Longfield Solar Farm

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1. Introduction

1.1 Introduction

1.1.1 Longfield Solar Energy Farm Ltd (hereafter referred to as the 'Applicant') has prepared this Outline Operational Environmental Management Plan (OEMP) in relation to an application for a Development Consent Order (DCO) for the construction, operation and maintenance, and decommissioning of the Longfield Solar Farm (hereafter referred to as the 'Scheme').

1.1.2 A DCO would provide the necessary authorisations and consents for the Scheme which comprises a solar photovoltaic (PV) electricity generating facility with a total capacity exceeding 50 megawatts (MW), an energy storage facility and an export/import connection to the National Grid, via an extension of the existing Bulls Lodge Substation. The Scheme will be located within the 'Order limits'.

1.1.3 The aim of this Outline OEMP is to provide a clear and consistent approach to the control of operational and maintenance activities in the Order limits. This document does not address construction or decommissioning activities, which are subject to separate environmental management plans and procedures.

1.1.4 Likely significant effects have been identified through the Environmental Impact Assessment (EIA) process and are reported in the ES. A range of 'standard' or best practice mitigation and operational management measures are accounted for in the assessments and these will be implemented during operation of the Scheme. This Outline OEMP details these operational mitigation measures. It also sets out the monitoring activities designed to demonstrate that such mitigation measures are carried out, and that they are effective.

1.1.5 The Scheme is likely to become operational (or be commissioned) in phases or parts, and it is envisaged that an OEMP may be prepared, approved and implemented for individual parts or phases of the Scheme (with the exception of the operation of the Bulls Lodge Substation). As a result, there could be multiple OEMPs prepared in accordance with the parts of this Outline OEMP.

1.1.6 Each OEMP will be produced in line with this Outline OEMP following grant of the DCO and would be approved by the relevant local planning authorities in advance of the date of final commissioning for the relevant phase of the Scheme (in accordance with the relevant DCO Requirement). This Outline OEMP is designed with the objective of ensuring compliance with the relevant environmental legislation and mitigation measures set out within the ES. This document provides the likely structure of the detailed OEMP(s) and relevant preliminary information. It also indicates what additional information or controls might be included under each sub-section within each OEMP(s).

1.1.7 The key elements of this Outline OEMP include:

a. An overview of the Scheme and associated operational programme;

b. Identification of potential environmental effects;

c. Proposed design and other mitigation measures to prevent or reduce potential adverse environment effects;

d. Monitoring and reporting of effectiveness of mitigation measures; and

e. Links to other complementary plans and procedures.

1.1.8 The appointed contractor(s) will be responsible for working in accordance with the environmental controls documented in the Outline OEMP and for the preparation and implementation of each OEMP.

1.1.9 Any additional licences, permits, or approvals that are required will be listed in the OEMPs.

1.2 The Order limits

1.2.1 The Order limits comprise a single parcel of land separated by several areas of woodland approximately 453ha in size. The Order limits are located within the administrative areas of Chelmsford City Council and Braintree District Council, in the county of Essex.

1.2.2 The Scheme comprises the installation of solar photovoltaic (PV) generating panels and on-site energy storage facilities together with grid connection infrastructure.

1.2.3 The area of land required for the construction, operation and maintenance, and decommissioning of the Scheme is shown on **Figure 1-2** and described in ***Chapter 2: The Scheme*** of the Environmental Statement (ES) **[EN010118/APP/6.1]**. This includes land required for temporary and permanent uses.

1.2.4 The OEMPs will include plans showing the land within each administrative area, and plans illustrating the Order limits, or where the OEMP is for only one phase of the Scheme, a plan showing that phase only.

1.3 The Scheme

1.3.1 The Order limits are described in ***Chapter 2: The Scheme***, of the ES **[EN010118/APP/6.1]** and comprises the Solar Farm Site (which includes the BESS and the Longfield Substation), the Grid Connection Route, the Bulls Lodge Substation Extension, and access routes.

1.3.2 The existing Bulls Lodge Substation will be extended to facilitate the connection of the Solar Farm Site to the National Grid, via the Grid Connection Route.

2. Operation Environmental Management

2.1 Introduction

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

2.2 Operation Activities

2.2.1 During the operational phase, activity within the Scheme will be minimal and will be restricted principally to vegetation management, equipment maintenance and servicing, replacement and renew of any components that fail, and monitoring. 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.

2.2.2 Along the Grid Connection Route operational activity will consist of routine inspections (schedule to be determined) and any reactive maintenance such as where a cable has been damaged.

2.2.3 Bulls Lodge Substation Extension will be managed and maintained by National Grid. National Grid will be responsible for preparing an OEMP or updating its existing OEMP to this Scheme component.

2.2.4 It is anticipated that there will be up to eight permanent staff onsite during the operational phase of the Solar Farm Site, which equates to a maximum of eight vehicles (or 16 daily two-way vehicle trips) per day, with additional staff attending when required for maintenance and cleaning activities.

2.3 Operation Programme

2.3.1 Operation of the Scheme is expected to start following construction, no earlier than 2026. The Scheme will operate for approximately 40 years, with decommissioning assumed for the purposes of the environmental impact assessment to be not earlier than 2066.

2.4 Working Hours

2.4.1 The Solar Farm Site will generally be manned during normal working hours (08:00-18:00) five days a week. The Bulls Lodge Substation will be unmanned during normal operation.

2.5 Control of Light

2.5.1 During operation, no part of the Scheme will be continuously lit. The use of motion detection security lighting to avoid permanent lighting will be utilised and a sensitive lighting scheme will be developed ensuring inward distribution of light and avoiding light spill on to existing boundary features.

2.5.2 Lighting will be directed downward and away from boundaries as captured within the Design Principles **[EN010118/APP/7.3].**

2.6 Parking Provisions

2.6.1 During operation, parking for up to nine vehicles on permeable gravel hardstanding will be provided at the operational maintenance building. Further parking will be provided at the Bulls Lodge Substation.

2.7 Management of Vegetation Planting

2.7.1 An Outline Landscape and Ecology Management Plan (OLEMP) has been prepared and submitted as part of the Application **[EN010118/APP/7.13]**.

2.7.2 The OLEMP provides a framework for delivering the landscape strategy and the successful establishment and future management of proposed landscape works associated with the 'the Scheme'. 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) measures embedded in the design.

2.7.3 The OLEMP sets out the measures proposed:

a. To mitigate the effects of the Scheme on landscape, biodiversity, and heritage features;

b. To enhance the biodiversity, landscape, and green infrastructure value of the Order limits; and

c. To secure compliance with relevant national and local planning policies.

2.7.4 A detailed Landscape and Ecology Management Plan (LEMP) will be prepared in accordance with the Outline LEMP and will be submitted to and approved by the relevant local planning authority prior to construction. This will include provisions in respect of on-going maintenance and management of the landscape and ecology.

2.8 Security

2.8.1 The Solar Farm Site will receive several security risk management threat assessments during its development, construction, operation, and ultimately decommissioning phases. These security risk management threat assessments are conducted by suitable qualified and experienced persons (SQEP) and will determine security risks.

2.8.2 The Applicant recognises, and embraces, the symbiotic relationship between safety and security. The security arrangements to be present at the Solar Farm Site will therefore contribute to the overall safety of all who will, or may, enter the site. The security arrangements will be SQEP reviewed at identified epochs commensurate to the Security Risk rating and will further assess any changes in the Security Risk Management Threat Assessment.

2.8.3 The boundary of the Solar Farm Site will be secured both by fencing and by the provision of Closed-Circuit Television (CCTV) equipment. Cameras in this system are to be placed at approximate 200m intervals inside the fence line in the Solar Farm Site, and up to 80m intervals in the BESS area for additional safety. Cameras would be placed on columns typically up to 5m in height, enabling sufficient vision above module tables and fencing, and would be supported by a ground mounted column of up to 2m in depth.

2.8.4 Other potential security measures to be included comprise:

a. Detection systems such as beam break, image detection etc. to raise alarm when fence breached;
b. Audio announcement when intruder detected to warn alarm triggered and police on way;
c. Barriers/locked gates at main site entrances;
d. Steel doors on substation buildings;
e. Buried cables as much as possible;
f. Remote monitoring; and
g. Alarm response contract with keyholder/security company

2.8.5 Weather monitoring equipment in the form of pyranometers will be incorporated within the Scheme, being placed on top of other structures without increasing the overall height of those structures.

3. Mitigation and Management

3.1 Purpose

3.1.1 This section of the Outline OEMP sets out the mitigation and management measures to be included as a minimum in the detailed OEMP. It also identifies where monitoring is proposed to assess the effectiveness of the mitigation measures.

Table 3-1: Climate Change

Potential Impact	*Mitigation / Enhancement Measure*	*Monitoring Requirements*
Greenhouse gas emissions from the operational maintenance activities required during operation of Scheme. Increased ambient temperature due to climate change.	a. Regular planned maintenance of the Scheme will be conducted to optimise efficiency of the Scheme infrastructure. b. Increasing recyclability by segregating waste to be re-used and recycled where reasonably practicable; c. 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; d. Encouraging the use of lower carbon modes of transport by identifying and communicating local bus connections and pedestrian and cycle access routes to/from the Scheme to all staff, and providing appropriate facilities for the safe storage of cycles; e. Liaising with operational personnel for potential to implement staff minibuses and car sharing options; f. Switching off vehicles and plant when not in use and ensuring vehicles conform to current EU emissions standards; and g. Conducting regular planned maintenance of the Scheme to optimise efficiency.	The overall responsibility will be with the Applicant. Specific responsibilities will be confirmed in the OEMP(s).

Table 3-2: Cultural Heritage

Potential Impact	*Mitigation / Enhancement Measure*	*Monitoring Requirements*
Impacts from security lighting, operational noise, associated traffic and glint and glare.	The ***OLEMP*** **[EN010118/APP/7.13]** describes how existing and new habitats will be maintained during the first five years following implementation and managed in the long-term until decommissioning, including hedgerows and planting which provide screening. Motion detection security lighting will be used to avoid permanent lighting and a sensitive lighting scheme will be developed ensuring inward distribution of light and avoiding light spill on to existing boundary features. Measures to minimise impacts from noise and traffic during operation are provided in the relevant sections.	Refer to the OLEMP.

Table 3-3: Ecology

Potential Impact	*Mitigation / Enhancement Measure*	*Monitoring Requirements*
Impacts on biodiversity features during the operation of the Scheme. Disturbance to wildlife from artificial lighting.	The ***OLEMP*** **[EN010118/APP/7.13]** will be used to manage the areas of landscaping to maximise the benefits for biodiversity and the monitoring requirements to ensure the successful establishment of the proposed planning. a. Vegetation clearance will be undertaken at an appropriate time of year so as to avoid incidental injuring or killing of reptiles and amphibians. b. Avoidance of the nesting bird period i.e. March to August (inclusive) for any management of vegetated areas. Any management of vegetated areas or works that could cause disturbance to nesting birds within the nesting bird period should be checked for the presence of any nests by a suitably qualified ornithologist, prior to such works in line with legislative requirements. Dependent upon the management activities, if active nests are found, dependent upon the bird species and status of the nesting attempt, then appropriate buffer zones may need to be required upon advice sought from an appropriately qualified ornithologist and the area monitored until the young birds have fledged. c. Reasonable avoidance measures for any management activities that have the potential to cause disturbance to badger setts or roosting bats, including appropriate buffers (of up to	Refer to the OLEMP.

Potential Impact	Mitigation / Enhancement Measure	Monitoring Requirements
	30m) around any Badger setts, or trees with bat roost potential (a buffer of 15m). Advice should be sought from an appropriately qualified ecologist. Motion detection security lighting will be used to avoid permanent lighting and a sensitive lighting scheme will be developed ensuring inward distribution of light and avoiding light spill on to existing boundary features.	

Table 3-4: Flood Risk, Drainage and Surface Water

Potential Impact	Mitigation / Enhancement Measure	Monitoring Requirements
The following impacts may occur without adequate mitigation: - Impacts on water quality in waterbodies that may receive surface water runoff or be at risk of chemical spillages from supporting infrastructure for the Scheme (e.g. substations, battery stores, solar stations, local site offices and car parking etc.) and maintenance activities; - Potential for reduced chemical loading of watercourses associated with cessation of nitrate, pesticide, herbicide and insecticide applications on arable fields, or reduction in fine sediment/soil erosion, which would be beneficial;	**Drainage Strategy** A Drainage Strategy is included in the in the Application and outlines management of surface and foul water. Refer to ***Appendix 9C: Longfield SuDS Strategy*** **[EN010118/APP/6.2]** and ***Appendix 9D: Bulls Lodge Substation Extension: Drainage Strategy*** **[EN010118/APP/6.2]**. The drainage design provides for the attenuation of surface water runoff from the operational Order limits, whilst minimising flood risk to the Scheme and surrounding areas. In accordance with planning policy guidance runoff from the Order limits requires attenuation to ensure no increase in surface water discharge rates and to provide water quality treatment of runoff water. The Drainage Strategies also outline how firewater runoff will be managed. They also include 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. **Solar PV Panels** The Scheme is mostly located within Flood Zone 1 with the minimum height of the lowest part of the solar PV Panels to be 0.6m above ground level. No solar PV Panels or other infrastructure will be located within fluvial Flood Zone 2 or 3 extents. Mounting poles will generally be driven or screwed into the ground to an indicative depth of 2m. In certain areas where there are restrictive overhead lines, weight-ballasted solutions, such as the use of concrete foundations may instead be required. The design assumes that approximately 5% of foundations could be concrete pads. **Watercourse Buffers**	Regular recording of compliance in a log book. The OEMP will detail the frequency.

Potential Impact	Mitigation / Enhancement Measure	Monitoring Requirements
- Hydromorphological impacts to waterbodies including changes to physical form (for example where outfalls or watercourse crossings are required) which underpin habitats; - Impacts on flood risk from increased runoff from new impervious areas across the site; - Potential impacts on hydrology as a result of the Scheme by changing the way water infiltrates into the ground; and - Potential beneficial impacts on local waterbodies where local abstractions are made for spray irrigation and therefore need will reduce.	There will be a minimum buffer of 8m around watercourses (measured from the water/channel edge under normal flows) within which there will be no built development. However, for main rivers a 10m buffer measured from the centre line of the watercourse as marked on Ordnance Survey mapping has been allowed for. A buffer of 5m around the margin of ponds has been included in the Scheme design. **Pollution Controls** The design of the Scheme has included measures to avoid and minimise the risk of water pollution during its operation. These include: a. All hazardous materials including chemicals, cleaning agents and solvent containing products to be properly sealed in sealed containers at the end of each day prior to storage in appropriately protected and bunded storage areas; b. Regular inspections and maintenance of all equipment will be undertaken in order to identify any leaks or damage early. Any panels which require maintenance / replacement will be removed before there is any leakage of chemicals from the sealed units. Any leaks will be dealt with in a way that is compliant with the prevailing environmental legislation. The detailed OEMP will include a regular schedule for visual inspection of the panels and all other equipment. **Resilience to Flooding** Regular inspection and maintenance of the 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 ***Appendix 9C: Longfield SuDS Strategy*** [**EN010118/APP/6.2**]. SuDS features will be utilised to ensure the surface water drainage strategy adequately attenuates and treats runoff from the Scheme, whilst minimising flood risk to the Order limits and surrounding areas.	

Table 3-5: Landscape and Visual Amenity

Potential Impact	*Mitigation / Enhancement Measure*	*Monitoring Requirements*
Loss of existing landscape features, e.g. vegetation Visibility of operational activities	The ***OLEMP*** **[EN010118/APP/7.13]** 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 Order limits (i.e. the green infrastructure). A detailed LEMP will be prepared in accordance with the principles of the OLEMP and will be submitted to and approved by the relevant planning authority. This will include measures to ensure landscape mitigation and enhancements are established and maintained into and throughout the operational phase. No visible lighting will be utilised at the Order limits perimeter. Visible lighting will be installed at site entrance points, the Longfield substation (entrance, parking area and control room), operations building (entrance, parking and refuge), and Bulls Lodge Substation Extension only. Lighting in these locations would be installed no higher than 4m above ground level, be fitted with downward directional cowls. Lighting would be turned on to allow security personnel to leave Site. Visible lighting would be installed at solar stations and the BESS but used outside working hours in emergencies. **Screening** Existing vegetation along the boundary of the Order limits will be retained and managed where practicable to ensure its continued presence and to aid the screening of low-level views into the Order limits.	Refer to the OLEMP.

Table 3-6: Noise and Vibration

Potential Impact	***Mitigation / Enhancement Measure***	***Monitoring Requirements***
Noise and vibration from operational equipment.	Acoustic barriers will be constructed around inverters within 250m of receptors R2, R3, R5, R6, R8, R9, R10, R15, R16, R19, R21 and R23. These may comprise close-boarded impervious wooden fencing or a similar construction, which can provide at least 10 dB of attenuation to noise emissions from inverters.	The Environmental Manager will regularly record compliance in a log book. The OEMP

Potential Impact	Mitigation / Enhancement Measure	Monitoring Requirements
		will detail the frequency.

Table 3-7: Socio-Economics and Land Use

Potential Impact	Mitigation / Enhancement Measure	Monitoring Requirements
Potential for surface soil compaction in some areas. For example, grassed access alleys traversed by light vehicles for site maintenance could cause surface compaction in damp or wet soil conditions. If sheep grazing is used for vegetation management surface compaction can result if numbers grazing are too great in wet conditions. Surface compaction can cause run-off.	A Soil Resource Management Plan (SRMP), in accordance with the Outline Soil Resource Management Plan (Outline SRMP) **[EN010118/APP/7.10 Appendix]** will detail how the risk of causing surface compaction can be minimised and how to remove compaction if it has occurred.	Soil assessments and monitoring will be undertaken as detailed in the Outline Soil Resource Management Plan.
Disruption to local residents, businesses and community facilities	Primary mitigation measures are embedded within the Scheme, as set out in the respective chapters, to reduce operational effects (such as noise, air quality, transport, and landscape and visual) which in turn will mitigate the effects on the local community and existing facilities from a socio-economic and land use perspective. Measures to mitigate the effects of operational noise are outlined in **Table 3-6.** Measures to mitigate the effects of visual impacts from operational are outlined in **Table 3-5**. Measures to mitigate the effects of operational traffic are outlined in **Table 3-8.**	

Table 3-8: Transport and Access

Potential Impact	*Mitigation / Enhancement Measure*	*Monitoring Requirements*
Vehicle movements during operation	a. Converting the north-south construction route to a green corridor and maintenance route, to improve connectivity for pedestrians and cyclists through the Solar Farm Site, as well as to allow operational vehicles to access all areas of the Solar Farm Site via a single point of access during the operational period; b. Maintaining access to all existing PRoW within the Order limits, with no diversions or closures (any PRoW temporarily diverted during the construction phase will be reinstated during the operational phase); c. Providing additional permissive paths within the Solar Farm Site to improve connections and desire lines for pedestrians and cyclists, including to / from existing PRoW, National Cycle Route 50, Essex Way and the Chelmsford Garden Community; d. Providing a suitable point of access for operational vehicles on Waltham Road circa. 125m to the south of the junction with Cranham Road; e. Controlling areas where the internal maintenance route crosses any existing PRoW or local access roads (such as by providing gates), permitting only operational traffic to utilise these internal routes within the Order limits. Operational traffic should give-way to other users (pedestrians and road users) when utilising the crossing points. Visibility will be maximised between operational vehicles and other users, with warning signage provided if required; and f. Measures such as planting of hedgerows, maintained to a height of at least 3m, in order to conceal the solar reflections and to mitigate the overall impacts for road receptors.	Not required.

Table 3-9: Air Quality

Potential Impact	*Mitigation / Enhancement Measure*	*Monitoring Requirements*
Dust emissions offsite	Dust emissions during operation will be managed through the following: a. Only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques such as water sprays or local extraction, e.g. suitable local exhaust ventilation systems.	Not required.

Potential Impact	Mitigation / Enhancement Measure	Monitoring Requirements
	b. Ensuring an adequate water supply on the site for effective dust/particulate matter suppression/mitigation, using non-potable water where possible and appropriate; and *c.* Ensuring equipment is readily available on-site to clean any dry spillages and clean up spillages as soon as reasonably practicable after the event using wet cleaning methods.	

Table 3-10: Ground Conditions

Potential Impact	Mitigation / Enhancement Measure	Monitoring Requirements
Potential for pollutants to enter the ground.	The design of the Scheme has included measures to avoid and minimise the risk of pollution to the ground and water during its operation. These include: a. Regular inspections and maintenance of all equipment will be undertaken in order to identify any leaks or damage early. Any panels which require maintenance / replacement will be removed before there is any leakage of chemicals from the sealed units. Any leaks will be dealt with in a way that is compliant with the prevailing environmental legislation. The detailed OEMP(s) will include a regular schedule for visual inspection of the panels and all other solar; b. During the operational phase there would be surface water runoff from the permanent structures, roofs, solar PV panels and access roads. Longfield SuDs Strategy (see [EN010118/APP/6.2]) has been prepared and includes a water quality risk assessment; c. A minimum buffer of 10m around all watercourses (measured from the water/channel edge under normal flows) and 5m around ponds has been included in the Design Principles; and d. All plant (i.e. inverters, transformers and switchgear) will be installed on concrete bases with suitable bunding where appropriate.	The Environmental Manager will regularly record compliance in a log book. The OEMP will detail the frequency.

Table 3-11: Major Accidents and Disasters

Potential Impact	Mitigation / Enhancement Measure	Monitoring Requirements
All works will be undertaken in accordance with relevant Health and Safety legislation and guidance. Details of fire, police, emergency services and hospitals will be publicised and included in the site induction. An Outline Battery Safety Management Plan has been produced for the Scheme **[EN010118/APP/.7.6]** and will be referred to during operation to sagely reduce and manage the risk of fire during operation. This will be updated and maintained as a 'live document' throughout the operational phase of the Scheme. An Emergency Response Plan will be prepared to minimise risks from smoke that may accompany a toxic gas release. An appropriate risk assessment will be produced to minimise the risk of major accidents during operation. Furthers risks of major accidents and disasters are covered in the following tables: **Table 3-4: Flood Risk, Drainage and Surface Water**, **Table 3-8: Transport and Access**, **Table 3-10**: **Ground Conditions**, and **Table 3-12: Waste**.		

Table 3-12: Waste

Potential Impact	Mitigation / Enhancement Measure	Monitoring Requirements
Impacts of waste to the surrounding environment. Potential to impact on sensitive receptors (humans, wildlife and controlled waters) if not stored and managed appropriately.	Materials requiring removal from the Order limits during operation would be transported using licensed carriers and records kept, detailing the types and quantities of waste moved and the destinations of this waste, in accordance with the relevant regulations.	A register of waste loads leaving the Order limits would be maintained to provide a suitable audit trail for compliance purposes and to facilitate monitoring and reporting of waste types, quantities and management methods.

4. Complementary Plans and Procedures

4.1.1 A suite of complementary environmental plans and procedures for the operational phase have been included within the DCO application and set out proposed mitigation for the operational phase, and further detailed plans will be prepared for further approval.

4.1.2 The suite of management plans is illustrated in **Plate 1**. Plans included in the DCO application are in blue, and where further detailed plans are to be prepared, these are identified in orange.

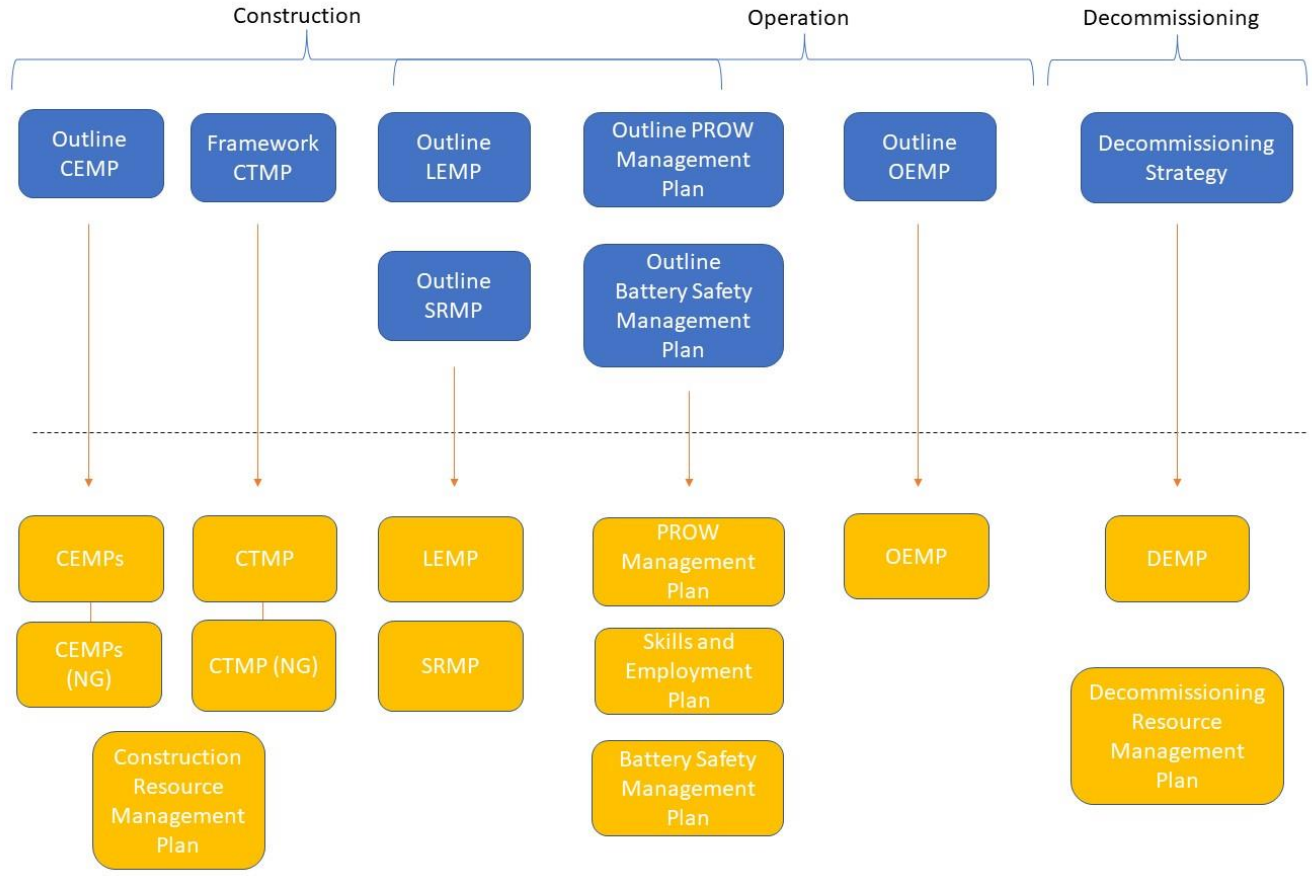

Plate 1: Longfield Solar Farm Management Plans

5. Implementation and Operation

5.1.1 Each OEMP will set out all roles, responsibilities and actions required in respect of implementation of the measures described in this Outline OEMP, including:

a. An organogram showing team roles, names and responsibilities:

b. Training requirements for relevant personnel on environmental topics;

c. 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;

d. Measures to advise employees of changing circumstances;

e. Communication methods;

f. Document control;

g. Monitoring, inspections and audits of site operations; and

h. Environmental emergency procedures.

6. Monitoring and Reporting

6.1 Monitoring

6.1.1 Monitoring and reporting will be undertaken for the duration of the operational phase in order to demonstrate the effectiveness of the measures set out in the OEMPs and related construction 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 OEMPs in a logbook, along with the action taken and general conditions at the time. In addition, the Environment Manager will conduct regular walkover surveys which will be documented, and arrange regular formal inspections to ensure the requirements of the OEMPs are being met.

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

6.2 Records

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

a. Results of routine site inspections by Environmental Manager/ Project Manager;

b. Environmental surveys and investigations;

c. Environmental Action Schedule;

d. Environmental equipment test records;

e. Licences and approvals; and

f. Corrective actions taken in response to incidents, breaches of the approved OEMPs or complaints received from a third party.

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

7. References

Ref 1 HMSO (2008) The Planning Act 2008.
Ref 2 HMSO (1974); Control of Pollution Act 1973.
Ref 3 HMSO (1995); Environmental Act 1995.
Ref 4 British Standards Institute (2014) BS 5228:2009+A1:2014 – Code of practice for noise and vibration control on construction and open sites, Noise, BSi, London.
Ref 5 Northern Ireland Environment Agency (NIEA) (2018), Above ground oil Storage tanks: GPP 2.
Ref 6 NIEA (2017), Treatment and disposal of wastewater where there is no connection to the public foul sewer, GPP 4.
Ref 7 NIEA (2018); Works maintenance in or near water, GPP 5.
Ref 8 NIEA (2017); Safe storage and disposal of used oils, GPP 8.
Ref 9 NIEA (2017); Pollution incident response planning GPP 21.
Ref 10 British Standards Institute (2012) BS 5837:2012 – Trees in relation to design, demolition and construction. Recommendations, Noise, BSi, London.
Ref 11 Department for Food and Rural Affairs (Defra) Guidance on protecting our water, soils and air.
Ref 12 Construction Industry Research and Information Association (CIRIA) Guidance.
Ref 13 NIEA (2017); Vehicle washing and cleaning.
Ref 14 NIEA (2017) Vehicles: Servicing and Repairs.
Ref 15 NIEA (2017) Dewatering underground ducts and Chambers.
Ref 16 NIEA (2018) Guidance for Pollution Prevention.
Ref 17 NIEA (2018) Safe storage of Drums and Intermediate Bulk Containers (IBCs).
Ref 18 British Standards Institute (2009) BS6031:2009 Code of Practice for Earth Works (British Standards Institute, 2009).
Ref 19 HMSO (2002) Control of Substances Hazardous to Health Regulations.
Ref 20 HMSO (2001) Control of Pollution (Oil Storage) (England) Regulations.