

Stonestreet Green Solar

Outline Construction Environmental Management Plan

PINS Ref: EN010135

Doc Ref. 7.8

Version 1

June 2024

APFP Regulation 5(2)(q)

Planning Act 2008

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



Table of Contents

1	Introduction	1
2	Construction Programme and Activities	5
3	General Construction Management Measures	6
4	Environmental Control Measures By Topic	11
5	Outline Air Quality and Dust Management Plan	29
6	Outline Soil Management Plan	35
7	Outline Site Waste Management Plan	40
8	Implementation	42
	Annex 1: Indicative Roles and Responsibilities Organogram	45
	References	46

List of Tables

Table 3.1: Indicative Construction Plant and Equipment	7
--	---

1 Introduction

1.1 Introduction

- 1.1.1 EPL 001 Limited (hereafter referred to as the 'Applicant') has prepared this Outline Construction Environmental Management Plan ('CEMP') in relation to an application (the 'Application') for a Development Consent Order ('DCO') for the construction, operation and maintenance, and decommissioning of Stonestreet Green Solar (hereafter referred to as the 'Project').
- 1.1.2 The Site is within the administrative boundaries of Ashford Borough Council ('ABC') and Kent County Council ('KCC').

1.2 The Project

- 1.2.1 The Project comprises the construction, operation and maintenance, and decommissioning of solar photovoltaic ('PV') arrays and energy storage, together with associated infrastructure and an underground cable connection to the existing National Grid Sellindge Substation.
- 1.2.2 The Project will include a generating station (incorporating solar arrays) with a total capacity exceeding 50 megawatts ('MW'). The agreed grid connection for the Project will allow the export and import of up to 99.9 MW of electricity to the grid. The Project will connect to the existing National Grid Sellindge Substation via a new 132 kilovolt ('kV') substation constructed as part of the Project and cable connection under the Network Rail and High Speed 1 ('HS1') railway.
- 1.2.3 The location of the Project is shown on **Environmental Statement ('ES') Volume 3, Figure 1.1: Site Location Plan (Doc Ref. 5.3)**. The Project will be located within the Order limits (the land shown on the **Works Plans (Doc Ref. 2.3)** within which the Project can be carried out). The Order limits plan is provided as **ES Volume 3, Figure 1.2: Order Limits (Doc Ref. 5.3)**. Land within the Order limits is known as the 'Site'.
- 1.2.4 Areas where infrastructure development is proposed are identified by field numbers, which are shown on **ES Volume 3, Figure 2.1: Field Boundaries and Site Area Plan (Doc Ref. 5.3)**. The areas of the Site where infrastructure development is proposed are referred to as follows:
- South Western Area (Fields 1 to 9);
 - Central Area (Fields 10 to 19 and 23 to 25);
 - South Eastern Area (Fields 20 to 22);
 - Northern Area (Fields 26 to 29);
 - Project Substation (location of the Project Substation, in the north western section of Field 26);

- 'Cable Route Corridor' (export of electricity from the Project at 132kV via underground cables (the 'Grid Connection Cable') to the Sellindge Substation) and 'Cable Route Crossing' (use of an existing cable duct under the HS1 railway or through Horizontal Directional Drilling ('HDD') beneath HS1 for the Grid Connection Cable); and
- Sellindge Substation (location of the existing Sellindge Substation).

1.3 Purpose of this Outline CEMP

- 1.3.1 The purpose of this Outline CEMP is to define the overarching principles for minimising, managing and / or mitigating the environmental effects of constructing the Project. It has been prepared to enable the Secretary of State and interested parties such as KCC, ABC and the local community to understand the nature of the standard environmental management, control measures and safety procedures to be implemented during the construction phase of the Project. It thereby provides a tool to ensure the successful management of the environmental effects resulting from the construction activities.
- 1.3.2 This Outline CEMP provides the overarching principles to ensure that all works associated with the construction of the Project are mitigated appropriately to minimise local disruption and to reduce environmental effects. More specifically, this Outline CEMP:
- Secures that the relevant mitigation measures set out in the **ES (Doc Ref. 5.1-5.4)** submitted as part of the DCO Application are secured and implemented during construction activities; and
 - Identifies the relevant legislation, government and industry standards, and construction industry codes of practice and good practice standards that will be complied with.
- 1.3.3 A detailed CEMP for each phase of the authorised development will be submitted to the local planning authority for approval prior to the commencement of construction of that phase. These detailed CEMP(s) will incorporate topic-specific mitigation measures identified as necessary to mitigate potentially adverse significant effects during the construction phase of the Project.
- 1.3.4 This Outline CEMP will form part of the Employers' Requirements between the undertaker and principal contractor ('Principal Contractor'). A Principal Contractor is the contractor with overall control and responsibility over a phase-specific or Works-specific element of the construction phase. The Principal Contractor will be responsible for production of and working in accordance with the detailed CEMP(s) but the undertaker remains ultimately responsible for compliance.
- 1.3.5 This Outline CEMP and the subsequent detailed CEMP(s) demonstrate the Applicant's commitment to construction of the Project in such a way as to avoid or minimise environmental effects and disruption and provide a mechanism for the implementation of recommended mitigation measures and monitoring throughout the works.

1.4 Document Structure

1.4.1 Following this introduction, this Outline CEMP includes the following:

- **Section 2:** Construction Programme and Activities;
- **Section 3:** General Construction Management Measures;
- **Section 4:** Environmental Control Measures by Topic;
- **Section 5:** Outline Air Quality and Dust Management Plan;
- **Section 6:** Outline Soil Management Plan;
- **Section 7:** Outline Site Waste Management Plan; and
- **Section 8:** Implementation.

1.5 Basis of this CEMP

1.5.1 This Outline CEMP is based on the following documents, legislation, Government and industry standards, and construction industry codes of practice and good practice standards:

- The **ES (Doc Ref. 5.1-5.4)** submitted with the DCO Application which includes assessments of the environmental effects of the Project during the construction works and includes relevant mitigation measures to eliminate, reduce or offset any effects;
- Environment Agency Guidance for Pollution Prevention ('GPP'¹) notes (e.g. GPP13: Vehicle Washing and Cleaning and GPP22: Dealing with Spills and others²);
- Construction Industry Research and Information Association ('CIRIA') – Control of Pollution from Construction Activities and other documents such as the SuDS Manual and Environmental Good Practice on Site Guidance (fifth edition³);
- Construction (Design and Management) Regulations 2015 ('CDM Regulations 2015')⁴;
- Environmental Permitting (England and Wales) Regulations 2016⁵;
- Control of Pollution (Oil Storage) (England) Regulations 2001⁶;
- Defra's Construction Code of Practice for the Sustainable Use of Soils on Construction Sites, 2009⁷;
- UK Forestry Standard and UK Woodland Assurance Standard⁸; and
- Relevant British Standards including:
 - BS 5228-1:2009, BS 5228-2:2009 'Code of practice for noise and vibration control on construction and open sites'⁹;
 - BS 42020:2013 'Biodiversity: Code of Practice for Development'¹⁰;
 - BS 5837:2012 'Trees in relation to design, demolition and construction. Recommendations'¹¹;

- BS 3882:2015 'Specification for topsoil and requirements for use'¹²;
- BS 3998:2010 'Tree work. Recommendations'¹³;
- BS 3936:2010 'Nursery stock – Specification for trees and shrubs'¹⁴;
- BS 6031:2009 'Code of Practice for Earthworks'¹⁵;
- BS 8601:2013 'Specification for Subsoil and requirements for use'¹⁶;
and
- BS 12464-2:2014 'Lighting of Outdoor Workplaces'¹⁷.

2 Construction Programme and Activities

2.1 Overview

2.1.1 An overview of the Project as well as construction programme and activities can be found in **ES Volume 2, Chapter 3: Project Description (Doc Ref. 5.2)**. This section provides a high-level overview of the indicative construction programme and activities.

2.2 Indicative Construction Programme

2.2.1 Construction works are anticipated to commence in 2026 and take place continuously over a 12-month period.

2.2.2 The anticipated duration of the construction activities associated with the Project are as follows:

- Enabling and Site preparation - 3 months;
- Installation of key infrastructure - 9 months;
- Project Substation construction - 10 months;
- Grid Connection Cable and Sellindge Substation works - 4 months; and
- Commissioning and Site restoration / landscaping - 2 months.

2.2.3 The above construction stages will overlap over the anticipated 12-month construction period. Specific detail on the construction programme will be provided within the detailed CEMP(s).

2.2.4 The main construction activities for each of the above stages for the Project are outlined in Section 3.14 of **ES Volume 2, Chapter 3: Project Description (Doc Ref. 5.2)**.

2.2.5 The **Outline Landscape and Ecological Management Plan (Doc Ref. 7.10)** ('Outline LEMP') provides the landscape and ecology impact avoidance measures and mitigation, as well as habitat improvement, management and monitoring to be implemented for the Project. The Outline LEMP provides details of the specific habitat and species surveys that will be required across the Site.

2.2.6 Once complete and prior to operation of the Project, testing and commissioning of the equipment will be carried out.

3 General Construction Management Measures

3.1 General Site Arrangements

3.1.1 The following general Site arrangements will be implemented:

- All unaccompanied personnel visiting or working on-Site must complete induction training;
- All plant / equipment used during the construction activities must be compliant with the relevant regulatory requirements;
- Site workers must wear appropriate Personal Protective Equipment ('PPE'), as well as additional Protective Equipment as required for specific works;
- All work areas must have clear, well maintained signage;
- All staff members must work to their safety method statements and abide by all safety signs at all times;
- A qualified First Aider / Emergency First Aider must be present on-Site at all times;
- Smoking is prohibited on-Site, except in designated areas, and the possession or use of alcohol or drugs is prohibited;
- Staff members must maintain the Site welfare facilities for the duration of the works;
- Use of audio equipment is not permitted on-Site, except in designated areas;
- Acts of threat or violence will not be tolerated and any offender will be removed and permanently excluded from the Site;
- The Principal Contractor and all Sub-contractors on-Site must co-operate in the interest of health and safety and perform their duties in a safe manner;
- All work areas must have clear, well maintained signage;
- The undertaker and Principal Contractor must have appropriate regard to the HSE Guidance Note GS6 'Avoiding danger from overhead power lines' (HSE, 2013¹⁸);
- Appropriate firefighting equipment must be maintained on-Site;
- No fires are permitted on-Site; and
- All waste materials must be collected and removed from Site at regular intervals.

3.2 Construction Method Statements

3.2.1 The detailed CEMP(s) will contain Construction Method Statements ('CMS') outlining specific activities and procedures necessary for completing construction works. The CMS will cover the following main elements:

- Comprehensive construction programme delineating various stages and their contextual significance within the Project. This includes a breakdown of materials, manpower resources, and necessary plant and equipment.
- Detailed Site layout arrangements incorporating temporary works requirements.
- Identification of prohibited or restricted operations or areas of the Site.
- Description of activities likely to cause disturbance, including expected duration with key dates.
- A procedure for prior notification to relevant authorities and neighbours for activities likely to cause disturbance.

3.3 Working Hours

3.3.1 Construction activities will be carried out during the following core hours:

- 08:00 – 18:00 hours on weekdays;
- 08:00 – 13:00 hours on Saturdays; and
- No working on Sundays or Bank Holidays.

3.3.2 Start-up and shut-down works will be undertaken before and after normal working hours (i.e. 07:00 to 08:00 and 18:00 to 19:00 on weekdays and 07:00 to 08:00 and 13:00 to 14:00 on Saturdays) including:

- Arrival and departure of workforce on-Site;
- Deliveries and unloading;
- Site inspections, plant maintenance and safety checks; and
- Site clean-up.

3.3.3 The hours of work as set out above will be secured through the detailed CEMP(s) and will be strictly adhered to with the exception of abnormal load deliveries and night-time construction works if required for HDD under the HS1 railway (part of Work No. 4).

3.4 Construction Plant and Equipment

3.4.1 An indicative list of plant and equipment that are likely to be used during the various stages of construction is shown in **Table 3.1**. A final version of this table will be provided within the detailed CEMP(s).

Table 3.1: Indicative Construction Plant and Equipment

	Stage of Works
--	----------------

Plant and Equipment	Enabling and Site preparation	Installation of key infrastructure	Grid Connection Cable and Sellindge Substation works	Commissioning and Site restoration / landscaping
Digger / Slew	✓	✓	✓	✓
Dumper Truck	✓	✓	✓	✓
Tractor with Hedge Cutter	✓			
Tractor Trailer	✓	✓	✓	✓
Compactor	✓	✓	✓	
4x4 Vehicle	✓	✓	✓	✓
4x4 Vehicle with cable trailer	✓	✓	✓	✓
Piling Rig	✓	✓	✓	
Mobile crane	✓	✓	✓	
Cement Mixer / Augur		✓	✓	✓
Mini Digger / Augur		✓	✓	✓

3.5 Construction Compounds and Material Storage

- 3.5.1 Two Primary Construction Compounds will be located within Fields 25 and 26 and will include temporary Site offices/welfare facilities, turning and loading areas for incoming heavy goods vehicles ('HGVs'), containerised storage areas, waste storage areas, PV panel testing area, bunded area for storage of fuels and hydrocarbons, parking, and security infrastructure (hoarding, fencing, and CCTV).
- 3.5.2 Locations for the Secondary Construction Compounds are shown on the **Works Plans (Doc Ref. 2.3)** in Fields 8/9, 19, 20 and 23. Secondary Construction Compounds will

provide additional temporary welfare facilities and areas for the temporary storage space of materials / waste, and plant and equipment (when not in use). Secondary Construction Compounds will be unsurfaced and fuel will not be stored within them.

- 3.5.3 Tertiary construction laydown areas will be located within the Site on a shorter-term basis and will move as the construction progresses. They will be used as temporary storage and distribution locations for construction materials. Inverter Stations within the Site, prior to any installation of infrastructure, are ideal locations as these are typically centrally placed and will have areas of open space around them large enough for the temporary storage of construction materials.

3.6 Construction Traffic and Site Access

- 3.6.1 The **Outline Construction Traffic Management Plan ('CTMP') (Doc Ref. 7.9)** confirms the proposed construction traffic route and worker transport. Construction traffic will not be routed through the centre of Aldington village or surrounding villages.
- 3.6.2 Access to the Aldington Flood Storage for the Environment Agency will be maintained at all times.
- 3.6.3 The Primary Site Access to the Project from the public highway will be located via access off Station Road and is shown as Work No. 6 on the **Works Plans (Doc Ref 2.3)**. This provides access to the Primary Construction Compounds within Fields 25 and 26.
- 3.6.4 With the exception of the South Eastern Area and the Sellindge Substation Extension, construction related traffic will not use the public highway (save for crossings points) after entering the Primary Site Access, with all movements being on the internal haulage road. Access to the South Western Area (Fields 1-9) into Field 9 will be via the existing Bank Farm access track off Roman/Bank Road.
- 3.6.5 Access to the South Eastern Area will be via an existing access from Goldwell Lane with escort vehicles used as required. A limited amount of construction traffic will need to use Goldwell Lane to reach this access as no other route is possible. Access to Sellindge Substation for construction purposes will continue to be via the existing access to the Sellindge Substation from Church Lane.

3.7 Security and Visitors

- 3.7.1 Site security during construction will be managed by the Principal Contractor. Once installed, the Site security fencing will remain in place throughout the duration of the construction period. Any storage of materials will be kept secure to prevent theft or vandalism. A safe system for accessing the materials storage areas will be implemented by the Principal Contractor.
- 3.7.2 Designated security staff during construction will manage the Order limits and patrol as necessary, including during periods where construction activities are not taking place.

- 3.7.3 Only authorised personnel will be permitted on-Site. All visitors will be required to enter through the main entrance gate to the Site and report to the Construction Manager/Site Manager and will be required to sign in and out to ensure that Site management are aware of the number of people on-Site in the event of an emergency. Visitors will be required to undergo induction training and wear necessary PPE i.e. safety helmet, hi-visibility attire and safety footwear.

3.8 Emergency Procedures

- 3.8.1 The Principal Contractor will prepare a detailed Emergency Preparedness Plan ('EPP') which will include an Emergency Flood Response Plan ('EFRP') in relation to responding to flood warnings and events.
- 3.8.2 The EPP will outline the process for responding to any incidents or emergencies on Site, including reporting requirements. In the event of a serious incident on Site ABC's Environmental Health Officer ('EHO') and any other relevant bodies will be notified, as required.

3.9 Utilities

- 3.9.1 Precautionary measures will be taken during the construction phase to avoid any damage to unidentified utilities during excavation and engineering activities.
- 3.9.2 The risk of damage to utilities during the construction phase will be minimised through consultation and agreement of construction methods with statutory undertakers prior to works commencing, with the use of micro-siting and suitable structures and construction methods such as non-intrusive concrete ballast systems, pipe bridges and HDD where required.

3.10 Considerate Constructors Scheme

- 3.10.1 The Principal Contractor will register the Project under the Considerate Constructors Scheme. This will ensure that good practices are adopted that exceed statutory compliance and will result in a reduction in pollution and nuisance impacts.

4 Environmental Control Measures By Topic

4.1 Introduction

- 4.1.1 The following section of this Outline CEMP describes the mitigation control measures to be implemented in the detailed CEMP(s) to ensure the protection of the environment from potential significant adverse effects.
- 4.1.2 Each topic is dealt with independently. However, there is overlap between topics and therefore they must be read in conjunction with each other.
- 4.1.3 Activities that require a 'Management Plan', namely the Air Quality and Dust Management Plan ('AQDMP'), the Soil Management Plan ('SMP') and the Site Waste Management Plan ('SWMP') are discussed in detail within **Sections 5 to 7** below.

4.2 Cultural Heritage

Built Heritage

- 4.2.1 Designated heritage assets outside the Site will be protected from harm through the management of construction traffic as detailed in the **Outline CTMP (Doc Ref. 7.9)** and the implementation of mitigation measures outlined within **Section 4** (i.e. control noise and vibration, site lighting, dust and construction traffic etc.) of this Outline CEMP.

Archaeology

- 4.2.2 Direct effects to archaeological remains will be mitigated through the implementation of a programme of archaeological works such as targeted watching brief(s) of ground disturbance, as part of the **Archaeological Management Strategy ('AMS') (Doc Ref. 7.17)**. This is secured by Requirement within the **Draft Development Consent Order (Doc Ref. 3.1)**.
- 4.2.3 The **AMS (Doc Ref. 7.17)** confirms that should archaeological remains be discovered and it be determined that these should be preserved in situ, and Project infrastructure not sited above it, a fenced buffer zone will be constructed around the area selected and maintained during the construction phase of the Project.
- 4.2.4 An article contained within the **Draft Development Consent Order (Doc Ref. 3.1)** makes provision for the event of the discovery of human remains.

4.3 Transport and Access

- 4.3.1 An **Outline CTMP (Doc Ref. 7.9)** has been produced which outlines the mitigation in relation to construction traffic and includes the following:
- Delivery management to minimise impact on the highway network;

- Traffic signage to warn motorists of construction traffic access;
- Traffic management in the form of temporary traffic lights, 'stop / go' boards and / or temporary warning signage will be used at locations where the internal haulage road crosses public highways and the Byway Open to All Traffic ('BOAT');
- Escort vehicles and / or designated banksmen / lookouts to be used where the construction traffic crosses public rights of way ('PRoW') within the Site to ensure PRoW user safety;
- The use of escort vehicles for the navigation of the bend on Goldwell Lane; and
- The use of wheel and underbody vehicle cleaning facilities, mechanised street sweepers and local damping and dust suppression measures.

4.3.2 An **Outline Rights of Way and Access Strategy ('RoWAS') (Doc Ref. 7.15)** has been produced which details mitigation measures associated with PRoW and vehicle movements to and within the Site. It also outlines how the PRoW will be managed to ensure they remain accessible and PRoW user safety is maintained during construction.

Construction Mitigation Measures

4.3.3 General construction measures to be adopted to reduce traffic and transportation effects include:

- Fire and emergency access routes will be kept free from obstruction at all times;
- Footpaths and roads (excluding public highways) that are within the Order limits to be kept clear of obstructions, including parked cars;
- Footpaths and local roads that are impacted by construction traffic will be protected and maintained in a condition suitable for vehicular and pedestrian traffic;
- Materials will not be stored in areas where they may constitute a hazard;
- Safety signs will be clearly posted to make personnel on Site aware of traffic hazards;
- Pedestrian accesses which lead onto any traffic route will be sufficiently separated to enable pedestrians to see approaching plant and vehicles;
- Adequate separation between vehicles and pedestrians will be established to ensure safety or, where not reasonably practicable, other means of protecting pedestrians and effective arrangements for warning; and
- Every traffic route within the Order limits, where necessary for reasons of health or safety, will be clearly indicated by suitable signs regularly checked and properly maintained.

4.4 Noise and Vibration

- 4.4.1 All works will comply with BS 5228 (Parts 1 and 2) Code of practice for noise and vibration control on construction and open sites.
- 4.4.2 To ensure compliance with BS 5228 the following monitoring will be conducted:
- A regime of noise monitoring will be defined in each detailed CEMP, including the consideration of alternative techniques and / or other means of controlling noise levels.
 - Additional bespoke monitoring of noise and vibration will be undertaken in response to specific complaints if reasonably requested by ABC.
- 4.4.3 A Section 61 agreement under the Control of Pollution Act 1974 will be secured and agreed with ABC if required.
- 4.4.4 The majority of works are anticipated to take place within the core working hours detailed in Section 3.3. However, night-time construction works may be required if HDD is required to create new cable ducting under the HS1 railway.

Mitigation Measures

- 4.4.5 Best practicable means ('BPM') will be applied during construction works at all times to minimise noise (including vibration) at neighbouring residential properties and other sensitive receptors. BPM are defined in Section 72 of the Control of Pollution Act 1974 and Section 79 of the Environmental Protection Act 1990 as those measures which are *"reasonably practicable having regard among other things to local conditions and circumstances, to the current state of technical knowledge and to financial implications"*.
- 4.4.6 The following measures will be adopted to reduce noise and vibration during the works:

Pre-construction measures:

- Implementing pre-construction processes and procedures to minimise noise throughout the Project duration.
- Ensuring contractors' familiarity with current legislation and BS:5228 guidelines prior to their appointment.

Noise and Vibration Control:

- Controlling noise and vibration at the source through methods like selecting quieter equipment and reviewing construction methodologies. Any machine capable of noise emissions in the region of 135dB would not be utilised on the Site and any failure of a mechanical nature resulting in a high noise event should be removed from the Site immediately for repair.
- Avoiding unnecessary engine revving and switching off equipment when not in use.

- Using modern, UK noise emission-compliant machinery and preferring hydraulic techniques over percussive ones where feasible.
- Minimising drop heights of materials and sequentially starting plant and vehicles.
- Avoid the use of heavy or vibration generating machinery where practical.
- Use of low vibration piling rigs at any location within 30m of a sensitive receptor.
- Hydraulic bursting to be used to remove concrete at any location identified within 30m of a sensitive receptor.

Construction Strategies:

- Preferring off-Site pre-fabrication when possible.
- Using local screening around noisy equipment and implementing quieter maintenance practices.
- Proper maintenance, silencing, and responsible operation of all construction machinery.

Works Management:

- Conducting vehicle movement and activities to minimise noise within specified limits.
- Use of reversing warning devices instead of typical tonal alarms on construction vehicles if possible.
- Routing construction traffic on public roads and the internal haulage road as per the **Outline CTMP (Doc Ref. 7.9)**.
- Limits on timing of deliveries to Site, with the exception of the delivery of abnormal loads.
- Prior to construction works being undertaken, liaison will be undertaken with occupiers of sensitive receptors that may be adversely affected by construction noise and vibration.
- All communications will contain contact details to direct any questions or complaints to a Project representative.

Monitoring and Compliance:

- Monitoring noise complaints and ensuring investigation and action as soon as practicable.
- Appropriate monitoring and communication to be undertaken where the use of excavators is required within 50m of residential properties.

Operational Guidelines:

- Adhering to manufacturers' recommendations while siting equipment away from noise-sensitive areas. Preferentially conducting loading and unloading away from such areas.

4.4.7 Enhanced mitigation measures will be required as outlined below to ensure construction noise is reduced below the Significant Observed Effect Level ('SOAEL')

for the individual noise sensitive receptor ('NSR'). These enhanced mitigation measures relate to the following:

- Installation of the internal access tracks in Fields 17 and 18;
- Cable installation within 100m of NSR 7 (Becketts Green); and
- Cable installation on Goldwell Lane.

4.4.8 Enhanced mitigation measures will be incorporated into the detailed CEMP(s) for the above to ensure construction noise is reduced below the SOAEL. These measures include:

- Selection and appropriate use of low noise construction plant that may be different from the typical plant used for similar works elsewhere on the Site.
- Targeted use of barrier attenuation to shield specific NSRs from noise.
- Targeted use of noise monitoring to track construction related noise levels during the working period with dedicated bespoke alarms set up to warn of potential breaches before they occur.
- Good communication between construction managers and residents / occupiers to give advanced notice of works and information about the reasons for the works and durations.
- Provision of contact numbers as part of communication to allow specific concerns during works to be addressed in a timely way.
- Where required, use of Section 61 applications to ABC to allow works to progress to agreed criteria in the event that SOAEL levels are likely to be exceeded, notwithstanding all mitigation measures and best practice detailed within the CEMP.

4.5 Air Quality and Dust

4.5.1 An Outline AQDMP has been prepared for the Project and included within **Section 5** of this Outline CEMP. Its principles will be incorporated into the detailed CEMP(s).

4.6 Landscape and Visual Amenity

4.6.1 An **Outline LEMP (Doc Ref. 7.10)** has been produced to support the DCO Application. Temporary landscape and visual impacts from construction activities within the Site will be managed through the following measures:

- Protection of existing vegetation from damage on and around the Site in accordance with BS 5837:2012;
- Limiting of construction activities (including start-up and shut-down works) to limit the extent to which construction activities affect receptors on a daily or weekly basis;
- All unloading or loading of construction materials and equipment is to be undertaken within the Site boundary;

- Local roads will be cleaned regularly where dirt is spread by construction traffic; and
- Litter within and around the Site will be removed and the Site will be kept free from litter throughout construction activities.

4.7 Land Contamination and Ground Conditions

- 4.7.1 **ES Volume 2, Chapter 11: Land Contamination (Doc Ref. 5.2)** assesses that the Site does not have a significant potential to be contaminated with chemical compounds which would pose an unacceptable level of risk to controlled waters or human health.
- 4.7.2 Work will be carried out in accordance with relevant CDM Regulations 2015 to manage the health, safety and welfare of site workers during the construction of the Project.
- 4.7.3 Site workers will be required to wear appropriate PPE that are suitable for the activities undertaken. All workers on-Site will be made aware of potential contamination issues on the Site during the induction and will use best practice techniques during all construction activities.

Mitigation Measures

- 4.7.4 The operation of construction vehicles and the handling, use and storage of hazardous materials will be undertaken as follows:
- Vehicles and plant will be well maintained and routinely checked to prevent accidental pollution from leaks. Static machinery and plant will include drip trays beneath oil tanks / engines / gearboxes / hydraulics, which will be checked and emptied regularly via a licensed waste disposal operator;
 - Refuelling will be undertaken in specified areas. Drip trays will be installed to collect leaks from diesel pumps;
 - Any tanks and associated pipe work containing oils and fuels will be double skinned and be provided with intermediate leak detection equipment;
 - The handling, use and storage of hazardous materials will be undertaken in line with the current best practice;
 - 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;
 - Adequate bunded and secure areas with impervious walls and floors, with a capacity of 110% of substance volume, will be provided for the temporary storage of fuel, oil and chemicals on-Site during construction. Valves and trigger guns will be protected from vandalism and kept locked up when not in use;
 - Provision of spill containment equipment such as absorbent material on-Site, to be kept in the vicinity of potentially hazardous materials storage areas. A spill procedure will be documented and all staff trained on the use of spill kits;

- The appropriate sewerage undertaker will be consulted on the potential requirement for an oil interceptor and sediment trap at the point where Site surface water runoff enters the sewerage network;
 - All construction, oil, fuel and diesel materials will be stored as far from the nearby water bodies and drainage as reasonably possible;
 - Installation of ground gas protection measures across areas or structures deemed to be at risk; and
 - On-Site provisions will be made to contain an accidental spill or leak through the use of booms, bunding and absorbent material.
- 4.7.5 A member of staff will be nominated to control and monitor the Control of Substances Hazardous to Health ('COSHH') system. A COSHH/fuel inventory will be maintained, and key contacts listed to be notified in the event of a significant pollution incident. Suppliers must send data sheets for every hazardous substance held on-Site. Supervisors and Safety Managers will brief staff members who will be using hazardous materials on its safe use, disposal and any emergency procedures. Written records of these briefings will be kept in the COSHH file held on the Site.
- 4.7.6 Tanks and dispensing pumps will be locked when not in use to prevent unauthorised access. Information regarding spill prevention and disposal of COSHH items will be provided as part of the standard Site induction presentations and during regular toolbox talks and the works progress.

Asbestos

- 4.7.7 In the event that asbestos is discovered on Site a competent / licensed contractor will remove asbestos containing materials and other materials and structures contaminated with asbestos fibres.
- 4.7.8 All excavation work will be carried in accordance with the Control of Asbestos Regulations 2012 and agreed safety measures (such as damping down during periods of dry weather and sheeting of stockpile and haulage) will be in place during any works across areas where asbestos may be encountered, although not considered likely given the greenfield nature of the Site.
- 4.7.9 Excavated materials will be segregated to ensure no cross-contamination of any potentially contaminated and clean excavated materials, and to minimise the long-term storage and management of excavated materials.

Unanticipated Ground Conditions

- 4.7.10 A general watching brief for evidence of contamination will be undertaken during construction works. If visual / olfactory evidence of contamination is encountered, works in the area will cease and a suitably qualified and experienced environmental consultant / engineer will be contacted. The assigned environmental consultant / engineer will be responsible for liaising with ABC Environmental Protection Team ('EPT') as appropriate throughout this protocol.

- 4.7.11 Under the direction of the environmental consultant / engineer, the area of concern will be examined. If required, samples of potentially contaminated material will be taken and analysed at an accredited laboratory to determine if the material meets the required criteria to be protective of human health and the environment.
- 4.7.12 Pending the laboratory results of the samples, the extent of the potential contamination will be delineated where practicable. It may be appropriate to separately stockpile arisings of potentially contaminated material on low permeability membrane to prevent leaching.
- 4.7.13 Upon receipt of the laboratory results, the results will be screened against suitable generic assessment criteria and assessed in accordance with the Land Contamination Risk Management guidance. If concentrations above the criteria are encountered, the findings of the assessment will be used to determine the risks and the appropriate course action. If required a remediation strategy will be submitted to and approved by ABC EPT. Any necessary remedial works will be undertaken as part of, and allowed for by, the Site Wide Works clause (c) "remediation of contamination" detailed in Schedule 1 of the **Draft Development Consent Order (Doc Ref. 3.1)**.
- 4.7.14 Relevant information should be included within the Principal Contractor's, and any other relevant contractor's, Health and Safety risk assessment and method statement for the construction works. This will include instruction to maintain a watching brief during the works for evidence of contamination and measures such as appropriate use of PPE and dampening stockpiles of excavated material to prevent dust generation.

Piling

- 4.7.15 Piling will be carried out in accordance with the Environment Agency Guidance Note on Piling / Penetrative Ground Improvement Methods on Land Affected by Contamination¹⁹ and ground investigations will inform the Foundation / Piling Works Risk Assessment which will define the appropriate piling methods and foundation design to mitigate risk.

4.8 Water Environment

- 4.8.1 Good practice construction measures contained within this Outline CEMP will prevent significant adverse effects in relation to flood risk, surface water drainage and pollution control of oils, sediments, cements and other polluting sources which may be hazardous to the environment.

Monitoring

- 4.8.2 All operatives will be made aware of the need to protect the East Stour River and Ordinary Watercourses from contamination, including Environment Agency guidance and legal obligations.
- 4.8.3 Water quality surveys will be undertaken prior to the commencement of construction to establish a baseline position, and regular monitoring of water quality in the East Stour River and Ordinary Watercourses on and downstream of the Site undertaken

during the construction phase. Details of the sampling regime, including the monitoring suite and sampling frequencies, will form part of the detailed CEMP(s) with records of the laboratory analysis documented to demonstrate compliance.

- 4.8.4 In some situations, it may be more appropriate to carry out specific impact and mitigation monitoring, such as upstream and downstream of HDD drill points and at water crossings. This will be undertaken on a case-by-case basis.
- 4.8.5 In the event that adverse changes in water quality are identified, the cause would be investigated in coordination with other development projects and remedial measures implemented, where appropriate.

Flood risk

- 4.8.6 In relation to flood risk mitigation, this Outline CEMP secures the following measures:
- The Principal Contractor will monitor weather forecasts and plan works accordingly;
 - An Emergency Flood Response Plan ('EFRP') will be provided through the detailed CEMP(s) and will set out actions that will be implemented in the event of flooding (fluvial or extreme rainfall) or the issue of a flood alert or warning during construction works. The EFRP will include: (1) Details of roles and responsibility for maintaining, updating and implementing the plan; (2) Overview of the local flood risk; (3) Details of the local Environment Agency flood warning service; (4) Specific action that will be undertaken in response to the issuing of a flood alert or flood warning; and (5) Details of access and egress routes onto the Site for the period in advance of and during a flood event. The EFRP will include procedures for securing or relocating materials stored in bulk from the floodplain and safe access and escape routes for personnel on-Site;
 - Stockpiling and ground raising will be avoided within the fluvial floodplain (Flood Zone 3), within the Aldington Flood Storage Area and in any other areas known to be at risk of surface water flooding;
 - Stockpiles used during the construction stage will be kept to the minimum reasonably possible size with gaps to allow surface water runoff to pass through;
 - The proposed Secondary Construction Compound in Field 23 is located in an area shown as a high risk of surface water flooding on Environment Agency mapping. However, the Flood Risk Assessment concludes this is risk is predominantly fluvial (**ES Volume 4, Appendix 10.2: Flood Risk Assessment (Doc Ref. 5.4)**). This compound will only be used to store PV panels and associated frames;
 - Potentially polluting materials will be located on construction compounds not at risk of flooding;
 - Drainage will be provided across the Site as construction works progress which will ensure that the flood risk to PRowS is not exacerbated through the Project; and

- If field underdrainage is encountered, measures to avoid damage or disruption to the underdrainage system will be implemented, by micro-siting excavations. Where this is not practicable, field underdrainage would, in consultation with the landowner, be diverted or replaced.

Watercourse crossings / HDD

4.8.7 A number of crossings have been identified where HDD methods are proposed for cable crossings. The following mitigation measures will be implemented:

- HDD will be undertaken by a specialist contractor and the water column above the drill path will be continuously monitored during drilling.
- Regular maintenance and servicing of all equipment with works undertaken in alignment with industry standard good practice measures to minimise the risk to groundwater aquifers beneath the Site.
- Discussions with the Environment Agency / Kent Internal Drainage Board for watercourse crossings will be undertaken as part of the Flood Risk Activity Permit process and the preparation of the detailed CEMP(s).
- Cable entry and exit points within transition pits will be sealed with an appropriate water proofing material to mitigate pollution incidents resulting from below ground flow into the excavation.
- Measures will be included to prevent potentially silt laden surface water runoff and/or potential contaminants reaching the watercourse during the installation of the crossings. Discharge from the works areas will therefore be drained to the watercourse via suitable sediment / silt traps.
- If leakage of bentonite water is observed in the watercourse or there is an increased perceived risk (e.g. lack of drilling mud returns) the drilling/boring operation would be suspended, remedial action implemented, and subsequently the methodology for that crossing re-evaluated. A particular risk arises from the potential 'blow out' of the drilling mud into the watercourse, however, the risks will be minimised by designing the vertical alignment of the bore with reference to a site-specific Site investigation.
- An HDD risk assessment will be provided as part of the detailed CEMP(s) and the EPP will include actions required in the event of a breakout of HDD fluids.

Surface Water Drainage

4.8.8 Implementation of appropriate temporary drainage measures will be required to minimise the potential risk of silt-laden runoff arising from construction activities and erosion of exposed soils reaching the existing drains and watercourses within and in the vicinity of the Site, and to mitigate flood risk and sediment loading.

4.8.9 Temporary management (attenuation) of surface water is likely to be required in any areas where earthworks are required. This will include the Project Substation, Inverter Stations and Intermediate Substations. For each of these areas a construction surface water drainage scheme will be developed and provided as part of the surface water management measures and provided in the detailed CEMP(s).

General Measures

4.8.10 The following mitigation measures will be implemented to protect the water environment and surface water quality during all construction activities:

- Where reasonably possible, operational surface water drainage features will be constructed in advance of general construction activities in a given area and allowed to stabilise to create features to intercept runoff from areas where works are occurring;
- Additional drainage or reworking of the soil will be implemented where compaction of soils is considered a significant risk or if significant compaction is noted along any of the traffic routes;
- Secondary Construction Compounds will be unsurfaced and fuel / oil will not be stored in these areas. Construction laydown areas will generally be unsurfaced. Laydown areas may also be used as temporary storage and distribution locations for construction materials, but no fuel or oil will be stored in these areas unless they are surfaced (e.g. Inverter Stations);
- The internal haulage road will comprise ground protection mats and will be permeable to avoid changes to the current flow of surface water;
- The time excavations are left open will be kept to a minimum to avoid ingress and removal of water. Excavations will be reinstated as soon as practicable once construction works are complete;
- Where appropriate, temporary cutoff drains will be installed to prevent surface water and shallow throughflow entering excavations. Treated / clean water will be discharged downstream of the excavation and encouraged to infiltrate into the ground mimicking natural flow patterns; and
- No stormwater outfalls are proposed into the East Stour River. Stormwater outfalls to Ordinary Watercourses will be set back from the channel and instead will have a diffuse outfall via a vegetation buffer, reducing the risk of scour.

Pollution Control: Oils

- Areas at risk of pollutant spillage, including construction compounds, vehicle maintenance areas and hazardous substance stores (including fuel, oils and chemicals) will be bunded and carefully sited to minimise the risk of hazardous substances entering drainage systems or local watercourses;
- Primary Construction Compounds will have impermeable bases to limit the potential for migration of contaminants into groundwater following any leakage/spillage. Primary Construction Compounds will include bunded areas used to store fuel, oil etc. which will have a 110% capacity;
- All fuel, oils and other polluting substances will be securely stored in suitably bunded containers on impermeable surfaces in accordance with GPP220 and GPP821. The total quantity and range of potential pollutants to be used on-Site is anticipated to be small;
- Static machinery and plant will, where practicable, have integral drip trays of 110% of the capacity of the fuel tank;

- The use of biodegradable oils and lubricants will also be used, where practicable;
- Refuelling will be undertaken in a designated and lined refuelling area;
- Machinery will be routinely checked to ensure it is in good working condition to reduce the risk of leaks;
- Any tanks and associated pipe work containing oils and fuels will be double skinned and be provided with intermediate leak detection equipment; and
- Any visual/olfactory signs of contamination encountered during excavation will be reported and investigated.

Pollution Control: Sediment

- Excavated material will not be placed or stored within the standoff zones along watercourses. Material will be placed in such a way as to avoid any disturbance of areas close to the banks of watercourses and to prevent spillage into water feature;
- Installation of temporary surface water drainage to mitigate flood risk and sediment loading;
- Appropriate measures will be adopted to prevent and control the release of sediment depending on the circumstances and nature of the works. These measures include surface water being directed across vegetated zones, or through mesh fencing, to capture sediment, as appropriate. Alternatives, such as sediment traps or settlement lagoons, may also be considered if the quantity of sediment laden water is anticipated to be large;
- Sediment control measures, drains and potholes will be regularly inspected and cleared / infilled / repaired;
- Sediment fences will be installed along watercourses when unavoidably working in close proximity to prevent sediment being washed into watercourses;
- Covers will be used by lorries transporting materials to or from the Site to prevent releases of dust / sediment to watercourses or drains;
- Subject to the nature of the material, stockpiled materials should be on an impermeable surface to prevent leaching of contaminants and covered when not in use to prevent materials being dispersed by wind or rainfall runoff;
- Strip soils and vegetation clearance to only occur during dry conditions with scheduling of significant earthworks to avoid extreme wet periods;
- Use of track mats to prevent unnecessary soils compaction, damage to vegetation, and/or erosion;
- Grass seeding will be undertaken as soon as reasonably possible after installation of panels or completion of other work to encourage grass regrowth;
- Once electrical cables are laid, all trenches will be backfilled and reinstated to the existing ground level and seeded to reduce the risk of runoff of fine sediments into watercourses; and

- Plant and wheel washing facilities will be provided as required. These will be located within the designated hard standings at least 10m from the nearest watercourse or surface water drain. Runoff from the facilities will be captured within a purpose designed system for recycling and re-use where possible within the Site. Settled solids will be regularly removed and disposed of by an appropriately licensed contractor.

Pollution Control: Cement

- Where reasonably practicable, precast concrete will be used in preference to wet pouring of concrete;
- No concrete batching will be permitted within the Site and all concrete delivery vehicles will be required to return to appropriate controlled and licenced facility for washout;
- Smaller equipment washout will occur in a lined and bunded area and all resulting liquid will be managed in line with Environment Agency's RPS 235²²;
- Cement/concrete mixes will be calculated to ensure that sufficient quantities are supplied (without needing to dispose of any excess), and that the cement/sand mix ratio will be monitored for consistency and suitability;
- Pouring of concrete for foundations will take place within well shuttered pours to prevent egress of concrete from the pour area; and
- Pouring of concrete or cement bound sand during adverse weather conditions will be avoided, where possible.

Pollution Control: Other

- All flows from facilities will be collected and tankered from the Site for treatment and disposal at a suitably licenced facility outwith the Stour catchment;
- Welfare facilities will not be provided in the Secondary Construction Compound that is at risk of surface water flooding (Field 23); and
- All welfare facilities will be sited out of the floodplain and away from watercourses.

Management of Spillage Risk

- 4.8.11 Detailed CEMP(s) will provide information regarding pollution incident response plans which will identify the type and location of on-Site resources (e.g. spill kits, absorbent materials, oil booms etc.) available for the control of accidental releases of pollution and other environmental incidents.
- 4.8.12 A spill procedure will be documented, and spill kits kept in the vicinity of potentially hazardous materials storage areas. All staff will be trained on the use of these spill kits as part of the Site induction, highlighting the importance of water quality, the location of watercourses and pollution prevention measures.

4.9 Biodiversity

- 4.9.1 This Outline CEMP describes the general mitigation measures for mitigation of effects on biodiversity where they relate to best practice construction measures or specific construction activities, where associated with dust deposition, air pollution, pollution incidents, water quality, light, noise and vibration.
- 4.9.2 An **Outline LEMP (Doc Ref. 7.10)** has been provided alongside this Outline CEMP in support of the DCO Application. The **Outline LEMP (Doc Ref. 7.10)** sets out the details in relation to habitat management and enhancement.

General Mitigation Measures

- 4.9.3 The following general measures will be implemented:
- Pollution prevention measures;
 - Retention and protection of ecological features and habitats, including vegetation;
 - Avoidance of retained woodland areas and root protection areas ('RPAs') where possible;
 - Pre-construction surveys, to validate and update baseline findings, as secured in the **Outline LEMP (Doc Ref. 7.10)**;
 - Adjusting the phasing of works to avoid significant adverse effects on protected species;
 - Implementation of precautionary ecological watching briefs when clearing vegetation or piles of debris;
 - Watercourse pollution prevention measures;
 - No trenches or pits to be left open overnight unless fitted with a means of escape for mammals;
 - Measures to prevent and control the spread of invasive non-native species;
 - Staff to receive toolbox talks on ecological risks present, legal requirements and working arrangements necessary to comply with legislation, with talks repeated as necessary over the duration of the relevant works; and
 - Following good practice guidelines.
- 4.9.4 Any relevant Natural England mitigation licences required will be adhered to.
- 4.9.5 As a precautionary approach, all foul or waste water arising from all stages of the Project will be removed off-Site and disposed of outwith the Stour catchment, to avoid any nutrient effects upon the Stodmarsh site complex.

Protection of Existing Vegetation

- 4.9.6 The following measures will be implemented to protect existing vegetation:

- Tree protective fencing will be installed as required in an area before any vegetation removal, ground works or soil stripping are carried out in that area. This will include root protection areas for veteran trees with no construction activity allowed within the enclosed areas .
 - A minimum buffer zone of 15 times the stem diameter or 5m beyond the trees crown spreads (whichever is greater) for veteran trees and of 15m from the canopy spread for ancient woodland will be maintained.
 - Protection zones will be established around identified hedgerows to prevent encroachment and damage, and clearly demarcate these zones using physical barriers, fencing or signage to ensure they are easily identifiable by construction personnel.
- 4.9.7 Detailed measures will be included within an Arboricultural Method Statement within the detailed CEMP(s) to detail the protective measures.

Protection of Existing Ecological Features and Habitats

- 4.9.8 The following measures will be implemented to protect existing ecological features and habitats:
- Biodiversity Protection Zones ('BPZs') will be created and maintained by the erection of exclusion fencing and debris netting (if needed) to protect retained habitats (including watercourses) and newly created habitats from the incursion of vehicles and machinery. Signage will be erected to identify these areas. Any works within BPZs would be approved by and supervised by an Ecological Clerk of Works;
 - The EPP will include reference to the Environment Agency's Pollution Prevention Guidelines to protect any aquatic environments. Control of the potential from pollution as a result of material storage, refuelling and machinery operation will be as specified within the detailed CEMP(s) and include use of spill kits, interception boards / bunds, wheel washers as appropriate; and,
 - All temporary external lighting will be designed to minimise the risk of light spill outside the area it is desired to illuminate; and particular care will be taken to minimise light spill on hedgerows or other linear features that can be used by nocturnal wildlife including bats.

4.10 Soil

- 4.10.1 An Outline SMP is included within this Outline CEMP as **Section 6** with a summary of soil-related activities set out below. The principles of the Outline SMP will be incorporated into the detailed CEMP(s).
- 4.10.2 Reprofilling will be required to construct the Project Substation platform. No further Site-wide reprofilling is anticipated however there may be a need to level limited areas within the Site. In some locations to intercept surface water runoff, scrapes and swales are proposed within low lying areas. This is unlikely to create excess topsoil, subsoil and spoil and it is not expected that this would need to be removed from the Site.

- 4.10.3 During construction any topsoil, subsoil and spoil will be stored within designated areas to be agreed in the detailed CEMP(s). Topsoil, subsoil and spoil will be stored outside of the 1 in 100-year floodplain extent.
- 4.10.4 Where soil stripping is to occur, topsoil and subsoil would be stripped, stored, and replaced separately to minimise soil damage and to provide optimal conditions for Site restoration. Topsoil, subsoil and spoil will be used to backfill and reinstate the soil profile in the cable trenches or used within the landscaping and will be tested prior to reinstatement. Any excess topsoil, subsoil and spoil will be utilised across the Site.
- 4.10.5 Any topsoil and other materials brought onto the Site will be free from contamination by such plants as Japanese knotweed and giant hogweed, i.e. material that adheres to British Standards.

4.11 Lighting

- 4.11.1 Full details on temporary construction lighting requirements and positions will be outlined within the detailed CEMP(s). In determining any temporary construction lighting arrangements for the Site, due consideration will be given by the Principal Contractor to residents and other sensitive receptors that may experience disturbance from the light.
- 4.11.2 General control measures for the use of lighting on-Site are outlined below:
- As far as is practical, lighting will be directed away from residential and ecological sensitive areas;
 - Lighting will always be positioned to prevent glare;
 - Luminaires used around the perimeter of the Site will be mounted within the Site boundary, so that the main photometric distribution of the luminaire is towards Site works, thereby keeping all light within the boundary and preventing artificial light spill;
 - Wherever possible consideration will be given to minimise the need for lighting in areas of ecology habitat or in areas situated directly adjacent to ecology habitat. Should health and safety require artificial lighting to these areas all luminaires will be directed away from the habitat area;
 - Wherever possible and subject to landscape design, natural and solid screen perimeters will be included to reduce obtrusive light to adjacent sensitive areas and light will be extinguished when not in use;
 - Wherever possible, all artificial lighting used during the construction phase will be directed below the horizontal to prevent unwanted upward light;
 - When not in use all artificial lighting used for construction will be extinguished;
 - Modern, high efficiency lamps and luminaires will be employed to ensure energy efficient; and
 - Illuminance levels will be designed in accordance with BS 12464-2:2014²³ and CIE 129²⁴; and no area will be over lit.

4.12 Waste and Materials

- 4.12.1 Solid waste materials generated during construction will be segregated and stored within the two Primary Construction Compounds in containers prior to transport to an approved, licensed third party landfill and recycling facilities.
- 4.12.2 The construction stage involves limited reprofiling of land. This is unlikely to create excess topsoil, subsoil and spoil and it is not expected that this would need to be removed from the Site.
- 4.12.3 The anticipated waste from the construction of the Project include:
- Wastewater from welfare facilities – effluent and waste from construction workers will be removed off-Site by tanker for treatment and disposal beyond the Stour catchment;
 - Waste chemicals, fuel and oils – these materials will be removed off-Site for disposal as appropriate;
 - Packaging materials, including cardboard, plastic, timber etc. – these materials will be separated, re-used or recycled as appropriate; and
 - Waste metals – excess steel and other metals from piling or cabling will be recycled.
- 4.12.4 No long-term on-Site storage of materials is required during the construction phase. Materials will be delivered via HGVs at regular intervals to the Primary Construction Compounds and then transported to where required within the Site.
- 4.12.5 An Outline SWMP is included as **Section 7** of this Outline CEMP. Its principles will be incorporated into the detailed CEMP(s).

4.13 Climate Change

- 4.13.1 Construction best practice measures will be adopted to reduce environmental impacts, including those set out in the Considerate Constructors Scheme and its Code of Considerate Practice, as well as measures to minimise the create of waste and the use of energy. This includes, where practicable, the use of low-carbon construction materials and practices.
- 4.13.2 All contractors will be required to investigate opportunities to minimise and reduce the use of energy and water, such as:
- Use of alternatives to diesel / petrol powered equipment, where possible;
 - The incorporation of sources of renewable energy to offset the use of main utilities will be considered;
 - Selection and specification of energy efficient plant and equipment, wherever viable; and
 - Use of recycling water systems such as wheel washes.

4.13.3 Details of measures to address climate resilience in the event of extreme weather events will be set out in detailed EFRPs, to be provided within the detailed CEMP(s).

5 Outline Air Quality and Dust Management Plan

5.1 Overview

- 5.1.1 The main sources of potential adverse air quality and dust impacts from the Project construction works are nitrogen dioxide (NO₂), particulate matter (PM₁₀ and PM_{2.5}), dust and fine particle emissions due to construction activities.
- 5.1.2 The measures for air quality control are set out within this Outline AQDMP with general provisions and specific mitigation measures to reduce potential impacts on local air quality and dust from construction activities. It provides information on the monitoring to be undertaken during construction to ensure that mitigation measures are suitable and effective. This Outline AQDMP secures measures in line with the Institute of Air Quality Management ('IAQM') 'Assessment of dust from demolition and construction' guidance²⁵.
- 5.1.3 Particulates are referred to within this document as follows:
- Dust – Defined as all particulates up to 75 µm in diameter (according to BS6069²⁶) and comprising both suspended and deposited dust;
 - PM₁₀ – Comprising coarse particles (2.5 -10 µm in diameter) which are primarily from non-combustion sources;
 - PM_{2.5} – Fine particles (<2.5 µm) from both non-combustion and combustion sources; and
 - PM₁ – Ultrafine particles (<1 µm) primarily from combustion processes.
- 5.1.4 This Outline AQDMP provides a mechanism to judge the effectiveness of any air quality control techniques and should be reviewed regularly. The detailed CEMP(s) will outline the following components:
- Potential air quality impacts;
 - Mitigation measures; and
 - Management, reporting and review.

5.2 Potential Air Quality Impacts

- 5.2.1 Construction activities that have the potential to generate air quality impacts include:
- Site clearance and preparation;
 - Preparation of temporary access / egress to the Site and internal access roads;
 - Earthworks;
 - Materials handling, storage, stockpiling, spillage and disposal;

- Movement of vehicles and construction traffic to, from and within the Order limits including excavators and dumper trucks; and
- landscape works.

5.2.2 The main potential air quality effects that may arise from those activities are:

- An increase in NO₂ emissions on Site and on surrounding areas;
- An increase in PM_{2.5} and PM₁₀ emissions on Site and on surrounding areas;
- Dust deposition, resulting in the soiling of surfaces; and
- Dust plumes, affecting visibility and amenity.

Dust Impacts

5.2.3 Dust generation is site specific with the level and distribution of construction dust emissions varying according to factors including the type of dust, duration and location of dust-generating activity, weather conditions and the effectiveness of suppression measures. Dust nuisance is normally experienced as a result of dust deposition upon clean surfaces e.g. windows, car, laundry and environmental receptors. The following sections outline specific, dust-causing construction activities.

Earthworks

5.2.4 Earthworks can include soil-stripping, ground-levelling, excavation and landscaping, all of which can potentially generate dust. The movement of vehicles and plant around the Site which are involved in earthworks can lead to dust emissions and re-suspension of dust during movements.

Construction Activities

5.2.5 Construction activities required will vary from each activity undertaken during works. Numerous construction works can potentially generate dust, examples include vehicle and plant movement, and stockpiling activities.

Track-out

5.2.6 Construction vehicles moving to and from the Site over unpaved ground can transport and deposit dust and dirt onto the public road network. Once deposited on the public road network it can then be re-suspended by other vehicles using the network and transferred further afield.

5.3 Air Quality Mitigation Measures

5.3.1 The construction of the Project is not expected to give rise to significant effects with standard mitigation in place, and specific mitigation measures are not included within this Outline AQDMP. This Outline AQDMP provides details of the necessary mitigation measures to ensure that significant effects would not arise.

5.3.2 A number of mitigation methods will be implemented to minimise air quality effects and the nuisance and impact arising from dust and maintain air quality levels, which are outlined below. All works will be undertaken in accordance with IAQM guidance.

5.4 General Measures

Site management

5.4.1 Contractors will be instructed to use all reasonable means available to keep dust to a minimum:

- Avoid dry sweeping of large areas;
- All staff will receive appropriate training on the AQDMP;
- Wind speed and direction must be taken into account when organising on-Site operations;
- The use of damping down equipment must be employed where dust may be generated to control dust at source. Water runoff from dust suppression activities will be controlled;
- Materials with the potential to produce dust will be stored away from the Site boundaries;
- Undertake daily on-Site visual inspection to monitor dust, record inspection results;
- Record all dust and air quality complaints, identify cause(s), take appropriate measures to reduce emissions in a timely manner and record the measures taken;
- Take appropriate remedial action in a timely manner with a record kept of actions taken;
- Dust Site inspections must be increased in particularly hot and windy conditions; and
- Record any exceptional incidents that cause dust and / or air emissions, both on- or off-Site and action taken to resolve the situation in the log book.

Site maintenance

- As far as practicable, plan the construction layout so that polluting machinery and dust causing activities will be located away from sensitive receptors;
- Where practicable, erect solid screens or barriers around dusty activities near to the Order limits that are at least as high as any stockpiles on-Site;
- Fully enclose activities or specific operations where there is a high potential for dust production;
- Keep Site fencing, barriers and scaffolding clean using wet methods;
- Avoid Site runoff of water or mud;
- Burning of any material is prohibited anywhere on-Site;
- Remove materials that have a potential to produce dust from Site as soon as possible, unless being re-used on-Site; and
- Cover, seed or fence stockpiles to prevent wind erosion of materials.

Transportation

- Select suitable haul routes away from sensitive areas, if possible;
- Reduce the width of haul roads (while still allowing two-way traffic) to minimise surface area from which dust may be produced;
- All vehicles will switch off engines when stationary and not involved in construction activities;
- Material deliveries and vehicle access to the Site will be timed to avoid the need to queue outside the Site prior to opening or whilst other deliveries are completed;
- Vehicles on-Site will use hard standing areas for deliveries and removal of material(s) from the Site. These surfaces will be kept clean to avoid the build-up of dust and regularly damped down;
- All vehicles carrying loose or potentially dusty materials to and from the Site will be covered;
- All vehicles and plant will be well maintained and serviced with accurate records available for inspection;
- All vehicles must comply with current emission standards; and
- Impose and signpost a maximum speed limit of 10mph for Project vehicles within the Site.

Construction

- Only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques, e.g. water sprays or local extraction;
- An adequate water supply will be provided on-Site for effective dust suppression, using non-potable water where possible and appropriate;
- Before concrete pours, dirt from relevant areas will be vacuumed rather than blown;
- Use enclosed chutes and conveyors and covered skips; and
- Avoid the use of diesel or petrol powered generators and use mains electricity or battery powered equipment where practicable.

5.5 Specialized Measures

Earthworks

- Minimise drop heights when unloading and loading material into vehicles;
- Re-vegetate earthworks and exposed areas / soil stockpiles to stabilise surfaces as soon as practicable; and
- Use hessian or mulches where it is not possible to re-vegetate or cover topsoil as soon as practicable.

Construction

- Avoid scabbling (roughening of concrete surfaces) if reasonably possible;
- Ensure sand and other aggregates are stored in bunded areas and are not allowed to dry out, unless this is required for a particular process, in which case ensure that appropriate additional control measures are in place;
- Locate stockpiles of fine grained material out of the wind (or provide wind breaks) to minimise the potential for dust generation;
- Stockpiles and mounds must be at an angle no greater than the natural angle of repose of the material, and stockpiles / mounds must not have sharp changes in shape;
- Prevention of wind-borne dust from stockpiles / mounds will be achieved through suitable and sufficient use of water sprays, wind barriers, and protective fences of a similar size and height to the stockpile / mound;
- Short-term storage of stockpiles / mounds will be enclosed or kept under sheeting;
- Bulk cement and other fine powder materials will be delivered in enclosed tankers and stored in silos with suitable emission control systems to prevent escape of material and overfilling during delivery; and
- Smaller supplies of fine powder materials will be sealed after use and store appropriately to prevent dust.

Plant and Machinery

- All Site plant will have upward facing exhaust and radiator cowls to reduce the generation of dust;
- Minimise on-Site transportation distances;
- Install hard surfaced haul routes, where practicable;
- Water sprays to moisten unpaved and water-assisted dust sweepers on paved on-Site haulage routes to be implemented;
- Low emission vehicles will be used where reasonably possible, with plant fitted with catalysis filters or similar devices;
- The discharge from screens onto conveyors or into other equipment will be enclosed as far as is practicable;
- Minimise drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment and use the fine water sprays on such equipment wherever appropriate; and
- Deposits of dust on external parts of the plant will be cleaned off at the end of each working day to minimise the potential for wind entrainment.

Track-out

- Use water-assisted dust sweeper on the entrance / exit points and access / local roads to remove, as necessary, any material tracked out of the Site;

- Avoid dry sweeping of large areas;
- Vehicles entering and leaving the Site with materials will be covered to prevent escape of materials during transport;
- Inspect internal haul routes for integrity and instigate necessary repairs to the surface as soon as reasonably practicable;
- Record all inspections of internal haul routes;
- Implement a wheel washing system (with rumble grids to dislodge accumulated dust and mud prior to leaving the Primary Site Access); and
- Provide an adequate area of hard surfaced road between the wheel wash facility and the Site exit, wherever Site layout permits.

5.5.1 This Outline AQDMP is intended to be used by construction staff and contractors on a day-to-day basis. The nominated person, normally the Works Manager, in conjunction with the Environmental Manager / Representative will be responsible for the management, control and implementation of the detailed AQDMP on-Site.

5.5.2 Scheduled monitoring of environmental performance and formal compliance auditing will be conducted throughout construction activities. The frequency of Site inspections will be increased when activities with a high potential to produce dust are being carried out and during prolonged dry or windy conditions.

6 Outline Soil Management Plan

6.1 Overview

- 6.1.1 This Outline SMP sets out the principles and procedures for general good practice for the handling, storage and reinstatement of soil to be used on the Project. The National Policy Statement for Renewable Energy Infrastructure (EN-3)²⁷ ('NPS EN-3') at paragraph 2.10.34 states, "*Applicants are encouraged to develop and implement a Soil Resources and Management Plan which could help to use and manage soils sustainably and minimise adverse impacts on soil health and potential land contamination*".
- 6.1.2 The Site is largely under agricultural use and contains large reserves of topsoil and subsoil. Therefore, as part of the measures to manage environmental impacts, it is the intention to recover, store and re-use the existing topsoil and subsoil reserves for landscaping and to maintain the quality of the soil by implementing appropriate techniques for stripping, storing and re-use. This Outline SMP therefore focuses on minimising damage to soil that remains in place, and to soil being excavated and stockpiled, in accordance with NPS EN-3.
- 6.1.3 This Outline SMP has been prepared in line with the Construction Code of Practice for the Sustainable Use of Soils on Construction Sites²⁸ (Defra, 2009) ('CoCP'), which is the overarching guidance governing the management of soil in construction. The aim of the CoCP is to assist everyone involved in the construction sector with the protection and enhancement of the soil resource. Additional consideration has been given to British Standard: Specification for Topsoil (BS 3882:2015) and British Standard: Specification for subsoil and requirements for use (BS 8601:2013).
- 6.1.4 Mitigation has also been identified with reference to the Good Practice Guide for Handling Soils (MAFF, 2000)²⁹, the British Standard: Specification for Topsoil and Requirements for Use (BS 3882:2015) and the British Standard: Specification for Subsoil and Requirements for Use (BS 8601:2013).

6.2 Potential Impact on Soils

- 6.2.1 Many general construction activities have the potential to damage soils. These include:
- Compacting soils through trafficking of plant or vehicles;
 - Earthworks, particularly those associated with construction compounds, access roads and cable trenching;
 - Mixing soil with construction materials such as cement, aggregate and, lime-stabilisation; and
 - Mixing different qualities of soil during handling and storage, including subsoil with topsoil.

6.2.2 Failure to protect soils during disturbance can lead to their degradation with consequential environmental impacts both on-Site and off-Site, such as:

- Soil erosion;
- Loss of soil organic matter leading to loss of nutrients and a decline in soil fertility;
- Soil compaction leading to loss of soil structure and permeability to water (waterlogging) and restricted aeration and rooting potential;
- Loss of soil biological activity;
- Poor re-establishment of vegetation; and
- Visual impact of slope failure or soil erosion (bare soil surfaces).

6.3 Soil Management Operations

General Principles for Soil Handling

6.3.1 To minimise the risk of damage to soil structure, the following main rules must be observed during all soil handling tasks:

- No trafficking of vehicles/plant or materials storage to occur outside demarcated working areas;
- No trafficking of vehicles/plant on reinstated soil (topsoil or subsoil);
- Use of ground protection mats, low-pressure tyres on wheeled vehicles and breaking up areas of compacted ground;
- Only direct movement of soil from donor to receptor areas (no triple handling and/or ad hoc storage);
- Soil handling methodology to be determined based upon soil moisture content. Where practicable soil handling when soil moisture content is above the lower plastic limit (the moisture content at which soil begins to behave as a plastic material and the soil is deemed too wet to handle without causing damage to the soil structure) will be avoided;
- Where soils are wet or damp, to minimise compaction, soils will be handled using excavators rather than dozers;
- No handling of soils to be carried out during periods of prolonged, heavy rainfall, where possible;
- No mixing of topsoil with subsoil, or of soil with other materials;
- Soil only to be stored in designated soil storage areas;
- Where possible, operate plant and machinery only when ground or soil surface conditions mean it can be operated efficiently (i.e. when machinery is not at risk of being bogged down or skidding causing compaction or smearing);
- All plant and machinery must always be maintained in good working condition to ensure that the soil is stripped correctly;

- Low ground pressure and tracked vehicles will be used where possible when working directly on bare or vegetated soils; and
- Daily records of operations undertaken and Site and soil conditions will be maintained during soil handling activities.

Pre-Construction Site Preparation

- 6.3.2 Pre-construction Site preparation includes the removal of vegetation; minimising working areas and vegetation clearance within designated sites and areas of protected habitat to only that essential for works as discussed within this Outline CEMP; and the clear marking and signposting of access tracks and all areas to remain undisturbed during construction activities.
- 6.3.3 Soil storage areas for different types of topsoil and subsoil will be identified prior to construction activities to avoid the mixing of these resources. In some locations, the excavated soil profile may contain more than one distinct subsoil horizon (i.e. upper and lower subsoil). Where excavations are required to extend below the upper subsoil, due to the different properties of the horizons, they must be excavated and stored separately.
- 6.3.4 To reduce the likelihood of anaerobic conditions developing within the topsoil stockpile prior to the soil strip commencing, the topsoil surface will either be bare, under stubble, or have only short surface vegetation. To achieve short surface the area will be mown with all cuttings disposed of off-Site to a suitably licensed facility. Cuttings must not be added to or mixed with the stripped soil, as the presence of excessive amounts of plant material in the stockpile will be detrimental to its quality due to its putrefaction (rotting) in anaerobic conditions.

Soil Stripping

- 6.3.5 The soil stripping method will follow the guidance set out in Defra's Construction Code of Practice for the Sustainable Use of Soils on Construction Sites. This method uses back-acting excavators, generally fitted with toothed buckets, in combination with dump trucks to strip the topsoil and subsoil (upper and lower where identified) progressively down to the sub-base (basal layer).
- 6.3.6 During the strip, the excavator will stand on the surface of the topsoil, digging the topsoil to the required depth and forming the stockpile or loading it into the transport vehicle (dump truck). Following topsoil removal to the full width of the strip the subsoil can be excavated (if required).
- 6.3.7 Where soils are to be stored away from the excavation area, it is expected that multiple excavators and transport vehicles will be required for soil stripping operations. The size of the earthmoving plant to be used will be tailored to the size of the area to be stripped and the space available within the working area. The use of a long reach excavator, which will minimise the need for movement across the soil surface, and the use of tracked vehicles will further reduce soil compaction.

Stockpiling

- 6.3.8 Soil stockpiling will be required during construction activities in order to enable the reuse of the soil resource, limit soil damage from weather and other construction activities and soil loss.
- 6.3.9 Pre-determined stockpile areas will be selected prior to the start of construction. Topsoil and subsoil will be stockpiled separately. Soils will not be stockpiled within 10m of surface water features and will not block surface runoff of flood flow pathways.
- 6.3.10 The area that is to be used for storing the topsoil will be cleared of vegetation, in-situ topsoil and any waste arising from the development e.g. building rubble and fill materials. Stockpiles must be appropriately marked out and clearly signed to ensure that they are easily identifiable for reinstatement.
- 6.3.11 Stockpiled soil must not be vulnerable to compaction nor erosion; must not cause pollution to surrounding watercourses; and must not increase flood risk to the surrounding area.
- 6.3.12 Topsoil will be stored temporarily prior to re-spreading into landscape areas when they become available. Topsoil will be stored in an area of the Site where they will not interfere with other Site operations so that they can be left undisturbed during other construction activities. Topsoil stockpiles will not exceed 4m in height and subsoil stockpiles will not exceed 4m in height.

Stockpile Maintenance

- 6.3.13 It is expected that the soil will be stored for a period of more than three months. Therefore, the stockpiles will be seeded with an appropriate low maintenance grass/clover mixture to protect the soil against erosion, minimise soil nutrient loss, and maintain soil biological activity. Appropriate seeding will also help prevent colonisation of the stockpile by weeds, including noxious / injurious weeds, that could spread seed onto adjacent land.
- 6.3.14 In the period when grass cover is establishing on the stockpiles, and where required during dry weather, the stockpiles will be sprayed with water to prevent wind erosion (generation of dust) and to ensure that the seeds establish. The stockpile vegetation cover is to be managed to prevent the spread of seeds from the stockpile onto adjacent land.
- 6.3.15 The condition of the stockpiles will be regularly monitored. If rainwater gathers on the stockpile surface or in areas directly adjacent to them, drainage pathways to soakaway areas away from the stockpile will be provided.

Reinstatement

- 6.3.16 Soil reinstatement is the reverse of soil stripping with topsoil being replaced over subsoil. The specifications for reinstated soil profiles are to be determined on a

location-by-location basis. Care must be taken to ensure that soil horizons are replaced to the correct thickness (with an allowance of up to 20% to allow for settlement).

- 6.3.17 Soil reinstatement will follow the methodology set out by Defra's Construction Code of Practice for the Sustainable Use of Soils on Construction Sites.
- 6.3.18 In most locations reinstatement of the soil from the stockpiles using a long-reach back-acting excavator will be possible. In this method, the subsoil will be replaced first, with the excavator travelling on the subsoil and gradually taking the topsoil from the stockpile, and depositing it on the subsoil. The deposition is to be carried out by loose tipping and a toothed digger bucket is to be used.
- 6.3.19 Prior to topsoil placement, subsoil decompaction may be required. For the decompaction to be effective, the moisture content of the soil must be below the lower plastic limit, so that the soil is dry enough to shatter and for fissures to be created.
- 6.3.20 The construction stage involves limited reprofiling of land. This is unlikely to create excess topsoil, subsoil and spoil and it is not expected that this would need to be removed from the Site. However, if this is required surplus soils will be disposed of in a sustainable manner in accordance with the Code of Construction Practice for the Sustainable Use of Soils on Construction Sites.

6.4 Management, Reporting & Review

- 6.4.1 This Outline SMP is intended to be used by operational staff and contractors on a day-to-day basis. The nominated person, normally the Works Manager, in conjunction with the Environmental Manager/Representative will be responsible for the management, control and implementation of the SMP on Site.
- 6.4.2 Scheduled monitoring of environmental performance and formal compliance auditing will be conducted throughout construction activities. The principles of this Outline SMP are to be included within detailed CEMP(s), which will also establish the frequency of monitoring and inspections.

7 Outline Site Waste Management Plan

7.1 Overview

7.1.1 This Outline SWMP has been developed to enable the control of waste throughout the construction phases of the Project. A detailed SWMP will be prepared before the commencement of construction and will support the identification of actions to minimise construction waste from the Project being sent to landfills. Accordingly, the Outline SWMP will be implemented by the Principal Contractor, once appointed, as an internal waste management and monitoring tool, and as a means of implementing best practice.

7.1.2 This Outline SWMP uses the legal definition of waste as defined in the Waste Framework Directive (2008/98/EC).

“Any substance or object which the holder discards or intends or is required to discard”.

7.1.3 This definition of waste also covers substances and objects that fall outside of the commercial cycle, in particular, items that are sold or taken off-Site for recycling are wastes, as they require treatment before they can be resold or reused. Therefore, waste includes, but is not limited to, surplus spoil, scrap, recovered spills, unwanted surplus materials, packaging, office waste, wastewater, broken, worn-out, contaminated or otherwise spoiled plant, equipment and materials, and general waste.

7.2 Waste Management Principles

General

7.2.1 The contractor(s) will consider the objectives of sustainable resource and waste management and seek to use material resources efficiently, reduce waste at source, reduce waste that requires final disposal to landfill and apply the principles of the waste hierarchy. This includes, where reasonably practical, working towards a cut and fill balance for excavations; segregation of construction materials on-Site for appropriate reuse, recycling and recovery, with landfill as a last resort.

7.2.2 This will be achieved by a combination of measures, including:

- The contractor(s) will prepare and implement a detailed SWMP(s);
- All waste transported off-Site will be delivered to appropriately licenced receivers of such materials;
- Contractor(s) will segregate construction waste to be reused and recycled where reasonably practicable;
- Use of off-Site pre-fabrication will be used, where reasonably practical, including the use of prefabricated structural elements, cladding units, mechanical and electrical risers and packaged plant rooms;

- Burning of waste or unwanted materials will not be permitted on-Site; and
- Materials requiring removal from the Order limits will 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.

7.2.3 The types, quantities and final destination of waste generated during the construction phase will be identified, measured and recorded through the detailed SWMP(s).

7.2.4 Wastewater from welfare facilities and firewater will be removed off-Site via tanker to an approved wastewater and treatment facility.

8 Implementation

8.1 Roles and Responsibilities

- 8.1.1 This Outline CEMP provides an overview of the key roles and responsibilities of the parties expected to be involved in the construction of the Project. The specific roles and responsibilities of relevant parties will be confirmed in the detailed CEMP(s).
- 8.1.2 Responsibility for all environmental issues relating to the construction of the Project rests collectively with the undertaker, the Principal Designer and the Principal Contractor. Individual responsibilities will be delegated to these parties and will relate to the implementation of environmental management measures and the co-ordination of training; communication and community engagement; and monitoring and reporting.
- 8.1.3 An indicative organogram of the proposed management and reporting structure to be implemented is provided in **Annex 1** of this Outline CEMP.

8.2 Monitoring

- 8.2.1 Scheduled monitoring of environmental performance and formal compliance auditing will be conducted throughout construction to ensure compliance with the detailed CEMP(s). This will enable the overall effectiveness of established environmental measures and compliance procedures to be assessed and allow areas of underperformance to be identified so corrective actions can be taken to strengthen environmental safeguards or improve outcomes.
- 8.2.2 This monitoring will include:
- Regular inspections to ensure compliance with the detailed CEMP(s); and
 - Event-based inspections such as following extreme weather events or events of non-compliance.
- 8.2.3 As part of the monitoring process the Principal Contractor is expected to appoint an Environmental Manager who will be present on-Site during the construction phase to observe and report on compliance with the detailed CEMP(s). The Environmental Manager is also expected to be the liaison with the relevant authorities, the Site Manager and any appointed Community Liaison Officer.
- 8.2.4 The Environmental Manager is to retain records of environmental monitoring and implementation of the detailed CEMP(s). These records will include:
- Any necessary licences or further approvals;
 - Results of inspections by the Environmental Manager;
 - Environmental surveys and investigations during the construction phase;
 - Equipment test records; and
 - Incident reports.

8.3 Community Liaison

- 8.3.1 The Construction Manager in conjunction with the undertaker and with the support of the Environmental Manager / Representative or any appointed specialists will be responsible for the liaison on environmental matters with statutory and non-statutory authorities. Consultation will be established and maintained with relevant regulatory bodies on the environmental aspects of the Project as required.
- 8.3.2 The Principal Contractor will commit to providing community relations personnel, who will be the first line of response to resolve issues of concern or complaints. Reasonable steps will be taken to engage with the local community and those in proximity to the Site. Occupiers of neighbouring properties and businesses will be informed in advance of works taking place. Site boards outlining information on the Project and forthcoming works will be erected at the entrance to the Site. Site contact numbers will be displayed as appropriate, along with the complaints procedure.

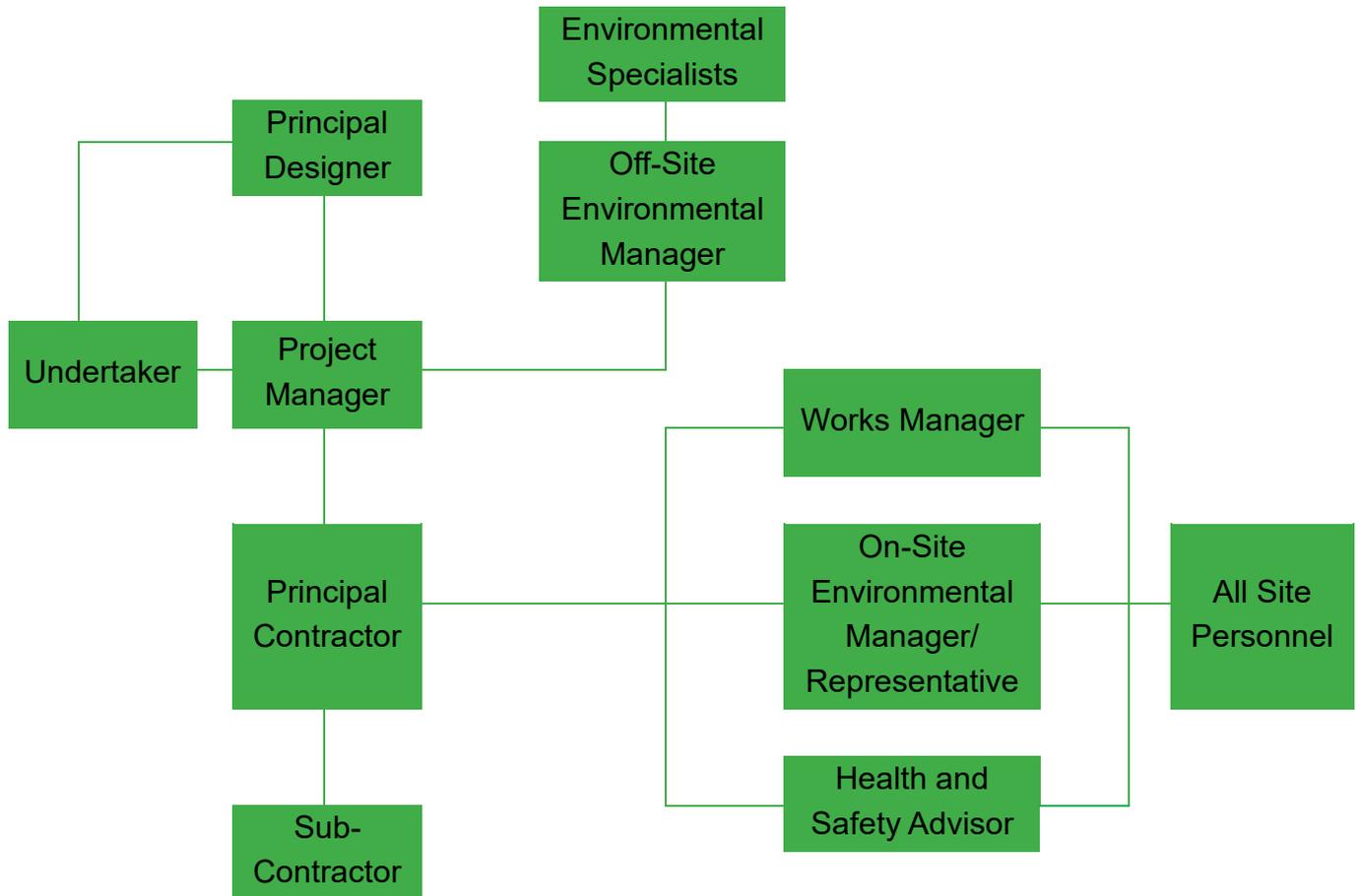
8.4 Framework for detailed CEMP(s)

- 8.4.1 The detailed CEMP(s) will set out all roles, responsibilities and actions required in relation to implementation of the measures described in this Outline CEMP:
- An organogram showing team roles, names and responsibilities;
 - Training requirements for relevant personnel on environmental topics;
 - Information for on-Site briefings and toolbox talks to equip staff with the necessary knowledge for construction procedures;
 - Measures to advise employees of changing circumstances as work progresses;
 - Communication methods;
 - Document control; and
 - Environmental emergency procedures.
- 8.4.2 Detailed CEMP(s) are also to include details of the following measures:
- Construction Method Statements;
 - Hours of work;
 - EPP, including an EFRP;
 - Information regarding procedures for the release of potential pollutants including fuel/oil spillage and surface water release, including pollution incident response plans;
 - Details regarding water quality monitoring, including sampling regime and frequencies;
 - Implementation of temporary construction drainage measures;
 - Arboricultural Method Statement including tree protection measures;
 - Precautionary ecological watching briefs for vegetation/debris clearance;

- Details of construction lighting;
- Details of accordance with the Outline SMP and of inspections and monitoring;
and
- Details of accordance with the Outline SWMP.

Annex 1: Indicative Roles and Responsibilities Organogram

Figure 1: Hierarchy of Roles and Responsibilities



References

¹ Environment Agency (2021) *Guidance for Pollution Prevention Vehicle Washing and Cleaning GPP 13 Version 1.2* Available at: [REDACTED]

² Environment Agency (2018). *Guidance for Pollution Prevention Dealing with spills*. Available at: [REDACTED]

³ Kwan, J., Dickinson, C. and MacLeod, C. (2023). *Environmental Good Practice on Site Guide*.

⁴ Legislation.gov.uk. (2015). *The Construction (Design and Management) Regulations 2015*. [online] Available at: <https://www.legislation.gov.uk/ukxi/2015/51/contents/made>. (Accessed 28th May 2024).

⁵ Legislation.gov.uk. (2016). *The Environmental Permitting (England and Wales) Regulations 2016*. [online] Available at: <https://www.legislation.gov.uk/ukxi/2016/1154/contents>. (Accessed 28th May 2024).

⁶ Legislation.gov.uk. (2022). *The Control of Pollution (Oil Storage) (England) Regulations 2001*. [online] Available at: <https://www.legislation.gov.uk/ukxi/2001/2954/contents/made>. (Accessed 28th May 2024).

⁷ Defra, (2009); 'Construction Code of Practice for the Sustainable Use of Soils on Construction Sites'. Accessed on 14/05/2018. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/707134/pb13298-code-of-practice-090910.pdf

⁸ Commission, F. (2023) *The UK forestry standard, GOV.UK*. Available at: <https://www.gov.uk/government/publications/the-uk-forestry-standard> (Accessed: 31 May 2024).

⁹ British Standards Institution (2009). *Noise and vibration control on construction and open sites*. London: Bsi.

¹⁰ British Standards Institution (2013) *Biodiversity : Code of Practice for Planning and Development*. Available at: <http://www.eoebiodiversity.org/pdfs/BS42020.pdf> [Accessed 16 May 2024].

¹¹ British Standards Institution (2012). *Trees in relation to design, demolition and construction : recommendations*. London, Eng.: B.S.I.

¹² British Standards Institute (2015). *Specification for topsoil*. London. BSI

¹³ British Standards Institution (2010). *Tree work : recommendations*. London: British Standards Institution.

¹⁴ British Standards Institution (2010). *Nursery Stock : Specification for trees and shrubs*. London: British Standards Institution.

¹⁵ British Standards Institution (2010). *Code of practice for earthworks*. London: British Standards Institution.

¹⁵ HSE (2013). *Avoiding danger from overhead power lines GS6 fourth edition*. Available at: <https://www.hse.gov.uk/pubns/g6.pdf> (Accessed 21 May 2024).

¹⁶ British Standards Institution (2013) *Specification for subsoil and requirements for use*, Available at: [REDACTED]

¹⁷ British Standards Institution (2014) *Light and lighting. Lighting of work places - Outdoor work places*, [REDACTED]

-
- ¹⁹ Environment Agency (2001). *Piling and Penetrative Ground Improvement Methods on Land Affected by Contamination: Guidance on Pollution Prevention, ref NC/99/73*. Accessed August 2023.
- ²⁰ Northern Ireland Environment Agency, SEPA, Natural Resources Wales (2017) GGP 2 Above ground Oil Storage Tanks, Available at: [https://\[REDACTED\]](https://[REDACTED])
- ²¹ Northern Ireland Environment Agency, SEPA, Natural Resources Wales (2021) GGP 8 Safe storage and disposal of used oils, Available at: [https://\[REDACTED\]](https://[REDACTED])
- ²² *Treating and using water that contains concrete and silt at construction sites: RPS 235 (2020) GOV.UK*. Available at: <https://www.gov.uk/government/publications/treating-and-using-water-that-contains-concrete-and-silt-at-construction-sites-rps-235/treating-and-using-water-that-contains-concrete-and-silt-at-construction-sites-rps-235> (Accessed: 31 May 2024).
- ²³ British Standards Institution (2014) *Light and lighting. Lighting of work places - Outdoor work places*, Available at: [https://\[REDACTED\]](https://[REDACTED])
- ²⁴ *Guide for lighting exterior work areas (1998)* [https://\[REDACTED\]](https://[REDACTED])
- ²⁵ IAQM (2024). *Guidance on the assessment of dust from demolition and construction*. Available at: [https://\[REDACTED\]](https://[REDACTED])
- ²⁶ *Characterisation of air quality - Glossary (1994)*, Available at: [https://\[REDACTED\]](https://[REDACTED])
- ²⁷ Department for Energy Security and Net Zero (2024) *National policy statement for Renewable Energy Infrastructure (EN-3)*, GOV.UK. Available at: <https://www.gov.uk/government/publications/national-policy-statement-for-renewable-energy-infrastructure-en-3> (Accessed: 31 May 2024).
- ²⁸ Defra, (2009); 'Construction Code of Practice for the Sustainable Use of Soils on Construction Sites'. Accessed on 14/05/2018. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/707134/pb13298-code-of-practice-090910.pdf
- ²⁹ *A good practice for handling soils - April 2000 (2000) Viking Link Interconnector*. Available at: [https://\[REDACTED\]](https://[REDACTED])