Meridian Solar Farm

EN010169

Volume 7

Other **Documents**

7.11 **Outline** Operational **Environmental Management Plan** (Rev 2) (Clean)

APFP Regulation 5(2)(q)

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

October 2026

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1. Introduction

1.1. Background

1.1.1. Meridian Solar Limited (hereafter referred to as 'the Applicant') is seeking a DCO for the construction, operation and decommissioning of the Meridian Solar Project (hereafter referred to as the 'Scheme'). The decision on whether to grant the DCO will be made by the Secretary of State for Energy Security and Net Zero (Secretary of State), in accordance with the Planning Act 2008[1] (hereafter referred to as the 'DCO Application').

1.1.2. This Outline Operational Environmental Management Plan (OOEMP) has been prepared to accompany the **Environmental Statement (ES)** (Doc Ref. 6.1) and provides an outline of the measures that would be implemented to ensure the management of environmental impacts during the operational phase of the Scheme.

1.1.3. If the DCO Application is approved, a detailed OEMP will be produced prior to the final commissioning of each part of the Scheme. In accordance with Requirement 13 of the **Draft DCO** (Doc Ref. 3.1), the detailed OEMP for each part must be submitted to and approved by the relevant planning authority, in consultation with the relevant highway authority, the relevant waste authority, the Environment Agency, and Lincolnshire County Council. The detailed OEMP will be substantially in accordance with this OOEMP and, once approved, must be implemented and maintained throughout the operation of the relevant part of the authorised development.

1.1.4. The aim of this OOEMP is to provide a clear and consistent approach to the control of operational and maintenance activities within the Order Limits. This document does not address construction or decommissioning activities, which are subject to separate environmental management plans and procedures. An **Outline Construction Environmental Management Plan (OCEMP)** (Doc Ref. 7.10) and **Outline Decommissioning Environmental Management Plan (ODEMP)** (Doc Ref. 7.12) have been prepared to accompany the DCO Application and will be secured as necessary through a requirement of the **Draft DCO** (Doc Ref. 3.1).

1.1.5. An Environmental Impact Assessment (EIA) has been undertaken for the Scheme and an ES has been prepared in accordance with the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (EIA Regulations)[2]. In accordance with the requirements of the EIA Regulations, the

[1] The Planning Act 2008. Available at https://www.legislation.gov.uk/ukpga/2008/29/contents [Accessed 10/10/2025]

[2] The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017. Available at https://www.legislation.gov.uk/uksi/2017/572/contents/made [Accessed 10/10/2025]

ES contains the assessment of the likely significant effects on the environment that may be caused during the operational phase of the Scheme and describes a range of 'industry standard' or best practice mitigation and operational management measures.

1.1.6. This OOEMP outlines how the operational mitigation measures included within the ES will be implemented and sets out the monitoring and auditing activities designed to ensure that such mitigation measures are carried out, and that they are effective.

1.1.7. It is envisaged that a detailed OEMP may be prepared, approved and implemented for individual parts of the Scheme. As a result, there could be multiple OEMPs prepared in accordance with the relevant parts of this OOEMP.

1.1.8. This document provides the likely structure of the OEMP(s) as well as outline information relevant to the OEMP(s). It indicates what additional information might be included under each sub-section within the OEMP(s). The objective of this OOEMP is to ensure compliance with the relevant environmental mitigation measures set out within the ES.

1.1.9. The key elements of this OOEMP include:

- An overview of the Scheme;
- A description of operational environmental management, including operational activities, replacement schedule, operational programme, and general environmental controls and management;
- A management and mitigation plan, including topic-specific measures for the management and mitigation of environmental effects;
- A summary of complementary plans and procedures;
- Description of implementation and operation; and
- Requirements for checking and corrective action.

1.1.10. In summary, this OEMP identifies how commitments made in the EIA will be translated into actions during Scheme operation and includes a process from implementing the actions through allocation of key roles and responsibilities.

1.1.11. The Applicant and any appointed contractor(s) will be responsible for working in accordance with the environmental controls documented in the OEMP which is required to be substantially in accordance with this OOEMP, pursuant to the **Draft DCO** (Doc Ref. 3.1).

1.1.12. This OOEMP has been developed to ensure compliance with all relevant environmental legislation and to incorporate the mitigation measures identified within the ES. Any additional licences, permits or approvals required for the Scheme will be listed in the detailed OEMP(s), together with any environmental information submitted in support of those applications.

1.2. Scheme Description

1.2.1. The Scheme comprises the construction, operation (including maintenance) and decommissioning of a solar photovoltaic (PV) electricity generating station with associated infrastructure, including co-located Battery Energy Storage System (BESS), Inter-Array Connections to link the land parcels that form the Solar Development Areas, and an up to 13 kilometres (km) overhead line Grid Connection (with one short undergrounded section) which would run north towards a point of connection (PoC) at the proposed Weston Marsh B National Grid Electricity Transmission (NGET) substation, to the north of Weston. The Scheme will have an operational lifecycle of 40 years.

1.2.2. The Solar PV generating station, associated BESS, onsite substations and other associated infrastructure would be located within four land parcels (A, B, C and D) referred to collectively as the 'Solar Development Area'.

1.2.3. The Inter-Array Connections are the areas within which connection cables (the 'Inter-Array Connections') would link the land parcels of the Solar Development Area. The configuration of the Inter-Array Connections (up to 132kV) would comprise underground cabling between Land Parcels A & B and an overhead line between Land Parcels C & D.

1.2.4. The Grid Connection Route is the area between the Solar Development Area and the National Grid Weston Marsh B Substation in which a 400kV overhead line (the 'Grid Connection') would be located. There is one section where the Grid Connection goes underground to avoid conflicts with existing overhead cabling.

1.2.5. A full description of the Scheme is included in **ES Chapter 2: The Scheme** (Doc Ref. 6.1). An overview of the Scheme and its environmental impacts is provided in the **ES Non-Technical Summary** (Doc Ref. 6.1).

2. Operational Environmental Management

2.1. Introduction

2.1.1. This section sets out the general arrangements for the operational phase of the Scheme.

2.2. Operational Activities

2.2.1. During the operational phase, activity within the Scheme will be minimal and will be restricted principally to vegetation management, maintenance and servicing of infrastructure, replacement and renewal of any components (where required), monitoring, and inspection. It is anticipated that maintenance and servicing would include the inspection, removal, reconstruction, refurbishment or replacement of faulty or broken equipment to ensure the continued effective operation of the Scheme and improve its efficiency.

2.2.2. In the Solar Development Area, there will also be a requirement once a year for the washing of the solar panels. This will use clean water with no added chemicals, sourced from local potable water suppliers. This will not take place in periods of high temperatures or prolonged sunlight in order to decrease the risk of thermal shock to the panels.

2.2.3. Along the Inter-Array Connection and Grid Connection Route, operational activity will also consist of routine annual inspections from the ground or by air (e.g. by drone or helicopter) to identify any visible faults or signs of wear, and any reactive maintenance, where infrastructure has been damaged. Inspections would include the identification of vegetation growth or development that has occurred that may either risk infringing clearances or could compromise the integrity of the assets.

2.2.4. Maintenance and safety inspections of all Scheme infrastructure would be carried out by the Undertaker or an appointed contractor.

2.3. Operational Water Use

2.3.1. The water supply for the office facilities at the On-Site Substation Compounds will either be tankered in or come from the mains supply. Whether it comes from the mains supply or tankered in, grey water will be disposed to a tank emptied by specialist licenced contractor. It is assumed that the Scheme will require 90 litres of water per person per day for up to 10 employees. Water supply for more extensive operational activities (e.g. panel cleaning) will be delivered to the Site from third party suppliers, so as not to put stress on local water supply.

2.3.2. Furthermore, during operation self-contained portable welfare units which store foul/wastewater via a sealed cesspit for collection/emptying by specialist

licenced contractors will be deployed on an ad hoc basis (e.g. if required by maintenance crews) at the further reaching sites where the use of the facilities at the On-Site Substation Compounds is not feasible.

2.4. Operational Traffic and Access

2.4.1. The operational accesses are summarised in Table 2-1. These accesses may be used by four wheel drive vehicles, small Mobile Elevated Working Platforms (MEWPs) and other agricultural type vehicles. The majority of routine visits during the operational phase will be via vans and four-wheel drive vehicles.

Table 2-1: Operational Accesses

Streets, Rights of Way and Access Plan (Doc Ref. 2.6)	Location and Description
HR-01	Access 1 - North Off A151 to Cross Gate
HR-02	Access 2 - North Off A151
HR-03	Access 3 - West off A151
AR-01	Access 7 - South off B1165
AR-02	Access 8 - North off B1165
A16-01	Access 12 - East off A16
QB-01	Access 13 - North off Queen's Bank
QB-02	Access 14 - South off Queen's Bank
BB-01	Access 15 - West of Spalding Road
CD-02	Access 17 - West off Cloot Drove
MR-01	Access 18 - East off Martins Road
MR-02	Access 19 - West off Martins Road
MR-03	Access 20 - East off Martins Road to Track
GB-01	Access 21 - South off Eaugate Road
CH-01	Access 22 - West off Chapel Hill
CH-02	Access 23 - East off Chapel Hill
HDG-01	Access 26 - West off B1168
HDG-02	Access 27 - East off B1168
LGR-01	Access 28 - East off Langary Gate Road
LGR-02	Access 29 - East off Langary Gate Road
LGR-03	Access 30 - West off Langary Gate Road
LGR-04	Access 31 - West off Langary Gate Road
LGR-05	Access 32 - West off Langary Gate Road
LGR-06	Access 33 - East off Langary Gate Road

Streets, Rights of Way and Access Plan (Doc Ref. 2.6)	Location and Description
LGR-07	Access 34 - East off Langary Gate Road
LGR-08	Access 35 - West off Langary Gate Road
LGR-09	Access 36 - East off Langary Gate Road
LGR-10	Access 37 - West off Langary Gate Road
LGR-11	Access 38 - East off Langary Gate Road
LGR-12	Access 39 - West off Langary Gate Road
LGR-13	Access 40 - East off Langary Gate Road
DB-03	Access 41 - East off Delgate Bank
DB-04	Access 42 - East off Delgate Bank
LGR-14	Access 43 - East off Langary Gate Road

2.4.2. It is expected that during the operational phase, the Scheme will be served by 10 full time staff and approximately 5 visitors per week (equating to one per day). As such, the Scheme is expected to attract a low level of vehicle trips during the operational phase, i.e. typically 11 vehicle arrivals and 11 vehicle departures daily (22 two-way daily movements). These may be four-wheel drive vehicles, HGVs or transit vans for maintenance.

2.5. Replacement Schedule

2.5.1. During the operational phase of the Scheme, various infrastructure components will require replacement as shown in Table 2-2, based on replacement rates for similar schemes and based on the design life of the components. As components approach their design life, there will be an evaluation to determine if the components require continued maintenance and/or replacing. It is not anticipated that wholescale replacement of infrastructure would be required but rather it would be programmed in stages.

2.5.2. Replacement of Scheme infrastructure is expected to generate up to a maximum of 40 HGVs (or 80 two-way HGV movements) per day, and up to 75 staff car trips (150 two-way movements) per day. Abnormal Indivisible Loads (AILs) would only be needed in the unlikely scenario of a complete transformer failure, where whole replacement would be required.

2.5.3. On an annual basis, the Applicant will submit a planned maintenance schedule for the year ahead to the relevant planning authorities, excluding unforeseen emergencies that require maintenance throughout the year. The latter are considered to include maintenance activities that are needed to be undertaken urgently for health, safety or environmental reasons in response to an event or circumstance which happens unexpectedly. The annual planned maintenance

schedule would include details with regards to the extent, nature and timing of the scheduled maintenance, transport requirements, environmental controls to be applied and confirmation that the environmental effects likely to arise as a result of such maintenance are not materially worse than those reported in the ES.

Table 2-2: Indicative Design Life of Scheme Components

Scheme Component	Indicative Design Life
Solar Development Area	
Solar Panels	25 to 40 years
Inverters	15 to 20 years
Racking and Mounting Systems	25 to 40 years
Transformers	25 to 40 years
Monitoring and Control Systems	15 years to 20 years
Batteries	10 to 15 years
DC/DC Converters	10 years to 15 years
Meteorological Systems	10 to 15 years
Substation Equipment	30 to 40 years
Communication Equipment	10 to 15 years
Grid Connection Route	
Cable Sealing End Compounds (CSEC)	25 to 40 years
Underground cable	25 to 40 years
Pylon Foundations	Replacement not required
Pylon Structures	Replacement not required
Overhead Line Insulators & Fittings	25 to 40 years
Overhead Line Conductors	25 to 40 years
Vibration Dampers & Spacers	20 to 30 years

2.6. Operational Programme

2.6.1. Subject to obtaining the necessary consents, the start of operation has been assumed for 2033. The Scheme will be operational for up to 40 years.

2.7. Control of Light

2.7.1. During operation, permanent security lights with motion detectors will be used for security purposes at the On-Site Substation Compounds, BESS and CSECs. No areas are proposed to be permanently lit.

2.8. Management of Vegetation Planting

2.8.1. An **Outline Landscape and Ecology Management Plan** (OLEMP) (Doc Ref. 7.16) has been prepared and submitted as part of the DCO Application.

2.8.2. The OLEMP provides a framework for delivering the landscape strategy and the successful establishment and future management of proposed landscape works. It sets out the short and long-term measures and practices that will be implemented to establish, monitor, and manage landscape and ecology mitigation and enhancement (biodiversity net gain (BNG)) measures embedded in the Scheme design.

2.8.3. The OLEMP sets out the measures proposed:

- To mitigate the effects of the Scheme on landscape, biodiversity, arboriculture and heritage features;
- To enhance the biodiversity, landscape, and green infrastructure value of the Order Limits; and
- To ensure compliance with relevant national and local planning policies.

2.9. Recovery, Recycling and Disposing Waste

2.9.1. In order to control the waste generated on-site during operation, the Undertaker will separate the main waste streams on-site prior to transport to an approved, licensed third party waste facility for recovery, recycling or disposal.

2.9.2. Prior to the start of operation, a detailed OEMP will be prepared by the Applicant, which will provide a waste estimate, specify key responsibilities, reporting and auditing and waste recovery targets.

2.9.3. The Waste Duty of Care will be followed for all waste generated on-site, ensuring all waste will be stored, handled, transported and disposed of safely and legally, using authorised carriers and permitted facilities with records retained as required. All waste to be removed from the Site will be undertaken by fully licensed waste carriers and taken to suitably licensed waste facilities and managed in line with the requirements of the Hazardous Waste (England and Wales) Regulations (2005)[3] and the Waste (England and Wales) Regulations (2011)[4]. The Scheme will apply the waste hierarchy, in priority order; prevention, preparation for reuse, recycled, other recovery and disposal.

[3] The Hazardous Waste (England and Wales) Regulations 2005. Available at https://www.legislation.gov.uk/uksi/2005/894/contents/made [Accessed 10/10/2025]

[4] The Waste (England and Wales) Regulations 2011. Available at: https://www.legislation.gov.uk/uksi/2011/988/contents/made [Accessed 10/10/2025]

2.9.4. The Applicant is committed to maximising recycling and reuse of the Scheme components at the end of their life.

2.9.5. To ensure the cumulative generation of waste is managed appropriately, the Applicant commits to working collaboratively to:

- Share data and reporting on waste types and volumes on an annual basis (for the next operational year), to support regional waste planning and avoid overburdening local waste infrastructure;
- Engage with the host authorities and waste planning bodies to ensure consistency with regional waste management strategies and capacity constraints; and
- Review and update waste mitigation measures regularly through continued dialogue with other developers post-consent.

2.9.6. Should any wheel washing be required during maintenance activities, the waste from this facility will be separated and transported to an approved licensed third party waste facility for recovery, recycling or disposal. The Detailed OEMP will include management procedures for any wheel washing activity required.

2.10. Responding to Environmental Incidents and Emergencies

2.10.1. An Emergency Response Plan (ERP) will be developed as part of the detailed OEMP, in consultation with the relevant local authority emergency planning officer, emergency services including the local fire service, as well as the Environment Agency in relation to responding to potential pollution incidents.

2.10.2. The ERP will detail the procedures for responding to incidents and emergencies on-site, and any reporting requirements.

2.10.3. The requirements for emergency response planning for the Battery Energy Storage System (BESS) are established within the **Outline Battery Safety Management Plan** (Doc Ref. 7.18), submitted with the DCO Application.

2.10.4. An Outline Flood Emergency Response Plan (OFERP) is located in Appendix A of the OCEMP (Doc Ref. 7.10). A detailed Flood Emergency Response Plan will be prepared prior to the start of the operational phase. The OFERP sets out the procedures to be followed in the event that the Site is subject to a flood warning, flood alert, or other indication of potential flood risk, including actions to be taken before flooding occurs. The OFERP identifies the roles and responsibilities of site personnel, the arrangements for monitoring flood warnings and weather forecasts, and the actions required to ensure the safety of all personnel working on site. Evacuation routes have been identified for all four Land Parcels of the Solar Development Area, the Inter Array Connections, and the Grid Connection Route, with Figures 1 and 2 within the OFERP providing details of the evacuation routes.

2.11. Security

2.11.1. The Scheme will receive several security risk management threat assessments during its development, construction, operation, and decommissioning phases. The security risk management threat assessments will be conducted by suitable qualified and experienced persons (SQEP) and will determine security risks.

2.11.2. The Applicant recognises, and embraces, the symbiotic relationship between safety and security. The security arrangements to be present at the Solar Development Area will therefore contribute to the overall safety of all who will, or may, enter the site. The security arrangements will be carried out by a suitably qualified and experienced person and reviewed at identified epochs commensurate to the Security Risk rating and will further assess any changes in the Security Risk Management Threat Assessment.

2.11.3. A security fence will enclose the operational areas of the Solar Development Area. The fence will be a 'deer fence' type, of approximately 2m in height measured from the ground. Pole mounted CCTV systems will also be deployed around key infrastructure and the perimeter of the operational area of the Solar Development Area. These would at up to approximately 5m in height.

2.11.4. Additionally, the On-Site Substations, BESS and CSEC Compounds would be enclosed by metal palisade type fencing up to approximately 2.5m in height. Further fencing, up to approximately 3m in height, may be required to further enclose electrical equipment within each compound.

3. Management and Mitigation Plan

3.1.1. This section of the document sets out the mitigation measures to be included as a minimum in the OEMP(s). It also sets out monitoring requirements and the responsible party identified for each mitigation measure or monitoring requirement. This section will be updated and expanded upon as part of the preparation of the OEMP(s). The mitigation measures or monitoring requirements apply to the entirety of the Scheme, unless otherwise stated.

Table 3-1: Agriculture and Soils

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirements	Responsibility
Risk of damage to soil structure associated with operational activities.	The **Outline Soil Management Plan** (Doc Ref. 7.14) submitted alongside the DCO Application details the threats to the soil resource during the operational phase and required management measures. In summary, all vehicle movements will be confined to access tracks unless there is a specific need to take a vehicle onto the grassed surface (e.g. for inspection and maintenance activities, vegetation management and grass cutting). All use of plant and transport vehicles within the Site for maintenance during the operational phase must comply with good practice guidance for handling soils[5]. Vehicle movements for mowing and/or supervision of livestock will as far as reasonably practicable be confined to periods of higher grass growth and naturally dryer soil conditions.	As set out in the **Outline Soil Management Plan** (Doc Ref. 7.14).	The overall responsibility will be with the Undertaker of the Scheme.

[5] The Institute of Quarrying (2021). Good Practice Guide for Handling Soils in Mineral Workings.

Table 3-2: Air Quality

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirements	Responsibility
Dust emissions off-site Operational activities including traffic movements associated with on-site staff, servicing and maintenance activities.	Dust emissions during operation will be managed through the following: • Use water-assisted dust sweeper(s) on the access and local roads to remove, as necessary, any material tracked out of the Site. • Ensure vehicles entering and leaving sites are covered to prevent escape of materials during transport. • Ensure vehicles are inspected and cleaned as required, prior to accessing the public highway. • If new haul routes are required for any major replacement or refurbishment work, install hard surfaced or matt. covered haul routes, which are regularly damped down with fixed or mobile sprinkler systems, or mobile water bowsers and regularly cleaned. Additional measures may be required to ensure surface water runoff containing fine sediment does not flow overland into any nearby water feature directly without pre-treatment (e.g. using fabric silt fences, straw bales etc.).	Monitoring requirements will be provided in the detailed OEMP.	The overall responsibility will be with the Undertaker of the Scheme.

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirements	Responsibility
	• Ensure an adequate water supply on the site for effective dust/particulate matter suppression/mitigation. • Ensure equipment is readily available on-site to clean any dry spillages and clean up spillages as soon as reasonably practicable after the event. • Fully enclose work areas or specific operations where there is a high potential for dust production and the Site is active for an extensive period. • Should any wheel washing be required during maintenance activities, the waste from this facility will be separated and transported to an approved licensed third party waste facility for recovery, recycling or disposal. The Detailed OEMP will include management procedures for any wheel washing activity required.		

Table 3-3: Climate Change

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirements	Responsibility
Greenhouse gas emissions during operation of Scheme.	• Increasing recyclability by segregating waste to be reused and recycled, where reasonably practicable. • Reusing suitable infrastructure and resources, where reasonably practicable, to minimise the use of natural resources and unnecessary materials. • Conducting regular planned maintenance of the Scheme to optimise efficiency of infrastructure. • Operating the Scheme in such a way as to minimise the creation of waste and maximise the use of alternative materials with lower embodied carbon, such as locally sourced products and materials with a higher recycled content, where reasonably practicable. • Low carbon design specifications, such as energy-efficient lighting and durable construction materials to reduce maintenance and replacement cycles. • Switching off vehicles and plant when not in use and ensuring vehicles conform to current EU emissions standards.	To be included in the detailed OEMP(s).	The overall responsibility will be with the Undertaker of the Scheme.

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirements	Responsibility
Climate change resilience of the Scheme	• During the operational phase, a maintenance check of the panels would be performed following a storm or a flood event. • Review measures to manage water scarcity and drought conditions, and designate alternative water sources, if required.		

Table 3-4: Cultural Heritage

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirements	Responsibility
Impacts on the historical setting of built heritage assets associated with increased visual and noise intrusion.	With regard to built heritage and historic landscape assets, appropriate and sensitive screening will be implemented and maintained to minimise the visual intrusion of the Scheme on these assets, while avoiding obscuring or intruding upon views and relationships between heritage assets. Mitigation planting has taken into consideration the surrounding landscape character. Details of planting management and management of existing and new habitats during operation of the Scheme are provided in the **OLEMP** (Doc Ref. 7.16) submitted alongside this DCO Application. This will be updated prior to operation to produce the detailed LEMP, which will be followed and referred to during	Specific responsibilities will be confirmed in the detailed OEMP(s).	The overall responsibility will be with the Undertaker of the Scheme.

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirements	Responsibility
	operation of the Scheme to ensure suitable management of the vegetation planting to achieve the objectives for which the planting design is intended (i.e. screening of views, landscape enhancement, mitigation for impacts on built heritage, and ecological habitat improvements).		
Disturbance or damage to archaeological remains preserved within the Order Limits during operational maintenance activities.	Sensitive archaeological sites have been defined within the layout of the Scheme. The areas of the Scheduled Monuments will be detailed within the detailed OEMPs and will be demarcated as appropriate to prevent accidental entry and damage during operation and maintenance of the Scheme. The two Scheduled Monuments (1004979, 1004978) will have a 20m buffer around them. Required management or monitoring measures during operation stage will be set out within the Archaeological Mitigation and Management Strategy, in accordance with the **Outline Archaeological Mitigation and Management Strategy (OAMMS)** (Doc Ref. 8.7). Any areas of the Scheme requiring on going archaeological monitoring will also be defined in the Archaeological Mitigation and Management Strategy. Cabling between PV modules will be suspended from the module mounting frames, with underground	Specific requirements of the archaeological mitigation and frequency of the monitoring will be included in the detailed OEMP(s) and described in detail in the Archaeological Mitigation and Management Strategy.	The overall responsibility will be with the Undertaker of the Scheme. Monitoring by Environment Manager or Archaeological Clerk of Works (if required).

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirements	Responsibility
	connections only at the ends of each row. The majority of trenches have been designed to run adjacent to access roads rather than beneath the PV modules, facilitating maintenance and minimising ground disturbance in areas of archaeological potential.		

Table 3-5: Ecology and Biodiversity

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirements	Responsibility
Disturbance of protected or notable species and habitats during operational maintenance activities.	The Scheme has been designed so that impacts upon habitats of ecological value (e.g. woodland, hedgerows, and aquatic habitats) are avoided or reduced, where reasonably practicable, and compensated for where not, through the enhancement of existing habitat and the creation of replacement/new habitat. The following design principles will be adopted: • Retention of, and minimising loss of ditches, hedgerows, trees and field edge habitats, where feasible; • Replacement of hedgerow/tree loss through planting of hedgerows or providing similar landscape features (i.e. lines of trees and shrubs) offering the	As set out in the **OLEMP** (Doc Ref. 7.16).	The overall responsibility will be with the Undertaker of the Scheme.

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirements	Responsibility
	same or better ecological function and value; • A 15m wide habitat enhancement buffer up and downstream at each proposed watercourse crossing would be created, subject to agreement with the Internal Drainage Boards, and • Provision of mitigation areas for ground-nesting birds, such as skylark. A Farmland Bird Mitigation Strategy will be developed to evidence on-site sufficiency of mitigation for ground-nesting birds. The design of operational maintenance activities for the Scheme complies with industry good practice and legislation afforded to protected and notable species and habitats, including but not limited to prevention of surface and ground water pollution (refer to Table 3-8), dust management (refer to Table 3-2), noise prevention or amelioration (refer to Table 3-10). The following mitigation measures will also be in place: • Maintenance buffers near drains; bank protection; pollution controls; lighting minimisation; biosecurity measures;		

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirements	Responsibility
	• Mammal-permeable fencing where required to maintain connectivity. The creation and subsequent management of habitats has been determined by the characterisation of the existing baseline and post construction mitigation habitat aims. Management seeks to maximise and reduce disturbance to biodiversity, through low density and short frequency sheep grazing (conservation grazing) or an appropriate, sensitive mowing regime. Further details are provided and secured in the **OLEMP** (Doc Ref. 7.16) submitted alongside this DCO Application. Any required management of vegetation within the Scheme will be undertaken in accordance with legislative requirements associated with protected and notable species likely to be present at the Site, e.g. undertaken outside of the bird nesting season (typically March to September inclusive) and directional clearance of habitats where reptiles are likely present. Where required pre-start checks by an ecologist and presence of Ecological Clerk of Works (ECoW) supervision will be provided. Further details covering all protected and notable species and maintenance activities will be provided in the detailed OEMP.		

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirements	Responsibility
	A programme of monitoring will be established in accordance with the **OLEMP** (Doc Ref 7.16) prior to operation to ensure that committed biodiversity measures are implemented with necessary remediation.		
Disturbance to wildlife through operational lighting.	No part of the Scheme will be continuously lit. Permanent security lights with motion detectors will be used for security purposes at the On-Site Substation Compounds, BESS and CSECs. Where reasonably practicable, lighting will be directed downward and away from boundaries and will conform to best practice guidelines; Bats and artificial lighting in the UK: Guidance Note 08/23 (GN08/23)[6]; with respect to minimising disturbance to bats and other protected and notable species know to be present and are active during the night, through illumination of habitats they are likely to be using at night. No visible lighting will be utilised at the Site perimeter fence, aside from the Site entrance points.	To be confirmed in the detailed OEMP.	The overall responsibility will be with the Undertaker of the Scheme.

[6] Institution of Lighting Professionals (2025) Bats and artificial lighting in the UK: Guidance Note 08/23.

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirements	Responsibility
Collision risk between birds and overhead power lines and risk of electrocution	Overhead line bird diverters will be used to mitigate the risk of collision between birds and the Grid Connection overhead lines, on spans identified by the collision risk analysis as elevated risk. Specific model and specifications of the diverters will be determined at detailed design, in consultation with Natural England. The model will be tried and tested, it will be commercially available in England, and will be appropriate for installation, monitoring and maintenance in relation to the final stage design of transmission apparatus. The diverters will be checked along with other overhead line checks, and replaced, as required. Further information on the required locations is provided within **ES Appendix 9-14: Habitats Regulations Assessment Report** (Doc Ref. 6.3). The Overhead Inter-Array Connection would implement arrangements at detailed design stage to minimise the risk of electrocution of birds. Bird collision incidents identified during monitoring, routine overhead-line inspections or reported by landowners, members of the public or other observers should be passed to the designated Environmental Manager throughout the operation of the Project. Collision incidents will be recorded in an incident log, including the date, location or overhead-line span, species, condition of the bird and photographic	Post-installation monitoring and incident logging. To be confirmed in the detailed OEMP.	The overall responsibility will be with the Undertaker of the Scheme.

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirements	Responsibility
	evidence. The recording of collision incidents can inform operational adaptive management. The designated Environmental Manager will coordinate a review of reported incidents (if any) on a regular basis, to include determination of whether adaptive management is required and the scope of any changes. Documentation of this process will be shared with Natural England and, where relevant, other authorities.		

Table 3-6: Ground Conditions

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirements	Responsibility
Hazards to human health associated with inhalation, ingestion, dermal uptake or contact with made ground or groundwater contaminated by metal, inorganic and organic chemicals.	Prior to maintenance and replacement work commencing, a health and safety risk assessment will be carried out in accordance with current health and safety regulations and based on ground investigation findings. For any maintenance and replacement activities that require ground disturbance, the following measures will apply: • All workers would be required to wear Personal Protective Equipment (PPE) including, where appropriate, dust masks, gloves, use of ground gas	To be included in the detailed OEMP(s)	The overall responsibility will be with the Undertaker of the Scheme.
Hazards to controlled waters associated with			

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirements	Responsibility
leaching of contaminants from soils, lateral groundwater migration, or contaminated discharge to watercourses or made ground or groundwater.	monitoring equipment and hygiene facilities; • Containment measures would be implemented, including drip trays, bunding or double-skinned tanks of fuels and oils; all chemicals would be stored in accordance with their Control of Substances Hazardous to Health (COSHH) guidelines, whilst spill kits would be provided in areas of fuel/oil storage; • Use of appropriate site control measures to minimise the migration of contaminated dusts and soils from the site to adjacent areas; • All plant and machinery would be kept away from surface water bodies wherever reasonably practicable, checked regularly and, where necessary, the use of drip trays would be employed. Refuelling and delivery areas would be located away from surface water drains; • An emergency spillage action plan will be produced, which staff will be required to have read and understood prior to		
Hazards to ecological receptors associated with chemical contaminants in made ground and groundwater, discharge to watercourses, sedimentation / dust deposition, physical damage to habitat, and increased human disturbance during maintenance.			

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirements	Responsibility
Contamination of ground gas to any on-site buildings. Creation of preferential pathways and mobilisation of contamination.	commencement of work, and provisions made to contain any leak/spill; • Should any potentially contaminated ground, including isolated 'hotspots' of contamination and/or potential deposits of asbestos containing materials (ACM) be encountered, the maintenance and replacement works contractors would be required to investigate the areas and assess the need for containment or disposal of the material. They would also be required to assess whether any additional health and safety measures, such as the use of suitable respiratory protective equipment, is required; • The Local Authority and the Environment Agency must be contacted in the event that contamination is identified, and the Environment Agency's Land Contamination Risk Management (LCRM) guidance must be followed. • To further minimise the risks of contaminants being transferred and contaminating other soils or water, maintenance workers would be briefed prior to works starting as to the possibility of the presence of such materials;		

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirements	Responsibility
	• In the event that contamination is identified, appropriate remediation measures would be taken to protect maintenance workers, future site users, water resources, structures and services; • The maintenance and replacement works contractors would be required to place arisings and temporary stockpiles away from watercourses and drainage systems, whilst surface water would be directed away from stockpiles to prevent erosion; • The risk to surface water and groundwater from run-off from any contaminated stockpiles during maintenance works will be reduced by implementing suitable measures to minimise rainwater infiltration and/or capture runoff and leachates, through use of bunding and/or temporary drainage systems. These mitigation measures will be designed in line with current good practice, follow appropriate guidelines and all relevant licences/permits; • The maintenance and replacement works contractors will ensure that all material is suitable for its proposed use and would not result in an increase in		

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirements	Responsibility
	contamination-related risks on identified receptors, including any landscaped areas and underlying groundwater; • The maintenance and replacement works contractors will implement a dust suppression/ management system in order to control the potential risk from airborne contamination migrating off-site to adjacent sites.		

Table 3-7: Human Health

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirements	Responsibility
Details with respect to mitigation measures relevant to human health, including minimising severance and amenity impacts on relevant receptors, are set out in the following tables: Air Quality (Table 3-2), Landscape and Visual (Table 3-9), Noise and Vibration (Table 3-10), Socio-Economics and Land Use (Table 3-11), and Transport and Access (Table 3-12). Relevant mitigation measures are also set out in; • **Outline Public Rights of Way Management Plan (PRoW-MP)** (Doc. Ref. 7.15) • **Outline Landscape and Ecology Management Plan (OLEMP)** (Doc. Ref.7.16)			

Table 3-8: Hydrology and Flood Risk

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirements	Responsibility
Impacts on surface and groundwater quality from site run-off and the potential for accidental spillages (e.g. substations, car parking) from supporting infrastructure and maintenance activities	**Surface Water Runoff** An Outline Drainage Strategy has been prepared and is included within **ES Appendix 11-4** (Doc Ref. 6.3). The Outline Drainage Strategy outlines the management of surface water runoff from the Scheme. In accordance with planning policy guidance (as outlined in **ES Appendix 11**-1: **Hydrology and Flood Risk Legislation, Policy and Guidance** (Doc Ref 6.3), runoff from the Scheme will be attenuated to ensure no increase in surface water discharge rates and to provide water quality treatment of runoff water. This is secured through compliance with the Outline Drainage Strategy within the **Draft DCO** (Doc Ref 3.1). The Environment Agency and DEFRA's 'Surface water pollution risk assessment for your environmental permit guidance'[7] will be adhered to. **Site runoff and chemical spillages from maintenance activities** The detailed OEMP(s) will include measures to manage the risk of pollution from any spillages and maintenance	Monitoring requirements will be included in the detailed OEMP(s). This will include routine monitoring of drainage systems and BESS fire detection/suppression systems to ensure correct operation or trigger standard management activities such as clearing excess sediment or removal/cutting back of vegetation in swales, as well as more targeted monitoring that may be required for ad hoc maintenance activities should they present a risk to a nearby water feature. The detailed OEMP(s) will also include measures to regulate the environmental effects of the	The overall responsibility will be with the Undertaker of the Scheme.

[7] Environment Agency and DEFRA (2026) Guidance: Surface water pollution risk assessment for your environmental permit. https://www.gov.uk/guidance/surface-water-pollution-risk-assessment-for-your-environmental-permit#screening-tests-estuaries-and-coastal-waters [Accessed 15/09/2026]

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirements	Responsibility
	activities, such as correct storage in appropriately bunded areas of any hazardous materials and appropriate, regular inspection and maintenance of all equipment on-site. This may include additional measures to control, intercept and treat site runoff from working areas, any excavations and temporary access tracks, as well as the application of good practice measures to manage the risk of chemical spillages (e.g. fuel) during the works. Fuel will be stored and used in accordance with the Control of Substances Hazardous to Health Regulations 2002, the Control of Pollution (Oil Storage) (England) Regulations 2001 and the Oil storage regulations for businesses guidance. Fuel and other potentially polluting chemicals will either be in self-bunded leak proof containers or stored in a secure impermeable and bunded area (minimum capacity of 110% of the capacity of the containers, which includes 10% more capacity than is needed). If pollution is detected within the transformer bunds as part of routine inspections it will be suctioned to a self-bunded (or similar) tank and ultimately removed from site for suitable disposal by a licenced waste contractor. Furthermore, the bunds under transformers will be routinely monitored and where oil contamination is suspected, the polluted water will be suctioned out for temporary storage in a self-bunded (or similar) tank before appropriate disposal off-site.	operational phase of the Scheme, and to ensure any maintenance activities take place in a way to avoid and minimise any potential environmental impacts relating to hydrology and flood risk.	

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirements	Responsibility
	The Detailed OEMP will include management procedures for any wheel washing activity required.		
Impacts on surface and groundwater quality as a result of the use of firewater in the event of a fire in the BESS or on-site substation. Impacts on groundwater resources (flows and level). Impacts on hydrology including subsequent impacts on aquatic habitats and water-dependent nature conservation sites due to maintenance. Potential for permanent hydro-	**BESS** **ES Appendix 11-4: Outline Drainage Strategy** (Doc Ref. 6.3) outlines how firewater runoff will be managed at the BESS. In the event of a fire, firewater will be captured and removed off site by a tanker to an accredited lab for testing or disposal and will not be discharged to controlled waters. It also includes detail on operation and management of the drainage infrastructure in order to ensure that they continue to function effectively throughout the lifetime of the Scheme. As set out within the **Outline Battery Safety Management Plan (OBSMP)** (Doc Ref 7.18) submitted alongside this DCO Application, BESS containers would have automatic fire detection systems in place along with fire suppression systems. Above ground water storage tanks or hydrants would be located adjacent to the BESS container units. Emergency vehicle rendezvous locations would be provided at each of the BESS and On-Site Substation Compound locations. In the case of an incident, fire water would be contained within the attenuated subbase of the gravel compound by a penstock valve to be pumped out and disposed of off-site by a specialist contractor to ensure the downstream watercourse is not polluted. The fire water		

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirements	Responsibility
morphological impacts to watercourses, especially where crossings are required. Impacts on the rate and volumes of surface water run-off entering local watercourses and subsequent increase in flood risk. Impact on local water supplies from water usage in a 'water stressed' area.	testing will be conducted in consultation with the Environment Agency. Sampling should use MCERTS approved methods, be sent to UKAS accredited laboratories and tested against the list of hazardous substances, It is not anticipated that active firefighting will be undertaken as this can spread chemicals used in the process and which are potentially harmful to the water environment. Instead, any apparatus or containers that catch fire will be allowed to burn out. Water from stores permanently sited on-site will be sprayed onto adjacent containers to keep them cool and reduce the risk of the fire spreading. The water used will therefore be less likely to be contaminated but will still be directed to the fire water storage areas from where consultation with the Environment Agency will be conducted, and decisions about suitable disposal can be made post incident, subject to an MCERTS approved laboratory testing. The BESS containers will also possess an internal fire suppression system. No fluids from the internal fire suppression system will be directed to swales, these will be isolated and contained separately for off-site disposal at a suitable licenced waste facility. If water for the water storage tanks for firefighting is to be obtained from the mains supply, a water supply request would be made to Anglian Water, accompanied by a Water		

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirements	Responsibility
	Resource Assessment. The need for the mains supply connection will be confirmed at detailed design stage. Further details will be established through the detailed BSMP and ERP to be prepared in accordance with the BSMP post-DCO consent. **Substations** Modern substations are designed in accordance with relevant UK standards and incorporate multiple layers of protection including electrical protection systems, fault detection, automatic isolation, fire separation distances, oil containment systems and routine inspection and maintenance. The proposed substation layout would incorporate fire-resistant walls and a minimum separation distance of 10 m between the transformers as part of the fire protection strategy to limit the potential for fire propagation between adjacent transformers. Consequently, the residual risk of a significant fire event is considered to be low. In the unlikely event of a fire, the electrical protection system would automatically disconnect the affected plant (e.g. transformer) from the network. Emergency services would be notified, where appropriate, and the site operator would implement the Emergency Response Plan. The incident would be quickly attended to by the local Fire Brigade. However, it is expected that active firefighting		

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirements	Responsibility
	would only occur if there is a danger to life. It is most likely that the fire will be allowed to burn out in a controlled manner. The 400kV and 3 no. 132kV substation sites are all lined preventing any infiltration of contaminated runoff. All substations except one of the 132kv sites (Parcel D) are also surrounded by flood bunds, which creates an opportunity to contain any contaminated runoff following an incident, but temporary measures would be implemented to contain any runoff at the substation in Parcel D if required. Any oil cooled transformers will be above a bund that will as a minimum, have a capacity of 110% of the total oil content of the transformer, which would minimise the risk of environmental contamination in the event of a fire. However, to ensure that any runoff from outside of this bund can be retained within the confines of the lined substation site, the drainage design will allow for it to be possible for the drainage from the substation site to be temporarily blocked if necessary. This may involve the use of temporary inflatable pipe stoppers or other suitable measure to be defined in the Emergency Response Plan (see Section 2.10 of this document) to plug the outfall pipe and retain any contaminated water within the substation site, from where it can ultimately be safely removed for appropriate offsite disposal. The necessary		

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirements	Responsibility
	equipment to temporarily block the outfall will be retained and maintained on site should it be needed quickly. Access arrangements would allow Fire and Rescue Services to respond safely, and any incident would be managed in accordance with the site's Emergency Response Plan and relevant Health and Safety procedures. Any contaminated runoff contained within the substation site will be tested similarly to at the BESS in advance of the runoff being pumped out for suitable offsite disposal. The substation site will then be cleaned of all contaminants as part of the remediation works. **Site Runoff** The design of the Scheme includes measures to avoid and minimise the risk of water pollution during its operation. These include: • The detailed drainage strategy will be designed so as to mimic the natural drainage conditions within the Order Limits. • As set out above, the **ES Appendix 11-4: Outline Drainage Strategy** (Doc Ref. 6.3) and **OBSMP** (Doc Ref 7.18) include measures to manage firewater runoff. • Individual solar PV panels will be held above the ground surface on mounting structures. These mounting structures will be supported		

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirements	Responsibility
	by poles driven into the ground to a depth of up to 3.5m. This prevents sealing the ground with an impermeable surface beneath the solar panels, allowing rainfall/runoff to infiltrate to ground throughout the Solar Development Area; • In order to limit the potential for channelisation from rainfall dripping off the end of the panels, the areas between, under and surrounding the solar PV panels will be planted with native grassland and wildflower mix to intercept and absorb rainfall running off the panels, preventing it from concentrating and potentially forming channels in the ground. • To prevent ponding occurring around the panels, a series of boundary (and some routing) swales will be constructed to mimic natural drainage conditions. • Solar PV panels will be constructed and installed to accepted industry standards and appropriately maintained to ensure no risk of escape of liquid substances into the water environment. • Any areas of the Scheme containing oils, such as transformers, will be bunded and removed from the Site for appropriate disposal at a suitably licensed waste facility or have self-		

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirements	Responsibility
	contained drainage systems. This would ensure that any leaks are contained and do not enter the surface water drainage system. • New operational access roads will be permeable. • The solar PV panels will be offset from watercourses by a buffer of 10m from the edge of wetted channel or the top of the bank of watercourses, whichever is greatest. This may require survey work (prior to construction) in some locations to adequately define and agree the top of bank position as this is variable. • New access tracks will also be buffered from watercourses other than where crossings are required. The watercourse buffer may be breached where surface water outfalls are required. **Inspections** Regular inspections and maintenance of all equipment will be undertaken in order to identify any damage early. This will ensure that the structural integrity of the infrastructure will be regularly observed. Any panels which require maintenance / replacement will be replaced. The Panel coatings will not contain PFAS Chemicals. The washing of PV panels will not take place in periods of high temperatures		

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirements	Responsibility
	or prolonged sunlight in order to decrease the risk of thermal shock to the panels. The detailed OEMP(s) will include a regular schedule for visual inspection of the panels and all other solar infrastructure. There will also be regular inspection and a maintenance programme implemented for Applicant owned drainage systems, proposed Sustainable Drainage Systems (SuDS), drainage outfalls and watercourse crossings. This will be carried out in accordance with good practice guidance. If there is any evidence of excessive erosion or sedimentation associated with new structures, further actions will be considered to remedy that impact as sustainably as reasonably practicable. **Resilience to Flooding** Regular inspection and maintenance of Applicant owned drainage systems, SuDS and culverts will take place throughout the operational phase. This will be undertaken in accordance with good practice guidance. Details are included in **ES Appendix 11-4: Outline Drainage Strategy** (Doc Ref. 6.3). Regular inspection and maintenance of fencing will be undertaken throughout the operational phase. During these inspection and maintenance visits, debris build up would be identified and removed when necessary.		

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirements	Responsibility
	Any fencing will be designed to prevent minor obstructions occurring, allowing the continuation of flow routes (if present) unimpeded through the Solar Development Area. The detailed OEMP will set out inspection requirements and long-term maintenance arrangements for any on-site flood bunds and flood defence walls. As shown on **ES Figure 2-2 Indicative Solar Development Area and Inter-Array Connection Layout Plan** (Doc Ref. 6.2 Rev 2), an 8m buffer from the EA land ownership boundary in Land Parcel A will be maintained and access provided to the EA for the maintenance of the Crowland and Cowbit Washes Flood Storage Reservoir. **Operational Cleaning** The solar PV panels will be cleaned once per year, using clean water with no added chemicals. Up to $3m^3$ of water will be required for every 1000 panels, with an estimated water requirement per year of $3,386m^3$. This water will be sourced from commercial third-party local water suppliers, and not from the main supply or abstracted from a local source.		
Water Resource	Opportunities for rainwater harvesting to serve non-potable water requirements during the operational phase will be investigated at detailed design.	n/a	The overall responsibility will be with the

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirements	Responsibility
			Undertaker of the Scheme.

Table 3-9: Landscape and Visual

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirements	Responsibility
Loss of existing landscape features and alteration of overall character due to change in land use	The **OLEMP** (Doc Ref. 7.16) sets out the measures proposed to mitigate the potential impacts and effects on landscape (and biodiversity) features, and to enhance the landscape and biodiversity value of the Site (i.e. the green infrastructure).	The **OLEMP** (Doc Ref. 7.16) sets out monitoring requirements.	The **OLEMP** (Doc Ref. 7.16) sets out roles and responsibilities for implementation.
Visibility of the Scheme and the potential to impact on nearby residential and road receptors			

Table 3-10: Noise and Vibration

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirements	Responsibility
Impact of noise and vibration associated with operational equipment on	The specification of plant machinery with low noise emission and properly attenuated supply and extract terminations will help to minimise noise emissions during the operational phase. The use of enclosures,	Site staff will carry out noise monitoring at locations agreed with the relevant planning authority,	The overall responsibility will be

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirements	Responsibility
nearby sensitive receptors.	local screening, mufflers, and silencers will also be used as appropriate. If required, the relevant penalty/ correction will be applied in accordance with British Standard (BS) 4142[8]. Plant within the On-Site Substation Compounds, including the BESS Compound, will be designed to have minimal tonal, impulsive or intermittent features. Noise source data for plant in **ES Chapter 13: Noise and Vibration** (Doc Ref. 6.1) has been selected based on experience of previous solar farms. There is a requirement for flexibility in design so noise source data may not be representative of plant in the final design. Although there can be variations in noise emissions, noise emitting plant will be selected with consideration of noise emissions, where reasonably practicable. In addition, the following measures will apply: • The potential for the use of low noise equipment, where reasonably practicable, is one of the criteria evaluated when determining appropriate	including noise monitoring which will test the performance of the substation transformers, inverters and BESS as part of the annual maintenance regime described in Section 2.2 of this document. This will include identifying any changes in sound pitches or volume early and carrying out the relevant maintenance. This is to ensure that plant noise at source, and therefore also at sensitive receptors, throughout the operational lifetime of the Scheme is not higher than the levels presented in the ES. The results of such monitoring will be submitted to the relevant	with the Undertaker of the Scheme.

[8] BSI (2019). BS4124:2014+A1:2019 Code of Practice for Earth Works. Methods for rating and assessing industrial and commercial sound.

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirements	Responsibility
	equipment for use on the Solar Development Areas; • The location and orientation of solar stations and substations, inverters, transformers and cooling fans have been placed away from large concentrations of receptors, so that operational noise emissions from electrical equipment are less impactful. There is a commitment to locate solar stations and the Substations and BESS Compounds at least 250 m from residential properties (see **Design Parameters Document** (Doc Ref. 7.4) and **Works Plans** (Doc Ref. 2.3)); and • Transformers may be standalone units or pre-assembled with inverters and switchgear to form a single contained unit (i.e. they are enclosed). Although the indicative Scheme layout has been optimised to minimise noise levels at sensitive receptors, there is a requirement to retain some flexibility where infrastructure will be located on-site. Consequently, if there is a decision in the future to move noise generating infrastructure closer to sensitive receptors than shown in **ES Figure 13-1: Study Area, Receptor and Noise Monitoring Locations** (Doc Ref. 6.2), the Applicant commits that	planning authority for review.	

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirements	Responsibility
	noise at sensitive receptors will be no higher than the levels presented in Section 13.9 of **ES Chapter 13: Noise and Vibration** (Doc Ref. 6.1). This is secured through Requirement 18 of the **Draft DCO** (Doc Ref. 3.1). As detailed information of the Grid Connection 400kV OHL design is subject to detailed design, a Tier 3 assessment in accordance with guidance provided in TGN(E)322[9] will be undertaken post-consent. This assessment will be undertaken with reference to baseline noise measurements presented **in ES Appendix 13-2: Baseline Noise Surveys** (Doc Ref. 6.3). Where operational noise monitoring indicates plant noise levels generated by the Scheme have increased beyond those presented in the ES, the Undertaker and relevant planning authority will liaise in respect of the appropriate further maintenance or mitigation. Measures could include repair and maintenance of the plant, sourcing quieter plant, barriers or enclosures. The nature of the appropriate course of action will depend on the local circumstances such as the level of		

[9] National Grid (2021); Technical Guidance Note TGN(E)322 – Operational Audible Noise Assessment Process for Overhead Lines (New Build, Reconducting, Diversion and Uprating).

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirements	Responsibility
	exceedance, distance to the receptor and cause of the noise. The Undertaker would then be responsible for implementing the agreed mitigation measures and issuing a report detailing the measures undertaken and updated noise monitoring results to the relevant planning authority, demonstrating that the noise levels from the Scheme are at or below the levels presented in the ES. Separate to the annual monitoring programme, in the event of a complaint concerning noise from the Scheme from a neighbouring receptor, the Undertaker would liaise with the relevant planning authority over the need for further monitoring and, if required, take updated sound measurements of relevant plant at locations and timings agreed with the relevant planning authority. If these measurements of relevant plant demonstrated that agreed levels coming from the Scheme are likely being exceeded at the receptor in question, the operator would then be responsible for implementing mitigation agreed with the relevant planning authority. The Undertaker will issue information to the relevant planning authority detailing the measures adopted and updated noise survey results that demonstrate that noise levels have returned to, or are below, those presented in the ES.		

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirements	Responsibility
	Further details are to be confirmed in the detailed OEMP(s).		

Table 3-11: Socio-Economics and Land Use

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirements	Responsibility
Disruption to local residents, businesses and community facilities due to severance associated with traffic.	Mitigation and management measures relating to Traffic and Access during the operational phase are included in Table 3-12.	As per Table 3-12.	As per Table 3-12.

Table 3-12: Traffic and Access

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirements	Responsibility
Vehicular movements during operation	No potential impacts related to traffic and access are anticipated during operation, due to the low number of anticipated vehicle movements and nature of the Scheme. No specific mitigation measures or monitoring requirements during operation are required, although the following will be considered:	Specific responsibilities will be confirmed in the detailed OEMP(s). Measures relating to PRoW during the operational phase are set	The overall responsibility will be with the Undertaker of the Scheme.

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirements	Responsibility
	• Providing suitable points of access for operational vehicles at all accesses marked as operational accesses in **ES Figure 2-5** (Doc Ref. 6.2); • Converting the internal construction routes within the Solar Development Area into maintenance routes, to allow operational vehicles to access all areas of the Solar Development Area via the proposed access points during the operational phase; • Utilising existing field access locations to facilitate access for periodic inspection and maintenance along the Grid Connection Route; • Maintaining access to all existing PRoW within the Scheme; • Maintaining access to the common land adjacent to Martin's Road; and • Controlling areas where the internal maintenance route crosses any existing PRoW or local access roads (such as providing gates), permitting only operational traffic to utilise these internal routes within the Scheme. Operational traffic will give-way to other users (including pedestrians and	out in the **Outline PRoW-MP** (Doc. Ref. 7.15)	

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirements	Responsibility
	road users) when utilising the crossing points. Visibility will be maximised between operational vehicles and other users, with warning signage provided if required. • During the operational phase, personnel will consider potential opportunities to implement staff minibuses and car sharing options.		

Table 3-13: Utilities

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirements	Responsibility
Potential interference with existing utility infrastructure above and below ground caused as a result of operational maintenance and replacement works.	Utilities infrastructure that crosses the Scheme has been mapped and strategically avoided through the design of the Scheme. Any maintenance and replacement activities will be undertaken with due regard to the existing utilities records to avoid impacting on these. Protective provisions are included within the **Draft DCO** (Doc Ref. 3.1) for statutory undertakers whose assets may be affected, and further bespoke protective provisions are being negotiated with statutory undertakers where necessary.	Not required	Not required

Table 3-14: Other Environmental Topics - Electric and Magnetic Fields

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirements	Responsibility
Impact of electric and magnetic field on residential receptors	The electric and magnetic field levels from the Scheme are predicted to be well below 1998 International Commission on the Non-Ionizing Radiation Protection (ICNIRP) reference levels[10] at all surrounding locations where public exposure levels are relevant. As such, no significant effects have been identified and no operational mitigation measures are required.	None required	None required

Table 3-15: Other Environmental Topics - Glint and Glare

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirements	Responsibility
Potential to impact on residential, road and rail, and aviation receptors	No mitigation is required due to the no significant effects found for the residential, road, rail and aviation receptors.	Not required	Not required

[10] ICNIRP (1998) INCIRP Guidelines For Limiting Exposure to Time Varying Electric, Magnetic and Electromagnetic Fields (up to 300 GHz) Available at: https://www.icnirp.org/cms/upload/publications/ICNIRPemfgdl.pdf. [Accessed 25 October 2025].

Table 3-16: Other Environmental Topics - Major Accidents and Disasters

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirements	Responsibility
Fire or Explosions associated with Scheme Infrastructure	As set out within the **OBSMP** (Doc Ref. 7.18), the BESS units proposed for the Scheme will have built in safety features including cooling systems, fire resistant construction, fire detection, suppression systems, emergency stop functions and isolation monitoring, which are designed to regulate temperatures to within safe conditions to minimise the risk of fire. Fire risks associated with substations will be controlled through compliance with Construction (Design and Management) Regulations 2015[11] and Regulatory Reform (Fire Safety) Order 2005[12], which will ensure that the risks are mitigated through design in accordance with a fire risk assessment. An Unplanned Emissions Assessment has been provided within **ES Appendix 16-4** (Doc Ref. 6.3) to consider potential impacts from toxic emissions released in the unlikely event of a BESS fire.	To be included in the detailed OEMP(s).	The overall responsibility will be with the Undertaker of the Scheme.

[11] Construction (Design and Management) Regulations 2015. Available at: https://www.legislation.gov.uk/uksi/2015/51/contents [Accessed 22/11/2025]

[12] Regulatory Reform (Fire Safety) Order 2005. Available at: https://www.legislation.gov.uk/uksi/2005/1541/contents [Accessed 22/11/2025]

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirements	Responsibility
	An Emergency Response Plan which will be developed in consultation with the relevant local authority emergency planning officer, emergency services including the local fire service and will detail the procedures for responding to incidents and emergencies on-site.		
Potential for criminal damage.	Section 2.11 of this document outlines key security arrangements to be present at the Solar Development Area. These arrangements will contribute to the overall safety of all who will, or may, enter the Site. The security arrangements will be carried out by a suitably qualified and experienced person and reviewed at identified epochs commensurate to the Security Risk rating and will further assess any changes in the Security Risk Management Threat Assessment. A security fence will enclose the operational areas of the Solar Development Area. The fence will be a 'deer fence' type, of approximately 2m in height measured from the ground. Pole mounted CCTV systems will also be deployed around key infrastructure and the perimeter of the operational areas of the Solar Development Area. These would at up to approximately 5m in height.	To be included in the detailed OEMP(s).	The overall responsibility will be with the Undertaker of the Scheme.

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirements	Responsibility
	The On-Site Substations, BESS and CSEC Compounds would be enclosed by metal palisade type fencing up to approximately 2.5m in height. Further fencing, up to approximately 3m in height, may be required to further enclose electrical equipment within each compound.		

Table 3-17: Other Environmental Topics - Materials and Waste

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirements	Responsibility
Operational waste arisings associated with the control, welfare, security and office facilities within the On-Site Substation Compounds waste and general waste.	During operation, the Scheme will prioritise waste prevention, followed by preparing for reuse, recycling and recovery and lastly disposal to landfill as per the waste hierarchy. All management of waste will be in accordance with the relevant regulations and waste will be transported by licensed waste hauliers to waste management sites which hold the necessary regulatory authorisation and/or permits for those wastes consigned to them. The detailed OEMP will set out: • The waste streams that will be generated;	The types, quantities and final destination of waste generated during the operational phase would be identified, measured and recorded through the OEMP. A register of waste loads leaving the Order Limits will be maintained to provide a suitable audit trail for compliance purposes and to facilitate monitoring and reporting	Overall responsibility lies with the Undertaker. Specific responsibilities will be confirmed in the detailed OEMP.
Production of waste and consumption of materials associated with the periodic replacement of			

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirements	Responsibility
infrastructure elements. Potential for waste to impact on sensitive receptors if not stored and managed appropriately.	• How the waste hierarchy will be applied to these wastes; • Good practice measures for managing waste; and • Roles and responsibilities for waste management. • The OEMP will set a waste recovery target. The OEMP will use, as its starting point, the measures detailed in **Outline Site Waste Management Plan (OSWMP)** (Doc Ref. 7.19), updated to reflect the circumstances prevailing during the period in which operation occurs.	of waste types, quantities and management methods.	

4. Complementary Plans and Procedures

4.1.1. In addition to this OOEMP, the following plans submitted with the Application provide requirements for the operational phase of the Scheme:

- **Outline Landscape and Ecology Management Plan** (Doc Ref. 7.16);
- **Outline Soil Management Plan** (Doc Ref. 7.14);
- **Outline Public Rights of Way Management Plan** (Doc Ref. 7.15);
- **Outline Battery Safety Management Plan** (Doc Ref. 7.18);
- **Outline Skills, Supply Chain and Employment Plan** (Doc Ref. 7.17);
- **ES Appendix 11-4: Outline Drainage Strategy** (Doc Ref. 6.3); and
- **Outline Flood Emergency Response Plan** (Appendix A of the **OCEMP** (Doc Ref. 7.10).

5. Implementation and Operation

5.1.1. The OEMP(s) will set out all roles, responsibilities and actions required in respect of implementation of the measures described in this OOEMP, including:

- An organogram showing team roles, names and responsibilities;
- Training requirements for relevant personnel on environmental topics;
- Information on-site briefings and toolbox talks that will be used to equip relevant staff with the necessary level of knowledge to follow environmental control procedures;
- Measures to advise employees of changing circumstances as work progresses;
- Communication methods;
- Document control;
- Monitoring, inspections and audits of site operations; and
- Environmental emergency procedures.

6. Checking and Corrective Actions

6.1. Monitoring

6.1.1. Monitoring and reporting will be undertaken for the duration of the operational phase to demonstrate the effectiveness of the measures set out in the OEMP(s) and related maintenance controls and allow for corrective action to be taken where necessary.

6.1.2. As part of the monitoring process a designated Environmental Manager will observe site activities and report any deviations from the OEMP(s) in a logbook, along with the action taken and general conditions at the time. In addition, the Environmental Manager will conduct regular walkover surveys which will be documented and arrange regular formal inspections to ensure the requirements of the OEMP(s) are being met.

6.1.3. The Environmental Manager will also act as day-to-day contact with relevant local authorities and other regulatory agencies, such as the Environment Agency.

6.2. Reporting

6.2.1. The Environmental Manager will retain records of environmental monitoring and implementation of the OEMP(s). This will allow provision of evidence that the OEMP(s) are being implemented effectively. These records will include:

- Results of routine site inspections by Environmental Manager/Project Manager;
- Environmental surveys and investigations;
- Environmental Action Schedule;
- Environmental equipment test records;
- Licences and approvals; and
- Corrective actions taken in response to incidents, breaches of the approved OEMP(s) or complaints received from a third party.

6.2.2. The OEMP(s) will be updated if it is necessary to add additional control measures, with a full review undertaken as required. Existing control measures and mitigation will not be amended without prior agreement with the local authorities.

6.3. Management Review

6.3.1. The OEMP(s) will be reviewed by the Undertaker on a six-monthly basis or more regularly, if there is a significant change in operational procedure. The review will be signed off by competent person(s). The responsibilities for this role will be set out within the OEMP(s).