ul style="list-style-type: none"> Construction work would take place during Monday to Saturday 07:00–19:00 hours, and some lighting in winter may be required dependent upon what construction activities are taking place. Outside of these hours, lighting may be required at night for safety or security. Temporary construction lighting would be controlled to minimise light spill on surrounding habitats. This would minimise impacts on nocturnal species such as bats that may use the nearby tree lines, or habitats for commuting, roosts or foraging. The lighting design would use light fittings chosen to limit stray light, and minimise impacts on sensitive species. The lighting would also be

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>designed to minimise the visibility from sensitive receptors off-site.</p> <ul style="list-style-type: none"> The proposed development includes the removal of several trees including three trees identified as having the potential to support roosting bats. Management measures would likely include: <ul style="list-style-type: none"> A final inspection of these trees would be undertaken as close to the timing of felling as possible to take into account the regular roost-switching behaviour displaced by tree-roosting bat species. Should bats (or evidence of use by bats) be identified, the mitigation strategies laid out in the licence application(s) would be implemented (for example, the fitting of exclusion devices). Felling of trees would generally be undertaken in September or October, to avoid both the maternity and hibernation periods during which bats are more vulnerable to disturbance (this timing also avoids the breeding bird season). <p><u>Monitoring:</u></p>

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<ul style="list-style-type: none"> There would be regular checks of construction lighting to monitor and correct for any extraneous light spill into surrounding habitats. There would also be regular checks of operational lighting to monitor and correct for any extraneous light spill into surrounding habitats. The TEMMP [REP5-088] outlines the proposed monitoring activities identified for bats during the construction and operational phases. A draft Sizewell C Bat Method Statement (Doc Ref. 9.92) has been compiled that details the key approaches to mitigating potential impacts to the bat populations present. Roosting features / roosts due to be lost will be replaced with ratios as set out below: <ul style="list-style-type: none"> 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. To mitigate for the roosting features to be lost, at least 6 bat boxes are proposed to be installed

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p><u>Monitoring:</u></p> <ul style="list-style-type: none"> The bat boxes installed on the suitable retained trees will be subject to inspection. The bat boxes will be checked for usage in September by the named ecologist/accredited agent on an annual basis during the construction phase from one year after installation. Boxes would continue to be monitored for five years beyond the completion of construction. Any boxes that require maintenance/repair/replacement will only be moved once they have been inspected by the named ecologist/accredited agent to ensure no bats are disturbed. If the bat boxes are damaged or missing, they will be replaced. In the unlikely events that the mitigation is shown to be ineffective (i.e. no evidence of bats using the bat boxes) then the bat box location may be amended. The conditions of the habitats in the vicinity of the bat boxes will also be checked by the named ecologist/accredited agent and any necessary management requirements reported back to EDF.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p><u>RAMS:</u></p> <p><u>Toolbox talk:</u></p> <ul style="list-style-type: none"> Prior to commencement of the vegetation clearance 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 bats. 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 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. <p><u>Precautionary working methods:</u></p> <ul style="list-style-type: none"> Construction lighting would 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 use light fittings chosen to limit stray light. Guidance within the latest Institution of Lighting Professionals Guidance Note would be followed as

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>far as possible. These measures would minimise impacts on nocturnal species such as bats that may use the nearby tree lines or habitats for roosts or foraging.</p> <ul style="list-style-type: none"> • 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. • Close-boarded fencing where the proposed development site abuts areas of woodland to provide additional protection from vehicle headlights and noise. • Initially all trees to be removed will be reassessed for bat roosting potential. • Any trees identified as having low bat roosting potential will be removed using a soft felling methodology outlined below with a suitability experienced, appropriately licensed, bat worker or bat worker assistant present. Trees will generally be removed in October, thereby avoiding the sensitive maternity (April-September) and hibernation (November-February) periods for bats.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<ul style="list-style-type: none"> For any trees with moderate or high roosting potential, a thorough pre works check for roosting bats will be undertaken. The methodology and required survey effort for these pre works checks will depend upon the status of the roosting features within the trees, but may include: <ul style="list-style-type: none"> a climbed or ground based tree inspection using an endoscope and / or torch; and emergence / re-entry surveys. 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. Should additional emergence re-entry surveys be required these will be undertaken between April and September inclusive. If no roosts are found, the approach outlined below will be undertaken. All trees with potential roost features for bats will be soft felled using the following precautionary measures: <ul style="list-style-type: none"> trees classed as having low potential to support roosting bats, shall be felled under the watching brief of the ECoW;

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<ul style="list-style-type: none"> ○ where potential roost features for bats cannot be exhaustively checked they will be section felled, with each section carefully lowered to the ground. Cuts will be made at least 50 cm beyond the extent of the potential roost feature; ○ if limbs or large branches require felling, consideration will 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 will be wedged open prior to removal of the limb/branch; ○ the stems of dense ivy will 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 will 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 will 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. ● If any bats are encountered during the felling operations all works and activity must cease immediately, until the ECoW

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>has advised on the most appropriate manner to deal with the situation.</p> <ul style="list-style-type: none"> To mitigate for the loss of the tree and potential roost resources, bat boxes would be installed on retained trees in suitable locations within the site boundary, prior to felling. 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. A variety of bat boxes would be used to support different species.
S41 bat species: soprano pipistrelle, brown long-eared.	Freight management facility	<p>Volume 8, Chapter 7: Terrestrial Ecology and Ornithology [APP-523]</p> <p>Volume 8, App 7A, Annex 7A04A RAMS Bats</p>	<p><u>Primary mitigation:</u></p> <ul style="list-style-type: none"> Lighting would be provided at the perimeter, and parking areas, for security and safety reasons. Lanterns would utilise LED based light fittings to ensure energy efficiency with zero-degree tilt, and lighting columns along the perimeter would use demountable shields 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 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

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
		<p>Terrestrial Ecology Monitoring and Mitigation Plan [REP5-088]</p> <p>Sizewell C Project Bat Method Statement (Doc Ref. 9.92)</p>	<p>Professionals Guidance Note would 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.</p> <p><u>Tertiary mitigation:</u></p> <ul style="list-style-type: none"> Construction work would take place during Monday to Saturday 07:00 to 19:00 and some lighting may be required during the Winter months, dependent upon the construction activities which are taking place; however, some activities may require 24 hour working and some targeted lighting would be required for site security. Temporary construction lighting would be controlled to minimise light spill on surrounding habitats. This would minimise impacts on nocturnal species such as bats that may use the nearby tree lines or habitats for commuting, roosts or foraging. The lighting design would use light fittings chosen to limit stray light and minimise impacts on sensitive species. The lighting would also be designed to minimise the visibility from sensitive receptors off-site.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<ul style="list-style-type: none"> The proposed development includes the removal of several trees identified as having the potential to support roosting bats. Management measures would likely include: <ul style="list-style-type: none"> A final inspection of these trees would be undertaken as close to the timing of felling as possible to account for the regular roost-switching behaviour displaced by tree-roosting bat species. Should bats (or evidence of use by bats) be identified, the mitigation strategies laid out in the licence application(s) would be implemented (for example, the fitting of exclusion devices). Felling would be undertaken in September/October and so would avoid the maternity and hibernation periods during which bats are more vulnerable to disturbance (this timing also avoids the breeding bird season). However, timing requirements would be confirmed following a pre-felling inspection, which could include a climbed inspection, if required. <p><u>Monitoring:</u></p> <ul style="list-style-type: none"> There would be regular checks of construction lighting to monitor and correct for any excessive light spill into the

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>surrounding habitats and particularly into the adjacent hedgerows and habitats.</p> <ul style="list-style-type: none"> • There would be regular checks of operational lighting to monitor and correct for any excessive light spill into the surrounding habitats and particularly into the hedgerows. • The TEMMP [REP5-088] outlines the proposed monitoring activities identified for bats during the construction and operational phases. • A draft Sizewell C Bat Method Statement (Doc Ref. 9.92) has been compiled that details the key approaches to mitigating potential impacts to the bat populations present. • Roosting features / roosts due to be lost will be replaced with ratios as set out below: <ul style="list-style-type: none"> • 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. • Only one tree with moderate value is due to be lost, therefore at least 1 bat box is proposed to be installed to mitigate this impact.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p><u>Monitoring:</u></p> <ul style="list-style-type: none"> The bat box installed on the suitable retained tree will be subject to inspection. The bat box will be checked for usage in September by the named ecologist/accredited agent on an annual basis during the construction phase from one year after installation. The box would continue to be monitored for five years beyond the completion of construction. If the box requires maintenance/repair/replacement, it will only be moved once it has been inspected by the named ecologist/accredited agent to ensure no bats are disturbed. If the box is damaged or missing, it will be replaced. In the event that the mitigation is shown to be ineffective (i.e. no evidence of bats using the bat box) then the bat box location may be amended. The conditions of the habitats in the vicinity of the bat box will also be checked by the named ecologist/accredited agent and any necessary management requirements reported back to EDF.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p><u>RAMS:</u></p> <p><u>Toolbox talk:</u></p> <ul style="list-style-type: none"> Prior to commencement of the vegetation clearance 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 bats. 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 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. <p><u>Precautionary working methods:</u></p> <ul style="list-style-type: none"> Lighting would be provided at the perimeter, and parking areas, for security and safety reasons. Lanterns would utilise LED based light fittings to ensure energy efficiency with zero-degree tilt, and lighting columns along the perimeter would use focused optics to reduce backward spill of light. To further assist on mitigating obtrusive light,

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>a Central Management System has been proposed for the lighting which would be capable of 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 would 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;</p> <ul style="list-style-type: none"> • 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. • Initially all trees to be removed will be reassessed for bat roosting potential. • Any trees identified as having low bat roosting potential will be removed using a soft felling methodology with a suitability experienced, appropriately licensed, bat worker

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>or bat worker assistant present. This is outlined below. Trees will generally be removed in October, thereby avoiding the sensitive maternity (April-September) and hibernation (November-February) periods for bats.</p> <ul style="list-style-type: none"> • For any trees with moderate or high roosting potential, a pre works inspection for roosting bats will be undertaken. The methodology and required survey effort for these pre works checks will depend 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. • 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. • If no roosts are found, the approach outlined below will be undertaken. • All trees with potential roost features for bats will be soft felled using the following precautionary measures:

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<ul style="list-style-type: none"> trees classed as having low potential to support roosting bats, shall be felled under the watching brief of the ECoW; where potential roost features for bats cannot be exhaustively checked they will be section felled, with each section carefully lowered to the ground. Cuts will be made at least 50 cm beyond the extent of the potential roost feature; if limbs or large branches require felling, consideration will 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 will be wedged open prior to removal of the limb/branch; the stems of dense ivy will 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 will be checked on the ground by a suitably experienced bat ecologist. If any potential roost feature can still not be exhaustively checked that section will be allowed a rest period of at least 24 hours to ensure that

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>any individual bats that may have been missed are given the opportunity to relocate.</p> <ul style="list-style-type: none"> 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. To mitigate for the loss of the tree and potential roost resources, bat boxes would 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. A variety of bat boxes would be used to support different species.
S41 bat species: noctule, soprano pipistrelle, barbastelle, brown long-eared bat, big bat', <i>Myotis</i> spp. and <i>Plecotus</i> spp	Sizewell link road	Volume 6 Chapter 7: Terrestrial Ecology and Ornithology [APP-461]	<p><u>Primary mitigation:</u></p> <ul style="list-style-type: none"> The route of the proposed development would be mostly unlit, thereby maintaining a dark corridor, minimising the potential impacts to nocturnal species. To ensure road safety, lighting would be provided at the A12 and B1122 roundabouts. The remaining junctions would have low minor road flows and be similar to existing unlit rural junctions and would be unlit to minimise light spill.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
		<p>Volume 6, Appendix 7A, Annex 7A-6B RAMS Bats [APP-462]</p> <p>Terrestrial Ecology Monitoring and Mitigation Plan [REP5-088]</p> <p>Sizewell C Project Bat Method Statement (Doc Ref. 9.92)</p> <p>Sizewell Link Road Landscape and Ecological</p>	<p>Operational lighting design would be compliant with relevant highway standards, and where possible would be chosen to limit stray light. Guidance within the latest Institution of Lighting Professionals Guidance Note: Bats and artificial lighting in the UK would be followed as far as possible. These measures would minimise impacts on nocturnal species, such as bats that may use the nearby tree lines, or habitats for roosting or foraging, and would also maximise the use of reinstated 'bat crossing points'.</p> <ul style="list-style-type: none"> In accordance with the LEMP (Doc Ref. 8.3 B(B)), crossing points (bat hop-overs) to facilitate the passage of bats across the road alignment have been incorporated in the design where foraging or commuting routes have been identified, to reduce the potential for incidental mortality as a result of bats crossing the road and colliding with vehicles. These features would comprise hedgerow planting. Also, features such as oversized culverts, crop kerb, filter drains / underpasses that will benefit both bats and great crested newts will remain functional and provide safe crossing points over the course of the operational phase.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
		Management Plan (Doc Ref. 8.3 B(B))	<ul style="list-style-type: none"> Also, in accordance with the LEMP, existing linear wooded corridors will be reinforced and expanded and others created to provide greater long-term connectivity for bats and other species on a landscape scale. Specifically, native woodland would be created east of the East Suffolk Line, in the vicinity of the existing Fordley Road, in the vicinity of Trust Farm, and linking Plumhill Covert to Pretty Road. Landscape features and mitigation areas for nocturnal species would not be illuminated or subject to light spill and dark corridors provided. <p><u>Tertiary mitigation:</u></p> <ul style="list-style-type: none"> Construction lighting, where required, would be provided at the minimum luminosity and would be designed, positioned and/or directed so as not to unnecessarily intrude on adjacent ecological receptors or habitats. Such measures could include (but not limited to) shielding of luminaires to reduce backward spill of light or use of sensors or timing devices to automatically switch off lighting where appropriate and provision of closed boarded fencing where the site abuts retained woodland. This would minimise impacts on nocturnal species such

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>as bats that may use the nearby tree lines or habitats for commuting, roosting or foraging.</p> <ul style="list-style-type: none"> The proposed development includes the removal of 42 trees identified as having the potential to support roosting bats. Management measures would likely include: <ul style="list-style-type: none"> final inspection of these trees would be undertaken as close to the timing of felling as possible to take into account the regular roost-switching behaviour displaced by tree-roosting bat species. Should bats (or evidence of use by bats) be identified, the mitigation strategies laid out in the licence application(s) would be implemented (for example, the fitting of exclusion devices); felling of trees would generally be undertaken in September or October, to avoid both the maternity and hibernation periods during which bats are more vulnerable to disturbance (this timing also avoids the breeding bird season). <p><u>Monitoring:</u></p> <ul style="list-style-type: none"> There would be regular checks of construction lighting to monitor and correct for any excessive light spill into the

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>surrounding habitats and particularly into the adjacent woodland.</p> <ul style="list-style-type: none"> Operational lighting would be checked to monitor and correct for any excessive light spill into the surrounding habitats, and particularly into the adjacent woodland. There would also be maintenance checks of operational lighting to monitor and correct for any extraneous light spill into surrounding habitats. The TEMMP [REP5-088] outlines the proposed monitoring activities identified for bats during the construction and operational phases. A draft Sizewell C Project Bat Method Statement (Doc Ref. 9.92) has been compiled that details the key approaches to mitigating potential impacts to the bat populations present. Roosting features / roosts due to be lost will be replaced with ratios as set out below: <ul style="list-style-type: none"> 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.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<ul style="list-style-type: none"> Approximately 102 compensatory roost mitigation features are required to mitigate for the loss of moderate or high potential roosting features. This will comprise a mixture of bat boxes and at least half will be features that are generated naturally or created through veteranisation within new woodland planting. <p><u>Monitoring:</u></p> <ul style="list-style-type: none"> The bat boxes installed on the suitable retained trees will be subject to inspection. The bat boxes will be checked for usage in September by the named ecologist/accredited agent on an annual basis during the construction phase from one year after installation. Boxes would continue to be monitored for five years beyond the completion of construction. Any boxes that require maintenance/repair/replacement will only be moved once they have been inspected by the named ecologist/accredited agent to ensure no bats are disturbed. If the bat boxes are damaged or missing, they will be replaced. In the unlikely events that the mitigation is

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>shown to be ineffective (i.e. no evidence of bats using the bat boxes) then the bat box location may be amended.</p> <ul style="list-style-type: none"> The conditions of the habitats in the vicinity of the bat boxes will also be checked by the named ecologist/accredited agent and any necessary management requirements reported back to EDF. <p><u>RAMS:</u> <u>Toolbox talk:</u></p> <ul style="list-style-type: none"> Prior to commencement of the vegetation clearance 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 bats. 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 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.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p><u>Precautionary working methods:</u></p> <ul style="list-style-type: none"> • Presence of 10m buffer areas between the edge of the proposed development and lowland mixed deciduous woodland • Presence of 10m buffer areas between the edge of the proposed development and watercourses where practicable • Close-boarded fencing where the proposed development site abuts woodland. • Construction lighting would be designed to minimise light spill and the potential for light disturbance on adjacent land. The lighting design for the proposed development would comply with the lighting strategy and use light fittings chosen to limit stray light. Guidance within the latest Institution of Lighting Professionals Guidance Note would be followed as far as possible. These measures would minimise impacts on nocturnal species such as bats that may use the nearby tree lines or habitats for roosting or foraging. • 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

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>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.</p> <ul style="list-style-type: none"> Initially all trees to be removed will be reassessed for bat roosting potential. Any trees identified as having low bat roosting potential will be removed using a soft felling methodology with a suitability experienced, appropriately licensed, bat worker or bat worker assistant present. This is outlined below. Trees will generally be removed in October, thereby avoiding the sensitive maternity (April-September) and hibernation (November-February) periods for bats. For any trees with moderate or high roosting potential, a pre works inspection for roosting bats will be undertaken. The methodology and required survey effort for these pre works checks will depend upon the status of the roosting features within the trees, but may include: <ol style="list-style-type: none"> a climbed or ground based tree inspection using an endoscope and / or torch; and emergence / re-entry surveys.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<ul style="list-style-type: none"> 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. All trees with PRFs will be soft felled using the following precautionary measures: <ol style="list-style-type: none"> where PRFs cannot be exhaustively checked they will be section felled, with each section carefully lowered to the ground. Cuts will be made at least 50 cm beyond the extent of the potential roost feature; if limbs or large branches require felling, consideration will 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 will be wedged open prior to removal of the limb/branch; the stems of dense ivy will be cut at ground level at least 48 hours before the tree is felled; and

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>4. once the trees have been felled the potential roost features will be checked on the ground by a suitably experienced bat ecologist. If any potential roost feature can still not be exhaustively checked that section will 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.</p> <ul style="list-style-type: none"> • 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. • To mitigate for the loss of the trees and potential roost resources, bat boxes would 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. A variety of bat boxes would be used to support different species. <p><u>Facilitating work requirements</u> <u>Vegetation clearance methods:</u></p>

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<ul style="list-style-type: none"> 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.
S41 bat species: noctule, soprano pipistrelle, barbastelle and brown long-eared bat	Two village bypass	<p>Volume 5, Chapter 7: Terrestrial Ecology and Ornithology [APP-425]</p> <p>Volume 5, App 7A, Annex 7A-6A RAMS Bats</p> <p>Terrestrial Ecology Monitoring and Mitigation Plan [REP5-088]</p>	<p><u>Primary mitigation:</u></p> <ul style="list-style-type: none"> The route of the proposed development would be mostly unlit, thereby maintaining a dark corridor and minimising the potential impacts to nocturnal species. To ensure road safety lighting would be provided at the A12 western roundabout and the A12/A1094 eastern roundabout extending north to highlight the junction to approaching vehicles. The remaining junctions would have low minor road flows, and be similar to existing unlit rural junctions, and would therefore be unlit to minimise light spill. Operational lighting design would be compliant with relevant highway standards and where possible would be chosen to limit light spill. Guidance within the latest Institution of Lighting Professionals Guidance Note: Bats and artificial lighting in the UK would be followed as far as possible. These measures would minimise impacts on nocturnal species such

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
		<p>Two Village Bypass Landscape and Ecological Management Plan [REP5-077]</p> <p>Sizewell C Project Bat Method Statement (Doc Ref. 9.92)</p>	<p>as bats that may use the nearby tree lines or habitats for roosting or foraging.</p> <ul style="list-style-type: none"> To reduce the potential for incidental mortality through collisions with vehicles, the design of the proposed development includes safe crossing points for bats and terrestrial mammal species such as oversized culverts as well as bat hop-over features whereby tree planting would be installed as close the carriageway edge as possible to encourage an inter-linking canopy, that in the long-term that would keep bats at height and away from the path of vehicles using the road. In accordance with the Landscape and Ecological Management Plan (LEMP), existing linear wooded corridors will be reinforced and expanded, and others created to provide greater long-term connectivity for bats on a landscape scale. Specifically, native woodland would be created in the vicinity of Foxburrow Wood. <p><u>Tertiary mitigation:</u></p> <ul style="list-style-type: none"> Construction lighting, where required, would be provided at the minimum luminosity and would be designed, positioned and/or directed so as not to unnecessarily intrude on

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>adjacent ecological receptors or habitats. Such measures could include (but not limited to) shielding of luminaires to reduce backward spill of light or use of sensors or timing devices to automatically switch off lighting where appropriate and provision of closed boarded fencing where the site abuts retained woodland. This would minimise impacts on nocturnal species such as bats that may use the nearby tree lines or habitats for commuting, roosting or foraging.</p> <ul style="list-style-type: none"> • During the construction stage, close-boarded fencing would be erected along the side of woodland blocks, where the site abuts these (e.g. TN2, Whin Covert, Nuttery Belt, The Belt and Foxburrow Wood CWS). This would help to minimise impacts from construction lighting and noise from construction activity. • The proposed development includes the removal of trees identified as having the potential to support roosting bats. Management measures would likely include: <ul style="list-style-type: none"> ○ A final inspection of these trees would be undertaken as close to the timing of felling as possible to take into account the regular roost-switching behaviour displaced by tree-roosting bat species. Should bats (or evidence of use by bats) be identified, the mitigation

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>strategies set out in the licence application(s) would be implemented (for example, the fitting of exclusion devices).</p> <ul style="list-style-type: none"> ○ Felling would ideally be undertaken in September or October, to avoid the maternity and hibernation periods during which bats are more vulnerable to disturbance (this timing also avoids the breeding bird season). <p><u>Monitoring:</u></p> <ul style="list-style-type: none"> • There would be regular checks of construction lighting to monitor and correct for any excessive light spill into the surrounding habitats and particularly into the adjacent woodland, floodplain grassland and watercourses. • There would be regular operational checks of lighting to monitor and correct for any excessive light spill into the surrounding habitats, and in particular into the adjacent woodland, floodplain grassland and watercourses. • The TEMMP [REP5-088] document outlines the proposed monitoring activities identified for bats during the construction and operational phases.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<ul style="list-style-type: none"> A draft Sizewell C Bat Method Statement (Doc Ref. 9.92) has been compiled that details the key approaches to mitigating potential impacts to the bat populations present. Roosting features / roosts due to be lost will be replaced with ratios as set out below: <ul style="list-style-type: none"> 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. Approximately 56 compensatory roost mitigation features are required to mitigate for the loss of moderate or high potential roosting features. This will comprise a mixture of bat boxes and at least half will be features that are generated naturally or created through veteranisation within new woodland planting. <p><u>Monitoring:</u></p> <ul style="list-style-type: none"> The bat boxes installed on the suitable retained trees will be subject to inspection. The bat boxes will be checked for usage in September by the named ecologist/accredited agent on an annual basis during the construction phase from one year after installation. Boxes

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>would continue to be monitored for five years beyond the completion of construction.</p> <ul style="list-style-type: none"> Any boxes that require maintenance/repair/replacement will only be moved once they have been inspected by the named ecologist/accredited agent to ensure no bats are disturbed. If the bat boxes are damaged or missing, they will be replaced. In the unlikely events that the mitigation is shown to be ineffective (i.e. no evidence of bats using the bat boxes) then the bat box location may be amended. The conditions of the habitats in the vicinity of the bat boxes will also be checked by the named ecologist/accredited agent and any necessary management requirements reported back to EDF. <p>RAMS document will be adhered to (same RAMS as the other AD sites) with the addition of;</p> <ul style="list-style-type: none"> In order to control impacts, 15m buffer areas between the edge of the proposed development and Foxburrow Wood CWS and watercourse. Erection of close-board fencing where the proposed development abuts woodland (such as along Whin

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			Covert, Nuttery Belt, The Belt, Pond Wood and Foxburrow Wood CWS).
S41 bat species: Soprano pipistrelle and brown long-eared	Yoxford	Volume 7, Chapter 7: Terrestrial Ecology and Ornithology [APP-494] Terrestrial Ecology Monitoring and Mitigation Plan [REP5-088]	<p><u>Primary mitigation:</u></p> <ul style="list-style-type: none"> Existing trees and hedgerows adjoining the site boundary would be retained where possible. This includes the retention of a tree belt to the north-west of the site, along the boundary of Satis House Hotel and hedgerow along the southern side of the B1122 (Middleton Road). Operational phase lighting would be designed to achieve a balance between providing lighting appropriate for all road users whilst seeking to minimise light-spill into adjacent habitats. Operational lighting design will be compliant with relevant highway standards and use light fittings chosen to limit stray light. Guidance within the latest Institution of Lighting Professionals (ILP) Guidance Note: Bats and artificial lighting in the UK would be followed as far as possible. <p><u>Tertiary mitigation:</u></p> <ul style="list-style-type: none"> Construction work would take place during Monday to Saturday 07:00 to 19:00, and there may be a requirement for lighting at night in the winter or for safety and security.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>In addition, there may be the need for 24-hour working and therefore would require lighting. Where temporary construction lighting is required, it would be controlled to minimise light spill on surrounding habitats and minimise the visibility from sensitive receptors off-site, where reasonably practicable. This would minimise impacts on nocturnal species such as bats that may use the nearby tree lines or habitats for commuting, roosting or foraging.</p> <ul style="list-style-type: none"> • The proposed development includes the removal of one tree identified as having negligible potential to support roosting bats. Management measures are likely to include: <ol style="list-style-type: none"> 1. A final inspection of these trees to be undertaken as close to the timing of felling as possible to account for the regular roost-switching behaviour displaced by tree-roosting bat species. Should bats (or evidence of use by bats) be identified, the mitigation strategies laid out in the licence application(s) would be implemented (for example, the fitting of exclusion devices). 2. Felling would ideally be undertaken in September/October, to avoid the maternity and

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>hibernation periods during which bats are more vulnerable to disturbance (this timing also avoids the bird-nesting season).</p> <p><u>Monitoring:</u></p> <ul style="list-style-type: none"> There would be regular checks of construction lighting to monitor and correct for any excessive light spill into the surrounding habitats and particularly into the adjacent woodland and watercourses. There would be regular operational checks of lighting to monitor and correct for any excessive light spill into the surrounding habitats and in particular into the adjacent woodland and watercourses. The TEMMP [REP5-088] outlines the proposed monitoring activities identified for bats during the construction and operational phases.
S41 bat species: noctule, soprano pipistrelle, barbastelle and	Green rail route	Volume 9, Chapter 7: Terrestrial Ecology and	<p><u>Primary mitigation:</u></p> <ul style="list-style-type: none"> Operational lighting would be limited to the B1122 (Abbey Road) level crossing and the level crossing at Buckleswood Road. The remaining rail route extension would be unlit. The lighting design for the proposed

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
brown long-eared bat		Ornithology [APP-555] Terrestrial Ecology Monitoring and Mitigation Plan [REP5-088] Sizewell C Project Bat Method Statement (Doc Ref. 9.92)	<p>development would use light fittings chosen to limit stray light. These measures would minimise impacts on nocturnal species such as bats that may use the nearby tree lines or habitats for roosting or foraging.</p> <p><u>Tertiary mitigation:</u></p> <ul style="list-style-type: none"> Where required, temporary construction lighting would be controlled to minimise light spill on surrounding habitats. The lighting design would use light fittings chosen to limit stray light and minimise impacts on sensitive species. The lighting would also be designed to minimise the visibility from sensitive receptors off-site. This would minimise impacts on nocturnal species such as bats that may use the nearby tree lines or habitats for commuting, roosting or foraging. The proposed vegetation clearance includes the removal of two trees with moderate or high potential to support roosting bats. A final inspection of these trees would be undertaken as close to the timing of felling as possible to take into account the regular roost-switching behaviour displaced by tree-roosting bat species.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<ul style="list-style-type: none"> Should bats (or evidence of use by bats) be identified, the mitigation strategies laid out in the licence application(s) would be implemented (for example, the fitting of exclusion devices). Should evidence of bat roosting be found, felling would ideally be undertaken under licence in September/October, to avoid the maternity and hibernation periods during which bats are more vulnerable to disturbance (this timing would also avoid the bird-nesting season). <p><u>Monitoring:</u></p> <ul style="list-style-type: none"> There would be regular checks of construction lighting to monitor and correct any excessive light spill into the surrounding habitats and particularly into the adjacent woodland. There would be regular checks of operational lighting to monitor and correct for any excessive light spill into the surrounding habitats and particularly into the adjacent woodland. The TEMMP [REP5-088] outlines the proposed monitoring activities identified for bats during the construction and operational phases.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<ul style="list-style-type: none"> A draft Sizewell C Bat Method Statement (Doc Ref. 9.92) has been compiled that details the key approaches to mitigating potential impacts to the bat populations present. Roosting features / roosts due to be lost will be replaced with ratios as set out below: <ul style="list-style-type: none"> 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. At least two bat boxes are required to mitigate for the loss of two moderate or high potential roosting features. <p><u>Monitoring:</u></p> <ul style="list-style-type: none"> The bat boxes installed on the suitable retained trees will be subject to inspection. The bat boxes will be checked for usage in September by the named ecologist/accredited agent on an annual basis during the construction phase from one year after installation. Boxes would continue to be monitored for five years beyond the completion of construction. Any boxes that require maintenance/repair/replacement will only be moved once they have been inspected by the

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>named ecologist/accredited agent to ensure no bats are disturbed.</p> <ul style="list-style-type: none"> If the bat boxes are damaged or missing, they will be replaced. In the unlikely events that the mitigation is shown to be ineffective (i.e. no evidence of bats using the bat boxes) then the bat box location may be amended. <p>The conditions of the habitats in the vicinity of the bat boxes will also be checked by the named ecologist/accredited agent and any necessary management requirements reported back to EDF.</p>
Otter	Main development site	<p>Volume 2, Chapter 14: Terrestrial Ecology and Ornithology [AS-033]</p> <p>Terrestrial Ecology Monitoring and Mitigation Plan [REP5-088]</p>	<p><u>Primary mitigation:</u></p> <ul style="list-style-type: none"> A barrier (e.g. sheet piling) would be installed to provide separation from the main platform and Sizewell Marshes SSSI with engineered drainage installed to limit the disturbance to the hydrology and geology of Sizewell Marshes SSSI (see Chapter 19: Groundwater and Surface Water of the ES (Book 6). The establishment of new reedbed and ditches at Aldhurst Farm (completed in 2016) has provided replacement for the land take of these habitats within

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
		<p>Draft Otter Method Statement and Supporting Information [REP5-051]</p>	<p>Sizewell Marshes SSSI. The replacement habitats have established successfully, and mobile aquatic plant and invertebrate species would colonise over time from the adjacent areas of the Sizewell Marshes SSSI. Otters have already been sighted in the newly created wetlands at Aldhurst Farm.</p> <ul style="list-style-type: none"> The SSSI crossing will consist of a 30m open single span bridge. This will facilitate the passage of otter. Pre-construction surveys to avoid disturbance or destruction of otter holts, and habitat creation at Aldhurst Farm. Primary mitigation includes a Lighting Management Plan for Construction and Operational Sites (Volume 2, Appendix 2B (Doc Ref. 6.3 2B(A))) and boundary treatments. <p><u>Tertiary mitigation:</u></p> <ul style="list-style-type: none"> Monitoring of otter activity would take place before, during and after construction, and would include methods to assess use of the SSSI crossing culvert by otter. The TEMMP [REP5-088] outlines the proposed monitoring

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>activities identified for otter during the construction and operational phases.</p> <ul style="list-style-type: none"> • An updated draft Otter Method Statement and Supporting Information has been submitted that outlines the key approaches to mitigating potential impacts to the otter populations present within or adjacent to the construction site for the main development site. • Pre-construction surveys are being undertaken in 2021 to confirm that no natal holts are present within the construction footprint. Also, pre-construction checks, as per guidance, of each holt to confirm the presence or absence of otter. • A 30m buffer of no activity is required around the known holts or other holts identified in future surveys and in the unlikely event that an otter is found within the known holts, works within the area will not take place until the otter has left. • As part of the scheme design, a lighting strategy will be put in place for the construction phase to avoid light spill as far as possible, where possible. The works should comply with the measures and approaches defined in the Lighting Management Plan (Doc Ref. 6.3 2B(A)).

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p><u>Artificial holt / habitat creation:</u></p> <ul style="list-style-type: none"> • An artificial holt will be created to compensate for the loss of the holt located along the Sizewell Drain to the east of Sizewell B. • Further enhancement will be provided with the provision of another artificial holt to the south-east of the flood compensation/wetland creation area. • Habitat creation in the north of the site will comprise dry grassland, reedbed and woodland and wet woodland creation. The increase in wetland habitat and increased connectivity and screening will be beneficial to otter in the long-term. • New otter holt construction will be in conjunction with vegetation clearance works elsewhere on site so that the materials can be salvaged and used for the holt construction. The landscape planting for the new wetland habitat will also improve general habitat and will increase the quantities of vegetation / cover available for use by otters in the long-term. • The licensed ecologist and / or their accredited agents will be present on site to oversee the vegetation clearance activities / holt removal, ensure the buffer zones around retained holts

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>are in place in place and to ensure that the content and agreed working methods are adhered to. The construction of the two artificial otter holts within the decided areas will be overseen by the licensed ecologist and / or their accredited agents and documentation provided to NE and the County Ecologist to confirm / demonstrate the works that have been carried out.</p> <ul style="list-style-type: none"> • The site clearance / habitat creation contractor will be familiar with working alongside ecologists and following the instructions provided. Prior to any works taking place, the named ecologist will carry out a toolbox talk and inform all site personnel on the works to be carried out and the methodologies to be implemented in relation to otters (and water vole) and will also discuss field signs and behavioural characteristics of otters which are relevant to the scheme and construction phase activities. • Methods and timings for monitoring otter are set out in the TEMMP [REP5-088] and includes the following: <ul style="list-style-type: none"> • Artificial holts created would be monitored during the construction phase and operational phase to ensure

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>that they remain in good condition and accessible for use by otters.</p> <ul style="list-style-type: none"> Known holt and couch locations at the north-eastern extent of the site on the boundary between the marsh harrier habitat creation area and the Minsmere to Walberswick Heaths and Marshes SSSI would be monitored during the construction phase. The artificial otter holts will be inspected during the operational phase, to ensure that it remains in good condition and accessible for use by otters. In the unlikely event that the otter holt has been tampered with, or destroyed, a new otter holt will be constructed. Depending upon the extent of damage, if this was to occur, a different site would be sought for the construction of a replacement holt and this would be agreed in advance with NE.
	Northern park and ride	Volume 3, Chapter 7: Terrestrial Ecology and	Scoped out as not present on site, no further measures implemented as no significant effect is considered likely.

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
		Ornithology [APP-363]	
	Southern park and ride	Volume 4, Chapter 7: Terrestrial Ecology and Ornithology [APP-394]	Scoped out as not present on site, no further measures implemented as no significant effect is considered likely.
	Freight management facility	Volume 8, Chapter 7: Terrestrial Ecology and Ornithology [APP-523]	Otter are not considered likely to be present within the site boundary, no further measures implemented as no significant effect is considered likely.
	Sizewell link road	Volume 6 Chapter 7: Terrestrial Ecology and Ornithology [APP-461]	There is no predicted effect upon otter population, so no specific measures are proposed. <u>Tertiary mitigation:</u> No storage of equipment or material would be allowed within 10m of a watercourse, and no materials would be stored in areas of high flood risk to avoid sediment loss during flooding.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			All soils would be stored away from watercourses (or potential pathways to watercourses), and any potentially contaminated soil would be stored on an impermeable surface and covered to reduce leachate generation and potential migration to surface waters.
	Two village bypass	<p>Volume 5, Chapter 7: Terrestrial Ecology and Ornithology [APP-425]</p> <p>Volume 5, App 7A, Annex 7A-6C RAMS otter</p> <p>Terrestrial Ecology Monitoring and Mitigation Plan [REP5-088]</p>	<p><u>Primary mitigation:</u> Proposed River Alde overbridge:</p> <ul style="list-style-type: none"> The crossing of the River Alde would comprise an overbridge, approximately 60m in length which would preserve the natural integrity of the banks of the river, bed and bankside, and minimise shading effects. This would be of sufficient size to enable passage for otters and water voles to be maintained during construction and operation. An otter ledge would be installed on bridge abutments, if required, to allow passage at times of high flows. Otter fencing would be incorporated where appropriate to guide otters to the crossing point. There would be eight 5.4m long, 3m wide flood relief culverts proposed (four on either side of the River Alde overbridge). There would also be two further culverts within the embankment outside the floodplain extent; on the western

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>side of the River Alde overbridge (approximately 200m south-east from the existing A12), the culvert would be approximately 5.4m by 3m and would allow an existing watercourse and livestock access track to pass beneath the road (on their existing alignment of an existing accommodation access track which would be diverted under the proposed bridge). A mammal mitigation culvert would be provided on the east side of the River Alde overbridge outside of the floodplain extent (approximately 5.4m by 1.2m)</p> <ul style="list-style-type: none"> • Field drains located at the western end of the bypass, either side of the proposed River Alde overbridge, would be diverted along the base of the embankment to the River Alde where possible with additional/excess water culverted through the embankments. • Any required flood compensation areas would be designed to minimise impacts to ditches and watercourses to avoid interfering with suitable otter and water vole habitat. The banks of the River Alde and the associated ditches would be protected during construction of any flood compensation areas. It is currently not thought likely that flood compensations areas will be required. • <u>Tertiary mitigation:</u>

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>Prior to any works taking place in watercourses and ditches, the following approaches would be used for otter and water vole:</p> <ul style="list-style-type: none"> • Otter: a pre-construction survey for otters would be conducted. If an otter lying up site or holt is recorded that would be impacted by the works, then an appropriate mitigation strategy would be developed and completed under agreement and, where necessary, licence to Natural England. <p><u>RAMS:</u> <u>Toolbox talk:</u></p> <ul style="list-style-type: none"> • Prior to commencement of the vegetation clearance 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 otters. 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 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.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p><u>Precautionary working methods:</u></p> <ul style="list-style-type: none"> • Pre-construction surveys will 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. • A European Protected Species Licence application and Method Statement would be 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 provided in a method statement, based on Natural England's standing advice and guidance in relation to otter and mitigation for development projects. • 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.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<ul style="list-style-type: none"> • Demarcation and of a 30m exclusion zone around otter holts. • Where possible, a minimum of a 20m buffer will 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. • 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. • Prior to works commencing an appropriately experienced ECoW will undertake a toolbox talk to site staff covering the Precautionary Working Methods to be adhered to. • Where works are required in areas of otter activity (but not a place of shelter) the ECoW will demarcate and agree on site in which areas which activity is permitted. • If night-time working is required, the works around the areas with suitable habitat for otter, light spill would be minimised to reduce any possible impacts to the species. • Such precautions will be put in place to avoid an offence being committed during the proposed works and subsequent development with respect to otter.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p><u>Vegetation clearance:</u></p> <ul style="list-style-type: none"> As set out above, vegetation clearance works are required in order to facilitate the development of the site. These works have the potential to impact the local otter population. Should vegetation clearance work occur within the proximity of the River Alde, a qualified ECoW will need to carry out a pre-construction check for signs of otter and otter activity within the footprint of the works. A European Protected Species Licence application and Method Statement would be 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. Should otter signs be present the ECoW will demarcate and agree on site in which areas which activity is permitted. <p><u>Equipment:</u></p> <ul style="list-style-type: none"> The vegetation clearance contractors on site will utilise equipment specific to their clearance methods as per their RAMS. For example:

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<ul style="list-style-type: none"> 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. <p><u>Ground-breaking works:</u></p> <ul style="list-style-type: none"> 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 ground-breaking works take occur (20m of the River Alde and within 10m of other watercourses), a qualified ECoW will need to carry out a pre-construction check for signs of otter and otter activity within the footprint of the works. A European Protected Species Licence application and Method Statement would be 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. Should otter signs be present the ECoW will demarcate and agree on site in which areas which activity is

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>permitted. Demarcation and exclusion from holts within 30m of working areas, potentially with the use of Heras fencing.</p> <ul style="list-style-type: none"> Any excavations made during construction activities would 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 be provided to ensure that any animals that may access these excavations have a means of escape.
	Yoxford	Volume 7, Chapter 7: Terrestrial Ecology and Ornithology [APP-494]	<p><u>Primary mitigation:</u></p> <ul style="list-style-type: none"> A 5m buffer would be maintained between the proposed Yoxford roundabout and the adjacent River Yox to protect the integrity of the banks as well as the associated ecological features. <p><u>Tertiary mitigation:</u></p> <p>Prior to works taking place adjacent to the River Yox, a pre-construction survey would be conducted for otter and water voles:</p> <ul style="list-style-type: none"> Otter: a pre-construction survey would be conducted to confirm the absence/presence of any otter holt. Should an

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			otter holt be identified that would be directly impact by the proposed works, a licence from Natural England would be obtained. Should breeding otter be recorded, then all works would cease until both adult and young otter have left the holt.
	Green rail route	Volume 9, Chapter 7: Terrestrial Ecology and Ornithology [APP-555]	Otter are not considered likely to be present within the site boundary, no further measures implemented as no significant effect is considered likely.
Water Vole	Main development site	Volume 2, Chapter 14: Terrestrial Ecology and Ornithology [AS-033] Appendix 14C6A - Water Vole Mitigation	<u>Primary mitigation:</u> <ul style="list-style-type: none"> The SSSI crossing will consist of a 30m open single span bridge. This will facilitate the passage water vole through the structure. The establishment of new reedbed and ditches at Aldhurst Farm (completed in 2016) has provided replacement for the land take of these habitats within Sizewell Marshes SSSI. The replacement habitats have established successfully, and mobile aquatic plant and invertebrate species have colonised over time from the adjacent areas of the Sizewell Marshes

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
		<p>Strategy [APP-252]</p> <p>Terrestrial Ecology Monitoring and Mitigation Plan [REP5-088]</p> <p>Sizewell C Main Development Site Water Vole Method Statement [REP5-050]</p>	<p>SSSI. These new habitats are suitable for water voles and Aldhurst Farm would act as the main receptor site for water voles, if they need to be translocated from the footprint of the main development site. One of the four lagoons at Aldhurst Farm was fenced to minimise the risk of water vole colonising naturally ahead of translocation however contained a moderate population when surveyed in 2020.</p> <p><u>Tertiary mitigation:</u></p> <ul style="list-style-type: none"> Tertiary mitigation measures are outlined in the mitigation strategy which was updated as part of the Jan 2021 submission to PINS and described in the 'Details from the mitigation strategy' section below. <p><u>Details from the mitigation strategy:</u></p> <ul style="list-style-type: none"> Displacement techniques and monitoring requirements are proposed where there is a working area with maximum length of 50m (for watercourse this equates to 50m on each bank). However, should displacement be unsuccessful (i.e. programme, season, signs continuously recorded following vegetation clearance), trapping will be undertaken within those areas.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<ul style="list-style-type: none"> • Displacement is proposed to mitigate habitat loss/disturbance within the 31m section of the east-west running drains west of Sizewell Drain by SZB that is due to be impacted. • Trapping out water vole from the Sizewell Marshes SSSI crossing construction footprint will be undertaken if displacement is no longer a viable alternative i.e. water vole are recorded present in areas currently unoccupied. The preference is for animals to be released directly into the receptor area at Aldhurst Farm. Should trapping be necessary and depending on the time of year, if the weather is cold (night-time temperature below freezing (0oC)) in the autumn, a contingency option for water vole captured during the 15 September to 30 November trapping is to be over-wintered in captivity. The water voles would then be released into the receptor area the following spring (between 1 March and 15 April). • As soon as water voles have been displaced/removed from the Sizewell Marshes SSSI crossing footprint, their habitat would be rendered unsuitable for re-colonisation. <p>Overall, in the long term, as a result of the proposed SZC main development site works, it is considered that there will be an</p>

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>overall increase in the conservation status of water vole, as a result of an increase in habitat availability.</p> <p><u>Monitoring:</u> The TEMMP [REP5-088] outlines the proposed monitoring activities identified for water vole during the construction and operational phases.</p> <ul style="list-style-type: none"> • An updated draft Water Vole Method Statement [REP5-050] has been submitted that outlines the key approaches to mitigating potential impacts to the water vole populations present within or adjacent to the construction site for the main development site. • As described in the aforementioned Water Vole Mitigation Strategy, the primary approach for water vole mitigation is likely to be via displacement, given the relatively low populations detected in surveys undertaken in 2020. Displacement techniques and monitoring are proposed where there is a working area with maximum length of 50m (for watercourse this equates to 50m on each bank). However, should displacement be unsuccessful (i.e. programme, season, signs continuously recorded following

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>vegetation clearance) trapping will be undertaken within those areas. Displacement is proposed to mitigate habitat loss/disturbance within the 31m section of the east-west running drains west of Sizewell Drain by SZB that is due to be impacted</p> <ul style="list-style-type: none"> Trapping out water vole from the Sizewell Marshes SSSI crossing construction footprint would only be undertaken if high populations are detected in a population resurvey prior to the works. Any capture and relocation works would be undertaken during spring and autumn periods as necessary. In spring, animals would be released directly into the receptor area at Aldhurst Farm. In the autumn and if the weather is cold (night-time temperature below freezing (0oC)), a contingency option for water vole captured during the 15 September to 30 November trapping is to be over-wintered in captivity. These water vole would then be released into the receptor area the following spring (between 1 March and 15 April). Trapping is proposed to mitigate habitat loss/disturbance within: <ul style="list-style-type: none"> Leiston Drain (where the SSSI crossing is to be constructed);

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<ul style="list-style-type: none"> Habitat Sizewell Marshes SSSI (where subject to land take associated with the SZC platform); and Sizewell Drain (where the ditch is being realigned). As soon as water voles have been removed from the areas to be impacted, their habitat would be rendered unsuitable for recolonization. Monitoring of water vole populations will occur prior to, during and after the above approach at the receptor site, the areas impacted by the works and the areas reinstated, such as the Sizewell Drain.
	Northern park and ride	Volume 3, Chapter 7: Terrestrial Ecology and Ornithology [APP-363]	Water vole are not considered likely to be present within the site boundary, no further measures implemented as no significant effect is considered likely.
	Southern park and ride	Volume 4, Chapter 7: Terrestrial Ecology and	Water vole are not considered likely to be present within the site boundary, no further measures implemented as no significant effect is considered likely.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
		Ornithology [APP-394]	
	Freight management facility	Volume 8, Chapter 7: Terrestrial Ecology and Ornithology [APP-523]	Water vole are not considered likely to be present within the site boundary, no further measures implemented as no significant effect is considered likely.
	Sizewell link road	Volume 6 Chapter 7: Terrestrial Ecology and Ornithology [APP-461]	Water vole are not considered likely to be present within the site boundary, no further measures implemented as no significant effect is considered likely.
	Two village bypass	Volume 5, Chapter 7: Terrestrial Ecology and Ornithology [APP-425]	<u>Primary mitigation:</u> <ul style="list-style-type: none"> There would be eight 5.4m long, 3m wide flood relief culverts proposed (four on either side of the River Alde overbridge). There would also be two further culverts within the embankment outside the floodplain extent; on the western side of the River Alde overbridge (approximately 200m south-east from the existing A12), the culvert would be approximately 5.4m by 3m and would allow an existing

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
		<p>Sizewell C Draft Water Vole Method Statement and Supporting Information – Two Village Bypass [REP5-055]</p> <p>Terrestrial Ecology Monitoring and Mitigation Plan [REP5-088]</p> <p>Two Village Bypass Landscape and Ecological Management Plan [REP5-077]</p>	<p>watercourse and livestock access track to pass beneath the road (on their existing alignment of an existing accommodation access track which would be diverted under the proposed bridge). A mammal mitigation culvert would be provided on the east side of the River Alde overbridge outside of the floodplain extent (approximately 5.4m by 1.2m)</p> <ul style="list-style-type: none"> Field drains located at the western end of the bypass, either side of the proposed River Alde overbridge, would be diverted along the base of the embankment to the River Alde where possible with additional/excess water culverted through the embankments. Any required flood compensation areas would be designed to minimise impacts to ditches and watercourses to avoid interfering with suitable otter and water vole habitat. The banks of the River Alde and the associated ditches would be protected during construction of any flood compensation areas. It is currently not thought likely that flood compensations areas will be required. <p><u>Tertiary mitigation:</u></p>

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<ul style="list-style-type: none"> No equipment or material would be stored within 10m of a watercourse, and no materials would be stored in areas of high flood risk to avoid sediment loss during flooding. All soils would be stored away from watercourses (or potential pathways to watercourses), and any potentially contaminated soil would be stored on an impermeable surface and covered to reduce leachate generation and potential migration to surface waters. <p>Prior to any works taking place in watercourses and ditches, the following approaches would be used for otter and water vole:</p> <ul style="list-style-type: none"> Water voles: a pre-construction survey for water voles would be conducted. In the event of works being required that affect the banks of watercourses and ditches/ within the wetted channel and where water voles are known to be present, then a licence from Natural England would be required. All survey work would be in line with best practice guidelines. If the proposed works do not require more than 50m of vegetation clearance from either bank of the ditch, then works would be conducted under a class licence WML-CL31. If works would require vegetation clearance

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>exceeding 50m, then a conservation licence would be required.</p> <p><u>Monitoring:</u> The protected species licence, which will be agreed with Natural England, will detail the monitoring requirements for water vole. The requirement for licensing has also been noted in the TEMMP [REP5-088].</p> <p>An updated draft Water Vole Method Statement [REP5-055] has been submitted that outlines the key approaches to mitigating potential impacts to the water vole populations present within or adjacent to the Two Village Bypass site.</p> <ul style="list-style-type: none"> The following mitigation measures are proposed under the draft method statement; <ul style="list-style-type: none"> Preventing incidental mortality through displacement of water voles from the works areas; Displacement techniques and monitoring requirements are proposed with a maximum working area with maximum length of 50m (for watercourse this equates to 50m on each bank).

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<ul style="list-style-type: none"> • Reinstatement of impacted areas after the works are completed. • Improving the conservation status of water voles through habitat creation; • Pre works, during works and post-construction monitoring of water vole populations will occur to ensure success of the mitigation approach. • Once any works which impact The River Alde are completed, these areas will be reinstated, in accordance with the two village bypass Landscape and Ecology Management Plan (LEMP) [REP5-077]. • Due to the close proximity of riparian vegetation, it is considered that the vegetation will recolonise promptly and planting of the impacted areas will not be necessary. In addition, the project will create new habitats, in accordance with the two village bypass LEMP, for water vole, providing a conservation gain overall. New swales are being created throughout the new two bypass development area. Although these swales will not be designed specifically to offer habitat for water vole, and will be intermittently wet, these swales will provide corridors for movement for water vole across the landscape. Also, new wetland channels would mitigate the

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>loss of approximately 143m of ditch associated with the land take from the proposed bypass footprint.</p> <ul style="list-style-type: none"> In summary, overall the project will provide a conservation gain for water vole, through minimising impacts from the River Alde crossing and any outflows impacting upon the ditches and providing an increase in water vole habitat in the vicinity of the River Alde. <p><u>Monitoring and management:</u></p> <ul style="list-style-type: none"> A regular monitoring programme, both during and after construction, would be required to assess the effectiveness of the mitigation and provide early warning of any changes in the population so that appropriate action can be taken. A single visit, one year after the completion of the construction will be sufficient to fulfil the monitoring requirements for the impacts associated with the project. However, should any issues be identified during the monitoring visit (i.e. failure of habitats to establish, absence of water vole), additional visits should be conducted to ensure that these issues are addressed. Monitoring can cease once all Key Performance Indicators (KPIs) for the water vole licence have been achieved – i.e. the impacted

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>areas have recovered a suitable vegetation community and have been recolonised by water vole and the newly created ponds have a habitat suitable for water vole.</p> <ul style="list-style-type: none"> In accordance with the two village bypass LEMP, there will be regular checks of ditch and pond habitat during the first five years of establishment.
	Yoxford	Volume 7, Chapter 7: Terrestrial Ecology and Ornithology [APP-494]	<p><u>Primary mitigation:</u></p> <ul style="list-style-type: none"> A 5m buffer would be maintained between the proposed Yoxford roundabout and the adjacent River Yox to protect the integrity of the banks as well as the associated ecological features. <p><u>Tertiary mitigation:</u> Prior to works taking place adjacent to the River Yox, a pre-construction survey would be conducted for otter and water voles:</p> <ul style="list-style-type: none"> Water vole: a pre-construction survey would be undertaken the year prior to construction to determine if any water voles or features which indicate water vole are present within the footprint of the work or within 3m. If water voles are confirmed within the footprint of works or within 3m, to inform

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			a licence application, detailed surveys would need to be conducted. The results of these surveys will inform a mitigation licence application to Natural England. Mitigation to displace water vole under licence can only take place between 15 February to 15 April. Surveys would be conducted in line with The Water Vole Mitigation Handbook.
	Green rail route	Volume 9, Chapter 7: Terrestrial Ecology and Ornithology [APP-555]	Water vole are not considered likely to be present within the site boundary, no further measures implemented as no significant effect is considered likely.
Brown Hare	Main development site	Volume 2, Chapter 14: Terrestrial Ecology and Ornithology [AS-033]	<u>Tertiary mitigation:</u> The phased approach to site clearance and topsoil stripping (as described previously to safeguard reptiles) would discourage brown hare and hedgehogs away from the site and into the surrounding suitable habitat.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
	Northern park and ride	Volume 3, Chapter 7: Terrestrial Ecology and Ornithology [APP-363]	<u>Tertiary mitigation:</u> The phased approach to site clearance and topsoil stripping (as described previously to safeguard reptiles) would discourage brown hare and hedgehogs away from the site and into the surrounding suitable habitat.
	Southern park and ride	Volume 4, Chapter 7: Terrestrial Ecology and Ornithology [APP-394]	<u>Tertiary mitigation:</u> The phased approach to site clearance and topsoil stripping (as described previously to safeguard reptiles) would discourage brown hare and hedgehogs away from the site and into the surrounding suitable habitat.
	Freight management facility	Volume 8, Chapter 7: Terrestrial Ecology and Ornithology [APP-523]	<u>Tertiary mitigation:</u> During the preliminary works and site preparatory works, the phased approach to site clearance (as described above to safeguard reptiles) would discourage brown hare and hedgehog away from the site of activity and into the surrounding suitable habitat.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
	Sizewell link road	Volume 6 Chapter 7: Terrestrial Ecology and Ornithology [APP-461]	<u>Tertiary mitigation:</u> The phased approach to site clearance and topsoil stripping (as described previously to safeguard reptiles) would discourage brown hare, and hedgehogs away from the site of activity and into the surrounding suitable habitat.
	Two village bypass	Volume 5, Chapter 7: Terrestrial Ecology and Ornithology [APP-425]	<u>Tertiary mitigation:</u> The phased approach to site clearance and topsoil stripping (as described previously to safeguard reptiles) would discourage brown hare, and hedgehogs away from the site of activity and into the surrounding suitable habitat.
	Yoxford	Volume 7, Chapter 7: Terrestrial Ecology and Ornithology [APP-494]	<u>Tertiary mitigation:</u> The phased approach to site clearance and topsoil stripping (as described previously to safeguard reptiles) would discourage brown hare, and hedgehogs away from the site of activity and into the surrounding suitable habitat.
	Green rail route	Volume 9, Chapter 7:	<u>Tertiary mitigation:</u>

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
		Terrestrial Ecology and Ornithology [APP-555]	During the preliminary works and site preparatory works, a phased approach to site clearance and topsoil stripping would discourage brown hares and hedgehogs away from the site of activity and into the surrounding suitable habitat.
Hedgehog	Main development site	Volume 2, Chapter 14: Terrestrial Ecology and Ornithology [AS-033]	<u>Tertiary mitigation:</u> Removal of vegetation, ground clearance and the commencement of construction activities have the potential to risk killing or injuring hedgehogs, either in summer or “day” nests or winter hibernation nests (hibernation occurs between November to April). Ground clearance works would generally be undertaken outside of the hibernation period. Prior to ground clearance, an inspection for hedgehog nests would be undertaken by a suitably experienced ECoW prior to the removal of vegetation; this is likely to be undertaken in parallel with removal of reptiles from the construction footprint.
	Northern park and ride	Volume 3, Chapter 7: Terrestrial Ecology and	<u>Tertiary mitigation:</u> The phased approach to site clearance and topsoil stripping (as described previously to safeguard reptiles) would discourage brown hare and hedgehogs away from the site and into the surrounding suitable habitat.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
		Ornithology [APP-363]	
	Southern park and ride	Volume 4, Chapter 7: Terrestrial Ecology and Ornithology [APP-394]	<u>Tertiary mitigation:</u> The phased approach to site clearance and topsoil stripping (as described previously to safeguard reptiles) would discourage brown hare and hedgehogs away from the site and into the surrounding suitable habitat.
	Freight management facility	Volume 8, Chapter 7: Terrestrial Ecology and Ornithology [APP-523]	<u>Tertiary mitigation:</u> During the preliminary works and site preparatory works, the phased approach to site clearance (as described above to safeguard reptiles) would discourage brown hare and hedgehog away from the site of activity and into the surrounding suitable habitat.
	Sizewell link road	Volume 6 Chapter 7: Terrestrial Ecology and Ornithology [APP-461]	<u>Tertiary mitigation:</u> The phased approach to site clearance and topsoil stripping (as described previously to safeguard reptiles) would discourage brown hare, and hedgehogs away from the site of activity and into the surrounding suitable habitat.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
	Two village bypass	Volume 5, Chapter 7: Terrestrial Ecology and Ornithology [APP-425]	<u>Tertiary mitigation:</u> The phased approach to site clearance and topsoil stripping (as described previously to safeguard reptiles) would discourage brown hare, and hedgehogs away from the site of activity and into the surrounding suitable habitat.
	Yoxford	Volume 7, Chapter 7: Terrestrial Ecology and Ornithology [APP-494]	<u>Tertiary mitigation:</u> The phased approach to site clearance and topsoil stripping (as described previously to safeguard reptiles) would discourage brown hare, and hedgehogs away from the site of activity and into the surrounding suitable habitat.
	Green rail route	Volume 9, Chapter 7: Terrestrial Ecology and Ornithology [APP-555]	<u>Tertiary mitigation:</u> During the preliminary works and site preparatory works, a phased approach to site clearance and topsoil stripping would discourage brown hares and hedgehogs away from the site of activity and into the surrounding suitable habitat.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
Harvest Mouse	Main development site	Volume 2, Chapter 14: Terrestrial Ecology and Ornithology [AS-033]	Scoped out, no further measures implemented as no significant effect is considered likely.
	Northern park and ride	Volume 3, Chapter 7: Terrestrial Ecology and Ornithology [APP-363]	Scoped out, no further measures implemented as no significant effect is considered likely.
	Southern park and ride	Volume 4, Chapter 7: Terrestrial Ecology and Ornithology [APP-394]	Scoped out, no further measures implemented as no significant effect is considered likely.
	Freight management facility	Volume 8, Chapter 7: Terrestrial	Scoped out, no further measures implemented as no significant effect is considered likely.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
		Ecology and Ornithology [APP-523]	
	Sizewell link road	Volume 6 Chapter 7: Terrestrial Ecology and Ornithology [APP-461]	Scoped out, no further measures implemented as no significant effect is considered likely.
	Two village bypass	Volume 5, Chapter 7: Terrestrial Ecology and Ornithology [APP-425]	Scoped out, no further measures implemented as no significant effect is considered likely.
	Yoxford	Volume 7, Chapter 7: Terrestrial Ecology and Ornithology [APP-494]	Scoped out, no further measures implemented as no significant effect is considered likely.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
	Green rail route	Volume 9, Chapter 7: Terrestrial Ecology and Ornithology [APP-555]	Scoped out, no further measures implemented as no significant effect is considered likely.
Polecat	Main development site	Volume 2, Chapter 14: Terrestrial Ecology and Ornithology [AS-033]	Scoped out, no further measures implemented as no significant effect is considered likely.
	Northern park and ride	Volume 3, Chapter 7: Terrestrial Ecology and Ornithology [APP-363]	Scoped out, no further measures implemented as no significant effect is considered likely.
	Southern park and ride	Volume 4, Chapter 7:	Scoped out, no further measures implemented as no significant effect is considered likely.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
		Terrestrial Ecology and Ornithology [APP-394]	
	Freight management facility	Volume 8, Chapter 7: Terrestrial Ecology and Ornithology [APP-523]	Scoped out, no further measures implemented as no significant effect is considered likely.
	Sizewell link road	Volume 6 Chapter 7: Terrestrial Ecology and Ornithology [APP-461]	Scoped out, no further measures implemented as no significant effect is considered likely.
	Two village bypass	Volume 5, Chapter 7: Terrestrial Ecology and Ornithology [APP-425]	Scoped out, no further measures implemented as no significant effect is considered likely.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
	Yoxford	Volume 7, Chapter 7: Terrestrial Ecology and Ornithology [APP-494]	Scoped out, no further measures implemented as no significant effect is considered likely.
	Green rail route	Volume 9, Chapter 7: Terrestrial Ecology and Ornithology [APP-555]	Scoped out, no further measures implemented as no significant effect is considered likely.
Reptiles – adder, slow-worm, grass snake and common lizard.	Main development site	Volume 2, Chapter 14: Terrestrial Ecology and Ornithology [AS-033]	<u>Primary mitigation:</u> <ul style="list-style-type: none"> Large areas of habitats for reptiles have been established, in advance of construction, to enable the translocation of reptiles from the site (further detailed in the Reptile Mitigation Strategy (Volume 2, Appendix 14C2 [APP-252] and (Doc Ref. 9.88A). This has also created areas of sand-dominated habitat likely to be beneficial to invertebrate

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
		<p>Appendix 14C2A – Reptile Mitigation Strategy [APP-252] (Doc Ref. 9.88 A)</p> <p>Terrestrial Ecology Monitoring and Mitigation Plan [REP5-088]</p>	<p>species such as those identified in the coastal and woodland ride habitats.</p> <p><u>Tertiary mitigation:</u> A Reptile Mitigation Strategy (Volume 2, Appendix 14C2 [APP-252] Doc Ref. 9.88 A) has been prepared. In summary, the proposed strategy involves:</p> <p><u>Reptile Capture and Exclusion:</u> Reptile translocation would only take place during the period when reptiles are above ground and active (March to late October), and during suitable weather conditions.</p> <ul style="list-style-type: none"> • Translocation will comprise compartmentalising areas to be cleared of reptiles to allow the sequential phasing of the clearance operation. • A number of survey techniques would be used to capture reptiles from the donor sites, including: <ul style="list-style-type: none"> • Laying artificial cover object (ACO's; also referred to as 'reptiles tins' or 'artificial refugia'). • Checking natural refugia and hibernacula features that are present within donor sites.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<ul style="list-style-type: none"> Walking pre-defined transects and attempting to hand-catch any observed reptiles (e.g. basking reptiles). Any reptiles caught would be placed in a suitable container and moved to a receptor site. <p><u>Habitat manipulation:</u></p> <ul style="list-style-type: none"> Habitat manipulation is proposed as a sole method for the displacement of reptiles and in conjunction with capture and translocation techniques to improve efficiency. <p><u>Vegetation removal:</u></p> <ul style="list-style-type: none"> Vegetation will be removed in two phases: <ul style="list-style-type: none"> 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. The area will then be left undisturbed for at least 24 hours during suitable weather conditions. Phase 2: Where vegetation within the mitigation area remains dense, this will be cleared to ground level, with arisings removed. The area will again be left undisturbed for at least 24 hours during suitable weather conditions. Phase 2 clearance will commence

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>on completion of a capture and translocation exercise or in line with habitat manipulation in target areas.</p> <ul style="list-style-type: none"> 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 be undertaken in conjunction with a secondary hand search and destructive search. The working area will be maintained free of vegetation for the duration of the works. <p><u>Hand and Destructive Searches:</u></p> <ul style="list-style-type: none"> Such activities will 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 be undertaken throughout the process to aid captures. For habitat manipulation, this will 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. 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

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>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 will not be conducted until the translocation effort is deemed complete.</p> <ul style="list-style-type: none"> • All works that have the potential to impact reptiles would be undertaken following the agreed Method Statement and would be overseen by an ECoW. <p><u>Welfare:</u></p> <ul style="list-style-type: none"> • Welfare measures will be implemented to minimise stress to the animals and/or the risk of injury or death. Translocated animals would be kept in captivity only for as long as is necessary and would 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 would be transported separately from the other species to avoid the risk of predation and reduce stress. • The staff responsible for undertaking the mitigation measures, and specifically the capture and translocation exercise, would be experienced reptile handlers. They may be assisted at times by trainees who would undergo training

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>on the identification of reptiles, and safe/appropriate handling techniques, particularly for venomous snakes.</p> <p><u>Monitoring:</u></p> <ul style="list-style-type: none"> 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. The TEMMP [REP5-088] outlines the proposed monitoring activities identified for reptiles and their habitats during the construction and operational phases. <p><u>Management:</u></p> <ul style="list-style-type: none"> Each of the receptor sites would be actively managed to maximise their reptile population carrying capacity. This would be implemented through the production of a management plan for each receptor site to cover the construction period. <p><u>Long term landscape strategy:</u></p> <ul style="list-style-type: none"> The final restoration plans as shown in the indicative Outline Landscape and Ecology Management Plan (oLEMP) [REP1-

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>010 will provide a long-term gain in suitable reptile habitat and connectivity on a wider, landscape scale, as a result of the creation of dry Sandlings grassland from the arable fields east of Upper Abbey Farm (the marsh harrier habitat compensation area), at Aldhurst Farm and in the areas south of Sandy Lane (including Broom Covert), the 'Studio Field complex'.</p> <ul style="list-style-type: none"> Although the construction period would result in temporary habitat fragmentation across the EDF Energy estate, this would be mitigated in the long term by greater landscape-wide opportunities for 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). The Sizewell C Project – Main Development Site – Reptile Method Statement [APP-252] outlines tool box talk requirements, precautionary working methods which includes methods of vegetation clearance and the translocation

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			methodology. This method statement will be developed in line with the construction phasing plan and all works that have the potential to impact reptiles would be undertaken following the final version; such works would also be overseen by an ECoW.
Reptile potential	All AD Sites including: Northern park and ride	Volume 3, Chapter 7: Terrestrial Ecology and Ornithology [APP-363] Volume 3, Chapter 7, Appendix 7A, Annex 7A.6B RAMS Reptiles [APP-364]	<u>Tertiary mitigation:</u> The following measures would be undertaken prior to the commencement of construction: <ul style="list-style-type: none"> • an inspection would be undertaken by a suitably experienced ecologist of any potential reptile refugia, after which the reptiles would be removed; and • a phased vegetation clearance process would be undertaken to displace any reptiles from the site, under the supervision of a suitably experienced ecologist. Removal of vegetation and of places of shelter/hibernation features would be undertaken outside of the reptile hibernating period (October to February inclusive), during periods of warm, dry weather (with due consideration of the seasonal constraints of clearance works during breeding bird season). If this is not possible, vegetation would 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

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
	Southern park and ride	Volume 4, Chapter 7: Terrestrial Ecology and Ornithology [APP-394]	vegetation would then be removed once the reptile hibernation season is over. Clearing of vegetation would be undertaken under the supervision of the suitably experienced ECoW.
	Two village bypass	Volume 4, Chapter 7, Appendix 7A, Annex 7A.5B RAMS Reptiles [APP-395] Volume 5, Chapter 7: Terrestrial Ecology and Ornithology [APP-425]	<p><u>RAMS:</u> <u>Toolbox talk:</u></p> <ul style="list-style-type: none"> Prior to commencement of the vegetation clearance 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 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 will be left undisturbed; and reptiles will not be handled by contractors. There is a declaration for those present to sign to confirm they have understood the constraints and actions presented. <p><u>Vegetation clearance:</u></p>

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
	Sizewell link road	Volume 5, Appendix 7A, Annex 7A-6D RAMS Reptiles [APP-426]	<ul style="list-style-type: none"> 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 will 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 undertaken under the direct supervision of the Ecological Clerk of Works (ECoW), in order to reduce the suitability of the habitats within the site.
	Yoxford	Volume 6 Chapter 7: Terrestrial Ecology and Ornithology [APP-461] Volume 6, Appendix 7A, Annex 7A-6B RAMS Reptiles [APP-462] Volume 7, Chapter 7:	<ul style="list-style-type: none"> Where it is necessary to undertake vegetation clearance in and around suitable reptile habitat the following precautionary measures will be put in place to avoid encountering and accidentally injuring reptiles: Vegetation clearance (below 150mm) and ground-breaking works will 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 8oC should be the minimum

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
	Freight management facility	Terrestrial Ecology and Ornithology [APP-494] Volume 7, Chapter 7: Terrestrial Ecology and Ornithology [APP-494]	<p>temperature). The works will not be conducted early in the morning before reptiles have had a chance to 'warm up';</p> <ul style="list-style-type: none"> the ECoW will work with the contractor to 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 be walked by the ECoW to disturb reptiles prior to works commencing; the ECoW will 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 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 then be cut to as close to ground level as possible;
	Green rail route	Volume 8, Chapter 7: Terrestrial Ecology and Ornithology [APP-523]	
		Volume 8, Appendix 7A, Annex 7A04A,	

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
		<p>RAMS Reptiles [APP-524]</p> <p>Volume 9, Chapter 7: Terrestrial Ecology and Ornithology [APP-555]</p> <p>Volume 9, Appendix 7a, Annex 7A-6B RAMS Reptiles [APP-556]</p>	<ul style="list-style-type: none"> • 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. 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 will be overseen by the ecologist. If a reptile is found the ecologist will decide whether or not it is appropriate to relocate the animal; • shelter features that require removal will 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 will 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; and • if reptiles are found, the ECoW will move the animals out of the way to a place of safety. The exact location would

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>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 not be handled by contractors, as common lizards and slow worms may shed their tails if handled inappropriately.</p> <ul style="list-style-type: none"> • Should any reptiles be found on site during the works when the ECoW isn't present, the ECoW will be contacted immediately for advice. • A staged vegetation clearance exercise at a suitable time of year will be undertaken in order to safeguard any reptiles present at the time of works. Such works will 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. • Prior to commencement of the vegetation clearance works, the ECoW will liaise with the contractor to clearly demarcate the required working areas.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<ul style="list-style-type: none"> • If shelter features are present (i.e. log and vegetation piles), those will be checked by the ECoW before their removal (should this be required). • If shelter features are present that require removal, those will 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 will 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. • Should works be required in winter (November to February inclusive) or in cold weather (below 8 oC overnight temperature) the ECoW will advise upon bespoke working methods. Likely to require a hand search and a staged vegetation clearance approach under direct supervision. • The vegetation arisings will be collected and used to create habitat piles in areas adjacent to the site (which are to be retained during the development works).

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<ul style="list-style-type: none"> The vegetation clearance contractors on site will utilise equipment specific to their clearance methods as per their reasonable avoidance measures. <p><u>Ground-breaking works:</u></p> <ul style="list-style-type: none"> 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. 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 the works take place during the reptile hibernation period (the dormancy period runs from November to February (inclusive) and initially will be avoided where possible), it is considered necessary for the ground-breaking works to be undertaken under direct supervision of the ECoW. Small sections of the topsoil removed and inspected by the ECoW. Hand-digging under ECoW supervision may also be required.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			Contractors will utilise the equipment as per their reasonable avoidance measures method, For example: JCB 16C-I new generation 1 tonne mini digger; spade; spill kits; and Chapter 8 barrier/ Heras fencing.
Natterjack Toad	Main development site	<p>Volume 2, Chapter 14: Terrestrial Ecology and Ornithology [AS-033]</p> <p>Appendix 14C7A – Natterjack Toad Mitigation Strategy [APP-252]</p> <p>Sizewell C Project Terrestrial Ecology</p>	<p><u>Tertiary mitigation:</u> A draft Natterjack Toad Protected Species Licence [REP5-053] has been prepared for the proposed development that outlines the key following approaches to mitigating potential impacts to the natterjack toad population present within the main development site;</p> <p><u>Mitigation measures:</u></p> <ul style="list-style-type: none"> • The proposed Water Management Zone (WMZ) will avoid the rabbit warren networks that natterjack toads are known to use. • A trapping and translocation exercise using pitfall buckets will be undertaken and captured individuals from within the construction working area will be released within a safe location adjacent to the breeding pond (N1) away from the works. • Amphibian exclusion fencing (as per Figure 4 of the Great Crested Newt Mitigation Guidelines) will be installed around the perimeter of the working area of the WMZ within

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
		Monitoring and Mitigation Plan [REP5-088] Natterjack Toad Method Statement [REP5-053]	<p>Retsom's Field to prevent any natterjack toads from entering the construction footprint and demarcate the trapping and translocation area. 'Permanent' type fencing is proposed as the fencing will remain in situ for c. 10 years. An amphibian proof grid will be installed at an access opening along the south of the fencing.</p> <ul style="list-style-type: none"> The trapping and translocation area will then be compartmentalised with temporary amphibian proof fencing in order to increase capture effort. Pitfall traps will be installed on the inside of perimeter fencing and both sides of internal fencing to ensure a trapping density of 100 traps per hectare. Carpet tiles will also be placed between alternate pitfall traps (i.e. at a density of 50 per hectare) and adjacent to pond N1 to act as sheltering habitat that can be easily checked for translocation. Fencing and traps will be installed by professional and experienced contractors using suitable machinery during the active season (spring – autumn). The ground along the fence line and access tracks will be prepared and hand searched prior to installation and the works will be undertaken under supervision by the licence holder or appointed agent.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<ul style="list-style-type: none"> Pitfall traps and carpet tiles will be checked daily before 11am and fencing will also be walked at night by torchlight to search for natterjack toads; any individuals encountered will be translocated to the receptor site adjacent to N1. This approach will continue for a minimum of 30 consecutive days/nights and until five consecutive nights of 'no capture' are observed. Following which, internal fencing will be removed, and the construction works for the WMZ would proceed within the exclusion zone. With the exception of an access track to the south, perimeter fencing will remain in situ for the duration of the WMZ (10 years). During this time, it will be maintained to ensure that it remains amphibian-proof. Fence removal will be undertaken out with the hibernation period and be under the supervision of the licence holder or appointed agent. <p><u>Habitat creation:</u></p> <ul style="list-style-type: none"> To compensate for the temporary loss of foraging habitat, it is proposed that four ponds would be created, comprising the reinstatement of pond N2 and the installation of a three section pond aggregation (pond N5). Pond N2 should be re-lined in a similar manner to N1 to re-instate this waterbody

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>which would be filled by heavy rain over the winter/early spring. Installation of netting over the waterbody, in the similar manner to N1, would reduce bird predation. This would double the available breeding habitat for the natterjack toad population in N1.</p> <ul style="list-style-type: none"> • New pond N5 will comprise three sections, N5a, b and c, and each section would consist of slightly different profiles to provide varying pond topography. These sections would be joined by two channels approximately 3m in width. This would result in a waterbody complex of approximately 300m². The N5 pond aggregation, along with the reinstatement of pond N2 would result in four new waterbodies within Retsoms field. • N5 would be lined with a black butyl or bentonite liner, which would create similar thermal conditions to pond N1. The west (a) and middle (b) section of pond N5 should be left with the liner exposed, closely mimicking N1 however the liner at the east (c) section should be covered in sediment, which is more similar to N3 and N4. This should provide an important transition in conditions once the natterjack toad population expands into pond N5.

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<ul style="list-style-type: none"> A berm would be created to buffer the pond for approximately 10m and consist of a 1:10 slope, up to ground level or to the base of the proposed sand banks. This should be landscaped after the pond liner gets installed and would initially be bare sediment however management maybe needed to maintain this bare ground resource. Landscaping is to be undertaken to provide foraging, refuge and overwintering opportunities within Retsoms Field. In addition, the management of the terrestrial habitats in Retsoms Field will be reviewed and improved to ensure conditions are of maximum value to the population. A long-term terrestrial enhancement schedule is proposed which would include creation of sand banks, scrapes and heather patches. Conservation management of the vegetation within Retsoms will also be optimised to favour natterjack toads. Subject to agreement with Natural England and other relevant stakeholders, a series of mound features comprising sand and stone would be created adjacent to N5 that will, in the short term, increase terrestrial opportunities (resting and overwintering) and increase connectivity between N1 and N3/N4. In the long term, these features should aid rabbit

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>warren excavation and further increase overwintering opportunities.</p> <ul style="list-style-type: none"> Two vertical sand banks are proposed (totalling approximately 160m) which run along the north and south edges of the berm. At the eastern extent, the sand banks veer away from the pond to the north and south, cut into the contours of the field gradient. These vertical sand banks would be approximately 50cm high and would provide burrowing opportunities for natterjack toads with patches of uncompacted sediment being supplied by bank erosion. They would also provide attractive habitat for rabbits to dig warrens, provisioning further sheltering and hibernating opportunities for natterjack toads. The vertical nature of these banks mean vegetation colonisation would be limited and could be relatively easily scraped off through management practices. The creation of the ponds, berms and sand banks will generate excavated material. This material will be used to install large sand /earth piles in a corridor from N1 to N3 and in the vicinity of N5, adjacent to or outside of the berm boundary or on top of the sand banks. These would be designed with slopes of approximately 1:3 and would be an

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>initial resource for foraging and burrowing natterjack toads. These would be ephemeral and would vegetate over and eventually would provide raised lawns of short turf for rabbits and sheep to graze, which would keep some bare ground resource.</p> <ul style="list-style-type: none"> • In addition, it is intended to create some surface fixed refugia, as the originally proposed stone wall or stone linear feature is not considered appropriate or in keeping with the Area of Outstanding Natural Beauty (AONB) setting, the distribution of a small number of concrete flag stones scattered on the surface of the bare sand is proposed. These would also not be as visually intrusive as a dry-stone wall arrangement and would provide suitable conditions to be exploited by the local natterjack toad population. • There will be terrestrial habitat improvements within Retsoms Field especially in the proposed natterjack corridor running north-east from N1. This will focus on increasing heather patch creation and the diversity of the grassland, opening up the vegetation in places and creating areas of bare ground, whilst minimising risks to the existing vulnerable population. Additional enclosure fencing is likely to be required locally

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>within the field to exclude sheep from the establishing heather patches.</p> <ul style="list-style-type: none"> • Subject to agreement with the RSPB, a land bridge between N3 in Retsoms field and N4 in Minsmere would be installed. • Pre-construction checks of any potential refugia in and alongside Retsom's Field would be required, with any natterjack toads found within the footprint of the proposed WMZ captured and relocated to the retained areas of Retsom's Field. Works would be undertaken outside of the hibernation season (considered to be October to April). Pre-construction checks would be completed by a licensed or accredited ecologist. <p><u>Monitoring and management</u></p> <ul style="list-style-type: none"> • It is proposed that the management regime of the remainder of Retsoms Field (i.e. outside of the WMZ construction area) continues as present (i.e. sheep grazing with at least the equivalent animals per hectare as current five year mean average). In addition to sheep grazing, the continued presence of rabbit grazing will keep bare ground patches, particularly on the proposed spoil mounds. N5 will be drained

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>down annually in late summer and allowed to fill naturally over winter (as practiced with N1).</p> <ul style="list-style-type: none"> Regular checks, management and maintenance will be undertaken to check and repair the amphibian fencing and manage vegetation alongside the fencing. Assurance checks will also be undertaken to ensure quality of work. Stock proof fencing will be installed in conjunction with the amphibian fencing to prevent grazing animals entering the WMZ. The new pond N5 would be monitored annually along with N1, N2 and N3 (it is also assumed that the RSPB will continue to monitor N4) for the duration of WMZ operation (c. 10 years). The TEMMP [REP5-088] outlines the Natterjack toad monitoring scheme for the population and the habitats during the construction and operation period. Monitoring surveys will be carried out annually, between April – July (ideally in damp conditions shortly after rainfall after daylight hours) Y1-Y12 construction phase assuming 12 years worst case (inclusive).

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
	Northern park and ride	Volume 3, Chapter 7: Terrestrial Ecology and Ornithology [APP-363]	Scoped out as not present on site, no further measures implemented as no significant effect is considered likely.
	Southern park and ride	Volume 4, Chapter 7: Terrestrial Ecology and Ornithology [APP-394]	Scoped out as not present on site, no further measures implemented as no significant effect is considered likely.
	Freight management facility	Volume 8, Chapter 7: Terrestrial Ecology and Ornithology [APP-523]	Scoped out as not present on site, no further measures implemented as no significant effect is considered likely.
	Sizewell link road	Volume 6 Chapter 7: Terrestrial Ecology and	Scoped out as not present on site, no further measures implemented as no significant effect is considered likely.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
		Ornithology [APP-461]	
	Two village bypass	Volume 5, Chapter 7: Terrestrial Ecology and Ornithology [APP-425]	Scoped out as not present on site, no further measures implemented as no significant effect is considered likely.
	Yoxford	Volume 7, Chapter 7: Terrestrial Ecology and Ornithology [APP-494]	Scoped out as not present on site, no further measures implemented as no significant effect is considered likely.
	Green rail route	Volume 9, Chapter 7: Terrestrial Ecology and Ornithology [APP-555]	Scoped out as not present on site, no further measures implemented as no significant effect is considered likely.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
Great crested newt	Main development site	<p>Volume 2, Chapter 14: Terrestrial Ecology and Ornithology [AS-033]</p> <p>Appendix 14C9A – Great Crested Newt Non-Licensable Method Statement [APP-252]</p>	<p><u>Tertiary mitigation:</u></p> <ul style="list-style-type: none"> A Great Crested Newt Method Statement (Volume 2, Appendix 14C9A [APP-252]) has been prepared detailing the approach to be used, including the removal of vegetation and ground clearance in areas where commencement of construction activities have the potential to kill or injure Great Crested Newts during their terrestrial phase (there are no breeding ponds within the site). A RAMS method statement document has been created to outline the appropriate measures that will be undertaken to prevent any negative impacts on GCN: <ul style="list-style-type: none"> 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.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<ul style="list-style-type: none"> 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 will be overseen by the ecologist. Shelter features that require removal will 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 will 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

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>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.</p> <ul style="list-style-type: none"> 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.
	Northern park and ride	<p>Volume 3, Chapter 7: Terrestrial Ecology and Ornithology [APP-363]</p> <p>Terrestrial Ecology Monitoring and Mitigation Plan [REP5-088]</p>	<p><u>Primary mitigation:</u></p> <ul style="list-style-type: none"> Pond [REDACTED] would be retained, directly protecting the known great crested newt population within the site boundary. A 10m buffer would be maintained around the pond, within which no construction works would take place other than the erection of ecological fencing. Additionally, the pond would be protected from construction and operational impacts by the landscape bund along the eastern boundary of the site. One-way directional newt fencing would be installed around the perimeter of the car parking areas, swales and landscape bunds, to prevent great crested newts from entering the site but allow them to leave should they accidentally gain access.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
		Darsham GCN Method Statement (Doc Ref. 6.4 7A.5(A))	<ul style="list-style-type: none"> Fencing would be sited to ensure that Pond [REDACTED] is excluded in order to maintain connectivity with existing, suitable great crested newt habitats. This approach would eliminate the need to translocate great crested newts away from the landscaped margins of the site when these areas are returned to agriculture use. This fencing would be installed at the start of the first phase of construction, maintained throughout operation, and would remain in place until the end of the site restoration works. Two small pipes or culverts would be placed beneath the new access road to allow the passage of great crested newts underneath the road. One of these would be on the north side of the landscape bund, and one would be at the point at which the new access road meets Willow Marsh Lane. Great crested newts would be directed to the culverts by one-way directional newt fencing. The planting of hedgerow along the southern side of Willow Marsh Lane with a rough, unmanaged grassland margin adjacent, and extending along the eastern and western site boundaries would minimise great crested newt habitat severance and habitat loss, facilitate continued access to

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>foraging and hibernation sites within Little Nursery Wood, and allow connectivity between Ponds [REDACTED].</p> <p><u>Tertiary mitigation:</u></p> <ul style="list-style-type: none"> • Additionally, works with the potential to affect great crested newts would be carried out under a licence from Natural England, following agreement with Natural England on an appropriate mitigation strategy, additional information from the draft Method Statement is provided below. • In addition to the primary mitigation measures identified previously, this would likely include: • Seasonal constraints to the timing of the installation of the one-way directional newt fencing described in section 7.5a of this chapter. If the timing of fence installation means there would be a risk of encountering newts as they move between their ponds and terrestrial habitat (notably in February/March), then the fencing would be combined with pitfall traps, and any trapped newts would be collected, and transferred to one of the ponds to the west of the A12 where great crested newts are known to occur (e.g. Pond [REDACTED] or [REDACTED]).

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<ul style="list-style-type: none"> If possible, the removal of hedgerow would be undertaken outside of the amphibian hibernation period (October to February inclusive). If this is not possible, vegetation would be cut to the ground (which would remove potential bird nesting habitat), but the roots would remain intact until hibernation is complete. The root system of vegetation would then be removed once the great crested newt hibernation season is over. This work would be overseen by a suitably experienced Ecological Clerk of Works (ECoW); The habitat around Pond [REDACTED] would be improved, and tussocky grassland and scrub encouraged to grow for the benefit of great crested newts and hibernation features would be installed. This would improve the foraging habitat around Pond [REDACTED] and would provide suitable hibernation sites adjacent to the pond. In addition, this commitment would need to be agreed with the landowner. In the event of the landowner not agreeing to the above approach, alternative measures would be adopted. <p><u>Monitoring:</u></p> <ul style="list-style-type: none"> During construction, there would be regular checks of the security fence, ecological fencing and close-boarded fence to

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>check these remain intact, and that there is no encroachment of construction activities beyond the site boundary or into the buffer areas. The newt culverts, when installed, would also be monitored to ensure these remain intact and clear of debris.</p> <ul style="list-style-type: none"> • The one-way directional newt fencing would be checked regularly to ensure that this remains intact. • Throughout the operational phase, regular monitoring of the one-way directional newt fencing and newt culverts would be conducted to ensure that these remain intact and clear of debris. This would ensure the continued exclusion of newts from the operational facility on the site. • The TEMMP [REP5-088] outlines the proposed monitoring activities identified for great crested newt during the construction and operational phases. <p>A draft Darsham GCN Method Statement (Doc Ref. 6.4 7A.5(A)) has been compiled that details the key approaches to mitigating potential impacts to the GCN populations present.</p> <ul style="list-style-type: none"> • Construction mitigation comprises hand searches in the areas of grassland present at the margins of the arable land prior to a staged vegetation clearance to be undertaken in

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>these areas, in addition to installing one-way directional newt fencing around the eastern perimeter of the works (to separate these areas from the pond and habitat area to the east of the site), to prevent great crested newts from entering the development area but allow them to move into the retained areas to the east. Any GCN found during the construction phase will be moved by hand into this safeguarded area.</p> <ul style="list-style-type: none"> • Fencing would be sited to ensure that Pond [REDACTED] is excluded from the site during the operational phase of the development. • This approach eliminates the need to translocate great crested newts away from the landscaped areas of the park and ride once this is returned to agricultural use (after approximately 9 years of the site being utilised as a park and ride scheme). This fencing would be installed at the start of the first phase of construction, maintained throughout operation and would remain in place until the end of the site restoration works, with bi-annual checks on the fencing structure undertaken during the operational use of the site.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<ul style="list-style-type: none"> If any GCN were found incidentally during the works, these will be moved by hand to the vicinity of the pond in the retained pond on site. Accordingly, the proposed development is predicted to have non-significant, minor temporary impacts on the great crested newt population. Once construction is complete the site area will be restored, therefore the impacts are considered to be negligible and only for the duration of the works. The vast majority of the affected terrestrial habitats are considered to be of low value for great crested newts providing few refuges (managed agricultural land). Once the development is implemented the areas now considered to be of limited value for the species will be enhanced with the creation of additional refugia/resting places suitable for GCN.
	Southern park and ride	Volume 4, Chapter 7: Terrestrial Ecology and Ornithology [APP-394]	<p>No great crested newts were recorded during surveys, however the following precautionary measures are proposed.</p> <p><u>Primary mitigation:</u> Pond ■ located within the site, close to the western boundary, would be retained, and so there would be no direct loss of this habitat, and its associated species. This pond would be further protected by a buffer area of a minimum of 10m between the</p>

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			pond, where with the exception of fencing, no above ground buildings or structures will be within this buffer zone.
	Freight management facility	Volume 8, Chapter 7: Terrestrial Ecology and Ornithology [APP-523]	Great crested newts considered absent from the zone of influence and no further measures implemented as no significant effect is considered likely.
	Sizewell link road	Volume 6 Chapter 7: Terrestrial Ecology and Ornithology [APP-461] Terrestrial Ecology Monitoring and Mitigation Plan [REP5-088]	<u>Primary mitigation:</u> <ul style="list-style-type: none"> The site boundary has been amended and reduced where possible to avoid direct and indirect impacts to ponds. Measures would be installed into the road design to maintain connectivity for great crested newts. The locations for crossing points will be finalised at the detailed design stage, however these would be as follows: The preferred option, where there is minimal fragmentation, and the development is at grade, as cited by Natural England, would be to allow newts to cross over the road. These measures would be incorporated into the proposed development design such as no kerbing or features that would inhibit the movement of newts to cross the road. In the

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
		<p>Sizewell Link Road Landscape and Ecological Management Plan (Doc Ref. 8.3 B(B))</p> <p>Sizewell Link Road GCN Method Statement (Doc Ref. 6.7 7A.5(A))</p>	<p>event of gully pots (which could become traps for amphibians) being identified as a requirement, the design will ensure that amphibian friendly gully pot designs are used so that a means of egress is provided to ensure that any amphibians do not get trapped within them.</p> <ul style="list-style-type: none"> Replacement great crested breeding ponds are included within the design of the proposed development to compensate for the loss of existing ponds. Replacement ponds would be created prior to destruction of the original ponds and appropriate terrestrial habitat would be created around the ponds. In accordance with the Landscape and Ecological Management Plan (LEMP) (Doc Ref. 8.3 B(B)), a total of up to eight mitigation ponds would be provided to provide new breeding habitats, whilst a further six ponds are to be created which will function as an enhancement of the aquatic habitats within the site post development. Pipes or culverts would be placed beneath the new access road to allow the passage of great crested newts underneath the road. Further details are provided in the Sizewell Link Road GCN Draft Method Statement (Doc Ref. 6.7 7A.5(A)).

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p><u>Monitoring:</u></p> <p>The TEMMP [REP5-088] outlines the proposed monitoring activities identified for great crested newt during the construction and operational phases.</p>
	Two village bypass	<p>Volume 5, Chapter 7: Terrestrial Ecology and Ornithology [APP-425]</p> <p>Volume 5, App 7A, Annex 7A-6B RAMS GCN [APP-426]</p>	<ul style="list-style-type: none"> Great crested newts are considered absent from the zone of influence and no further measures implemented as no significant effect is considered likely. <p><u>Action to take if great crested newts are found:</u></p> <ul style="list-style-type: none"> 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; and 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

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
	Yoxford	Volume 7, Chapter 7: Terrestrial Ecology and Ornithology [APP-494]	Scoped out as not present on site, no further measures implemented as no significant effect is considered likely.
	Green rail route	Volume 9, Chapter 7: Terrestrial Ecology and Ornithology [APP-555] Volume 9, Chapter 7, Appendix 7A Annex 7A-6 RAMS GCN [APP-556]	<u>Tertiary mitigation:</u> <ul style="list-style-type: none"> • Works with the potential to affect great crested newts would be carried out under a licence and in accordance with reasonable avoidance methods statement. • The sections of hedgerow to be removed would be cleared outside of the amphibian hibernation period (October to February inclusive). If this is not possible, vegetation would be cut to just above ground level (to remove potential bird nesting habitat), but the roots would remain intact until the newt hibernation season is complete. The root system of vegetation would then be removed once the great crested newt hibernation season is over. This work would be overseen by a suitably experienced Ecological Clerk of Works (ECoW), under licence from Natural England. Any great crested newts encountered would be translocated to an

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
		<p>Terrestrial Ecology Monitoring and Mitigation Plan [REP5-088]</p> <p>GRR GCN Method Statement (Doc Ref. 6.4 7A.5(A))</p>	<p>appropriate pond within the ZOI, known to support them, with suitable adjacent terrestrial habitats.</p> <ul style="list-style-type: none"> • To minimise the risk of incidental mortality, all vegetation within the site boundary would be maintained in a state unsuitable for great crested newts, i.e. vegetation would be maintained to ground level, this would also support mitigation for reptiles. A suitably experienced ECoW would oversee all ground-breaking activities and would inspect all excavations, if uncovered, on a daily basis. • During the removal and reinstatement phase, the removal of the railway ballast and bunds would be conducted outside of amphibian and reptile hibernation period (October to February inclusive) where possible. Otherwise, a suitably experienced ECoW would oversee all dismantling and removals. • A GRR GCN Method Statement (Doc Ref. 6.4 7A.5(A)) has been produced that outlines the mitigation measures required for GCN. • No GCN breeding ponds will be lost or directly impacted by the planned works in the short-term (construction phase) or long-term (operational phase). However, the construction

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>phase activities will require standard operations including vegetation clearance and topsoil stripping. The temporary loss of sub-optimal habitat, in the form of arable land, and suitable habitat, hedgerows, will be during the construction phase and operational phase of the railway, however this will be replaced with areas of reinstated agricultural land and hedgerows after the development has been removed.</p> <ul style="list-style-type: none"> • Nevertheless, in absence of mitigation there is the potential to injure/kill individual GCN and, as such, precautionary working methods are proposed. • Accordingly, the proposed development is predicted to have non-significant, negligible temporary impacts on the great crested newt population. Once construction is complete the site area will be restored, therefore the impacts are considered to be negligible and only for the duration of the works. The vast majority of the affected terrestrial habitats are considered to be of low value for great crested newts providing few refuges (managed agricultural land). <p><u>GCN RAMS:</u> <u>Toolbox talk for great crested newts</u></p>

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<ul style="list-style-type: none"> 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. 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 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 be left undisturbed; and great crested newt should not be handled by contractors. <p><u>Precautionary working methods:</u></p> <ul style="list-style-type: none"> A different precautionary working method will 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

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>November to February inclusive (hibernation season) and March to October (active season). The ECoW will be responsible for determining the appropriate working methodology.</p> <ul style="list-style-type: none"> • The prescriptions of this method statement should 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. • 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 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. • 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:

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<ul style="list-style-type: none"> • Vegetation clearance in the active season. • Vegetation clearance in the hibernation season. • Ground-breaking works in the active and hibernation season. <p>Approach to vegetation clearance</p> <p>a) Vegetation clearance in the active season</p> <ul style="list-style-type: none"> • Prior to commencement of the vegetation clearance works, the ECoW will liaise with the contractor to clearly demarcate the required working area. • The precautionary working methods to safeguard great crested newt during vegetation clearance in the active season are set out below. <ul style="list-style-type: none"> • 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

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>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.</p> <ul style="list-style-type: none"> • 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 newt present at the time of works to move away from the cut areas, this will also allow the

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>ECoW to check the area for great crested newt, along with other species.</p> <ul style="list-style-type: none"> • 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 newt within the site. <p>b) Vegetation clearance in the hibernation season</p> <ul style="list-style-type: none"> • Prior to commencement of the vegetation clearance works, the ECoW will liaise with the contractor to clearly demarcate the required working area. • The precautionary working methods to safeguard great crested newt during vegetation clearance in the hibernation season are set out below. <ul style="list-style-type: none"> • 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.

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<ul style="list-style-type: none"> 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 newt within the site. <p>c) Approach to ground-breaking works including top-soil stripping (active season and hibernation period)</p> <ul style="list-style-type: none"> 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 ponds during this period. However, there are restrictions on certain

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>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.</p> <ul style="list-style-type: none"> 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. 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. The precautionary working methods to safeguard great crested newt during ground-breaking works in the active season are set out below. <ul style="list-style-type: none"> 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).

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>If possible, this removal should be undertaken by hand or slowly under close supervision by the ECoW.</p> <ul style="list-style-type: none"> 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 topsoil will then be carefully removed using a toothed bucket (if permitted under the contractors reasonable avoidance measures method statement) under close ecological supervision by the ECoW. <p>d) Action to take if great crested newt are found</p> <ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> the works will stop;

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<ul style="list-style-type: none"> the great crested newt will not be handled or moved from its resting place; and 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. <p><u>Monitoring:</u> The TEMMP [REP5-088] outlines the proposed monitoring activities identified for great crested newt during the construction and operational phases.</p>
Common toad	Main development site	Volume 2, Chapter 14: Terrestrial Ecology and Ornithology [AS-033]	There is no specific mitigation proposed for common toad, however tertiary reptile and amphibian mitigation measures will also benefit common toad.
	Northern park and ride	Volume 3, Chapter 7: Terrestrial Ecology and	Common toad has been scoped out of the detailed assessment; however, mitigation measures employed to protect GCN would also protect this species.

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
		Ornithology [APP-363]	
	Southern park and ride	Volume 4, Chapter 7: Terrestrial Ecology and Ornithology [APP-394]	Common toad has been scoped out of the detailed assessment, no further measures implemented as no significant effect is considered likely
	Freight management facility	Volume 8, Chapter 7: Terrestrial Ecology and Ornithology [APP-523]	Common toad has been scoped out of the detailed assessment, no further measures implemented as no significant effect is considered likely
	Sizewell link road	Volume 6 Chapter 7: Terrestrial Ecology and Ornithology [APP-461]	Common toad has been scoped out of the detailed assessment; however, mitigation measures employed to protect GCN would also protect this species.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
	Two village bypass	Volume 5, Chapter 7: Terrestrial Ecology and Ornithology [APP-425]	Common toad has been scoped out of the detailed assessment, no further measures implemented as no significant effect is considered likely.
	Yoxford	Volume 7, Chapter 7: Terrestrial Ecology and Ornithology [APP-494]	Common toad has been scoped out of the detailed assessment, no further measures implemented as no significant effect is considered likely.
	Green rail route	Volume 9, Chapter 7: Terrestrial Ecology and Ornithology [APP-555]	Common toad has been scoped out of the detailed assessment; however, mitigation measures employed to protect GCN would also protect this species

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
S41 bird species on main development site: Bittern, hen harrier, nightjar, woodlark, black-tailed godwit, lapwing, stone curlew, grey partridge, turtle dove, cuckoo, marsh tit, skylark, starling, song thrush, spotted flycatcher, house sparrow, yellow wagtail, linnet, yellow hammer	Main development site	Volume 2, Chapter 14: Terrestrial Ecology and Ornithology [AS-033]	<p>No species-specific measures are proposed for any of the S41 species. General measures that apply to all bird species are as follows.</p> <p><u>Primary mitigation:</u></p> <ul style="list-style-type: none"> The Rights of Way and Access Strategy for the EDF Energy estate (see Chapter 15, Appendix 15I of the ES (Book 6)) has been developed to minimise the displacement of people away from the proposed development area to nearby European (National) sites to minimise disturbance to ground-nesting bird species and trampling of vegetation at those sites. In addition, the strategy outlines a monitoring programme for recreational displacement and identify local mitigation measures, to be agreed with local land managers, which could be introduced to further reduce recreational disturbance. The establishment of new reedbed and ditches at Aldhurst Farm (completed in 2016) has provided replacement for the land take of these habitats within Sizewell Marshes SSSI. The replacement habitats have established successfully, and mobile aquatic plant and invertebrate species would colonise over time from the adjacent areas of the Sizewell Marshes

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>SSSI. These new habitats also provide nesting and foraging habitat for many bird species. Marsh Harriers have already started breeding in the new wetlands.</p> <ul style="list-style-type: none"> • The extensive grasslands created to provide reptile mitigation and marsh harrier compensation habitats as well as the grasslands at Aldhurst Farm already support populations of skylarks, meadow pipits, woodlark and linnets which would have been present at substantially lower densities when these habitats were intensively cultivated arable fields. • Removal of vegetation, ground clearance and the commencement of construction activities have the potential to risk killing or injuring nesting birds, and to damage or destroy nests, including those of ground-nesting species, should works be undertaken during the breeding bird season. Birds and their nests are protected under the Wildlife and Countryside Act (W&CA) and the removal of scrub and trees and ground clearance works would generally be undertaken outside of the breeding bird season. Where it is not possible to undertake these works outside of the breeding bird season, an inspection for nests would be undertaken by a suitably experienced ECoW prior to the

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			removal of vegetation. If nesting birds are identified during this process, works in the vicinity of the nest (estimated to be a 10m standoff or greater, depending upon species) would cease until the young have fledged.
S41 species: herring gull, house sparrow, linnet, marsh tit, skylark, yellowhammer, song thrush, starling, bullfinch.	Northern park and ride	Volume 3, Chapter 7: Terrestrial Ecology and Ornithology [APP-363]	<u>Tertiary mitigation:</u> <ul style="list-style-type: none"> The removal of vegetation, ground clearance, and the commencement of construction activities have the potential to risk killing or injuring nesting birds, and to damage or destroy nests, including those of ground-nesting species, should works be undertaken during the breeding bird season (considered to be late February to August). Birds and their nests are protected under the Wildlife and Countryside Act, and the removal of scrub and trees and ground clearance works would generally be undertaken outside of the breeding bird season. Measures could also be put in place to deter birds from nesting in any hedgerow to be removed (for example, cutting back vegetation and making the area less suitable), however, the ground would need to remain undisturbed during the reptile hibernation period. Where it is not possible to undertake these works outside of the breeding bird season, an inspection for nests would be

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			undertaken by a suitably experienced ECoW prior to the removal of vegetation. If nesting birds are identified during this process, works in the vicinity of the nest (estimated to be a 10m standoff) would cease until the young have fledged.
S41 bird species: Lapwing, linnet, skylark, song thrush, yellowhammer, grey partridge, herring gull	Southern park and ride	Volume 4, Chapter 7: Terrestrial Ecology and Ornithology [APP-394]	<u>Tertiary mitigation:</u> <ul style="list-style-type: none"> Construction activities have the potential to risk killing or injuring breeding birds, and damage or destroy nests, including those of ground-nesting species, should works be undertaken during the breeding bird season (late February to August inclusive). Birds and their nests are protected under the Wildlife and Countryside Act, therefore removal of scrub and trees and ground clearance works would generally be undertaken outside of the breeding bird season. Measures could also be put in place to deter birds from nesting in any hedgerow to be removed (for example, cutting back vegetation and making the area less suitable); however, the ground would need to remain undisturbed during the reptile hibernation period. Where it is not possible to undertake these works outside of the breeding bird season, an inspection for nests would be undertaken by a suitably experienced ECoW prior to the removal of vegetation. If

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			breeding birds are identified during this process, works in the vicinity of the nest (estimated to be a 10m standoff) would need to cease until the young have fledged.
S41 bird species: Desk study records - corn bunting, grey partridge, lapwing, linnet, turtle dove, tree sparrow, yellowhammer, yellow wagtail, skylark.	Freight management facility	Volume 8, Chapter 7: Terrestrial Ecology and Ornithology [APP-523]	<u>Tertiary mitigation:</u> <ul style="list-style-type: none"> Removal of vegetation, ground clearance, and the commencement of construction activities have the potential to risk killing or injuring nesting birds and to damage or destroy nests, including those of ground-nesting species, if works are undertaken during the breeding bird season (considered to be late February to August inclusive). Birds and their nests are protected under the Wildlife and Countryside Act and the removal of scrub and trees and ground clearance works would generally be undertaken outside of the breeding bird season. Measures could also be put in place to deter birds from nesting in any hedgerow to be removed (for example, cutting back vegetation and making the area less suitable); however, the ground would need to remain undisturbed during the reptile hibernation period. Where it is not possible to undertake these works outside of the breeding bird season, an inspection for nests would be undertaken by a suitably experienced Ecological

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			Clerk of Works (ECoW) prior to the removal of vegetation. If nesting birds are identified during this process, works in the vicinity of the nest (estimated to be a 10m standoff) would cease until the young have fledged.
S41 bird species: Skylark, yellowhammer linnet, song thrush, yellow wagtail, house sparrow and cuckoo, reed bunting and dunnock.	Sizewell link road	Volume 6 Chapter 7: Terrestrial Ecology and Ornithology [APP-461]	<u>Tertiary mitigation:</u> <ul style="list-style-type: none"> Construction activities have the potential to risk killing or injuring breeding birds, and damage or destroy nests, including those of ground-nesting species, should works be undertaken during the breeding bird season (late February to August inclusive). Birds and their nests are protected under the Wildlife and Countryside Act, therefore removal of scrub and trees and ground clearance works would generally be undertaken outside of the breeding bird season. Measures could also be put in place to deter birds from nesting in any hedgerow to be removed (for example, cutting back vegetation and making the area less suitable); however, the ground would need to remain undisturbed during the reptile hibernation period. Where it is not possible to undertake these works outside of the breeding bird season, an inspection for nests would be undertaken by a suitably experienced ECoW prior to the removal of vegetation. If breeding birds are identified during this process, works in the

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			vicinity of the nest (estimated to be a 10m standoff) would need to cease until the young have fledged
S41 bird species: herring gull, song thrush, marsh tit, dunnock, reed bunting, linnet, house sparrow, skylark, bullfinch.	Two village bypass	Volume 5, Chapter 7: Terrestrial Ecology and Ornithology [APP-425]	<p><u>Tertiary mitigation:</u></p> <ul style="list-style-type: none"> Construction activities have the potential to risk killing or injuring breeding birds, and damage or destroy nests, including those of ground-nesting species, should works be undertaken during the breeding bird season (late February to August inclusive). Birds and their nests are protected under the Wildlife and Countryside Act, therefore removal of scrub and trees and ground clearance works would generally be undertaken outside of the breeding bird season. Measures could also be put in place to deter birds from nesting in any hedgerow to be removed (for example, cutting back vegetation and making the area less suitable); however, the ground would need to remain undisturbed during the reptile hibernation period. Where it is not possible to undertake these works outside of the breeding bird season, an inspection for nests would be undertaken by a suitably experienced ECoW prior to the removal of vegetation. If breeding birds are identified during this process, works in the vicinity of the nest (estimated to be a 10m standoff) would need to cease until the young have fledged.

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
S41 bird species: Desk study - grey partridge, lapwing, linnet, turtle dove, and yellowhammer and skylark.	Yoxford	Volume 7, Chapter 7: Terrestrial Ecology and Ornithology [APP-494]	<u>Tertiary mitigation:</u> <ul style="list-style-type: none"> The removal of vegetation, ground clearance and the commencement of construction activities have the potential to risk killing or injuring nesting birds, and to damage or destroy nests, including those of ground-nesting species, should works be undertaken during the breeding bird season (considered to be late February to August). Birds and their nests are protected under the Wildlife and Countryside Act and the removal of scrub and trees and ground clearance works would generally be undertaken outside of the breeding bird season. Measures could also be put in place to deter birds from nesting in any hedgerow to be removed (for example, cutting back vegetation and making the area less suitable); however, the ground would need to remain undisturbed during the reptile hibernation period, after which groundworks could commence. Where it is not possible to undertake these works outside of the breeding bird season, an inspection for nests would be undertaken by a suitably experienced ECoW prior to the removal of vegetation. If nesting birds are identified during this process, works in the

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			vicinity of the nest (estimated to be a 10m standoff) would cease until the young have fledged.
S41 bird species: herring gull, skylark, song thrush, yellowhammer, dunnock, bullfinch house sparrow, lapwing, starling.	Green rail route	Volume 9, Chapter 7: Terrestrial Ecology and Ornithology [APP-555]	<u>Tertiary mitigation:</u> <ul style="list-style-type: none"> Removal of vegetation, ground clearance and the commencement of construction activities have the potential to risk killing or injuring nesting birds, and to damage or destroy nests, including those of ground-nesting species, should works be undertaken during the breeding bird season (considered to be late February to August). Birds and their nests are protected under the Wildlife and Countryside Act and the removal of scrub and trees and ground clearance works would generally be undertaken outside of the breeding bird season. Measures could also be put in place to deter birds from nesting in any hedgerow to be removed (for example, cutting back vegetation and making the area less suitable); however, if conducted during the reptile hibernation period, the ground would need to remain undisturbed. Where it is not possible to undertake these works outside of the breeding bird season, an inspection for nests would be undertaken by a suitably experienced ECoW prior to the removal of vegetation. If nesting birds are identified during

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			this process, works in the vicinity of the nest (estimated to be a 10m standoff) would cease until the young have fledged.
S41 fish species: European eel	Main development site	Volume 2, Chapter 14: Terrestrial Ecology and Ornithology [AS-033] Eels Regulations Compliance Assessment	<u>Primary mitigation:</u> <ul style="list-style-type: none"> The realignment of the Sizewell Drain and the construction of associated water control features would enable manipulation of the water levels within Sizewell Marshes SSSI, to safeguard retained areas of fen meadow and reedbed habitats (see Chapter 19 Ground and Surface Water of the ES (Book 6)). Control structures would include passage for eels and other fish (see Eels Regulations Compliance Assessment, 2019). The SSSI crossing was designed to be an embankment and culvert. The design of the SSSI crossing was updated as part of the ES Addendum and will now consist of a 30m open single span bridge. This will be more porous than the original proposed culvert and similarly facilitate the passage of fish, including eels, through the structure. As outlined under section 14.7 of this chapter there would be a loss of approximately 2km of ditch habitat which has already been recreated within the habitat creation at Aldhurst Farm which is in direct hydrological connection with the ditch

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>network of Sizewell Marshes SSSI and there would new habitat created when the Sizewell Drain is realigned. So overall no net loss of fish (ditch) habitat is anticipated. In addition, as outlined in section 14.4 of this chapter, the culvert crossing of the Leiston Drain would be of sufficient dimensions to leave the bed and bank of the Leiston Drain unmodified and the proposed control structure on the realigned Sizewell Drain would incorporate a fish pass so no obstruction to migratory fish and eels is anticipated. The installation of such a structure is in line with the Eel Regulations as demonstrated in the Eels Regulations Screening Report.</p> <ul style="list-style-type: none"> When the Sizewell Drain is realigned, a fish (and eel) rescue would be carried out by a specialist sub-consultant. The working methods would be secured via appending to the CoCP and thus via requirement 2 [AS-275], relocating stranded individuals across to the new realigned drain or undisturbed section of the Sizewell Drain. <p><u>Eels Regulations Compliance Assessment</u> <u>Freshwater Elements</u></p>

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<ul style="list-style-type: none"> Eel rescue carried out (if required) prior to any in-stream works. No piling at night to be carried out. Incorporation of suitable bed and bank protection (using bioengineering solutions) either upstream and/or downstream of culverts. Careful operational management of water control structures to ensure adequate environment flows for in-stream eel habitat and survival. No permanent in-stream barriers to eel migration to be constructed and operated without full consideration of eel migration, including the installation of appropriate eel passes at water control structures. <p><u>Marine elements:</u></p> <ul style="list-style-type: none"> Low velocity side entry type intake head design; Fish Recovery and Return systems to be fully integrated within the cooling water infrastructure FRR to include fish-friendly elevator ledges or 'buckets' optimised for eels.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<u>Monitoring:</u> Ongoing entrainment and impingement monitoring of eels at Sizewell C to be undertaken to implement alternative measures if deemed necessary. Monitoring will include that of habitat quality and fish assemblage present. Further details have been provided in the TEMMP [REP5-088] .
	Northern park and ride	Volume 3, Chapter 7: Terrestrial Ecology and Ornithology [APP-363]	Scoped out as not present on site, no further measures implemented as no significant effect is considered likely.
	Southern park and ride	Volume 4, Chapter 7: Terrestrial Ecology and Ornithology [APP-394]	Scoped out as not present on site, no further measures implemented as no significant effect is considered likely.
	Freight management facility	Volume 8, Chapter 7: Terrestrial	Scoped out as not present on site, no further measures implemented as no significant effect is considered likely.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
		Ecology and Ornithology [APP-523]	
	Sizewell link road	Volume 6 Chapter 7: Terrestrial Ecology and Ornithology [APP-461]	Scoped out as not present on site, no further measures implemented as no significant effect is considered likely.
	Two village bypass	Volume 5, Chapter 7: Terrestrial Ecology and Ornithology [APP-425]	Scoped out as not present on site, no further measures implemented as no significant effect is considered likely.
	Yoxford	Volume 7, Chapter 7: Terrestrial Ecology and Ornithology [APP-494]	Scoped out as no significant effect is considered likely.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
	Green rail route	Volume 9, Chapter 7: Terrestrial Ecology and Ornithology [APP-555]	Scoped out as not present on site, no further measures implemented as no significant effect is considered likely.
Other S41 fish species: Atlantic cod, plaice, whiting, herring,	Main development site	Volume 2, Chapter 22, Marine Ecology and Fisheries [AS-035]	<u>Coastal defence feature mitigation:</u> <u>Tertiary Vessel Traffic and Pollution mitigation:</u> <ul style="list-style-type: none"> • The potential for chemical and oil spills whilst recognised will be mitigated by compliance with IMO regulations. • The potential for invasive non-native species (INNS) to be introduced during ballast water activities will be managed by compliance with the IMO Ballast Water Management Convention (adopted in 2004). • Waste management procedures outlined in site waste management plans. • Artificial lighting on the BLF and moored vessels would introduce light into the marine environment. Mitigation measures as part of the site Lighting Management Plan (Doc Ref. 6.3 2B(A)) aims to minimise light spill into the adjacent environment.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p><u>Cooling water infrastructure mitigation:</u></p> <ul style="list-style-type: none"> A tunnel boring machine (TBM) slurry method is the most likely scenario for tunnelling. Spoil from the cutting face would be transported to a temporary stockpile for onward management. This is primary mitigation as it avoids damage to the seabed from the alternative of a 'cut and fill' method. Groundwater would be generated from digging the galleries allowing access to the tunnels. To encompass worst-case water quality scenarios, assessments assume discharges of wastewater from the CDO. Effects from discharges from the CDO would be mitigated by treatment with a siltbuster or similar technology to minimise sediment inputs (primary mitigation). <p><u>Cooling water headworks:</u></p> <ul style="list-style-type: none"> The optimal location of the outfall heads was investigated using validated hydrodynamic modelling in consultation with the Environment Agency to ensure compliance with Environment Agency guidelines to reduce environmental impacts of the thermal plume as well as to minimise recirculation of heated water at the Sizewell B intakes.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>Embedded (primary) mitigation measures of the design of the intake and outfall headworks includes:</p> <ul style="list-style-type: none"> • The intakes and outfalls of the cooling water infrastructure would be located east of the Sizewell-Dunwich Bank approximately 3km offshore in deep water, thereby allowing greater dilution of cooling water discharges and reducing potential intersections with the shore. • The intakes would be fitted with low-velocity side-entry (LVSE) headworks designed to minimise water velocities across the face. • The long axis of the intakes would be positioned parallel to the current in a north-south orientation. Intake slits would be positioned on the side of the headworks perpendicular to the tidal flow. This reduces both vertical currents, which fish are susceptible to, and reduces the probability of fish being forced into the intakes by tidal currents. • Coarse bar screens at the intakes would prevent marine mammals and marine debris from entering the CWS. • The outfall headworks are designed to funnel thermally buoyant discharges away from the seabed thereby minimising effects on benthic receptors.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<ul style="list-style-type: none"> The offshore location of the CW intakes of the proposed development relative to the FRR systems means the potential for re-impingement of fish is negligible. Seismic qualification will be required for some of the headworks and depending on the ground conditions would be achieved through the installation of piles. Piles would be installed by drilling, rather than percussive methods to reduce the incidence of underwater noise. Chlorination of critical plant would be applied after the drum screens, meaning the FRR would not be chlorinated. This primary mitigation prevents exposure of impinged biota to chlorine. To reduce the annual duration of chlorinated discharges, seasonal chlorination would be applied (tertiary mitigation). However, spot-chlorination may be required to protect critical plant outside these periods. <p><u>Fish recovery and return system:</u></p> <ul style="list-style-type: none"> The FRR is a key element of embedded mitigation, allowing robust species of fish and invertebrates that are impinged to be recovered and returned to the sea thereby reducing mortality, see Volume 2, Appendix 22I of the ES [APP-326].

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>Dead and moribund biota are also returned to sea via the FRRs, ensuring that biomass is not lost from the system.</p> <ul style="list-style-type: none"> A number of primary mitigation measure feature in the construction of the FRRs. The small diameter FRR tunnels (approximately 0.65m internal diameter) would be drilled beneath the seabed with arisings transported to landward for disposal. No marine impacts would arise apart, potentially, from a very small (non-significant) release of bentonite upon breakthrough to the sea. Primary mitigation would be to utilise a bentonite recovery system at the cutter face to reduce the potential for release. <p>The northing of the two FRR outfalls is designed to be closely aligned with the forebays of each reactor, minimising the required tunnel length and hence the time taken for fish to be returned to the marine environment. The optimal easterly position has been determined by several interacting factors, including:</p> <ul style="list-style-type: none"> The depth of the water at the point of discharge. Water depths must be sufficient at all stages of the tide to reduce predation by surface feeding birds.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<ul style="list-style-type: none"> • Avoidance of mobile geomorphic features. The two nearshore bars at Sizewell are important to sand transport and move naturally in response to the prevailing wave climate. The bars must be cleared to avoid burial of the system. The outfalls have been positioned on the seaward flank of the outer longshore bar, where bed level fluctuations are less, due to lower rates of transport. This location minimises the effects of the structures on geomorphology to localised scour only. • Minimising transit time of impinged biota. • Avoiding the Sizewell B nearfield discharge plume. The Sizewell B outfall is positioned 150m offshore (from mid tide level). A short FRR tunnel would, therefore, release fish into the Sizewell B discharge plume on the ebb tide (which would have elevated temperature and contain TRO throughout year). • Minimising the risk of fish re-entrapment into Sizewell B. The Sizewell B intake is 600m offshore and there is a risk that, on the flood tide, some of the fish discharged from the FRR outfall could be re-abstracted at the Sizewell B intake. • The use of a dedicated FRR for each EPR™ avoids the need for a complex junction system with associated increase in

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>transit times. Elevations and tidal heights allow direct discharge without the need for an Archimedes screw (necessary in the Hinkley Point C design), thus minimising the 'handling' of impinged fish and crustaceans. This is primary mitigation.</p> <ul style="list-style-type: none"> The FRR wash water would not be chlorinated, therefore, impinged biota would not be subjected to TRO exposure (primary mitigation). <p><u>Combined drainage outfall mitigation/design:</u></p> <ul style="list-style-type: none"> In accordance with the CoCP, discharges from the CDO would be treated with oil separators to minimise potential hydrocarbon contamination from mobile or fixed plant operations and a siltbuster or similar technology to reduce sediment loading (primary mitigation). Discharges would be subject to a WDA Environmental Permit and any conditions therein. The location of the CDO, approximately 400m offshore from the HCDF, limits the potential for discharges to interact with the coastline (primary mitigation). Chemicals used during the cold testing commissioning phase would be directed to storage and/or treatment tanks as

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>appropriate prior to controlled release via the CDO. This embedded mitigation would allow the managed release of commissioning effluent to achieve environmentally acceptable standards. Discharges would be subject to a WDA Environmental Permit and any conditions therein.</p> <p><u>Monitoring:</u></p> <ul style="list-style-type: none"> Condition 50 on the Marine Licence requires a fish impingement monitoring plan to be prepared and approved prior to operation of Sizewell C. The plan will monitor the species, number, length and mass of fish impinged on the drum screens throughout the year at various states of the tide.
Fish species	Northern park and ride	Volume 3, Chapter 7: Terrestrial Ecology and Ornithology [APP-363]	Scoped out as not present on site, no further measures implemented as no significant effect is considered likely.
Fish species	Southern park and ride	Volume 4, Chapter 7: Terrestrial	Scoped out as not present on site, no further measures implemented as no significant effect is considered likely.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
		Ecology and Ornithology [APP-394]	
Fish species	Freight management facility	Volume 8, Chapter 7: Terrestrial Ecology and Ornithology [APP-523]	Scoped out as not present on site, no further measures implemented as no significant effect is considered likely.
Fish species	Sizewell link road	Volume 6 Chapter 7: Terrestrial Ecology and Ornithology [APP-461]	Scoped out as not present on site, no further measures implemented as no significant effect is considered likely.
Fish species	Two village bypass	Volume 5, Chapter 7: Terrestrial Ecology and Ornithology [APP-425]	Scoped out as not present on site, no further measures implemented as no significant effect is considered likely.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
Fish species	Yoxford	Volume 7, Chapter 7: Terrestrial Ecology and Ornithology [APP-494]	Scoped out as no significant effect is considered likely.
Fish species	Green rail route	Volume 9, Chapter 7: Terrestrial Ecology and Ornithology [APP-555]	Scoped out as not present on site, no further measures implemented as no significant effect is considered likely.
S41 marine mammals found in the Greater Sizewell Bay: Harbour porpoise and common seal	Main development site	Volume 2, Chapter 22, Marine Ecology and Fisheries [AS-035]	All general primary and tertiary mitigation measures are outlined above in Fish Species measures. Other specific measures include: Piling activities associated with the installation of the 18 intertidal and subtidal piles required for the permanent BLF and approximately 114 piles required to construct the BLF, will conform to best environmental practice in accordance with Joint

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			Nature Conservation Committee guidelines to mitigate effects on marine mammals. A marine mammal mitigation protocol was submitted as part of the Sizewell DCO Application, provided in Volume 2, Appendix 22N of the ES [APP-331] and a Site Integrity Plan For The Southern North Sea Special Area Of Conservation was included at Appendix 9A of the sHRA Addendum [AS-178] . This is tertiary mitigation.
Marine mammals	Northern park and ride	Volume 3, Chapter 7: Terrestrial Ecology and Ornithology [APP-363]	Scoped out as not present on site, no further measures implemented as no significant effect is considered likely.
Marine mammals	Southern park and ride	Volume 4, Chapter 7: Terrestrial Ecology and Ornithology [APP-394]	Scoped out as not present on site, no further measures implemented as no significant effect is considered likely.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
Marine mammals	Freight management facility	Volume 8, Chapter 7: Terrestrial Ecology and Ornithology [APP-523]	Scoped out as not present on site, no further measures implemented as no significant effect is considered likely.
Marine mammals	Sizewell link road	Volume 6 Chapter 7: Terrestrial Ecology and Ornithology [APP-461]	Scoped out as not present on site, no further measures implemented as no significant effect is considered likely.
Marine mammals	Two village bypass	Volume 5, Chapter 7: Terrestrial Ecology and Ornithology [APP-425]	Scoped out as not present on site, no further measures implemented as no significant effect is considered likely.
Marine mammals	Yoxford	Volume 7, Chapter 7: Terrestrial Ecology and	Scoped out as not present on site, no further measures implemented as no significant effect is considered likely.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
		Ornithology [APP-494]	
Marine mammals	Green rail route	Volume 9, Chapter 7: Terrestrial Ecology and Ornithology [APP-555]	Scoped out as not present on site, no further measures implemented as no significant effect is considered likely.
Crustacean: <i>Gammarus insensibilis</i> Polychaete: <i>Sabellaria spinulosa</i>	Main development site	Volume 2, Chapter 22, Marine Ecology and Fisheries [AS-035]	All general primary and tertiary mitigation measures are outlined above in Fish Species measures. No specific measures implemented for <i>Gammarus insensibilis</i> as no significant effect is considered likely Other specific measures for <i>Sabellaria spinulosa</i> include: Micro-siting (site selection) of intake structures to avoid reef areas as much as possible. Monitoring: A <i>Sabellaria</i> monitoring plan is secured at Condition 45 of the Marine Licence.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
Crustacean	Northern park and ride	Volume 3, Chapter 7: Terrestrial Ecology and Ornithology [APP-363]	Scoped out as not present on site, no further measures implemented as no significant effect is considered likely.
Crustacean	Southern park and ride	Volume 4, Chapter 7: Terrestrial Ecology and Ornithology [APP-394]	Scoped out as not present on site, no further measures implemented as no significant effect is considered likely.
Crustacean	Freight management facility	Volume 8, Chapter 7: Terrestrial Ecology and Ornithology [APP-523]	Scoped out as not present on site, no further measures implemented as no significant effect is considered likely.
Crustacean	Sizewell link road	Volume 6 Chapter 7: Terrestrial Ecology and	Scoped out as not present on site, no further measures implemented as no significant effect is considered likely.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
		Ornithology [APP-461]	
Crustacean	Two village bypass	Volume 5, Chapter 7: Terrestrial Ecology and Ornithology [APP-425]	Scoped out as not present on site, no further measures implemented as no significant effect is considered likely.
Crustacean	Yoxford	Volume 7, Chapter 7: Terrestrial Ecology and Ornithology [APP-494]	Scoped out as not present on site, no further measures implemented as no significant effect is considered likely.
Crustacean	Green rail route	Volume 9, Chapter 7: Terrestrial Ecology and Ornithology [APP-555]	Scoped out as not present on site, no further measures implemented as no significant effect is considered likely.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
S41 Invertebrates Norfolk Hawker, grayling, white- mantled Wainscot, white admiral, white-letter hairstreak	Main development site	Volume 2, Chapter 14: Terrestrial Ecology and Ornithology [AS-033] Terrestrial Ecological Monitoring and Mitigation Plan [REP5-088]	<u>Primary:</u> <ul style="list-style-type: none"> Permanent foraging habitat for marsh harriers, which will also benefit invertebrates, is being established and enhanced within the northern part of the EDF Energy estate, in advance of construction, to provide alternative habitats if any potential disturbance effects arise during construction which might discourage marsh harriers from foraging over parts of the Minsmere South Levels and Sizewell Marshes SSSI. These habitats will provide habitats for many invertebrate species including Grayling. The oLEMP outlines management actions to return existing arable land on the EDF Energy estate post-construction to Suffolk Sandlings habitat comprising dry acid grassland and with additional areas of woodland and scrub. In the operational phase of the development, this landscape-scale habitat creation approach would replace existing intensively managed arable farmland with habitats of greater biodiversity value and would increase habitat connectivity. The oLEMP includes also long-term management prescriptions and a monitoring programme for habitats created ensuring that these areas deliver the habitats proposed. These open habitats will provide

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>habitats for many invertebrate species including Grayling whilst additional woodland will benefit White Admiral and white-letter hairstreak.</p> <ul style="list-style-type: none"> Large areas of habitats for reptiles have been established, in advance of construction, to enable the translocation of reptiles from the site (further detailed in the Reptile Mitigation Strategy (Volume 2, Appendix 14C2 [APP-252]). This has also created areas of sand-dominated habitat likely to be beneficial to invertebrate species such as those identified in the coastal and woodland ride habitats. These habitats will provide habitats for many invertebrate species including Grayling. <p>Norfolk hawk is a protected species under Schedule 5 of the Wildlife and Countryside Act (1981) and a mitigation plan to recover larvae of this species along with other macro-invertebrates in the impacted lengths of the Sizewell Drain, the Leiston Drain and related ditches has been developed [AS-275] and is appended to the CoCP and thus secured via requirement. This is integrated with a 'fish rescue' for these watercourses during the relevant early construction works.</p>

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p><u>Monitoring:</u></p> <ul style="list-style-type: none"> The TEMMP [REP5-088] provides the proposed monitoring schedule and approaches to monitoring of invertebrates. Habitat monitoring and targeted invertebrate sampling would be undertaken throughout the construction phase to assess the effectiveness of the mitigation provided and to inform mitigation and management approaches. Monitoring would target invertebrate assemblages of national importance and high conservation value which are characteristic of the habitats to be lost, including populations of Norfolk Hawker and the white-mantled wainscot, to assess the extent to which these assemblages become established in the new habitats within the site boundary and across the wider EDF Energy estate. Targeted invertebrate surveys would be undertaken in Y4, Y8 and Y12 The creation of Suffolk Sandlings dry acid grassland habitat during operation across the EDF Energy estate as well as the re-establishment of the coastal habitats would be subject to monitoring to determine the extent to which invertebrate assemblages become established and would be directly

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			relevant to the establishment of Grayling across these areas of the estate.
S41 invertebrates: (desk study) Stag beetle	Northern park and ride	Volume 3, Chapter 7: Terrestrial Ecology and Ornithology [APP-363]	No further measures implemented as no significant effect is considered likely.
S41 Invertebrates	Southern park and ride	Volume 4, Chapter 7: Terrestrial Ecology and Ornithology [APP-394]	No further measures implemented as no significant effect is considered likely.
S41 Invertebrates: Grayling, cinnabar, stag beetle,	Freight management facility	Volume 8, Chapter 7: Terrestrial Ecology and Ornithology [APP-523]	No further measures implemented as no significant effect is considered likely.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
Invertebrates: (desk study) – white-letter hairstreak, silver-studded blue, small heath, grayling, wall, white admiral	Sizewell link road	Volume 6 Chapter 7: Terrestrial Ecology and Ornithology [APP-461]	No further measures implemented as no significant effect is considered likely. <u>Primary mitigation:</u> <ul style="list-style-type: none"> Replacement habitat for the loss of woodland and hedgerows would be incorporated into the proposed development and would use native species only. A total of 13,490m of new hedgerow would be planted, with a further 3,487m of hedgerow within the site boundary unaffected by the proposed development, resulting in a total of 16,980m of hedgerow within the site boundary. This planting would also provide habitat for invertebrates Hedgerow planting along the length of the route and will include some Elm hedgerow (for white-letter hairstreak).
S41 invertebrates: Grayling, small heath.	Two village bypass	Volume 5, Chapter 7: Terrestrial Ecology and Ornithology [APP-425]	No further specific measures implemented, however the landscaping strategy for the site has been designed to minimise potential positive effects for invertebrate populations through the provision of planting. For example, <u>Primary mitigation:</u>

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<ul style="list-style-type: none"> Existing vegetation would be retained where possible, except where the route crosses field boundaries. Native hedgerow planting would integrate the road with the surrounding landscape, compensating for the loss of hedgerows severed by the route. These new hedgerows would connect into the existing hedgerow network, where possible. A12/Tinker Brook to Pond Wood planting: Grass verges are proposed along this section of the route (except on the overbridge). Additional grassed areas are proposed around the infiltration basins south of the A12 roundabout and east of Whin Covert. Native tree and shrub planting is proposed around the infiltration basins to integrate them into the surrounding landscape. Pond Wood to north of Farnham Hall planting: native tree and shrub planting is proposed along the western side of the cutting as the route of the two village bypass passes Farnham Hall and residential properties, as well as along the western side of the proposed embankment up to the overbridge, to provide visual screening. Native tree and shrub planting is also proposed on the east side of the overbridge, adjacent to Foxburrow Wood and Farnham

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>Hall Farmhouse to provide visual screening and enhance ecological connectivity. Grass verges are proposed along the length of the route on this section.</p> <ul style="list-style-type: none"> North of Farnham Hall to A12/A1094 (Friday Street) planting: grass verges are proposed along the length of the proposed development in this section as well as around the proposed roundabout. Additional native tree and shrub planting is also proposed around the infiltration basin, south-west of Friday Street Farm, to help integrate this feature into the landscape.
S41 species: Desk study – wall butterfly, small heath butterfly	Yoxford	Volume 7, Chapter 7: Terrestrial Ecology and Ornithology [APP-494]	Scoped out, no further measures implemented as no significant effect is considered likely.
S41 Inverts: white-letter hairstreak, small heath, grayling,	Green rail route	Volume 9, Chapter 7: Terrestrial Ecology and	Scoped out, no further measures implemented as no significant effect is considered likely.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
wall, white admiral.		Ornithology [APP-555]	
S41 Habitats: Wet woodland, fen meadow, reedbed meadow, Eutrophic Standing Open Water (within Sizewell Marshes SSSI), Shingle and Sand Dune Vegetation (within Minsmere to Walberswick SSSI/SAC), acid grassland, and Shingle and Sand Dune Vegetation (within	Main development site	Volume 2, Chapter 14: Terrestrial Ecology and Ornithology [AS-033] Terrestrial Ecology Monitoring and Mitigation Plan [REP5-088]	<u>Primary mitigation:</u> <ul style="list-style-type: none"> A barrier (e.g. sheet piling) would be installed to provide separation from the main platform and Sizewell Marshes SSSI with engineered drainage installed to limit the disturbance to the hydrology and geology of Sizewell Marshes SSSI (see Chapter 19: Groundwater and Surface Water of the ES (Book 6)). The realignment of the Sizewell Drain and the construction of associated water control features would enable manipulation of the water levels within Sizewell Marshes SSSI, to safeguard retained areas of fen meadow and reedbed habitats (see Chapter 19 Ground and Surface Water of Volume 2 of the ES [APP-297]). The establishment of new reedbed and ditches at Aldhurst Farm (completed in 2016) has provided replacement for the land take of these habitats within Sizewell Marshes SSSI. The replacement habitats have established successfully, and mobile aquatic plant and invertebrate species would colonise

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
Suffolk Shingle Beaches CWS).			<p>over time from the adjacent areas of the Sizewell Marshes SSSI.</p> <ul style="list-style-type: none"> • A Fen Meadow Strategy [AS-209] has been prepared (which includes three locations in Suffolk at which permanent fen meadow habitat would be developed to compensate for the permanent loss of about 0.46ha of fen meadow habitat from within Sizewell Marshes SSSI, associated with the construction of the main platform and the diversion of the Sizewell Drain. • An area of 0.7ha of wet woodland would be created within the north of the development, adjacent to the marsh harrier habitat improvement area and a further 2.36ha would be created at the two fen meadow sites at Benhall and Pakenham. This would provide compensatory habitat for the loss of 3.06ha of wet woodland to the development. • The oLEMP outlines management actions to return existing arable land on the EDF Energy estate post-construction to Suffolk Sandlings habitat comprising dry acid grassland and with additional areas of woodland and scrub. In the operational phase of the development, this landscape-scale habitat creation approach would replace existing intensively managed arable farmland with habitats of greater biodiversity

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>value and would increase habitat connectivity. The oLEMP includes also long-term management prescriptions and a monitoring programme for habitats created ensuring that these areas deliver the habitats proposed.</p> <p><u>Wet woodland:</u> A total of 0.7ha of new wet woodland is proposed to compensate for the loss of wet woodland associated with the SSSI crossing and the diversion of the Sizewell Drain (Primary mitigation). A Wet Woodland Strategy [REP1-020] to define further opportunities has been developed. The Wet Woodland Strategy [REP1-020] includes the following:</p> <ul style="list-style-type: none"> • Additional areas of wet woodland at the Fen Meadow compensation sites, although not at the expense of fen meadow habitats proposed at these locations. At both Benhall and Pakenham areas of wet Alder woodland are immediately adjacent to the sites and could be extended into the sites by manipulating water levels or by some local shallow excavation of topsoil. <p><u>Reedbed, ditch, fen meadow:</u></p>

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<ul style="list-style-type: none"> Reedbed and ditch habitat creation at Aldhurst Farm is well-established and is already supporting plant and bird species characteristic of reedbed habitat. A management strategy for the site, which includes monitoring targets, is in place and is being updated. A Fen Meadow Strategy [AS-209] is in place which defines two sites in Suffolk on which permanent fen meadow habitat would be developed to compensate for the permanent loss of about 0.46ha of fen meadow habitat from within Sizewell Marshes SSSI. Uncertainties remain regarding the success of fen meadow habitat creation which may take time to be fully effective. 0.7ha of wet woodland to be created in the north-east of the site. As outlined in the Plants and Habitats Synthesis Report (Volume 2, Appendix 14B1 [APP-250]) the fen meadow habitats within the Sizewell Marshes SSSI have been subject to a long running monitoring programme undertaken on behalf of the SWT and SZC Co. During construction and operation this monitoring programme would continue, in particular recording the extent of the two sensitive plant assemblages within the Grade 1 and 2 fen meadow, namely

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>low growing species and species indicative of nutrient poor conditions.</p> <ul style="list-style-type: none"> As at present, if monitoring indicates a measurable decline in the extent of these sensitive plant assemblages or indicates that habitat condition is deteriorating, for example due an increase in the extent and abundance of coarse grass and sedge species, then it would be appropriate to undertake additional mitigation. Additional mitigation could include additional stock grazing or a cutting regime to remove excess vegetation. <p><u>Acid grassland:</u></p> <ul style="list-style-type: none"> Landscape-scale restoration to summer parched grassland with scrub across the wider EDF Energy estate under the operational masterplan is providing long-term replacement for any losses of acid grassland.
S41 habitats: Arable and horticulture: Arable field margins, boundary	Northern park and ride	Volume 3, Chapter 7: Terrestrial Ecology and Ornithology [APP-363]	<p><u>Primary mitigation:</u> <u>Hedgerow habitat:</u></p> <ul style="list-style-type: none"> A 10m buffer would be maintained along the north-east boundary (along the rear of the existing houses), and south-west boundary (adjacent to the railway line south of Little Nursery Wood) to provide some protection to existing

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
hedgerows, freshwater: pond			<p>hedgerows. This would assist in minimising any impacts (such as noise, lighting and human disturbance) on other ecological receptors associated with the site.</p> <ul style="list-style-type: none"> On-site hedgerows would be retained where appropriate, with the hedgerows along the eastern and northern site boundaries supplemented with further planting to permanently infill existing gaps which currently do not serve a purpose (for example, access). Replacement habitat planting of a permanent hedgerow along the southern side of Willow Marsh Lane during construction (which would also provide suitable great crested newt habitat) would result in the planting of approximately 585m of hedgerow to compensate for the 220m lost during construction. <p><u>Pond:</u></p> <ul style="list-style-type: none"> Pond 78 would be retained. A 10m buffer would be maintained around the pond, within which no construction works would take place other than the erection of ecological fencing. Additionally, the pond would be protected from construction and operational impacts by

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			the landscape bund along the eastern boundary of the site.
S41 habitats: lowland mixed deciduous woodland, pond, hedgerows, arable field margins	Southern park and ride	Volume 4, Chapter 7: Terrestrial Ecology and Ornithology [APP-394]	<u>Primary mitigation:</u> <u>Woodland habitat:</u> <ul style="list-style-type: none"> Woodland blocks on the perimeter, including Whin Belt, would be retained in their entirety, and so there would therefore be no direct loss of this habitat and its associated species. A buffer distance of 10m between the woodland, and the proposed perimeter fence would be maintained along sections of the boundary, namely along the southern, eastern and, where adjacent to woodland blocks, the western boundaries. With the exception of fencing, no above ground buildings or structures will be within this buffer zone. The Outline Drainage Strategy, provided in Appendix 2A of Volume 2 of the ES (Doc Ref. 6.3 2A (A)), for the site includes the provision of SuDS infrastructure which would be implemented to minimise surface water run-off, and prevent diffuse pollution from sediment and other pollutants arising. This buffer would assist in minimising any indirect impacts (e.g. from noise,

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>lighting and human disturbance) on those species using habitats adjacent to the site.</p> <ul style="list-style-type: none"> In addition to the measures previously, close-boarded fencing would be erected where the site boundary abuts woodland blocks to provide protection from vehicle headlights and noise. The close-boarded fencing would be maintained during operation and until reinstatement is complete to act as a screen for lighting and noise impacts. <p><u>Hedgerow:</u></p> <ul style="list-style-type: none"> All boundary hedgerows would be retained other than a short section of hedgerow, approximately 40m in length, which would be lost at the location of the access road. Soft landscaping, including grassed areas, tree and shrub planting would be installed and maintained for the operation of the proposed development. There would also be temporary hedgerow planting along the access road, whilst the park and ride is operational, to replace hedgerows lost during construction, and would be re-planted along the original hedgerow line during the removal and reinstatement phase. It is considered that landscape planting would offset the loss of hedgerow

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>qualifying as 'important' under the Hedgerows Regulations required to accommodate the access road.</p> <ul style="list-style-type: none"> Permanent supplementary hedgerows would be planted along the southern and eastern boundaries of the site. <p><u>Pond:</u></p> <ul style="list-style-type: none"> Pond 59 located within the site, close to the western boundary, would be retained, and so there would be no direct loss of this habitat, and its associated species. This pond would be further protected by a buffer area of a minimum of 10m between the pond, where with the exception of fencing, no above ground buildings or structures will be within this buffer zone.
S41 habitats: arable field margins, hedgerow, ponds	Freight management facility	Volume 8, Chapter 7: Terrestrial Ecology and Ornithology [APP-523]	<p><u>Primary mitigation:</u></p> <ul style="list-style-type: none"> All species-rich hedgerows would be retained. planting of additional screen planting around all boundaries of the site, to supplement the existing boundary vegetation; a 10m landscaped buffer zone is proposed around the north, east and west boundaries of the site. Where possible, existing vegetation in these areas would be enhanced. Where agreed with landowners, this planting would be retained as permanent;

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<ul style="list-style-type: none"> Sustainable Drainage Systems infrastructure (proposed as a swale) would be constructed across the northern boundary and part of the eastern boundary to ensure that surface water run-off would be contained within the site and infiltrated into the underlying strata. Sustainable Drainage Systems would minimise surface water run-off and prevent diffuse pollution from sediment and other pollutants arising. Bypass separators would be incorporated within the drainage design where considered necessary. The swales would attenuate and convey surface water runoff at a rate not exceeding existing green field run-off rates; during the removal and reinstatement phase, the screen planting which would be provided around all boundaries of the site would be left in situ, where agreed with landowners. Temporary hedgerow planting within the site would be removed and reinstated along the original hedgerow lines. Other planting that was provided within and around the parking areas would be removed. <p><u>Tertiary mitigation:</u></p>

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<ul style="list-style-type: none"> A 10m buffer area would be provided for the existing balancing pond, along the northern boundary, and also along the western and eastern boundaries. Works would be undertaken outside the root protection zones for the trees and the hedgerows that are to be retained as part of the proposed development. Tree protective fencing as described in section 6.2 of British Standard 5837:2012 should 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 will remain intact throughout the duration of the works and only be removed upon completion. Weather-proof notices will 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 and any advice provided adhered to, to secure the long-term survival of the trees and hedgerows.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<ul style="list-style-type: none"> The central hedgerow would be re-instated following completion of removal and reinstatement works in accordance with the proposed landscape planting.
S41 habitats: arable field margins, species rich hedgerows, rivers, lowland mixed deciduous woodland, ponds	Sizewell link road	<p>Volume 6 Chapter 7: Terrestrial Ecology and Ornithology [APP-461]</p> <p>Landscape and Ecology Management Plan (Doc Ref. 8.3 B(B))</p>	<p><u>Primary mitigation:</u></p> <ul style="list-style-type: none"> The retention of existing woodland and hedgerows, except where the proposed development crosses existing field boundaries or tree belts. The site boundary has been amended and reduced where possible to avoid direct and indirect impacts to ponds. <p>Replacement habitat for the loss of woodland and hedgerows has been incorporated into the proposed development and would use native species only. The landscaping strategy for the site has been designed to minimise potential effects through the provision of planting, and will follow the design principles set out in the Associated Development Design Principles document. This would provide benefits to ecology and help maintain potential bat corridors. Proposed planting includes:</p> <ul style="list-style-type: none"> hedgerow planting along the length of the route and will include some Elm hedgerow; tree and shrub planting around the proposed infiltration and flood relief basins to help integrate these features into the surrounding landscape;

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<ul style="list-style-type: none"> • where field corners are severed from the rest of the field by the proposed development would be planted with tree and shrubs to replicate the pattern of small woodland blocks in the surrounding landscape and replace that lost during construction; • tree and shrub planting on the south side of the route of the proposed Sizewell link road, east of the East Suffolk link; • tree and shrub planting at the junction with the proposed Middleton Moor Link; • tree planting south of the route to compensate for woodland lost in the vicinity of Fordley Road, and to minimise visibility of the route from nearby residential properties. • tree and shrub planting south of the route in the vicinity of Trust Farm to Hawthorn Road; • tree planting west of the route in the vicinity of Dovehouse Farm, to compensate for the loss of woodland in the belt west of Theberton Hall and to infill field corners severed by the proposed route. Further planting is proposed east of the route in this vicinity to minimise visibility from the Theberton Hall estate and to help integrate the proposed Pretty Road overbridge into the surrounding landscape.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<ul style="list-style-type: none"> tree planting north and south of the route between Theberton and Theberton Grange, to minimise visibility of the route from residential properties and to infill field corners severed by the proposed route. Grassed areas are also proposed along the length of the route, including on embankment. These areas would help buffer any potential impacts to nearby ecological features. <p><u>Tertiary mitigation:</u></p> <ul style="list-style-type: none"> No storage of equipment or material would be allowed within 10m of a watercourse, and no materials would be stored in areas of high flood risk to avoid sediment loss during flooding. All soils would be stored away from watercourses (or potential pathways to watercourses), and any potentially contaminated soil would be stored on an impermeable surface and covered to reduce leachate generation and potential migration to surface waters. Where feasible, works would be undertaken outside of all tree and hedgerow root protection zones that would not be removed as part of the proposed development. Tree protective fencing as described in section 6.2 of British

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			Standard 5837:2012 would be installed where required, prior to works commencing in the adjacent areas. If works need to be undertaken within the root protection zones an arboricultural survey would be required and any advice provided adhered to, to support the long-term survival of the tree/hedgerow.
S41 habitats: Arable field margins, Coastal and floodplain grazing marsh, river, hedgerow, lowland mixed deciduous woodland, ponds	Two village bypass	Volume 5, Chapter 7: Terrestrial Ecology and Ornithology [APP-425] Two village bypass Landscape and Ecology Management Plan [REP5-077]	<u>Primary mitigation:</u> <ul style="list-style-type: none"> The temporary contractor compounds would be located to away from sensitive surface water habitats such as the floodplain grasslands and the River Alde. Sustainable Drainage Systems (SuDS) infrastructure (proposed as swales and infiltration basins) would be installed along the length of the highway. SuDS would minimise surface water run-off and prevent diffuse pollution from sediment and other pollutants arising. Separators and silt traps would be incorporated within the drainage design where considered necessary. The swales would attenuate and convey surface water run-off at a rate not exceeding existing green field run-off rates. Existing local drainage from fields would be culverted so that their use would continue unchanged.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<ul style="list-style-type: none"> • Foxburrow Wood CWS ancient woodland will be retained in its entirety. A buffer distance of 15m from earthworks would be applied to prevent impacts to the trees on the edge of the woodland. Some limited footpath works would however be required at the edge of this zone. <p>The landscaping strategy for the site has been designed to minimise potential effects through the provision of planting:</p> <ul style="list-style-type: none"> • Existing vegetation would be retained where possible, except where the route crosses field boundaries. Native hedgerow planting would integrate the road with the surrounding landscape, compensating for the loss of hedgerows severed by the route. These new hedgerows would connect into the existing hedgerow network, where possible. • A12/Tinker Brook to Pond Wood planting: Grass verges are proposed along this section of the route (except on the overbridge). Additional grassed areas are proposed around the infiltration basins south of the A12 roundabout and east of Whin Covert. Native tree and shrub planting is proposed around the infiltration basins to integrate them into the surrounding landscape. • Pond Wood to north of Farnham Hall planting: native tree and shrub planting is proposed along the western side of the

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>cutting as the route of the two village bypass passes Farnham Hall and residential properties, as well as along the western side of the proposed embankment up to the overbridge, to provide visual screening. Native tree and shrub planting is also proposed on the east side of the overbridge, adjacent to Foxburrow Wood and Farnham Hall Farmhouse to provide visual screening and enhance ecological connectivity. Grass verges are proposed along the length of the route on this section.</p> <ul style="list-style-type: none"> • North of Farnham Hall to A12/A1094 (Friday Street) planting: grass verges are proposed along the length of the proposed development in this section as well as around the proposed roundabout. Additional native tree and shrub planting is also proposed around the infiltration basin, south-west of Friday Street Farm, to help integrate this feature into the landscape. • The provision of up to four ponds is also proposed along the route, which would provide additional pond habitat in the area and contribute to bio-diversity net gain <p><u>Tertiary mitigation:</u></p>

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<ul style="list-style-type: none"> No equipment or material would be stored within 10m of a watercourse, and no materials would be stored in areas of high flood risk to avoid sediment loss during flooding. All soils would be stored away from watercourses (or potential pathways to watercourses), and any potentially contaminated soil would be stored on an impermeable surface and covered to reduce leachate generation and potential migration to surface waters. Where feasible, for the trees and hedgerows being retained, works would be undertaken outside of root protection zones. Tree protective fencing as described in section 6.2 of British Standard 5837:2012 would be installed, where required, prior to works commencing adjacent to these areas. If works need to be undertaken within the root protection zones, an arboricultural survey would be undertaken, and any advice provided adhered to, to support the long-term survival of the tree/hedgerow.
S41 habitats (including within 500m):	Yoxford	Volume 7, Chapter 7: Terrestrial Ecology and	<u>Primary mitigation:</u> <ul style="list-style-type: none"> Yoxford Roadside Nature Reserve (RNR 197) would be retained in its entirety and there would be no habitat loss to the RNR.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
river (River Yox), hedgerows,		Ornithology [APP-494]	<ul style="list-style-type: none"> Existing trees and hedgerows adjoining the site boundary would be retained where possible. This includes the retention of a tree belt to the north-west of the site, along the boundary of Satis House Hotel and hedgerow along the southern side of the B1122 (Middleton Road). The landscaping strategy for the site has been designed to minimise potential effects through the provision of planting, and will follow the design principles set out in the Associated Development Design Principles document (Doc Ref. 8.3(A)). The proposed Yoxford roundabout would include grassed areas and new tree and hedgerow planting along the eastern edge of the realigned roads and around the proposed infiltration basin south of the new roundabout. Replacement planting would respect the new line of the A12. The drainage design would comprise channels, kerb drains or gullies that would remove surface water run-off in accordance with the Drainage Strategy (Volume 2, Appendix 2A) (Doc Ref. 6.3 2A (A)). Underground drains would convey the run-off to an infiltration basin located between the proposed roundabout and the proposed access road to the south. If required, runoff which does not infiltrate would discharge at a controlled flow rate lower than the

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>current rate of run-off into Yoxford to the existing highway drainage network, the detailed design of which is to be agreed with the Highway Authority. Bypass separators and silt traps would be incorporated within the drainage design where considered necessary.</p> <ul style="list-style-type: none"> A 5m buffer would be maintained between the proposed Yoxford roundabout and the adjacent River Yox to protect the integrity of the banks as well as the associated ecological features. <p><u>Tertiary mitigation:</u></p> <ul style="list-style-type: none"> A temporary drainage strategy would be implemented early in the construction phase. Construction drainage would be contained within the site, with drainage to ground. Only if full infiltration is not possible would these systems discharge into the surface drainage network at greenfield runoff rates to minimise the potential for impact. This would preserve the hydrological regime of the adjacent River Yox and habitats and minimise the impacts to this feature. No storage of equipment or material would be stored within 5m of the River Yox. No materials would be stored in areas of high flood risk to avoid sediment loss during flooding.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<ul style="list-style-type: none"> For trees and hedges to be retained within or immediately adjacent to the site boundary, tree and hedgerow root protection zones would be established. Tree protective fencing as described in section 6.2 of British Standard 5837:2012 would be erected, where required, prior to construction works commencing. If works need to be undertaken within the root protection zones, an arboricultural survey would be undertaken and the recommended measures would be implemented to support the long-term survival of the tree/hedgerow.
S41 habitats: Hedgerows, lowland mixed deciduous woodland, ponds,	Green rail route	Volume 9, Chapter 7: Terrestrial Ecology and Ornithology [APP-555]	<p><u>Primary mitigation:</u></p> <ul style="list-style-type: none"> Buckle's Wood CWS and surrounding blocks of broadleaved woodland (TN 6 and TN 9) would be retained in their entirety. Most hedgerows on-site would be retained and only four small sections of defunct, species-poor hedgerow and one section of species-rich 'important' hedgerow would be removed and there would therefore be only limited direct loss of hedgerow habitat. All hedgerows removed during construction would be replanted during the removal and reinstatement phase.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<ul style="list-style-type: none"> Soft landscaping would be maintained during the operational lifetime of the proposed rail extension route before being removed when the agricultural use is reinstated. Sustainable Drainage Systems (SuDS) would be implemented to minimise surface water runoff. <p><u>Tertiary mitigation:</u></p> <ul style="list-style-type: none"> Temporary SuDS would be implemented early in the construction phase. Construction phase water management zones would intercept surface run-off, sediment and contaminants from the construction compound and laydown areas, and incorporate sustainable drainage measures such as swales, filter drains, infiltration basins and soakaways to promote infiltration. Construction drainage would be contained within the site, with drainage to ground. Only if full infiltration is not possible would these systems discharge into the surface drainage network (at greenfield runoff rates) to minimise the potential for impact; a Dust Management Plan would be developed and implemented across the site. This would minimise impacts to neighbouring habitats, such as Buckle's Wood CWS;

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<ul style="list-style-type: none"> standard pollution prevention control measures would be implemented to avoid any pollution risk to watercourses and sensitive habitats; for trees and hedges to be retained within or immediately adjacent to the site boundary, tree and hedgerow root protection zones would be established. Tree protective fencing as described in section 6.2 of British Standard 5837:2012 would be erected, where required, prior to plant and machinery arriving on site and construction works commencing. The fencing would remain intact throughout the duration of the works and would only be removed upon completion of construction. Weather-proof notices would be attached to any protective fencing located adjacent to retained trees displaying the words 'Construction Exclusion Zone'. If works need to be undertaken within the root protection zones, an arboricultural survey would be undertaken and the recommended measures implemented to secure the long-term survival of the tree/hedgerow.
S41 plant species: Deptford Pink	Main development site	Volume 2, Chapter 14: Terrestrial Ecology and	A draft Deptford Pink Method Statement [AS-209] has been prepared for Deptford Pink (<i>Dianthus armeria</i>). If the species is relocated in targeted searches, the collection of both seeds and plants would be undertaken with translocation to a suitable

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
		Ornithology [AS-033] Main development site Draft Deptford Pink Protected Species Licence and associated Method Statement [REP5-052]	<p>location on the existing sea defence seaward of the Sizewell B power station that would not be directly affected by the construction of the proposed development. The translocation would be monitored pre- and post-construction and would be conducted under licence from Natural England.</p> <p><u>Translocation:</u> <u>Plants:</u> Up to 100 non-flowering rosettes will be carefully moved from the donor site to the prepared receptor area. The plants will be dug by hand using a trowel, attempting to keep the root ball intact. They will then be wrapped in damp newspaper and placed in a plastic bag to prevent drying out before replanting in the prepared receptor area on the same day. The plants will be moved during cool damp weather in October the year of the DCO (Year 1). Plants will be watered into place.</p> <p><u>Seeds:</u> All seed heads will be collected, as the colony is to be lost in its entirety. Seeds are due to be collected in autumn 2022 and if practicable in 2021. The collection date will be during dry weather. Seed heads will be placed in paper or muslin bags.</p>

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p>Seed heads will be stored in trays, kept cool and dry indoors until they dehisce. They will be regularly inspected to ensure they are not damp or infected with mould. Once the seeds have dehisced, they will be 'cleaned' by removing the empty capsules, debris and any pests such as weevils or caterpillars.</p> <p>The following approach will be taken to seed sowing, based on the number collected:</p> <ul style="list-style-type: none"> • < 100 seeds. Half to be grown on by a competent establishment as plug plants. Half to be sent for storage to the Millennium Seed Bank, Wakehurst Place (to be confirmed with Millennium Seed Bank). • > 100 seeds. Fifty seeds to be grown on by a competent establishment as plug plants. Fifty seeds to be sent for storage to the Millennium Seed Bank, Wakehurst Place (to be confirmed with Millennium Seed Bank). The remainder to be sown in the prepared receptor areas during mild, damp weather in October the year of the DCO (Year 1). Seed will be scattered by hand and gently raked in. The sown areas will be photographed, their GPS location recorded and marked using a numbered cane.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
			<p><u>Monitoring:</u></p> <p>The receptor area will be monitored the following July/August for successful establishment. Flowering plants and non-flowering rosettes will be counted up to 1000 basal rosettes, estimates will be made beyond this number. This monitoring will be extended for 5 years following translocation.</p> <p>In the event that establishment has been poor or plants fail to persist, a proportion of seed stored in the Millennium Seed Bank may be grown on as plugs and transplanted to the site as previously described in an attempt to boost establishment. A detailed monitoring plan will be prepared and this will be reported annually.</p>
Plant species	Northern park and ride	Volume 3, Chapter 7: Terrestrial Ecology and Ornithology [APP-363]	No further measures implemented as no significant effect is considered likely.
Plant species	Southern park and ride	Volume 4, Chapter 7: Terrestrial	No further measures implemented as no significant effect is considered likely.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

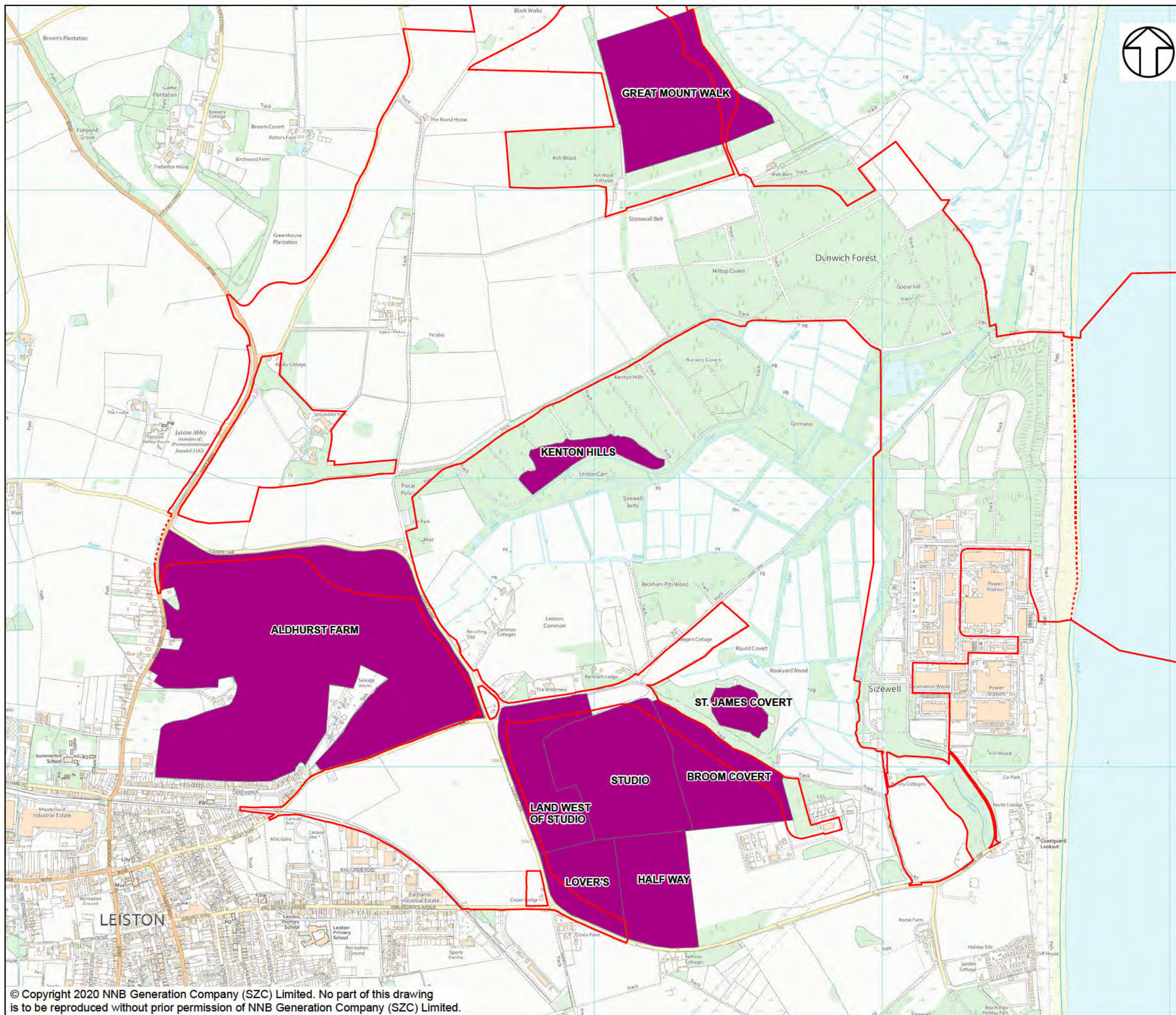
NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
		Ecology and Ornithology [APP-394]	
Plant species	Freight management facility	Volume 8, Chapter 7: Terrestrial Ecology and Ornithology [APP-523]	No further measures implemented as no significant effect is considered likely.
Plant species	Sizewell link road	Volume 6 Chapter 7: Terrestrial Ecology and Ornithology [APP-461]	No further measures implemented as no significant effect is considered likely.
Plant species	Two village bypass	Volume 5, Chapter 7: Terrestrial Ecology and Ornithology [APP-425]	No further measures implemented as no significant effect is considered likely.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

NERC Section 41 Habitats and Species	Sites of Relevance	Relevant document(s)	Measures to be implemented to conserve these species and habitats
Plant species	Green rail route	Volume 9, Chapter 7: Terrestrial Ecology and Ornithology [APP-555]	No further measures implemented as no significant effect is considered likely.
Fungus species: Sandy Stilt Puffball	Yoxford	Volume 7, Chapter 7: Terrestrial Ecology and Ornithology [APP-494]	<u>Primary mitigation:</u> Sandy Stilt Puffball is located within Yoxford Roadside Nature Reserve 197 (RNR 197). RNR 197 would be retained in its entirety and there would be no habitat loss to the RNR.

Appendix 2B – Figure 14C2A.10 Identifying the Location of Studio Fields Complex, St James Covert, Great Mount Walk



NOTES

KEY

- SIZEWELL C MAIN DEVELOPMENT SITE BOUNDARY
- DEMARCATION LINE
- RECEPTOR SITES

NOT PROTECTIVELY MARKED

COPYRIGHT
Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationary Office © Crown Copyright (2019). All Rights reserved. NNB GenCo 0100060408.



DOCUMENT:
SIZEWELL C
ENVIRONMENTAL STATEMENT
VOLUME 2
APPENDIX 14C2A
REPTILE MITIGATION STRATEGY

DRAWING TITLE:
PROPOSED RECEPTOR SITES

DRAWING NO:
FIGURE 14C2A.10

DATE: JAN 2020 **DRAWN:** R.G. **SCALE:** 1:12,500 @A3

SCALE BAR
0 100 200 300 400 500
M



SIZEWELL C PROJECT –
RESPONSES TO EXAMINING AUTHORITY'S
WRITTEN QUESTIONS ISSUED ON 3RD AUGUST 2021

NOT PROTECTIVELY MARKED

Appendix 3A – STATUS OF NEARBY ENERGY PROJECTS

NOT PROTECTIVELY MARKED

CONTENTS

1	STATUS OF NEARBY ENERGY PROJECTS	1
1.1	Changes to nearby energy Nationally Significant Infrastructure Projects	1

TABLES

Table 1.1: Status of energy NSIPs in close proximity to the Sizewell C Project2

FIGURES

None Provided.

ANNEXES

None Provided.

1 STATUS OF NEARBY ENERGY PROJECTS

1.1 Changes to nearby energy Nationally Significant Infrastructure Projects

1.1.11 The status of energy Nationally Significant Infrastructure Projects in close proximity to the Sizewell C Project, as of August 2021, is listed in **Table 1.1**

Table 1.1: Status of energy NSIPs in close proximity to the Sizewell C Project

Application	Status reported within the ES	Status as of May 2021	Status as of August 2021	New details available (since May 2021)
East Anglia ONE North	DCO Submitted – pre examination	Examination period	Examination closed - awaiting recommendation	No new information available.
East Anglia TWO	DCO Submitted – pre examination	Examination period	Examination closed - awaiting recommendation	No new information available.
East Anglia THREE	DCO granted	Submission of non-material change made	Change authorised	No new information available.
Eurolink Interconnector	Pre-application	Pre-application	Pre-application	No new information available.
Nautilus Interconnector	Pre-application	Pre-application	Pre-application (<i>Note: EIA Scoping expected Q1 2022</i>)	No new information available.
Greater Gabbard Extension OWF	Pre-application	Pre-application	Pre-application (<i>Note: Informal Introductory Consultation expected</i>)	No new information available.

SIZEWELL C PROJECT –
 RESPONSES TO EXAMINING AUTHORITY'S
 WRITTEN QUESTIONS ISSUED ON 3RD AUGUST 2021
NOT PROTECTIVELY MARKED

Application	Status reported within the ES	Status as of May 2021	Status as of August 2021	New details available (since May 2021)
			<i>Autumn 2021 – including EIA Scoping)</i>	
Galloper Extension OWF	Pre-application	Pre-application	Pre-application (<i>Note: onshore and offshore surveys commence summer 2021</i>)	No new information available.



SIZEWELL C PROJECT –
RESPONSES TO EXAMINING AUTHORITY'S
WRITTEN QUESTIONS ISSUED ON 3RD AUGUST 2021

NOT PROTECTIVELY MARKED

Appendix 3B – Agreed Housing Fund Approach

NOT PROTECTIVELY MARKED

CONTENTS

1	AGREED HOUSING FUND APPROACH	1
1.1	Introduction	1
1.2	Summary.....	1
1.3	Housing Fund – Non-Contingent Elements	2
1.4	Housing Fund - Contingent Elements	4
1.5	Release of Contingency	6

1 AGREED HOUSING FUND APPROACH

1.1 Introduction

1.1.14 This note sets out the agreed approach (between SZC Co and East Suffolk Council) towards contingent and non-contingent payments from the Housing Fund to ensure that there is an appropriate level of resource to proactively (and with assurance):

- a) deliver measures related to the identified significant effects;
- b) provide a mechanism for re-directing this mitigation towards different measures in different locations depending on observed effects and effectiveness of measures; and
- c) react to any observed, residual housing market stress and delay in delivery of Project Accommodation relative to demand from the NHB workforce.

1.1.15 With regard to (c) – this does not in any way diminish the Project's commitment to providing the Project Accommodation. Bespoke, on site accommodation is an important part of SZC Co.'s workforce strategy to manage and support the efficient and productive delivery of the Sizewell C Project. It is strongly in the Project's interest to deliver the campus and the LEEIE caravan pitches when they are needed early in the construction phase. However, ESC has asked that there be a contingent payment against the possibility that the worker accommodation is delayed for any reason.

1.2 Summary

1.2.14 The following table summarises the scale, release, and contingent/non-contingent scale of the proposed Housing Fund, set out in more detail in the following sections:

Table 1: Summary of Housing Fund

Element	Total Amount	Release
Non-Contingent		
Private Housing Market Supply	£8,837,965	Annual release in first seven years
Tourist Accommodation Market Supply	£1,000,000	Annual release throughout Construction Period

NOT PROTECTIVELY MARKED

Housing and Homelessness Services Resilience Measures	£500,000	Single release
Staff Resourcing	£1,540,000	Annual release in first seven years
SUB-TOTAL	£11,877,965	
Contingent		
Housing and Homelessness Services Resilience Measures	£1,266,823	Considered annually; Released based on observed housing market stress (includes element for SCC in event of Care Home Closure)
Tourist Accommodation Market Supply (LEEIE Caravan Site)	£1,050,000	Released based on late delivery of LEEIE Caravan Site (relative to NHB workforce)
Private Housing Market Supply (Campus Phase 1)	£4,020,000	Released based on late delivery of Phase 1 (1,200 beds) of Accommodation Campus (relative to NHB workforce)
Private Housing Market Supply (Campus Phase 2)	£4,020,000	Released based on late delivery of Phase 2 (1,200 beds) of Accommodation Campus (relative to NHB workforce)
SUB-TOTAL	£10,356,823	
Overall		
TOTAL	£22,234,788	

- 1.2.15 If agreed by the Accommodation Working Group – funds can be moved between different elements of the Housing Fund based on monitoring of the effectiveness of measures.

1.3 Housing Fund – Non-Contingent Elements

TOTAL = £11,877,965

a) Private Housing Market Supply

- 1.3.15 SZC Co will provide ESC with **£8,837,965** in non-contingent funding between Commencement and the anticipated peak of construction, in annual instalments. This funding will be released annually, and will be directed towards measures that will be determined by the *Private Housing Supply Plan* (which will be prepared by ESC and agreed by the Accommodation Working Group each year).
- 1.3.16 Both parties agree that this element of the Housing Fund, based on the indicative mix of measures within it developed through technical engagement, will be able to provide at least 1,200 bedspaces by the peak of construction.
- 1.3.17 The indicative split of this element of the Housing Fund will broadly match the breakdown in **Table 2** – but, if agreed by the Accommodation Working

Group, and based on the monitoring of effectiveness of spending on different measures year-by-year, the mix of measures can be changed and added to:

Table 1: Indicative Mix of Measures for Boosting Supply

Measure	Indicative Bedspaces	Indicative Cost
Support rent / deposit guarantee	500	£755,000
Equity loans to residents in OO / PRS	31	£800,000
Equity loans to residents in SR	30	£700,000
Empty Homes	217	£1,627,500
Loans / Grants / Guaranteed lets	336	£2,060,465
Subsidising development	105	£2,800,000
Tackling under-occupation	9	£95,000
TOTAL	1,228	£8,837,965

- 1.3.18 In this way, it can be assured that the Housing Fund will respond to any variations in the effectiveness of predicted measures or changes in the distribution of NHB workers and identified housing market stress effects. Its early availability and flexibility is therefore considered to be both pro-active and reactive.

b) Tourist Accommodation Market Supply

- 1.3.19 SZC Co will provide ESC with **£1,000,000** in non-contingent funding from Commencement during the Construction Phase. Part of this element of the Fund (£100,000) would be released no later than 1 month following the approval of the first *Tourist Accommodation Plan*.
- 1.3.20 The rest of this funding will be released annually throughout the Construction Period, and will be directed towards measures that will be determined by subsequent annual *Tourist Accommodation Plans* (which will be prepared by ESC and agreed by the Accommodation Working Group each year).
- 1.3.21 In this way, the Accommodation Working Group will be able to monitor the effectiveness of this element of the Fund and re-direct it where appropriate to respond to any variations in the effectiveness of predicted measures or changes in the distribution of NHB workers and identified housing market stress effects. It is therefore also considered to be both pro-active and reactive.

c) **Housing and Homelessness Services Resilience Measures**

- 1.3.22 A non-contingent element will be provided to ESC on or before the first anniversary of the Commencement Date – agreed to be **£500,000** to support the precautionary and proactive delivery of measures to support the East Suffolk Council's statutory housing advice and homelessness prevention service including staff resourcing, training and projects, landlord engagement and support, management of HMOs and temporary/emergency accommodation.

a) **Staff / Resourcing**

- 1.3.23 ESC consider that, to facilitate applications and appropriate spending of the Housing Fund, the following staff resourcing would be needed for 7 years, each at £55,000 per year:
- 1 x Private Sector Housing Officer;
 - 1 x Housing Needs Officer;
 - 1 x Development Officer; and
 - 1 x Project Support Officer.

- 1.3.24 This totals **£1,540,000**, to be provided in instalments of £220,000 on or before Commencement and in six subsequent payments on the anniversary of Commencement.

1.4 **Housing Fund - Contingent Elements**

TOTAL = up to £10,365,823

a) **Housing and Homelessness Services Resilience Measures**

- 1.4.15 SZC Co will make available up to a maximum of **£1,266,823** to support the delivery of measures to support the East Suffolk Council's statutory housing advice and homelessness prevention service including staff resourcing, training and projects, landlord engagement and support, management of HMOs and temporary/emergency accommodation.
- 1.4.16 This element of the fund will be considered for release on an annual basis on receipt of evidence of information provided by East Suffolk Council that the Accommodation Working Group agrees shows housing market stress

relative to pre-Commencement levels which may reasonably be related to the effects of the NHB Workforce (and any HB Workers moving their single address explicitly to work on the Project).

1.4.17 It may also be released upon late delivery of the Project Accommodation as set out in **Section 1.5**.

1.4.18 In this way, it can be assured that this element of the Housing Fund (if triggered) will proactively help to avoid - and also be able to respond to - any unexpected or observed housing market stress. This includes an element that may be used by SCC in the event that the Accommodation Working Group agrees that any closure of Council-provided residential care homes is directly as a result of the Sizewell C Project.

b) Private Housing Market Supply and Tourism Accommodation

1.4.19 In addition, SZC Co will provide contingent funding up to £8,040,000 to support the further delivery of bedspaces in the event that SZC Co does not open Project Accommodation based on an agreed relationship between the scale of the worker accommodation and monitoring of NHB workers, as set out in **Section 1.4**.

1.4.20 This contingency element would be used for additional Private Housing Market Supply and Tourist Accommodation Market Supply measures deemed appropriate by the Accommodation Working Group and the measures would be set out in Private Housing Supply Plan and Tourist Accommodation Plans in place at that time.

1.4.21 Given the need to provide bedspaces rapidly with this part of the contingent fund, the Private Housing Market Supply measures most likely to be effective are (based on **Table 1**) *Support rent / deposit guarantee* and *Loans / Grants / Guaranteed lets* – these can be deployed quickly and effectively to increase capacity in the market.

1.4.22 For Tourist Accommodation Market Supply Measures, it will be at the discretion of the Accommodation Working Group to determine the most effective use of funds – this may include support for individual providers to amend licenses, reconfigure sites, or develop infrastructure, or for enforcement action for illegal sites, for example.

1.5 Release of Contingency

a) Monitoring Housing Market Stress (Housing and Homelessness Services Resilience Measures)

1.5.15 Release dictated by **Schedule 3** of the **Draft Deed of Obligation**.

b) Project Accommodation Delay

1.5.16 Any triggers for the delivery of the Project Accommodation should be linked to the size and growth of the NHB workforce rather than specific dates or construction milestones. This links the mitigation to the demand / need for spaces and to the impact (NHB demand for other accommodation). The NHB workforce will be reported every six months.

LEEIE Caravan Park

1.5.17 The **Implementation Plan** [REP2-044] shows the LEEIE Caravan Park being delivered after 12 months – the end of Q4 Year 1 - when the peak NHB workforce is estimated to peak at 815. It cannot practically be delivered sooner due to the need for site preparation works, including utilities diversions and the need for site access works.

1.5.18 SZC Co estimates that the NHB workforce would reach 850 in Q2 Year 2 – this is broadly the size of a peak NHB workforce in a SZB outage. SZC Co is committed to delivering the caravan park in accordance with the Implementation Plan but, as a fallback, will accept a requirement in the Deed of Obligation to have completed the LEEIE Caravan Park within 3 months of the Workforce Survey reporting more than 850 NHB workers.

1.5.19 If there was a default against this requirement i.e. should the LEEIE Caravan Park **not** be available within 3 months of the Workforce Survey reporting more than 850 NHB workers, SZC Co will be required to release a payment into the Housing Fund to be used for measures within the Tourist Accommodation Plan.

1.5.20 The amount released would be proportionate to the number of bedspaces (of the total 600, within 400 pitches) not delivered by that date, at a rate of £1,750 per bedspace¹ (or £2,625 per pitch), up to a **maximum liability of £1,050,000**.

¹ The ES (Vol 2, Ch 9) sets thresholds for the number of NHB workers that the tourist accommodation market – based on the geographical distribution of workers from the Gravity Model – could accommodate locally at peak season without causing a significant

- 1.5.21 This would both act as an incentive to SZC Co to deliver the LEEIE Caravan Park, and secure that in the event this mitigation is not delivered, that East Suffolk Council has adequate additional resources to mitigate subsequent demand in the market – for example to enhance its licensing and enforcement activities and prevent unauthorised use of caravan sites by workers, and support additional capacity in existing sites.

Accommodation Campus

- 1.5.22 The **Implementation Plan** [REP2-044] shows the Accommodation Campus being delivered after 30 months – Q3 Year 3 – when the peak NHB workforce is estimated to peak at 2,320.
- 1.5.23 SZC Co is proposing (for the purposes of securing delivery) that the Accommodation Campus will be delivered in two phases of 1,200 beds each, to be secured through the Deed of Obligation.
- 1.5.24 Although not explicit in the **Implementation Plan** [REP2-044], the intention is not to deliver all the capacity at once but rather to make it available in two principal phases over time, aligned with the growth of the Non-Home Based (NHB) workforce. This has advantages to the Sizewell C Project as well as reducing wider housing market impacts. It also enables early, phased opening.
- 1.5.25 By opening new capacity as the workforce increases it means that project provided accommodation will be available to workers as they join the Sizewell C Project rather than them being forced to seek other accommodation. Phased delivery also avoids the risk of having Accommodation Campus bedspaces available for which there is no demand (and creating a false incentive to maximise non home based recruitment). It also helps smooth the profile of demand for other accommodation (be that tourist or private rented) rather than seeing jumps or falls as the workforce increases or the campus becomes available.

Phase 1

- 1.5.26 SZC Co estimates that the NHB workforce would reach 2,500 in Q4 Year 3. SZC Co is expecting to open Phase 1 of the Accommodation Campus

effect in any ward. The residual is the number of workers (approx. 600 of the total peak estimate of 800 in the tourist sector) for which mitigation is provided in the non-contingent element of the Tourist Accommodation Market Supply element of the Housing Fund. The rate per un-delivered bedspace is therefore based on the sum of residual workers requiring mitigation, divided by the total per-worker cost.

(at least 300 bedspaces and amenity facilities) prior to the Workforce Survey reporting more than 2,500 NHB workers.

- 1.5.27 The rest of Phase 1 would be delivered in increments in-line with the growth of the NHB workforce with completion required six months after the Workforce Survey reports that the NHB workforce has reached 3,000 (expected in Q3, Year 4).
- 1.5.28 Should Phase 1 not be complete within three months of the Workforce Survey reporting more than 3,000 NHB workers, SZC Co will be required to release a payment into the Housing Fund to deliver additional capacity in the private housing market and to support the delivery of tourist accommodation equivalent to the average per-bed space rate of *Support rent / deposit guarantee* and *Loans / Grants / Guaranteed lets* measures (c. £3,350), applied to the number of bedspaces not delivered at that point (up to 1,200) – so with a **maximum liability of £4,020,000**. This would effectively mitigate for the accommodation effects of the NHB workforce not accommodated by the undelivered Project Accommodation bedspaces.

Phase 2

- 1.5.29 SZC Co estimates that the NHB workforce would reach 4,000 in Q1 Year 5.
- 1.5.30 Following on from the phasing set out above, SZC Co is expecting to open Phase 2 of the Accommodation Campus (at least 300 bedspaces and any further amenity facilities (if required / if not fully delivered in Phase 1)) prior to the Workforce Survey reporting more than 4,000 NHB workers.
- 1.5.31 The rest of Phase 2 would be delivered in increments in-line with the growth of the NHB workforce with a completion prior to the NHB workforce exceeding 4,800 (expected in Q2, Year 6).
- 1.5.32 Should Phase 2 not be complete within three months of the Workforce Survey reporting more than 4,800 NHB workers, SZC Co will be required to release a payment into the Housing Fund to deliver additional capacity in the private housing market and to support the delivery of tourist accommodation equivalent to the average per-bed space rate of *Support rent / deposit guarantee* and *Loans / Grants / Guaranteed lets* measures (c.

£3,350), applied to the number of bedspaces not delivered at that point (up to 1,200) – so with a **maximum liability of £4,020,000.**²

² This is additional to the contingent payment for Phase 1.

Appendix 4A – Response to concerns expressed by Suffolk Coastal Friends of the Earth in REP5-271

CONTENTS

1	INTRODUCTION.....	2
1.1	Purpose of this document.....	2
1.2	SZC Co's monitoring of the wrong soil water level variable within the Sizewell Marshes SSSI	2
1.3	SZC Co's gross underestimation of the value of ecohydrological guideline information for M22 vegetation community	3
1.4	SZC Co's sole plan for mitigating the predicted water table drawdown within Sizewell Marshes SSSI would draw poor quality and damaging water into the stands of M22	5
1.5	Brief comments in relation to SZC Co's reply to our initial written representation; hydro(geo)logy	5
1.6	Summary and conclusions	6

1 INTRODUCTION

1.1 Purpose of this document

1.1.1 This document provides comments from SZC Co. (the Applicant) on the Written Submission of Oral Case (ISH7) provided by Suffolk Coastal Friends of the Earth at Deadline 5 [[REP5-271](#)].

1.1.2 The Examining Authority has requested, as part of ExQ2, that concerns expressed by Suffolk Coastal Friends of the Earth be responded to. The Applicant's response is set out below. To facilitate cross-referencing the headings used in [REP5-271](#) have been replicated in this document, however this does not mean the Applicant is in agreement with the wording used.

1.1.3 In addition to the below the Applicant would advise that the concerns raised by Suffolk Coastal Friends of the Earth are addressed in previously submitted material including the following:

- Written Summaries of Oral Submissions made at ISH7: Biodiversity and Ecology Parts 1 and 2 (15-16 July 2021) [[REP5-112](#)]
- Comments on Written Representations [[REP3-042](#)]
- Appendix B of Comments on Written Representations [[REP3-043](#)]

1.2 SZC Co's monitoring of the wrong soil water level variable within the Sizewell Marshes SSSI

1.2.1 The Applicant agrees that an important variable when considering hydrological supporting conditions in wetlands is the position of the water table relative to the ground surface.

1.2.2 There appears to be a misconception around the nature of the monitoring points within the Sizewell Marshes SSSI. As stated during ISH7 there is a well-established monitoring network both within the Sizewell Marshes SSSI and the surrounding area. The peat monitoring points in the Sizewell Marshes were installed in November 2012, with surface monitoring points installed between November and December 2013. The suitability of the monitoring network was agreed with stakeholders, including the Suffolk Wildlife Trust, Natural England and the Environment Agency.

1.2.3 Each groundwater monitoring point within the Sizewell Marshes SSSI was installed to a depth between 1 and 2 metres below ground surface, and has a response zone that allows the phreatic surface (water table) to be measured. The monitoring points in the Sizewell Marshes SSSI were

installed by hand. This is acknowledged as being standard practice in wetland settings in [REP5-271](#).

- 1.2.4 Downhole instrumentation is installed at each monitoring point in the SSSI to automatically record the position of the water table at 15 minute intervals. Regular monitoring visits have been undertaken since the installation of the monitoring points in the SSSI to download the recorded data. These visits typically occur once per month, and are currently ongoing. During the visits manual measurements of the water table position are taken to validate the recorded data.
- 1.2.5 There is recognised to be an upward hydraulic gradient between the Crag and the peat in the Sizewell Marshes. The Crag groundwater levels around the SSSI are slightly higher than those in the peat. This means there is potential for groundwater within the Crag beneath the SSSI to migrate upwards into the peat. This is discussed in detail in Appendix B of [REP3-043](#).
- 1.2.6 Due to the difficulties with installing monitoring points at greater depth in the SSSI, acknowledged in [REP5-271](#), it is not possible to directly measure the upward hydraulic gradient in the peat. However, the monitoring points that have been installed at a shallow depth below ground level in the Sizewell Marshes measure the water table in the peat. This, combined with the wider monitoring network outside the SSSI limits allow a comparison of the position of the water table in the peat with Crag groundwater levels to characterise the vertical hydraulic gradient.
- 1.2.7 The assertion that the upwards hydraulic gradient, referred to as a hydrological gradient in [REP5-271](#), poses “*a significant risk that the measured water level (the piezometric level) within the shallow piezometers that SZC Co have installed is higher than the water table (at the same location)*” is not valid. The monitoring points within the Sizewell Marshes measure the position of the water table.
- 1.2.8 No concerns have been raised by stakeholders about the nature of the monitoring points since their installation. The data collected during the baseline monitoring period has been scrutinised by numerous parties, including the Suffolk Wildlife Trust, Natural England and the Environment Agency. At no stage have concerns been raised about the validity of the data representing the position of the water table in the SSSI.
- 1.3 [SZC Co's gross underestimation of the value of ecohydrological guideline information for M22 vegetation community](#)
- 1.3.1 It is stated in [REP5-271](#) that “*it is worth noting that relatively little information is available about the hydrological supporting conditions for many wetland*

vegetation communities, including M22". This is why such an extensive site specific baseline dataset has been collected for the Sizewell Marshes.

- 1.3.2 The rationale behind characterising the current hydrological supporting conditions is to allow future change to be properly considered in a site specific context. As discussed during ISH7 the present conditions at the site are already outwith the published literature ranges for M22 at some times of the year.
- 1.3.3 The Applicant rebuts the assertion that comparison with national ranges of conditions that support M22 would be beneficial. Natural England's latest condition assessment was conducted in 2021, and records that Sizewell Marshes SSSI is in favourable condition. This demonstrates that the current hydrological regime at the site is appropriate.
- 1.3.4 The assessment of predicted change to the water environment resulting from the construction and operation of Sizewell C is reported in [APP-297](#), and based on the numerical modelling reported in [APP-298](#). Further clarification was provided on the nature of the predicted change, and the implications for the supported ecology, in Appendix B of [REP3-043](#).
- 1.3.5 The assessment demonstrates that there is a small localised change in groundwater levels close to the Main Development Area. This change is limited in duration and extent, and the greatest change occurs during the least significant time of year with respect to the supported ecology.
- 1.3.6 There is a misrepresentation of the predicted change in the peat water table in [REP5-271](#), which suggests the predicted drawdown of between 7 and 11 cm could occur in summer. As set out in Appendix B of [REP3-043](#) the greatest predicted drawdown occurs during the winter months of the early years of construction, not in the summer. This misrepresentation of the predicted change in the peat water table is misleading and unhelpful.
- 1.3.7 A monitoring plan has been submitted to the Examining Authority at Deadline 7, which sets out the proposed future monitoring activities the Applicant is committed to. This monitoring will allow a direct comparison between future conditions and the baseline data. There is a commitment to maintain the hydrological conditions within the observed baseline range throughout the year.
- 1.3.8 It remains the Applicant's position that there is no mechanism for effect to the supported ecology as long as the hydrological conditions remain in line with recorded baseline conditions. It is not considered that consulting data from different sites in different settings around the country would alter this position.

- 1.4 SZC Co's sole plan for mitigating the predicted water table drawdown within Sizewell Marshes SSSI would draw poor quality and damaging water into the stands of M22
- 1.4.1 [REP5-271](#) misrepresents the mechanism for change in the water table in the peat in the Sizewell Marshes stating that it is solely a result of reduced upflow from the underlying Crag as a result of construction dewatering. As set out in detail in Appendix B of [REP3-043](#) this is not the case.
- 1.4.2 There are two mechanisms for change comprising construction dewatering, and the realignment of the Sizewell Drain. A detailed discussion on both mechanisms of change is presented in Section 1.5 of Appendix B of [REP3-043](#), and has not been reproduced here.
- 1.4.3 It is positive to see acknowledgement in [REP5-271](#) that there is no intention to introduce extra water into the SSSI. However, the contention that the mitigation strategy is to raise water levels in the ditch network using control structures to force more water to flow from the ditches to the peat is incorrect.
- 1.4.4 The purpose of the new control structures is to prevent the realigned drain allowing water to discharge more freely from the peat. As set out in Appendix 19C in [APP-309](#) the realigned drain has been designed to minimise land take in the SSSI. The result is that the realigned drain is shorter and straighter than the existing watercourse. It would therefore discharge more freely resulting in a lowering of the peat water table in the surrounding area. The new control structures were incorporated into the design to address this.
- 1.4.5 The assertion that more nutrient rich water needs to enter the peat to offset the loss of upwelling Crag groundwater is based on a mischaracterisation of the hydrological functioning of the SSSI.
- 1.4.6 The balancing of water within the peat groundwater and surface water systems within Sizewell Marshes is a pre-existing and naturally occurring mechanism that already dominates the characteristics of the peat groundwater in the SSSI.
- 1.5 Brief comments in relation to SZC Co's reply to our initial written representation; hydro(geo)logy
- 1.5.1 The Applicant welcomes the acknowledgement in response to Comment 11 that this is standard practice and plays an important role in data analysis.
- 1.5.2 The Applicant recognises that the depth to the water table is important in an ecohydrological context. This has been discussed extensively

throughout stakeholder consultation and considered in the assessment, notably in the numerical modelling when determining evapotranspiration rates in the Sizewell Marshes.

- 1.5.3 Had the predicted change in hydrological conditions been greater then there would have been a need to consider it in terms of depth to water table and the implications for the supported ecology. However, as the degree of change is sufficiently small, and can be managed using the proposed embedded mitigation in the design, conditions equivalent to those observed during baseline monitoring can be maintained.
- 1.5.4 In relation to the response to Comment 30 the Applicant advises that the range of values used in the sensitivity analysis are in line with standard modelling practice when representing cut-off walls.
- 1.5.5 In relation to the response to Comment 9 a monitoring plan has been submitted to the Examining Authority at Deadline 7, which sets out the proposed future monitoring activities the Applicant is committed to. This monitoring will allow a direct comparison between future conditions and the baseline data, including regular reviews. The scope of the monitoring plan is informed by the assessment and the magnitude and extent of predicted change. The purpose of the water monitoring plan, as set out in Volume 2 Appendix 19F of [APP-309](#) (updated as [AS-236](#)) is to provide reassurance monitoring and ground truth the predicted change.
- 1.6 **Summary and conclusions**
- 1.6.1 The Applicant advises that for the reasons set out above the criticisms of the understanding of the hydrological regime in the Sizewell Marshes SSSI, and the assessment of predicted effects from construction and operation of Sizewell C, are unfounded. There are numerous misrepresentations of the evidence, conceptual understanding, nature of predicted change and implications for the SSSI in [REP5-271](#).



SIZEWELL C PROJECT –
RESPONSES TO EXAMINING AUTHORITY'S
WRITTEN QUESTIONS ISSUED ON 3RD AUGUST 2021

NOT PROTECTIVELY MARKED

Appendix 4B – Concrete Domes – Example Photos

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

SZC – DCO ExQ2 – MDS 29 – Example Photographs of Concrete Domes

EDF Saint Alban, France (commissioned 1989)



Seabrook Station, Gulf of Maine, New Hampshire, USA (Completed 1986)

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED



NOT PROTECTIVELY MARKED



SIZEWELL C PROJECT –
RESPONSES TO EXAMINING AUTHORITY'S
WRITTEN QUESTIONS ISSUED ON 3RD AUGUST 2021

NOT PROTECTIVELY MARKED

Appendix 5A – Section 61 Notice - Tilbury 2

NOT PROTECTIVELY MARKED

CONTROL OF POLLUTION ACT 1974 - SECTION 61

PRIOR CONSENT FOR WORK ON CONSTRUCTION SITES

To: Stephen Balfour
GRAHAM,
[REDACTED],
Hillsborough,
Co Down,
[REDACTED]

WHEREAS you have made an application dated **1st April 2019** for prior consent under Section 61(1) of the Control of Pollution Act 1974 in respect of construction work for the Tilbury 2 Port Development at the Marine and Terrestrial Sites, Tilbury 2 (EX RWE Power Station A), Fort Road, Tilbury RM18 8UJ as indicated on the submitted plans at Appendix1 and as described in Part 3 of the Application comprising:

Aggregate deliveries

- Continuous aggregate deliveries during seven discrete 48 hour periods over 9 months.
- Stockpile management associated with the deliveries

Insofar as these works lie within the boundaries of the Thurrock Borough Council,

CONSENT is **HEREBY GIVEN** by the **THURROCK BOROUGH COUNCIL** (hereinafter referred to as the "Council"), subject to the following conditions:

1. **Normal construction activities**

Normal construction activities shall only be carried out between the hours specified below.

Monday – Friday	08:00 -18:00 hours
Saturday & Sunday	08:00 -16:00 hours

There shall be no working on a Bank Holiday or outside these stated hours except for:

- (a) Enabling Activities (see below)
- (b) Pumps to control water levels which may operate 24 hours per day, 7 days per week as required
- (c) Delivery of abnormal loads as required.

Aggregate Deliveries and stockpile management

Monday – Sunday (excluding Public Holidays)	00:00 -24:00 hours
---	--------------------

For a maximum continuous period of 48 hours on each of the 7 requested occasions.

Enabling Activities

To maximise the work that can take place within the above prescribed normal working hours, enabling activities may take place between:

07:00 – 08:00 and 18:00 – 20:00 Monday – Sunday

The following activities may be undertaken during the start and close down period:

- Arrival and departure of workforce on site
- Deliveries and off loading
- Maintenance and checking of plants and machinery
- Refuelling of plants and machinery
- Start-up of plant and machinery engines
- Site inspections and safety checks prior to commencing work
- Site meetings/ TBT/ Task briefing
- Site clean-up

The start-up and close down will not be considered as an extension of the normal working hours and the activities will be carried out as close to the normal working hours as practically possible.

2. Project Management

If, in the opinion of the site management, in order to comply with Health and Safety legislation (including making works safe), codes of safe working and traffic management, construction works and associated operations from time to time can only be undertaken outside of these hours, then prior approval must be sought from the Environmental Protection Team (telephone: 01375 652096 or email mgentry@thurrock.gov.uk) and the approval given in writing/email before works can commence outside the hours stipulated in (1) above.

3. Permitted Maximum Noise Levels.

The noise mitigation measures described in section 7 of the application shall be used in order to minimise the resultant noise level at the façade of the nearest noise sensitive receptors.

The noise immission levels, from the consented construction works, at any residential noise sensitive receptor shall not generally exceed the limits in the Table 1 below. For the avoidance of doubt the periods in the table below are not the permitted hours of work. Periods outside the permitted hours of work as described in (1) above are provided for information in case the Council explicitly agrees to works outside the permitted hours for the reasons described in (2) above.

Where predicted or measured noise levels exceed the limits in the table below for the corresponding time period, noise mitigation commensurate with Best Practicable Means (BPM) shall be put in place so that, wherever possible, the limits are no longer exceeded.

Table 1. Airborne noise LIMIT levels

Day	Time	Averaging Period, T	Noise LIMIT Level ^[1] dB L _{Aeq,T}
Mondays to Fridays	0700 - 0800	1 hour	70
	0800 - 1800	10 hours	75
	1800 - 1900	1 hour	70
	1900 - 2200	1 hour	65
Saturdays	0700 - 0800	1 hour	70
	0800 - 1300	5 hours	75
	1300 - 1400	1 hour	70
	1400 - 2200	1 hour	65
Sundays	0700 - 2200	1 hour	65
Any day	2200 - 0700	1 hour	55

Note: [1] L_{Aeq,T} shall be as defined in BS 5288

It is unlikely that the proposed works could give rise to complaints related to vibration by residents. If complaints are received the Council will investigate and decide what action is appropriate on a case-by-case basis with reference to the vertical Vibration Dose Value (VDV - as defined in BS 6472) and the corresponding probability of adverse comment for nuisance. Alternatively the estimated VDV (eVDV) may be derived from measurements of the peak particle velocity.

If residents become concerned about damage to their property, reference will be made to BS 7385 - Evaluation and measurement for vibrations in buildings Part 2, Guide to damage levels from groundborne vibration. Vibrations levels measured in accordance with BS 7385 Part 1, shall be at least an order of magnitude below the “cosmetic damage” threshold with respect to the peak particle velocity for residential premises.

4. Details of any site activities that cannot comply with (1) or (3) above shall be submitted to the Council in advance by e-mail, using the variation notice attached. Use this form to confirm your application for a minor variation to the works that featured in your application for a Section 61 consent and for which consent has been issued by the Thurrock Council. This also includes *minor* additional activities that were not included in the original application and do not materially affect any predicted noise levels.
5. The plant and equipment listed in Section 6 of the application shall be used to carry out the works outlined in sections 3 and 4 of the application. The applicant may substitute an alternative item or use additional items of plant or equipment and will use BPM to ensure that the effective sound power level is equivalent, similar or lower than that stated in the application.
6. Where it becomes apparent that pre-planned construction works, not covered by dispensation from this consent, are going to run after the consented hours, the applicant shall notify the Environmental Protection Team of this Council on the following telephone number: (01375) 652096 and confirm this using the overrun notification proforma attached, which is to be emailed to [mgentry@thurrock.gov.uk](mailto:mgency@thurrock.gov.uk) of the Environmental Protection Team of the Council.
7. Best Practicable Means (BPM) as defined in Section 72 of the Control of Pollution Act 1974 shall be employed at all times to reduce noise (including vibration) to a minimum, with reference to the general principles contained in British Standard BS 5228-:2009+A1:2014 ‘Code of practice for noise and vibration control on construction and open sites’. The steps taken to minimise noise and vibration as detailed in section 7 of the application shall be adhered to at all times.

8. The applicant shall carry out noise and/or vibration monitoring if requested by the Council. Appropriate noise monitoring may be requested where complaints are received by the council and verified by the Environmental Protection Team. Significant deviation from any predicted noise levels contained in the application will be considered when assessing whether BPM are being employed. The results of any such monitoring will be made available, at the site office, to any Authorised Officer from the Council as soon as reasonably practicable.
 9. An emergency contact name and telephone number available on a 24 hours basis shall be notified to the undersigned prior to the commencement of operations and shall be on display in the vicinity of the working area or at the site entrance and on the project website (if one is available).
 10. The date of commencement of each of the 7 above consented 48 hour periods shall be notified to the undersigned by email prior to any activity commencing on site.
 11. Occupiers who may be significantly affected by noise from the works shall be notified of the nature of the works, a contact name, telephone number (including that to be used outside normal working hours), and address to which any enquiries should be directed. Such notification shall take place, where possible, 2 weeks but, in any event, at least a week prior to the works commencing. The Council shall be consulted on the wording of any notification, and the proposed distribution list. A copy of the final notification, together with its distribution list, shall be sent to the undersigned at the time of distribution.
 12. This consent will remain valid until **31st April 2020** or until the works to which it relates are completed whichever is the sooner.
-

THIS CONSENT

- A. RELATES ONLY TO THE INFORMATION GIVEN IN YOUR APPLICATION, TOGETHER WITH ANY ADDITIONAL INFORMATION PROVIDED IN WRITING WHICH FORMS PART OF THIS CONSENT, AND
- B. MUST BE NOTIFIED TOGETHER WITH ANY CONDITION SPECIFIED ABOVE BY THE APPLICANT TO ANY OTHER APPROPRIATE PERSON CARRYING OUT ANY SUCH WORK ON THE SITE, AND
- C. IS GIVEN IN RELATION TO THE PROVISIONS OF SECTION 61 OF THE CONTROL OF POLLUTION ACT 1974. IT MUST NOT BE TAKEN TO REPLACE ANY RESPONSIBILITIES YOU MAY HAVE UNDER THE WORKPLACE HEALTH & SAFETY LEGISLATION, OR ANY OTHER LEGISLATIVE REQUIREMENTS.

If you knowingly carry out or permit to be carried out works in contravention of any conditions attached to this consent you will be guilty of an offence under Part III of the Control of Pollution Act 1974. On summary conviction will be liable to a fine not exceeding Level 5 on the Standard Scale of fines* together in any case with further fines not exceeding £50 for each day on which offence continues after conviction.

This consent is authorised by

.....
Mark Gentry
Environmental Health Officer
(The Officer appointed for this purpose)

Thurrock Borough Council
Environmental Protection Team
Planning, Transportation & Public
Protection Place Directorate
Civic Offices, New Road
Grays, Essex
RM17 6SL

Dated **9th April 2019**

*Currently £5,000 (subject to alteration by Order)

NOTES

The Local Authority draws attention to:

- Section 61(5)(b) of the Control of Pollution Act 1974 and may vary this consent due to any changes in circumstances.
- Section 61(9) of the Control of Pollution Act 1974 – That his consent does not of itself constitute any ground of defence against any proceedings instituted under section 82 of the Environmental Protection Act 1990.
- Section 61 of the Control of Pollution Act 1974 may be viewed on line here: <https://www.legislation.gov.uk/ukpga/1974/40/section/61>
- Any predicted noise levels in the application, to which regard will be had in assessing whether BPM are being employed.

SCHEDULE 1

Dispensations

Where the proposed works have to be changed from the original programme as given in the application to require operations outside the terms of this Consent, the Applicant shall apply to the Council in writing for a Dispensation at least 14 days in advance of the proposed operation submitting the following:

- Details of the operation in question
- Reasons why the operation cannot be carried out within the terms of the Consent
- Proposed working hours
- Predicted noise and vibration levels at relevant locations
- Proposed steps taken to reduce noise and/or vibration to a minimum

Where the working method and proposed mitigation is deemed to be acceptable to the Council, a Dispensation varying the terms of this Consent will be issued in respect of the proposed activities. The Dispensation may be issued subject to specific conditions and may be time limited subject to review. Occupiers of nearby residential or other noise sensitive properties who are likely to be affected shall be informed as soon as reasonably practicable by the Applicant about this and, where appropriate, the likely duration of the works.

Variations

Experience has shown that minor variations in the works featured in the consent application are found to be necessary as work progresses, for a variety of reasons. Where the rescheduling of works is of a critical nature (such as a key activity likely to delay other key activities) the Applicant can apply to the Council for a Variation. This procedure has also been used for minor additional activities that were not included in the original application and do not materially affect the predicted noise levels. In these circumstances, it is not necessary for the Applicant to provide the details commensurate with an application for a dispensation. A form has been devised allowing the Applicant to confirm by email relevant details to the Council. The application is to be received by the Council where practicable 7 days, but at least 2 working days, ahead of the start of the works for which the application is made. If the Council approves the application, the document will be countersigned and emailed back to the Applicant with conditions, if appropriate. Occupiers of nearby residential or other noise sensitive properties who are likely to be significantly affected shall be informed as soon as reasonably practicable by the Applicant about this and, where appropriate, the likely duration of the works.

Notification of an Overrun

It is accepted that overruns may occur from time to time. These are looked upon sympathetically by the Council where they are for sound engineering or health and safety reasons. A form has been devised allowing the contractor to confirm by email relevant details of an overrun to the local authority. The Council countersigns the document confirming its receipt and emails it back to the Applicant. It should be noted that, unlike the dispensation and variation procedures, this is not an approval process. If the Council subsequently determines that the overrun was not for sound engineering or health and safety reasons and could have been avoided, the matter will be taken up with the Applicant as being a potential breach of this Consent.

INFORMATION CONCERNING APPEALS

The *Control of Noise (Appeals) Regulations 1975* provide as follows:

Appeals under *Section 61(7) of the Control of Pollution Act 1974*

1. The provisions of this regulation shall only apply to an appeal brought by any person under sub-section (7) of Section 61 (prior consent for works on a construction site) in relation to a conditional consent given by the Local Authority under that Section or in relation to an Authority's refusal or failure to give a consent within the period specified in sub-section (6) of that Section (see Note below).
2. In this regulation "conditional consent" means a consent given by the Local Authority under Section 61 in respect of which the Local Authority have attached any condition or imposed any limitation or qualification in pursuance of Section 61(5)(a), (b) or (c); and "conditions" includes any limitation or qualification so imposed.
3. The grounds on which a person to whom a Local Authority give a conditional consent may appeal under the said sub-section (7) may include any of the following grounds which are appropriate in the circumstances of the particular case :-
 - (a) that any condition attached or imposed in relation to the consent (hereinafter referred to as "a relevant condition") is not justified by the terms of Section 61;
 - (b) that there has been some informality, defect or error in, or in connection with, the consent;
 - (c) that the requirements of any relevant condition are unreasonable in character or extent, or are unnecessary;
 - (d) that the time, or where more than one time is specified, any of the times, within which the requirements of any relevant condition are to be complied with is not reasonably sufficient for the purpose.
4. If and so far as an appeal is based upon the ground of some informality, defect or error in, or in connection with, the consent, the magistrates' court shall dismiss the appeal, if it is satisfied that the informality, defect or error was not a material one.
5. Where the appeal relates to a conditional consent given by a Local Authority, on the hearing of the appeal, the magistrates' court may -
 - (a) vary the consent or any relevant condition in the favour of the appellant in such a manner as it thinks fit, or
 - (b) quash any relevant condition, or
 - (c) dismiss the appeal;and a consent or condition which is varied under sub-paragraph (a) above shall be final and shall otherwise have effect, as so varied, as if it had been given, attached or imposed in that form by the Local Authority.

NOTE

Any appeal must be lodged with the magistrates' court within 21 days of the date of this consent.

NOTIFICATION OF OVERRUN

For GRAHAM

Contractor Section 61 Reference:	
Local Authority Section 61 Consent Reference:	Tilbury 2 Port – 48h Aggregate & Stockpiles 01/MG
Date:	
Overrun Reference:	

Brief Description of Overrun (including Reason)

Location of works:	
Date and period of overrun:	
Details justifying need to work outside normal working hours:	
Equipment to be used:	
Person in charge of out of hours works:	
Direct site contact telephone number for person in charge:	

	For GRAHAM	Noted by Thurrock Borough Council
Name:		
Signature:		
Date:		

Distribution:

APPLICATION FOR VARIATION TO SECTION 61 CONSENT

For GRAHAM

Contractor Section 61 Reference:	
Local Authority Section 61 Consent Reference:	Tilbury 2 Port – 48h Aggregate & Stockpiles 01/MG
Date:	
Variation Reference:	

--

	For GRAHAM	Approved by Thurrock Council
Name:		
Signature:		
Date:		

Distribution:

Notes

Use this form to confirm your application for a minor variation to the works that featured in your application for a Section 61 consent, for which consent has been issued by the Thurrock Council. This includes minor additional activities that were not included in the original application and do not materially affect the predicted noise levels.

Do not use this form for other matters that were not included in your application for a Section 61 consent and are not covered in the consent that has been granted. For these matters please use the standard Section 61 dispensation form

Approved, Subject to the Following Conditions





SIZEWELL C PROJECT –
RESPONSES TO EXAMINING AUTHORITY'S
WRITTEN QUESTIONS ISSUED ON 3RD AUGUST 2021

NOT PROTECTIVELY MARKED

Appendix 6A – Responses to TT.2.25

NOT PROTECTIVELY MARKED

Table TT.2.25

	YEAR #	Year 1																																																				
	QUARTER	Q1													Q2													Q3													Q4													
	Wk Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	
MDS HGV Count	Peak Daily HGVs		96	166	177	181	188	155	153	150	205	284	308	246	241	240	242	229	223	251	314	351	374	342	359	333	230	206	230	241	238	272	302	448	248	269	269	322	295	293	288	302	280	283	336	337	336	276	283	278	268	330	369	75
	Wkly HGVs		338	583	621	635	660	541	534	524	716	996	###	863	845	842	849	803	782	879	###	###	###	###	###	###	806	722	806	845	834	953	###	###	868	942	942	###	###	###	###	###	980	991	###	###	###	965	990	972	939	###	###	263
Total HGV / qu.		463,980	8,934													12,940													13,012													13,136												
Tonnes del. / qu.		4,747,657	139,366													201,871													202,980													204,919												
Approx proportion of:	OGV2 (18-44t GVW)		33%													31%													52%													44%												
	OGV1 (7.5-18t GVW)		33%													37%													28%													33%												
	LGVs (3.5-7.5t GVW)		34%													31%													20%													23%												

Early Years	Typical payload / HGV	15.6 OGV2
Main works	Typical payload / HGV	9 OGV1

Notes

Peak Daily HGVs:	the highest forecast number of HGV deliveries in one day for the specific week
Weekly HGVs:	the total number of HGV forecast over the working week
Total HGV / qu:	the total number of forecast HGV movements per quarter
Tonnes del. /qu.:	the total tonnage of materials imported per quarter (including temporary construction plant, materials and consumerables)

* - Excludes buses for the purposes of assessing HGV payloads

Table TT.2.25

	YEAR #	Year 2																																																					
	QUARTER	Q1													Q2													Q3													Q4														
	Wk Number	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	
MDS HGV Count	Peak Daily HGVs		115	383	390	335	331	254	283	237	289	207	160	154	144	110	187	165	210	212	225	232	220	192	279	214	231	195	245	225	251	173	176	154	239	187	153	170	219	189	233	189	174	146	156	170	187	184	200	184	210	210	293	100	67
	Wkly HGVs		402	###	###	###	###	889	990	829	###	726	562	541	506	387	656	579	737	744	786	810	768	670	976	749	808	682	857	787	878	605	616	539	836	654	535	595	766	661	815	661	609	511	546	595	654	643	699	643	734	734	###	349	##
Total HGV / qu.		463,980	11,488													9,352													9,806													7,975													
Tonnes del. / qu.		4,747,657	179,207													145,886													152,972													124,405													
Approx proportion of:	OGV2 (18-44t GVW)		49%													47%													48%													41%													
	OGV1 (7.5-18t GVW)		29%													31%													32%													37%													
	LGVs (3.5-7.5t GVW)		22%													22%													20%													22%													

Table TT.2.25

	YEAR #	Year 3																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
	QUARTER	Q1								Q2								Q3								Q4																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
	Wk Number	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
MDS HGV Count	Peak Daily HGVs																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								</

Table TT.2.25

[illegible]

Table TT.2.25

[illegible]

Table TT.2.25

[illegible]

Table TT.2.25

[illegible]

Table TT.2.25

[illegible]

Table TT.2.25

	YEAR #		Year 9																																																											
	QUARTER		Q1												Q2												Q3												Q4																							
	Wk Number		419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470								
MDS HGV Count	Peak Daily HGVs		238	238	238	238	236	236	236	236	229	229	229	229	229	222	222	222	222	227	227	227	227	232	232	232	232	232	236	236	236	236	238	238	238	238	220	220	220	220	220	222	222	222	222	213	213	213	213	209	209	209	209	209								
	Wkly HGVs		833	833	833	833	825	825	825	825	802	802	802	802	777	777	777	777	794	794	794	794	811	811	811	811	811	825	825	825	825	833	833	833	833	771	771	771	771	771	777	777	777	777	746	746	746	746	731	731	731	731	731									
Total HGV / qu.		463,980													10,645												10,336												10,490												9,747											
Tonnes del. / qu.		4,747,657													95,809												93,028												94,406												87,721											
Approx proportion of:	OGV2 (18-44t GVW)																																																													
	OGV1 (7.5-18t GVW)																																																													
	LGVs (3.5-7.5t GVW)																																																													

Table TT.2.25

[illegible]

Table TT.2.25

[illegible]

Table TT.2.25

[illegible]