



MORGAN AND MORECAMBE OFFSHORE WIND FARMS: TRANSMISSION ASSETS

Draft European Protected Species Mitigation Licence for Sand Lizard - Method Statement



Deadline: 5
Application Reference: EN020028

Document numbers:
MRCNS-J3303-RPS-19218
MOR001-FLO-CON-CAG-LIC-0001

Document reference: S_D5_16

22 September 2025
F01

Document status					
Version	Purpose of document	Approved by	Date	Approved by	Date
F01	Deadline 5	HK	September 2025	IM	September 2025

Prepared by:

**Morgan Offshore Wind Limited,
Morecambe Offshore Windfarm Ltd**

Prepared for:

**Morgan Offshore Wind Limited,
Morecambe Offshore Windfarm Ltd**

Contents

1	PART ONE: BACKGROUND AND SUPPORTING INFORMATION	1
1.1	Executive Summary	1
1.2	Introduction.....	2
1.2.1	Background to activity/ development.....	2
1.2.2	Full details of proposed works on site that are to be covered by the licence	3
1.3	Survey and Site Assessment	3
1.3.1	Pre-existing information on species at the survey site	3
1.3.2	Status of species	4
1.3.3	Objectives of the survey	4
1.3.4	Scaled plan/ map of the survey area	4
1.3.5	Site/ habitat description	4
1.3.6	Field surveys.....	4
1.3.7	Survey results	5
1.3.8	Interpretation/ evaluation of survey results.....	5
1.4	Impact assessment in absence of mitigation	7
1.4.1	Short-term impacts: disturbance	7
1.4.2	Long-term impacts: habitat loss or modification	16
1.4.3	Long-term impacts: fragmentation and isolation.....	16
1.4.4	Post-development interference impacts	16
1.4.5	Predicted scale of impact.....	16
1.5	Annexes	16
2	PART 2: DELIVERY INFORMATION	17
2.1	Mitigation and compensation	17
2.1.1	Summary of mitigation strategy	17
2.2	Works to be undertaken by the ecologist or suitably experienced person	19
2.3	Works to be undertaken by the Developer/ Landowner.....	19
2.4	Post-development site safeguard.....	19
2.5	Land ownership: mitigation areas	19
2.5.1	Mitigation site ownership	19
2.5.2	Declaration statement.....	20

Tables

Table 1 Potential impacts considered and relevant avoidance and/or mitigation measures ..**Error! Bookmark not defined.**

Glossary

Term	Meaning
400 kV grid connection cables	Cables that will connect the proposed onshore substations to the existing National Grid Penwortham substation.
400 kV grid connection cable corridor	The corridor within which the 400 kV grid connection cables will be located.
Onshore Order Limits	Onshore Order Limits See Transmission Assets Order Limits: Onshore (below).
Onshore substations	The onshore substations will include a substation for the Morgan Offshore Wind Project: Transmission Assets and a substation for the Morecambe Offshore Windfarm: Transmission Assets. These will each comprise a compound containing the electrical components for transforming the power supplied from the generation assets to 400 kV and to adjust the power quality and power factor, as required to meet the UK Grid Code for supply to the National Grid.
Special Protection Areas	A site designation specified in the Conservation of Habitats and Species Regulations 2017, classified for rare and vulnerable birds, and for regularly occurring migratory species. Special Protection Areas contribute to the national site network.
Transmission Assets	The area within which all components of the Transmission Assets will be located, including areas required on a temporary basis during construction and/or decommissioning.
Transmission Assets Order Limits	The area within which all components of the Transmission Assets landward of Mean High Water Springs will be located, including areas required on a temporary basis during construction and/or decommissioning (such as construction compounds). Also referred to in this report as the Onshore Order Limits, for ease of reading.

Acronyms

Acronym	Meaning
CIEEM	Chartered Institute of Ecology and Environmental Management
CoCP	Code of Construction Practice
DCO	Development Consent Order
ECOW	Ecological Clerk of Works
EPS	European Protected Species
ES	Environmental Statement
EMP	Ecological Management Plan
OEMP	Outline Ecological Management Plan
SPA	Special Protection Area

Acronym	Meaning
SSSI	Site of Special Scientific Interest
UK	United Kingdom

Units

Unit	Description
%	Percentage
ha	Hectare
kV	Kilovolt
m	Metre

1 **PART ONE: BACKGROUND AND SUPPORTING INFORMATION**

1.1 **Executive Summary**

- Construction activities for the proposed Morgan and Morecambe Transmission Assets project on Lytham St Anne's beach will occur close to coastal dune habitats supporting a reintroduced population of sand lizard.
- The Transmission Assets have committed to installing the offshore export cables under Lytham St Annes SSSI and St Annes Old Links Golf Course via trenchless techniques (CoT44, REP4-018). The trenchless technique exit pit locations for the offshore export cables will be at approximately MHWS with a minimum distance of 100m from the western boundary of Lytham St Annes Dunes SSSI (CoT44). This therefore means that the surface of the Lytham St Annes SSSI will be not be subject to any form of open-cut trenching and the sand dunes will therefore be undisturbed at a surface level. no sand lizard habitats will be directly impacted ..
- A temporary compound (Compound 3 in the Outline Landfall Construction Method Statement (AS-081) (previously used for sand-winning operations on the beach) and an existing beach access track from A584/Clifton Drive North to the beach will be used by construction vehicles and staff for the duration of construction activities at the landfall site (estimated to be a maximum of 48 weeks across the maximum 66 month construction period) .
- There is a potential low risk of killing/ injury to sand lizard that may occur along the access road from A584/Clifton Drive North, and in close proximity to the temporary compounds . However this will be managed through precautionary working methods and the use of an appropriately experienced ECoW (see Section 2).
- The potential for noise/ vibration disturbance to sand lizard and sand lizard burrows by vehicles moving along the beach access road and along the beach will be managed through the use of temporary track matting (or similar) to reduce the transmission of vibration from construction vehicles moving along the track to the adjacent.
- Given the public location of the site and the very low risk to sand lizard, no temporary exclusion fencing will be installed.
- There is no risk of any post-development impacts to sand lizards or their habitats.

1.2 Introduction

1.2.1 Background to activity/ development

- 1.2.1.1 The purpose of the Transmission Assets is to connect the Morgan Offshore Wind Project: Generation Assets and Morecambe Offshore Windfarm: Generation Assets (referred to collectively as the ‘Generation Assets’) to the National Grid. The Generation Assets are each subject to separate applications for development consent. Further details are provided in Volume 1, Chapter 1: Introduction of the Environmental Statement (APP-021).
- 1.2.1.2 The Transmission Assets will be located within the Transmission Assets Order Limits as shown on Figure 3.1 (see Volume 1: Figures (REF)). The offshore elements of the Transmission Assets are located in the east Irish Sea within English offshore waters (beyond 12 nm from the English coast) and inshore waters (within 12 nm from the English coast). The onshore elements of the Transmission Assets are located within the local authority areas of Fylde Council, Blackpool Council, South Ribble Borough Council, Preston City Council and Lancashire County Council.
- 1.2.1.3 The key components of the Transmission Assets for both the Morgan Offshore Wind Project and the Morecambe Offshore Windfarm include:
- Offshore:
 - offshore export cables: these export cables will bring the electricity generated by the Generation Assets to the landfall for onward transmission.
 - Landfall:
 - landfall site: this is where the offshore export cables are joined to the onshore export cables via the transition joint bays (TJBs). This term applies to the entire area between Mean Low Water Springs (MLWS) and the TJBs.
 - Onshore elements:
 - onshore export cables: these export cables will be joined to the offshore export cables via the TJBs at the landfall site, and will bring the electricity generated by the Generation Assets to the onshore substations;
 - onshore substations: the two electrically separate onshore substations will contain the components for transforming the power supplied via the onshore export cables up to 400 kV; and
 - 400 kV grid connection cables: these export cables will bring the electricity generated by the Generation Assets from the two electrically separate onshore substations to the existing National Grid substation at Penwortham.
 - environmental mitigation areas – temporary and/or permanent areas, including accesses identified to provide environmental mitigation only.

– biodiversity benefit areas - temporary and/or permanent areas, including accesses identified to provide biodiversity benefit only.

1.2.1.4 The offshore cables make landfall at Lytham St Anne's beach which is adjacent to the Lytham St Anne's Dunes Site of Special Scientific Interest (SSSI). The dunes support a reintroduced population of sand lizard (*Lacerta agilis*).

1.2.2 Full details of proposed works on site that are to be covered by the licence

1.2.2.1 This draft EPS mitigation licence method statement applies to the construction activities of the Transmission Assets located landward of Mean High Water Springs (MHWS). This EPS licence application does not consider construction impacts seaward of MHWS on the basis that the species is highly unlikely to be encountered in habitats beyond the footprint of the dunes.

1.2.2.2 The proposed works that are to be covered by the licence are associated with the following construction areas, and include associated vehicle and personnel movements:

- Works Nos. 5A5B – temporary construction compound(s) at landfall on the beach for exit pits for trenchless techniques for onshore cable construction beneath the dunes (temporary compound 2).
- Works Nos. 6A6B – Offshore export cable trenchless technique installation beneath Lytham St Anne's Dunes SSSI
- Works Nos. 7A7B – Temporary construction access to St Annes beach
- Works Nos. 18A18B – Temporary construction compound 3 (former sand winning compound).
- Works Nos. 42A42B – Pedestrian only access between Lytham St Annes beach and the Welfare Compound situated in North Beach Car Park
- Works Nos. 47A47B – Permanent access to St Annes beach during the operation and maintenance phase of the project for cable repair and reburial

1.3 Survey and Site Assessment

1.3.1 Pre-existing information on species at the survey site

1.3.1.1 The sand lizard population at Lytham St Anne's dunes disappeared in the 1960s due to predation and habitat loss along the coastline. A captive-bred release programme resulted in the re-introduction of sand lizard to the dunes between 2017 and 2021, alongside successful habitat enhancement works (such as the burying of Christmas trees to encourage dune accretion) by the Fylde Sand Dunes Project.

- 1.3.1.2 A total of 412 captive-bred sand lizard hatchlings has been re-introduced over this period, and monitoring is undertaken annually¹.
- 1.3.1.3 The Fylde Sand Dunes Project undertakes an annual programme of monitoring of the sand lizard population, and the data have been shared with the Applicants to inform this EPS licence application (see below).

1.3.2 Status of species

- 1.3.2.1 Sand lizard is one of the rarest UK reptiles, and following significant declines due to habitat loss its distribution in the UK is restricted to a handful of locations in southern England and north-west England.

1.3.3 Objectives of the survey

- 1.3.3.1 Annual monitoring of the sand lizard population is undertaken by the Fylde Sand Dunes Project to generate 'heat maps' showing the grouped location of sand lizard sightings (to assist with understanding the distribution of the species within the dunes), and a record of the age class and sex of individuals observed is noted where it could be determined by the surveyors.
- 1.3.3.2 Survey data are gathered from visual observations by experienced and appropriate licensed surveyors as they walk through the dunes, all areas of which are accessible on foot.

1.3.4 Scaled plan/ map of the survey area

- 1.3.4.1 The survey area includes the Lytham St Anne's dunes and beach/ dunes interface between North Beach car park and Starr Gate.

1.3.5 Site/ habitat description

- 1.3.5.1 The Site (for the purpose of the sand lizard field surveys) comprises the coastal dunes, dune heaths and dune slacks that lie on the western side of Clifton Drive North, stretching from North Beach car park in the south up to Starr Gate in the north.
- 1.3.5.2 Most of the dune habitats are within the boundary of the Lytham St Anne's Dunes SSSI, although there has been seaward accretion of the dunes beyond the mapped SSSI boundary due to favourable management interventions in recent years. Habitats suitable for, and used by, sand lizard therefore occur up to c. 30 m seaward of the mapped SSSI boundary, as well as within the SSSI.

1.3.6 Field surveys

- 1.3.6.1 The Applicants have not undertaken surveys of the sand lizard population because it is subject to annual monitoring surveys by the Fylde Sand Dunes Project. The survey data therefore provide details of the peak and

¹ Fylde Sand Dunes Project webpage: <https://www.lancswt.org.uk/our-work/projects/fylde-sand-dunes>

cumulative counts, point locations, sex and age class (where recorded) and annual trends in distribution for sand lizard on the dunes collected over several years. Data from surveys undertaken in 2022, 2023, 2024 and 2025 (surveys ongoing) were provided to the Applicants by Fylde Borough Council in September 2025 to inform this draft EPS mitigation licence method statement.

- 1.3.6.2 As the data have been provided by a third party there are some restrictions on what can be presented due to confidentiality requirements. The Fylde Sand Dunes Project surveyors have a survey licence from Natural England to undertake annual visual walkover presence/absence surveys for sand lizard between April and September.

1.3.7 Survey results

- 1.3.7.1 See **Annex A** for full details.
- 1.3.7.2 Survey data from surveys undertaken in 2022, 2023 and 2024 have been provided; surveys for 2025 are ongoing and therefore the full dataset is not yet available.
- 1.3.7.3 There was a peak count of eight sand lizards on surveys undertaken in 2022 and in 2023. The peak count of individuals and the total number of records for 2022 and 2023 (60 and 61 respectively) indicate a stable population in those years. There appears to have been a slight increase in the population in 2024, with a peak count of nine, which was recorded on two separate days, with a cumulative total of 96 records.
- 1.3.7.4 The peak count for the 2025 surveys undertaken to date (survey data have been provided up to early August) has again increased, with 14 individuals observed in April 2025.
- 1.3.7.5 The population is comprised of approximately 14 adult females and a fluctuating number of adult males, with total records of males ranging from 14 to 43 recorded between years (possibly due to certain individuals being more prominent and being recorded frequently on each survey visit).
- 1.3.7.6 In 2023 the specific number of hatchlings was recorded, but in subsequent years this has only been recorded as juveniles, with a note on birth year indicating that the majority are considered to have hatched in the year they were recorded.

1.3.8 Interpretation/ evaluation of survey results

- 1.3.8.1 The data indicates that there has been annual increases in the peak and cumulative numbers of sand lizards observed during the surveys undertaken over the past four years. The presence of hatchlings and juveniles confirms that breeding activity is taking place, and the heat maps show a widening of the distribution of the population within the dunes over the surveyed period, particularly extending further to the north.
- 1.3.8.2 The heat maps indicate hot spots of sand lizard sightings on the areas of barer sand at the seaward end of the beach access road; this corresponds with the area in which Christmas tree planting has been undertaken to

encourage dune accretion, and there has been substantial seaward accretion of dunes at this location. The embryonic dunes provide favourable habitat for sand lizard being dominated by areas of bare sand that provide good opportunities for basking and burrow construction. Similarly, the southern face of the dunes along the beach access road is also a recognised hot spot for sightings of sand lizard; due to the prevalence of bare sand for basking/ burrow construction and the south-facing aspect of the slope.

1.4 Impact assessment in absence of mitigation

1.4.1 Short-term impacts: disturbance

- 1.4.1.1 The following potential temporary impacts due to the construction of the Morgan and Morecambe Transmission Assets Project in relation sand lizards have been identified:
- Damage to dune habitats supporting sand lizards due to construction activities
 - Damage and/ or disturbance to dune habitats due to vibration from construction
 - Disturbance to sand lizards due to noise and vibration from construction
 - Damage and/ or disturbance to dune habitats due to increased footfall from construction workers
 - Damage and/ or disturbance to dune habitats from increased vehicle movements on the beach and beach access road
 - Risk of killing/ injury to sand lizards due to increased vehicle movements on the beach and beach road.
- 1.4.1.2 The duration of the construction activities at each of the working areas that are in close proximity to the dunes supporting sand lizards is provided in Table 1.
- 1.4.1.3 There will be no works on the beach during the peak wintering bird season of November to March inclusive to avoid disturbance to waterbirds that are designated features of the Ribble & Alt Estuaries Special Protection Area (SPA) and Ramsar (CoT44 in REP4-019). There will therefore be no construction activities at any of the compounds, or any vehicle or staff movements along the beach and beach access road during the sensitive hibernation period for sand lizard.

Table 1: Anticipated maximum design parameters

Works Nos.	Construction activity	Anticipated duration of use (including mobilisation and demobilisation)		Anticipated maximum total durations	
		Morgan OWL	Morecambe OWL	Concurrent construction scenario	Sequential construction scenario
4A4B and/or 5A5B	Compound 2 (Lytham St Annes Beach)	32 weeks (within 36 months)	16 weeks (within 30 months)	48 weeks (within 36 months)	48 weeks (within 66 months)
18A18B	Compound 3 (former sand winning compound)	32 weeks (within 36 months)	16 weeks (within 30 months)	48 weeks (within 36 months)	48 weeks (within 66 months)

Works Nos.	Construction activity	Anticipated duration of use (including mobilisation and demobilisation)		Anticipated maximum total durations	
		Morgan OWL	Morecambe OWL	Concurrent construction scenario	Sequential construction scenario
7A7B	Construction access from Clifton Drive North to Lytham St Annes Beach	32 weeks (within 36 months)	16 weeks (within 30 months)	48 weeks (within 36 months)	48 weeks (within 66 months)

- 1.4.1.4 The potential impacts to sand lizard and sand lizard habitats have been identified and assessed in Table 2 below. A number of avoidance measures have been designed into the project to avoid impacts to the sensitive dune habitats and the species they support, including the use of trenchless techniques to install the offshore export cables beneath dunes, and the positioning of the TJBs approximately 600 m landward of the dunes. Mitigation measures to be implemented via an EPS licence are set out in Section 2.1.

Table 1 Impact Assessment

Construction activity	Potential impacts	Potential effect on sand lizards and their habitats	Avoidance measures	Mitigation proposed?
Offshore export cable installation between the landfall site at Lytham St Annes and Transition Joint Bays (TJBs)	Damage to dune habitats supporting sand lizards due to construction activities	<p>There will be no direct impacts to the dunes during the construction phase because the Lytham St Annes Dunes SSSI will be crossed utilising trenchless techniques of which the exit pit will be situated 100 m seaward of the western boundary of Lytham St Annes SSSI². The Applicants have made a commitment (CoT44 of Volume 1, Annex 5.3:</p> <p>Commitments Register of the ES (Document reference F1.5.3)) to set out that the installation of the offshore export cables under Lytham St Annes SSSI and the St Annes Old Links Golf Course will be undertaken by direct pipe trenchless installation technique. This is secured by [Requirement 8 within Schedules 2A & 2B] of the draft Development Consent Order (AS-004). Detailed CoCP Plan(s) will be implemented by the Applicants as approved by the Relevant Planning Authority in consultation with relevant stakeholders, as appropriate.</p>	<ul style="list-style-type: none"> The Applicants have made a commitment (CoT44 of Volume 1, Annex 5.3: Commitments Register of the ES (AS-030)) to set out that the installation of the offshore export cables under Lytham St Annes SSSI and the St Annes Old Links Golf Course will be undertaken by direct pipe trenchless installation technique of which the exit pit will be situated 100 m seaward of the western boundary of Lytham St Annes SSSI. This is secured by [Requirement 8 within Schedules 2A & 2B] of the draft Development Consent Order (AS-004). Detailed CoCP Plan(s) will be implemented by the Applicants as approved by the Relevant Planning Authority in consultation with relevant stakeholders, as appropriate. Transition Joint Bays will be located within Blackpool Airport which is at minimum 600 m from the SSSI boundary <p>Minimum trenchless installation drill depth of 10m beneath the SSSI.</p>	No – potential adverse effects to sand lizard are avoided.

² The 100 m buffer has been designed to ensure sufficient offset to the works on the beach taking into account the current dune accretion area seaward of the SSSI boundary, and future dune accretion prior to the commencement of construction activities.

Construction activity	Potential impacts	Potential effect on sand lizards and their habitats	Avoidance measures	Mitigation proposed?
		The trenchless technique installation drill depth will range from a minimum of 10m to a maximum of 30m below ground level beneath Lytham St Annes Dunes SSSI. The sand lizard burrows within the dunes would be expected to at depths no greater than 1 m below ground. Therefore, there is no risk of disturbance to burrows during drilling activities, as there is a significant depth of substrate that would absorb vibration from the drill head.		
Piling associated with the installation of the cofferdam required for the exit pits for the trenchless installation of the export cable beneath Lytham St Annes SSSI	Damage and/ or disturbance to dune habitats supporting sand lizard burrows due to vibration from construction activities	<p>There is potential for disturbance to sand lizard habitats due to piling associated with the installation of the cofferdam required for the exit pits for the trenchless installation of the export cable beneath Lytham St Annes SSSI</p> <p>The Applicants have made a commitment (CoT44 of Volume 1, Annex 5.3: Commitments Register of the ES (AS-030)) to set out that the installation of the offshore export cables under Lytham St Annes SSSI and the St Annes Old Links Golf Course will be undertaken by direct pipe trenchless installation technique. This technique reduces risks associated with frack out of drilling</p>	<ul style="list-style-type: none"> The Applicants have made a commitment (CoT44 of Volume 1, Annex 5.3: Commitments Register of the ES (APP-037)) to set out that the installation of the offshore export cables under Lytham St Annes SSSI and the St Annes Old Links Golf Course will be undertaken by direct pipe trenchless installation technique of which the exit pit will be situated 100 m seaward of the western boundary of Lytham St Annes SSSI. This is secured by [Requirement 8 within Schedules 2A & 2B] of the draft Development Consent Order (AS-004). Detailed CoCP Plan(s) will be implemented by the Applicants as approved by the Relevant Planning Authority in 	No – potential adverse effects to sand lizard are avoided.

Construction activity	Potential impacts	Potential effect on sand lizards and their habitats	Avoidance measures	Mitigation proposed?
		<p>fluids or the collapse of the drill hole if unsuitable ground conditions are encountered along the drill profile.</p> <p>The sand lizard burrows within the dunes would be expected to at depths no greater than 1 m below ground and therefore would be very unlikely to be at a depth beneath the level of the dunes that would be adversely affected by vibration piling activities of exit pits situated 100 m seaward of the SSSI boundary.</p>	<p>consultation with relevant stakeholders, as appropriate.</p> <ul style="list-style-type: none"> Transition Joint Bays will be located within Blackpool Airport which is at minimum 600 m from the SSSI boundary The Applicants have made a commitment (CoT110 of Volume 1, Annex 5.3: Commitments Register of the ES (APP-037)) that there will be no works on the beach between November and March inclusive. This will also avoid works being undertaken in the hibernation period for sand lizard. 	
	Disturbance to sand lizards due to noise and vibration from construction activities	<p>The assessment identified the potential for disturbance to sand lizards occupying the dunes due to piling for cofferdams and cable installation using trenchless techniques.</p> <p>All lizard species have a similar hearing frequency range of approximately 0.1 – 5 kHz (Wever, 1978; Manley 2000; 2004). Research indicates that in all species, the auditory nerve fibres have V-shaped tuning curves with lowest thresholds at 5 dB Sound Pressure Level (SPL) and show phase locking (i.e. informing the direction and pitch of the sound to</p>	<ul style="list-style-type: none"> The Applicants have made a commitment (CoT44 of Volume 1, Annex 5.3: Commitments Register of the ES (APP-037)) to set out that the installation of the offshore export cables under Lytham St Annes SSSI and the St Annes Old Links Golf Course will be undertaken by direct pipe trenchless installation technique of which the exit pit will be situated 100 m seaward of the western boundary of Lytham St Annes SSSI. This is secured by [Requirement 8 within Schedules 2A & 2B] of the draft Development Consent Order (AS-004). Detailed CoCP Plan(s) 	No – potential adverse effects to sand lizard are avoided.

Construction activity	Potential impacts	Potential effect on sand lizards and their habitats	Avoidance measures	Mitigation proposed?
		<p>initiate a response in the auditory system) to low-frequency stimuli below approximately 1 kHz.</p> <p>The potential effects of construction noise and vibration are assessed in Volume 3 Chapter 8: Noise and vibration (APP-117), although this is relating to human health receptors and not to important ecological features. However, predicted noise levels during construction activities at the landfall site do not exceed 59dB at the nearest sensitive residential receptors (Dune Point, Century Care Home and Almond Close, of which both Dune Point and Century Care Home are located immediately adjacent to the dunes where sand lizards have been recorded off Clifton Drive North). This is comparative to noise levels during normal spoken conversation and would therefore not reasonably be expected to disturb sand lizards given that the dunes are already publicly accessible.</p> <p>The Outline Construction Noise and Vibration Management Plan (APP-196) states that it is anticipated that the Peak Particle Velocities (PPVs) from construction operations would be below 1.0 mms⁻¹ at the nearest</p>	<p>will be implemented by the Applicants as approved by the Relevant Planning Authority in consultation with relevant stakeholders, as appropriate.</p> <ul style="list-style-type: none"> • Transition Joint Bays will be located within Blackpool Airport which is at minimum 600 m from the SSSI boundary • The Applicants have made a commitment (CoT110 of Volume 1, Annex 5.3: Commitments Register of the ES (APP-037)) that there will be no works on the beach between November and March inclusive. This will also avoid works being undertaken in the hibernation period for sand lizard. 	

Construction activity	Potential impacts	Potential effect on sand lizards and their habitats	Avoidance measures	Mitigation proposed?
		vibration sensitive receptors and no significant disturbance effects are predicted (Section 1.3). As the sand lizard burrows within the dunes would be expected to at depths no greater than 1 m below ground, they would be very unlikely to be at a depth beneath the level of the dunes that would be adversely affected by vibration piling activities.		
Construction workers moving on foot between construction activities on the beach and temporary construction compounds 1, 2 and 3 (As shown on Figure 4 and 5 of REP1-040)	Damage and/ or disturbance to dune habitats due to increased footfall from construction workers	<p>The beach and sand dunes are publicly accessible, and therefore subject to existing potential damage/ disturbance pressure from users.</p> <p>Construction workers will only be on the beach/ beach access road commuting between the temporary site compounds and working areas on the beach, and will not be walking across or through the dunes.</p> <p>Similarly, construction workers will only be present within the beach working areas and in the temporary construction compound on the beach (compound 2). Construction workers will not need access to the dunes or the dune edge habitats during construction.</p> <p>The seaward boundary of the accreting dunes is already fenced with chestnut paling fencing at this location, which although not its</p>	None.	Yes. See Section 2.1

Construction activity	Potential impacts	Potential effect on sand lizards and their habitats	Avoidance measures	Mitigation proposed?
		<p>primary purpose, serves to discourage pedestrian access from the most sensitive areas of dunes.</p> <p>The additional footfall from construction workers would not result in any significant increase in pedestrian activity along either the beach road or the beach itself, given the current baseline usage of this part of the coastline by recreational users.</p>		
Use of temporary construction compound 3 and access track from Clifton Drive North to Lytham St Annes beach during the construction period	Damage and/ or disturbance to dune habitats	<p>Temporary compound 3 already exists as a 'works compound', having been previously used for operations associated with the sand winning operations on the beach. The area is hard surfaced (although becomes covered in wind-blown sand) and is periodically used for storage of materials and vehicles including the tractor and trailer used for beach maintenance.</p> <p>The compound (and beach road) is outside the boundary of the SSSI; however, habitats used by sand lizards occur along the edges of the access track where there are bare areas of sand, and in particular on the south-facing dune slope that forms the northern boundary of the access track.</p>	None.	Yes. See Section 2.1

Construction activity	Potential impacts	Potential effect on sand lizards and their habitats	Avoidance measures	Mitigation proposed?
		Predicted vehicle movements along the track when it is in use would be approximately eight two-way movements on average per day (i.e. four arrivals and four departures).		

1.4.2 Long-term impacts: habitat loss or modification

- 1.4.2.1 There will be no long-term impacts resulting from habitat loss or modification because there will be no direct impacts to sand lizard habitats.

1.4.3 Long-term impacts: fragmentation and isolation

- 1.4.3.1 No long-term impacts resulting in fragmentation and isolation of the population will occur. The predicted disturbance during construction will be minor and temporary for the duration of the construction period.

1.4.4 Post-development interference impacts

- 1.4.4.1 There will be no post-development interference impacts. The dunes and beach are already well-used by the general public, and the sand lizard population exists and thrives in that context.

1.4.5 Predicted scale of impact

- 1.4.5.1 The predicted disturbance will be limited in duration for the construction period(s) when the temporary compounds and beach access road are in use (the anticipated timescales for which are presented in Table 1).
- 1.4.5.2 The predicted disturbance will also be limited in extent to a small proportion of the dune system, albeit in areas where hotspots of sand lizard sightings have occurred.
- 1.4.5.3 There will be no long-term impacts to the sand lizard population at the dunes, because post-construction there would be no pathways by which the dunes would be impacted either directly or indirectly by the Transmission Assets.

1.5 Annexes

Annex A: Survey Data

2 PART 2: DELIVERY INFORMATION

2.1 Mitigation and compensation

2.1.1 Summary of mitigation strategy

- 2.1.1.1 Temporary disturbance to sand lizards during construction activities in close proximity to the dune habitats will be primarily managed through the use of a suitably experienced and licensed Ecological Clerk of Works (ECoW) to undertake visual checks and walkovers prior to works commencing.
- 2.1.1.2 Any sand lizards encountered in areas affected by construction activities when they are observed by the ECoW will be captured by hand, where possible, and relocated immediately to a place of safety away from the construction activities.
- 2.1.1.3 The mitigation measures set out in Table 2.1 will be applicable to all construction activities taking place in the Work Nos. set out in Section 1.2.2 of this method statement.

Table 2.1: Mitigation Measures

Construction activity	Potential impacts	Mitigation measures
Construction workers moving on foot between construction activities on the beach and temporary Compounds 1, 2 and 3	Damage and/ or disturbance to dune habitats due to increased footfall from construction workers	<ul style="list-style-type: none"> A toolbox talk will be provided by the ECoW to highlight the sensitive nature of the dunes and the flora and fauna species they support. The toolbox talk will include an identification guide for sand lizards at all life stages, their eggs and burrows and will clearly identify high-risk habitats based on the 'hotspots' of sand lizard observations from the baseline data. Construction workers will be briefed as part of the toolbox talk not to walk on any part of the dunes, and foot access from the temporary site compound to the beach during construction will be restricted to the existing beach road to minimise the risk of disturbance to sand lizard. Appropriate waste disposal in the temporary site compound to ensure that there is no littering of the beach or dunes by construction workers. Any sightings of sand lizard will be reported to the ECoW.
Use of temporary compound 3 and access track from Clifton Drive North to Lytham St Annes beach during the construction period	Damage and/ or disturbance to dune habitats	<ul style="list-style-type: none"> A toolbox talk will be provided by the ECoW to highlight the sensitive nature of the adjacent dunes and the flora and fauna species they support. The toolbox talk will include an identification guide for sand lizards at all life stages, their eggs and burrows and will clearly identify

Construction activity	Potential impacts	Mitigation measures
		<p>high-risk habitats based on the 'hotspots' of sand lizard observations from the baseline data.</p> <ul style="list-style-type: none"> • An ECoW will be present on site for any activities undertaken during set up and demobilisation of the construction compound. • An ECoW will be present on site for any activities requiring the removal of wind-blown sand e.g. from within the compound or along the beach access road. Sand removal will be undertaken in stages to encourage any sand lizards present to disperse. • Measures to ensure that no sand lizard habitats or refuges are created within the compound will be implemented where practical (such as smooth solid edging at the base of site fencing). • An ECoW will be present on site for any activities undertaken on the beach access road e.g. clearance of wind-blown sand. • The ECoW supervising the works will hold a Natural England survey licence for sand lizards so that they have the necessary experience with the species to provide advice and guidance. • Any lizards encountered will be recorded and re-located to a place of safety away from the compound by the ECoW. • A European Protected Species (EPS) mitigation licence will be obtained from Natural England so that any sand lizards encountered can be captured (by hand) and safely relocated by the ECoW. • Consideration will be given to use temporary track matting (or similar) for vehicle movements along the access track and onto and off the beach to minimise the risk of vibrations transmitting to the sand dunes from HGVs using the track. • A speed limit of 10 mph for construction vehicles using the access track will be enforced. • Construction lighting will only operate when required and will be positioned to avoid sensitive receptors, and designed in accordance with latest relevant guidance and legislation (CoT28). The design and use of the construction lighting will be set out in the detailed Construction Artificial Light Emissions Management Plan that will be agreed with the relevant planning authority.

Construction activity	Potential impacts	Mitigation measures
		<ul style="list-style-type: none"> Fuel storage will be in appropriate containers with bunds to contain any spillages. Measures will be set out in the detailed Pollution Prevention Plan that will be agreed with the relevant planning authority. The detailed Pollution Prevention Plans will be in accordance with the Outline Pollution Prevention Plan (J1.4/F02). Plant will be stored using plant nappies to prevent leakage of fuel into the dunes. Measures will be set out in the detailed Pollution Prevention Plan (see above). No vehicle refuelling will take place in temporary compound 3 or on the beach access road. Measures will be set out in the detailed Pollution Prevention Plan (see above).

2.2 Works to be undertaken by the ecologist or suitably experienced person

- 2.2.1.1 Any sand lizards encountered in areas affected by construction activities when they are observed by the ECoW will be captured by hand, where possible, and relocated immediately to a place of safety away from the construction activities.
- 2.2.1.2 Sand lizards may be held for a short period of time (no more than a few minutes) by the ECoW in an appropriate container with air holes to facilitate transport along the beach/ dunes to a place of safety prior to release.

2.3 Works to be undertaken by the Developer/ Landowner

- 2.3.1.1 Not applicable.
- 2.3.1.2 There will be no impacts to breeding sites or resting places and therefore no habitat creation for mitigation or compensation will be undertaken by the Applicants.

2.4 Post-development site safeguard

- 2.4.1.1 Not applicable.
- 2.4.1.2 The dunes and beach are already well-used by the general public, and the sand lizard population exists in that context. No post-development site safeguards will therefore be implemented post-construction by the Applicant.

2.5 Land ownership: mitigation areas

2.5.1 Mitigation site ownership

- 2.5.1.1 Not applicable.

- 2.5.1.2 Any sand lizards encountered in the working areas that require capture and moving by hand to a place of safety by the ECoW will be relocated onto areas of dune habitat adjacent to where they are found (at a safe distance from any construction activities).

2.5.2 Declaration statement

- 2.5.2.1 The relevant declaration statements would be confirmed by the Applicants on submission of the application to Natural England.