



SUNNY OAKS RENEWABLE ENERGY PARK

**Outline Construction Environment
Management Plan**

AUGUST 2022

Prepared By:

Ridge Clean Energy

Noah's Ark
Market Street
Charlbury
Oxfordshire
OX7 3PL

T +44 (0)1608 819 253 | **E** energy@ridgecleanenergy.com

W www.ridgecleanenergy.com

Registered in England No. 08830217

1 Introduction

1.1 Background

- 1.1.1 This Outline Construction Environment Management Plan (OCEMP) has been prepared to support the development of the proposed c.20 Megawatt (MW) Sunny Oaks Renewable Energy Park (the Proposed Development) on land south west of Wootton, Isle of Wight.
- 1.1.2 A figure showing the layout of the Proposed Development is included in this report as **Plate 1**.
- 1.1.3 The purpose of this document is to demonstrate, at an outline level, the overarching principles as to how the Proposed Development intends to avoid, minimise or mitigate effects on the environment during the construction process.
- 1.1.4 Aspects of work identified within this document will be within the remit of the Principle Contractor (PC) for the construction works and their suitable experienced and trained employees and/or sub-contractors.
- 1.1.5 The final CEMP will be secured by way of planning condition and be materially in accordance with the measures identified within this OCEMP, and should be used as one of several guidance documents when formulating the detailed construction works and detailed method statements. If any works require deviation from the principles set out in this document, then guidance should be sought from the PC.
- 1.1.6 Construction activities at the site shall not commence until such a time as the CEMP has been approved in writing by the Isle of Wight Council (IOWC). Any changes to the CEMP would be made in consultation with the IOWC, specifically the Environmental Health Officer.

1.2 Description of Proposed Development Site

- 1.2.1 The Sunny Oaks Renewable Energy Park is located on land at Whiterails Road south west of Wootton, Isle of Wight NGR: 452942, 091002. The site comprises a number of agricultural fields covering an area of 32.5 hectares (ha) in total. However, solar panels are only proposed on land to the north of Whiterails Road covering an area of approximately 27.2ha, with land to the south of Whiterails Road being utilised for a Battery Energy Storage System (BESS) and substation, along with associated maintenance tracks, electrical cabling and ancillary works.
- 1.2.2 The site is traversed by existing overhead (poled) electrical cables, medium and intermediate buried gas pipelines and sewer pipes. A network of existing hedges and trees border agricultural (pasture) fields, with the western extent of the solar development being bordered by Fattingspark Copse (Ancient Woodland and Site of Importance for Nature Conservation).
- 1.2.3 The highest point of the Site is located to the east alongside Whiterails Road at 43.5m Above Ordnance Datum (AOD). The lowest point of the Site is located to the west at 24.5m AOD.
- 1.2.4 An existing recreation route and designated cycleway runs parallel to the northern boundary of the site, taking the form of a disused railway in an east/west orientation. There are no other public rights of way in proximity to the proposed development.
- 1.2.5 The Proposed Development would be accessed via two existing points of entry off the public

highway. Access to the solar PV area would be from an existing field entrance off Whiterails Road, while the BESS/Substation would be accessed from an existing farm entrance immediately south of Briddlesford Lodge Farm.

- 1.2.6 The proposed access route would see vehicles arriving at the port of East Cowes. Heavy Goods Vehicles (HGVs) would be routed along the A3021/Whippingham Road, then along the A3054/Lushington Hill to Wootton Bridge where vehicles would turn right along Station Road, then either on to Whiterails Road for access to the solar development, or left hand turn onto Briddlesford Road for access to the BESS/substation. No HGVs would be routed along Park Road and no delivery vehicle would be larger than the 18.65m/44T threshold that constitutes the need for police notifications.

1.3 Description of the Proposed Development

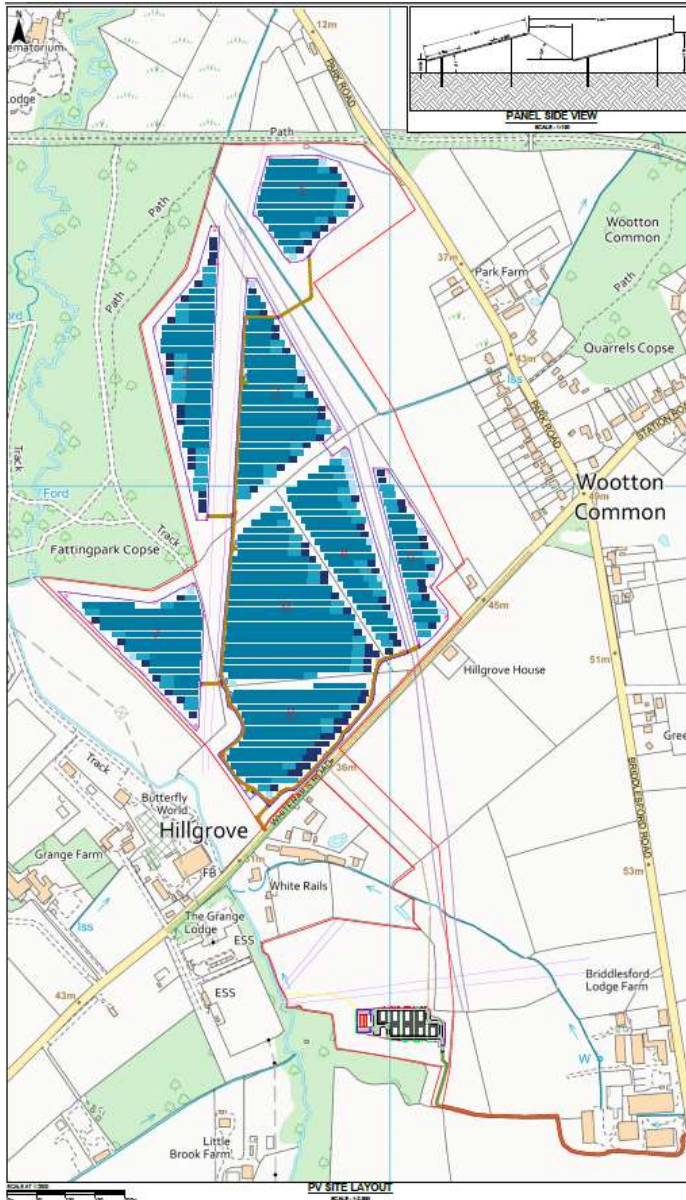
- 1.3.1 The Proposed Development comprises solar photovoltaic (PV) arrays, site maintenance tracks and a Battery Energy Storage System (BESS), alongside associated electrical and supporting infrastructure to export the generated electricity to the local electrical distribution network. Furthermore, the Proposed Development comprises a suite of environmental enhancements and wider scheme benefits.

- 1.3.2 Typical components are:

- solar PV panels with a total installed capacity of 20MW;
- panel frames;
- Battery Energy Storage System (BESS);
- String inverters (mounted on panel frames) and transformers;
- Substation;
- New access tracks, up to 4.5m wide;
- Electrical cabling and conduits;
- Closed Circuit Television;
- Minimal construction lighting; and
- Temporary construction compounds.

- 1.3.3 Plate 1 below identifies the Application Boundary and site layout:

Plate 1 – Application Boundary



1.4 Scope of this Report

1.4.1 The following subjects are considered within the scope of this plan:

- Health and Safety Management;
- Responsibilities;
- Policy, Legislation and Best Practice;
- Construction Programme and Activities;
- Considerate Constructors Scheme;

- Site Induction;
- Toolbox Talks and Method Statement Briefings;
- Emergency Procedures and Incident Reports;
- Working Hours;
- Community Relations;
- Access and Routing;
- Noise;
- Air Quality;
- Landscape and Visual Impact;
- Water quality;
- Ecology (excluding arboriculture);
- Arboriculture; and
- Materials and waste.

1.5 Health and Safety Management

1.5.1 A site specific Health and Safety plan should be implemented and followed during construction of the Proposed Development. All work should be carried out in accordance with the Health and Safety at work Act 1974.

1.6 Responsibilities

1.6.1 The detailed CEMP will need to confirm the details outlined in **Table 1** below:

Table 1 - Responsibilities

	Name	Role	Address	Name & Contact
Main contractor	TBC	Responsible for the development of the CEMP in line with relevant planning conditions	TBC	TBC
Site Manger	TBC	Responsible for the implementation of the CEMP with all site personnel	TBC	TBC
Environmental Compliance Officer	TBC	Responsible for the coordination and development	TBC	TBC
Consulting Engineers	TBC	Responsible for the development of method statements and design	TBC	

1.7 Policy, Legislation and Best Practice

- 1.7.1 Mitigation and environmental control measures within the CEMP have been derived from the planning application and supporting documents, relevant best practice, policies and legislation relating to the proposed project. The mitigation and environmental control measures detailed are the minimum measures that will form part of any site-specific method statements and scopes of work managed and implemented by the Principle Contractor.
- 1.7.2 The Principle Contractor must comply with all the relevant legislation that is current at the time of this OCEMP and make updates to the CEMP and the site notice boards when any new environmental legislation comes into force.

1.8 Construction Programme and Activities

- 1.8.1 The Proposed Development has a maximum theoretical capacity of approximately 20MW of electrical output from the solar development, and 28.5MW of battery energy storage discharge over a 2 hour period. The typical build programme for the Proposed Development would be approximately six months. The full details of the construction programme and methodology will be developed once the Principle Contractor has been appointed, at which time the CEMP will be updated and agreed with the IOWC. A typical construction programme (not including the installation of tree protection measures) for the Proposed Development is shown in Plate 2 below.

Plate 2 – Typical construction programme

Activity	Total Movements	Programme Month					
		1	2	3	4	5	6
		Week 1-4	Week 5-8	Week 9-12	Week 13-16	Week 17-20	Week 21-24
Construction compound, including gates, welfare and temporary surfacing	48	■					
Site tracks (crushed stone over geogrid base)	430	■	■	■	■	■	■
Security fencing and gates	18	■					■
LV and HV Cabling	4		■	■	■	■	
Cable trench sand	16		■	■	■	■	
Transformers	8		■	■	■	■	
Solar panels	114						■
Mounting system	20		■	■	■	■	■
String inverters	2		■	■	■	■	
Foundation concrete for transformers, spare part containers, connection compound units and fence posts	92		■	■	■	■	■
Customer container	2				■	■	
Battery Energy Storage containers	68				■	■	■
Ecological works, subject to appropriate time of year	4						■
Site commissioning and testing and removal of temporary construction equipment	58						■
TOTAL MOVEMENTS and TOTAL MOVEMENTS average by month	884	137	147	146	183	180	92
Average movements per day, assuming 24-day working month		6	8*	8*	8	8	4
Average movements per hour on working days, assuming off-peak delivery between 9am and 3pm (6 hours)		1	2	2	2	2	1

1.9 Considerate Constructors Scheme

- 1.9.1 The Principle Contractor will be required to register the site under the national 'Considerate Constructors Scheme' administered by the Construction Confederation on behalf of the Construction Industry Board. These scheme seeks to:

-
- Minimise any disturbance or negative impact (in terms of noise, dirt and inconvenience) sometimes caused by construction sites to the immediate neighbourhood;
 - Eradicate offensive behaviour and language from construction sites; and
 - Recognise and reward the constructor's commitment to raise standards of site management safely and environmental awareness beyond statutory duties.

1.10 Site Induction

1.10.1 All site personnel including sub-contractors will be made aware of their responsibilities under the detailed CEMP and its appropriate implementation. A site induction will be provided by the PC to all personnel at the start of each construction phase and to each visitor on an as needed basis.

1.11 Toolbox Talks and Method Statement Briefings

1.11.1 Toolbox talks and method statement briefings will be given as the work proceeds and will cover the environmental controls related to specific activities undertaken during the construction; for example, clearance of vegetation, protecting and spill response procedures etc. A full register of toolbox talks and method statement briefing attendance shall be maintained on site.

1.12 Emergency Procedures and Incident Reports

1.12.1 Procedures will be implemented to respond to any emergency incidents which may occur on site. In order to ensure that compliance with the requirements of the relevant legislation and to avoid or mitigate against any significant environmental impacts, an Emergency Preparedness Plan (EPP) will be developed by the Principal Contractor following appointment.

1.12.2 Once completed, all staff will be trained and made aware of the EPP set in place. In the event of any incident the Principal Contractor's Environmental Health and Safety Team will be notified as well as the Client. Additionally, the IOWC Environmental Health Department and any other interested bodies will be notified as required.

1.13 Working Hours

1.13.1 Construction works would be kept to specified hours to reduce potential impacts on nearby residential receptors, specified as:

- 7am to 7pm during weekdays; and
- 7am to 1pm on Saturdays.

1.14 Community Relations

1.14.1 The Principal Contractor will be responsible for the liaison on environmental matters with statutory and non-statutory authorities. In particular, liaison with nearby residents will be required to avoid conflicts of operations, deliveries, removals and other highways matters.

-
- 1.14.2 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 local residents and businesses prior to and during construction (such as through the use of newsletters and fliers). 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.
- 1.14.3 A formal complaints procedure will be developed; a named construction manager will be responsible for receiving, recording and responding to external complaints and will have their telephone number displayed for quick response to complaints. The complaints will be logged, together with a record of the responses and action taken.

1.15 Access and Routing

- 1.15.1 In advance of construction activities commencing, routing of the construction traffic will be agreed with IOWC, by way of a Construction Traffic Management Plan (CTMP), that will be submitted in outline prior to the appointment of a Principal Contractor.
- 1.15.2 The construction access, as currently envisaged, would be from East Cowes, south via the A3021, east on Lushington Hill to High Street, right hand turn onto Station Road then either on to Whiterails Road for access to the solar development, or left hand turn onto Briddlesford Road for access to the BESS/substation. Park Road would not be utilised by HGV traffic.
- 1.15.3 A CTMP will be agreed and secured by way of planning condition, to include (but not limited to) the following measures:
- Advanced warning signs, fully compliant with the Traffic Signs Manual / Chapter 8, will be located at an appropriate distance, either side of the junction.
 - The gate to the site will be manned during construction hours.
 - All vehicles entering the site will be required to have yellow flashing lights and these will be engaged before slowing to enter the site thereby warning traffic to the rear of their intention to slow and enter the site.
 - Restricted times for deliveries, where possible, to off-peak weekdays;
 - Restriction of delivery vehicles to the route identified in a management plan to be secured by condition; and
 - Use of wheel wash facilities.
- 1.15.4 A Final CTMP will be prepared and agreed with the IOWC, the principle aims of which would be to ensure that components of the Proposed Development are organised and delivered in a manner that avoids or reduced impacts on local roads and safeguards highway safety and amenity.

1.16 Noise

- 1.16.1 The generation of excessive construction noise extending beyond the site boundary could be deemed a statutory nuisance and can lead to complaints. In addition to specified working hours, the following matters should be implemented:
- 1.16.2 Best practicable means (BPM) would be applied during construction works to minimise noise and neighbouring 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”.

- 1.16.3 BPMs may include where reasonably practicable: the use of quieter alternative methods, plant and/or equipment; the use of site hoardings, enclosures, portable screens and/or screening nosier items of plant; and maintaining and operating all vehicles, plant and equipment in an appropriate manner, to ensure that extraneous noise from mechanical vibration is kept to a minimum.
- 1.16.4 Site personnel will be informed about the need to minimise noise as well as about the health hazards of exposure to excessive noise. Their training will include advice relating to the proper use and maintenance of tools and equipment, the positioning of machinery on site to reduce noise emissions to neighbouring residents, and the avoidance of unnecessary noise when carrying out manual operations and when operating plant and equipment.
- 1.16.5 All construction equipment will be maintained in good working order and any associated noise attenuation measures such as engine casings and exhaust silencers shall remain fitted at all times.
- 1.16.6 Plant and machinery will be turned off when not in use.

1.17 Air Quality

- 1.17.1 Emissions to air in the form of dust and exhaust fumes can be created from the following construction activities:
 - Site preparation;
 - Earthworks and excavation;
 - Material handling;
 - Use of construction machinery; and
 - Construction traffic.
- 1.17.2 During construction, BPM will be employed including (but not limited to):
 - Implement a wheel washing system at site entrances;
 - Enclose specific operations where there is a high potential for dust production;
 - Dust management would be controlled by damping down and good housekeeping; and
 - Waste skips and lightweight materials would be covered if there is a likelihood for dust escaping.

1.18 Landscape and Visual

- 1.18.1 Visual effects on receptors may arise from construction operations and associated components such as the installation of visible plant, temporary lighting, temporary fencing. To mitigate such impacts, the following measures are proposed:
 - An evergreen hedge will be planted as a temporary feature to reduce the visual appearance of the solar panels and other built interventions along this roadside edge.

- An additional belt of native scrub is also planted along the edge here which supplements the existing hedgerow. In time, once the new native plantings have matured, the evergreen hedge will be removed. As an additional visual measure, the roadside hedgerow maintenance regime will be altered so that it is clipped into an 'A' shape which improves the durability of the hedge and the height will be slightly raised to around 2m. Native trees will also be planted within the roadside hedgerow.

1.19 Water quality

- 1.19.1 The appointed Principal Contractor will take precautions during construction activities to protect the local drainage system, nearby watercourses and groundwater from siltation or pollution. Any effluent encountered during the construction phases will not be directly discharged to surface or foul drains without the prior consent of the appropriate body.
- 1.19.2 Permeable surfacing for the access roads and any limited parking and circulation areas – which effectively replicates natural drainage characteristics – is also proposed.
- 1.19.3 Standard practices to prevent any silted run off reaching receptors will be employed. The reestablishment of vegetation, post construction, will mean these measures need only be temporary.
- 1.19.4 Spill kits will be on hand to address any minor incidents such as fuel leaks from vehicles. If any fuel, oil or solvents which are temporarily stored on site will be contained within bunds or drum pallets, and covered where possible to prevent the accumulation of rainwater or damage.
- 1.19.5 Wheel wash facilities will be provided for vehicles leaving and entering the construction site to prevent the transfer of mud and sediment to the surrounding road system drains.

1.20 Ecology

- 1.20.1 Working methods should be employed to protect habitat and species during the construction stage.
- 1.20.2 The proposed Laurel hedge will be managed during construction (and beyond) so that it does not spread further than its intended layout.
- 1.20.3 Where temporary lighting is necessary, LED sensor operated downward facing, hooded and low level lights would be used to minimise disturbance to commuting and foraging bats.
- 1.20.4 Staged clearance of scrub would take place to allow reptiles (if present) to seek habitats elsewhere.
- 1.20.5 Grass on site to be cut to ground level prior to the ground nesting season (March – August).
- 1.20.6 Any required scrub or hedge removal should be conducted outside of the bird nesting season.
- 1.20.7 If works are necessary during bird nesting season which would cause disturbance, then the area should be checked first by a suitably qualified ecologist.
- 1.20.8 If deadwood needs removing, then it should be relocated to shady areas close to its place of origin.

1.21 Arboriculture

1.21.1 Working methods should be employed to protect trees and hedges during the construction stage. Construction would be undertaken in accordance with an agreed Tree Protection Plan (as accompanies this application for planning permission), the heads of terms for which are outlined as follows:

- Appointment of the Responsible Person;
- Agreement of the Arboricultural monitoring timetable;
- Distribution of Tree Protection and Arboricultural Method Statement;
- General measures, including access, storage of materials;
- Tree works;
- Tree protection barrier erection; and
- Soft land scaping in RPA of retained trees and the ancient woodland buffer zones.

1.22 Materials and Waste

1.22.1 Surplus waste materials may arise from materials imported to site, or those generated during the construction phase.

1.22.2 A waste management plan shall be prepared which follows the waste hierarchy, as outline within article 4 of the Waste Framework Directive 2008/98/ES. The waste hierarchy, as defined within legislation, is details below:

- Prevention;
- Re-use;
- Recycling;
- Other recovery; and
- Disposal.

1.22.3 Surplus or waste materials may arise from either material imported to site or from those generated on site. However, there are other considerations to waste management such as waste reduction, segregation of waste, disposal of waste, financial impacts of waste disposal and recording, monitoring, education and reviewing. The waste management plan shall outline the procedures that would be put in to place and demonstrate how they benefit the environment, how effects can be measured and how these procedures and practices are sustainable. Relevant waste and resource management procedures will be communicated to all operatives during the site induction.

1.22.4 A specific area shall be laid out and labelled to facilitate the separation of materials for potential recycling, salvage, reuse and return. Recycling and waste receptacles are to be kept clean and should be clearly marked in order to avoid contamination of materials. The labelling system shall be clear and simple. If the relevant receptacles are clearly identified this will aid the bulk of the workforce in depositing the correct materials into the appropriate receptacle.

1.23 Conclusion

1.23.1 This OCEMP identifies in outline, the measures to be adopted to result in impacts to the

environment being minimised where possible during the construction of the Proposed Development.

- 1.23.2 A detailed CEMP will be secured by way of planning condition in the event that planning permission is secured for the Proposed Development.
- 1.23.3 This document will remain live so that as more information and detail becomes available it can be incorporated.