SUBSTATIONS STAGE

Code of Construction Practice

Requirement 22 (1) to (6)

Project	East Anglia TWO Offshore Windfarm	**Classification**	Public
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REVISION SUMMARY

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1	23.04.2025	Kay Griffin	David Lewis	Ming Cole
2	26.11.2025	Kay Griffin Digitally signed by Kay Griffin DN: cn=Kay Griffin, c=GB, o=SLR Consulting, email=kgriffin@slrconsulting.com Date: 2025.11.26 11:11:53	David Lewis David Lewis Digitally signed by David Lewis Date: 2025.11.26 12:13:56 Z	Eleni Gaki Eleni Gaki Digitally signed by Eleni Gaki Date: 2025.11.26 12:47:24 Z

DESCRIPTION OF REVISIONS

Rev	Page	Section	Reason for issue	Description
1	ALL	ALL	Issued for Review	New Document
2	ALL	ALL	Issued for Review	Finalised for discharge

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APPENDICES

1. ABBREVIATIONS

ALO	Agricultural Liaison Officer
AQMP	Air Quality Management Plan
BCT	Bat Conservation Trust
BPM	Best Practicable Measures
CALEMP	Constructoin Artificial Light Emissions Mangement Plan
CDM	Construction (Design and Management) Regulations 2015
COSHH	Control of Substances Hazardous to Health
CEMP	Construction Environmental Management Plan
CLO	Community Liaison Officer
CMS	Construction Method Statement
CoCP	Code of Construction Practice
dB	Decibels
DBEIS	Department of Business, Energy and Industrial Strategy
DCO	Development Consent Order
DEFRA	Department for Environment, Food and Rural Affairs
DPF	Diesel Particulate Filters
DOW COP	Definition of Waste Code of Practice
EA	Environment Agency
EA TWO	East Anglia TWO
EA2L	East Anglia TWO Limited
ECoW	Ecological Clerk of Works
EMFP	Environmental Management Framework Plan
EMP	Environmental Management Plan
EMS	Environmental Management System
EnvCoW	Environmental Clerk of Works
ES	Environmental Statement
ESC	East Suffolk Council
FRA	Flood Risk Assessment
IDB	Internal Drainage Board
Km	Kilometre
LLFA	Lead Local Flood Authority
MMP	Materials Management Plan
mph	Miles per hour
NGET	National Grid
NRMM	Non-Road Mobile Machinery

OCoCP	Outline Code of Construction Practice
PEMP	Project Environmental Management Plan
PPE	Personal Protective Equipment
PPRP	Pollution Prevention and Response Plan
PRoW	Public Right of Way
RAMS	Risk Assessment and Method Statement
SCC	Suffolk County Council
SPR	ScottishPower Renewables
SWDMP	Site Waste Drainage Management Plan
SWMP	Site Waste Management Plan
WFD	Water Framework Directive

2. INTRODUCTION AND SCOPE

2.1 PROJECT OVERVIEW

East Anglia TWO Limited (EA2L), a wholly owned subsidiary of ScottishPower Renewables (SPR), was awarded a Development Consent Order (DCO) by the Secretary of State, Department of Business, Energy and Industrial Strategy (BEIS) on 31st March 2022 for the East Anglia TWO Offshore Windfarm (EA TWO), under the Planning Act 2008. The DCO granted consent for the development of an offshore windfarm and associated infrastructure.

The construction works will be spread across a 9.7km corridor between the Suffolk coast at Thorpeness and the substation at Friston, passing to the south of Leiston. The infrastructure to be installed for EA TWO comprises:

- The landfall site at Thorpeness with up to two transition bays containing the connection between the offshore and onshore cables;
- Up to six onshore electrical cables (single core);
- Up to two fibre optic cables;
- Up to two distributed temperature sensing cables;
- Up to 19 jointing bay locations;
- A new onshore substation at Grove Wood, Friston;
- A new National Grid substation;
- Up to six electrical cables to link the substation at Friston to the National Grid Substation; and
- Connection to the existing overhead lines in proximity to the National Grid substation (including one additional and one re-positioned tower).

The EA TWO project is being developed in parallel to the proposed East Anglia ONE North Offshore Windfarm (EA ONE North), which benefits from its own DCO. EA ONE North is adjacent to the EA TWO project, within the same development order limits. EA ONE North is subject to project specific Requirement Discharge Documents. EA ONE North works and consenting matters are not covered by this document.

The National Grid infrastructure has been consented as part of both the EA ONE North and EA TWO DCOs but will be constructed by National Grid Electricity Transmission (NGET). These works are located within Work Nos. 38 to 43 and are part of the Substations Stage.

2.2 SCOPE AND PURPOSE

The scope of this Code of Construction Practice (CoCP) relates the construction and reinstatement of the EA TWO Substations Stage. The works in this stage will be located within Work No.s 30 to 34 and 37 to 43 in the DCO as described in Section 5.1 and as shown on Figure 1 Site Context Plan. This document has been prepared in accordance with the Outline CoCP(EA2-DWF-CNS-PLN-IBR-000010) and produced to discharge DCO Requirement 22 parts (1) to (6) which state:

> ***22***.—*(1) No stage of the onshore works may commence until for that stage a code of construction practice (which must accord with the outline code of construction practice) has been submitted to and approved by the relevant discharging authority.*
>
> *(2) The code of construction practice must include—*
>
> *(a) a surface water and drainage management plan;*
>
> *(b) a flood management plan;*
>
> *(c) a construction phase noise and vibration management plan;*
>
> *(d) a site waste management plan;*
>
> *(e) a soil management plan including method statements for soil handling;*
>
> *(f) an air quality management plan;*
>
> *(g) a materials management plan;*
>
> *(h) a pollution prevention and response plan including a groundwater protection method statement and construction method statements for the protection of onshore water;*
>
> *(i) a stakeholder communications plan;*
>
> *(j) an artificial light emissions management plan;*
>
> *(k) a watercourse crossing method statement (which accords with the outline watercourse crossing method statement); and*
>
> *(l) a Sizewell Gap construction method statement (which accords with the outline Sizewell Gap construction method statement).*
>
> *(3) The relevant discharging authority is the relevant planning authority, except in relation to any surface water and drainage management plan prepared under requirements 22(2)(a) or flood management plan prepared under requirement 22(2)(b), where it is the relevant lead local flood authority.*
>
> *(4) The code of construction practice approved in relation to the relevant stage of the onshore works must be followed in relation to that stage of the onshore works.*
>
> *(5) In approving the code of construction practice the relevant discharging authority must consult with the relevant planning authority in relation to the following plans—*
>
> *(a) the surface water and drainage management plan; and*
>
> *(b) the flood management plan.*
>
> *(6) In approving the code of construction practice the relevant discharging authority must consult with the relevant statutory nature conservation body in relation to the watercourse crossing method statement and in relation to the following plans to the extent that they relate to the Works Nos. specified—*
>
> *(a) the surface water and drainage management plan in respect of Work Nos. 7 to 14 and Work No. 19;*
>
> *(b) the construction phase noise and vibration management plan in respect of Work Nos. 7 to 14;*
>
> *(c) the soil management plan in respect of Work No. 12 and Work No. 12A;*
>
> *(d) the pollution prevention and response plan in respect of Work Nos. 7 to 14 and Work No. 19; and*
>
> *(e) the artificial light emissions management plan in respect of Work Nos. 7 to 14*

With regards to part (6), it is only the Watercourse Crossing Method Statement that will require the relevant discharging authority (East Suffolk Council (ESC)) to consult with the relevant statutory nature conservation body (Natural England), as the Substations Stage does not relate to the Work No.s indicated.

The CoCP provides a key mechanism, enforceable by Requirement 22 of the DCO, through which the regulatory authorities can be assured that environmental impacts associated with Substations Stage will be appropriately controlled and mitigated. The information contained herein shall be adhered to by the appointed EA2L and NGET Principal Contractors and their subcontractors and implementation and compliance will be monitored by the EA2L and NGET Construction Management Teams. These measures will only be revised with the agreement of ESC and where relevant, Suffolk County Council (SCC)(as relevant lead local flood authority).

This CoCP reinforces commitments made in the EA TWO Environmental Statement, October 2019 (ES) and associated documents and complements other requirements set out in Schedule 1, Part 3 of the DCO, issued in accordance with the Planning Act 2008.

The Substations Stage will comprise:

- Foundations, Earthworks and Platforming, relevant to all of the substations (within Work No. 30);
- Landscaping, Bunding and Provision of drainage and SUDS basin (within Work No. 33);
- Building construction and equipment installation for both EA TWO Substation and National Grid Substation (within Work No.s 30 and 41);
- Construction of the permanent Access 13 on Saxmundham Road and the permanent Substation Access Road (within Work No. 34);
- The National Grid CCS (within Work No. 42);
- Connection works between the EA TWO Substation and National Grid Substation (within Work No. 32);
- Potential reinforcement works at Marlesford Bridge (Work No. 37) to enable its use by abnormal indivisible loads (AIL);
- National Grid overhead line works – addition of one tower and movement of another (Work No. 39); and
- Balance of works at the Substation area.

Separate CoCPs will be produced for each stage of the project and are provided under separate cover.

The term ‘construction’ in the CoCP refers to all related engineering and construction activities and reinstatement and mitigation works carried out during the construction and reinstatement of the Substations Stage. The CoCP sets out the general objectives and measures for the construction activities and provides a summary of the various relevant environmental management plans produced for the Substations Stage.

The practical implementation and compliance arrangements, associated with the CoCP commitments will primarily be delivered via the EA2L and NGET’s Principal Contractors’ Construction Environmental Management Plans (CEMPs) and through the other associated and topic specific plans produced (including for air quality, surface water, noise, waste management, landscape and ecology). These plans will be developed and updated as work proceeds and will be audited and enforced both by the EA2L and NGET Construction Management Teams and their appointed Principal Contractors.

2.3 STRUCTURE OF THE COCP

In accordance with Requirement 22 of the DCO, a series of topic specific environmental plans and strategies for construction management have been prepared as part of this CoCP and each of the plans are attached as appendices, see Table 1-1.

Table 1-1 DCO Requirements

DCO Requirement 22 (2)	Appendix
(a) a surface water and drainage management plan	Appendix 1
(b) a flood management plan	Appendix 2
(c) a construction phase noise and vibration management plan	Appendix 3
(d) a site waste management plan	Appendix 4
(e) a soil management plan including method statements for soil handling	Appendix 5
(f) an air quality management plan	Appendix 6
(g) a materials management plan	Appendix 7
(h) a pollution prevention and response plan including a groundwater protection method statement and construction method statements for the protection of onshore water;	Appendix 8
(i) a stakeholder communications plan	Appendix 9
(j) an artificial light emissions management plan	Appendix 10
(k) a watercourse crossing method statement (which accords with the outline watercourse crossing method statement)	Appendix 11
(l) a Sizewell Gap construction method statement (which accords with the outline Sizewell Gap construction method statement).	Not relevant to the Substations Stage

Certain topics including archaeology, ecology, public rights of way, landscape and traffic management are covered by individual DCO Requirements. Detailed plans have been prepared to fulfil these Requirements and are provided under separate cover.

A number of detailed Construction Method Statements (CMS) have been or will be developed by the Principal Contractor for relevant construction operations. The CMS which have been produced as part of this CoCP comprise:

- Watercourse Crossing Method Statement (Appendix 11);
- Groundwater and Surface Water Protection Method Statement (part of Appendix 8); and
- Method Statement for Soil Handling (part of Appendix 5).

In addition, the following CMS which have been produced as part of the Ecological Management Plan (EA2-OND-CNS-PLN-IBR-000003) comprise:

- Breeding Bird Protection Plan; and
- Arboricultural Method Statement.

Each CMS follows construction industry good practice guidance and adheres to the following, as required by the Outline CoCP:

- Environment Agency Pollution Prevention Guidance (PPG2) 01 – General guide to the prevention of water pollution;
- Environment Agency PPG05 – Works near or liable to affect watercourses;
- Environment Agency PPG06 – Working at construction and demolition sites;
- Environment Agency PPG08 – Storage and disposal of used oils;
- Environment Agency PPG11 – Preventing pollution at industrial sites;
- Environment Agency PPG20 – Dewatering of underground ducts and chambers;

- Environment Agency PPG 21 – Pollution incident response planning;
- Environment Agency, Pollution Prevention for Businesses (2016);
- The Sustainable Drainage System (SuDS) Manual, C697/C753, CIRIA (2007 and 2015);
- Site Handbook for the Construction of SuDS, C698, CIRIA (2007);
- CIRIA Report C502 Environmental Good Practice on Site;
- CIRIA Report C532 Control of Water Pollution from Construction Sites;
- CIRIA Report C648 Control of Pollution from Linear Construction Project Technical Guidance;
- CIRIA Handbook C692 Environmental Good Practice on Site; and
- CIRIA Handbook C651 Environmental Good Practice on Site Checklist.

Good Practice Guidelines (GPGs)[1] are also available, which although specific to regulations in Ireland, Scotland and Wales provide updated guidance for the whole of the UK.

3. COCP GOVERNANCE

EA2L and NGET and their Principal Contractors (and subcontractors) are required to comply fully with the terms of this CoCP. The appointed EA2L and NGET Onshore Construction Managers, and associated Construction Management Teams, will be responsible for implementation and monitoring of the provisions of this CoCP and for ensuring that the Principal Contractors remain in compliance with these requirements. The practical implementation arrangements and responsibilities conferred to the Principal Contractors are set out in the environmental management protocols of the EA TWO Onshore Project Environmental Management Plan (EA2-GEN-ENV-PLN-IBR-000005)(PEMP) and will be further detailed in the Principal Contractors' CEMPs.

The CoCP includes information on mitigation of nuisance to the public and the measures adopted to safeguard the environment during construction. Construction activities will be monitored and environmental performance enforced by an Environmental Clerks of Works (EnvCoW), supported by other specialists as necessary (including Ecological, Arboriculturist, Archaeological and Environmental Auditing specialists). In addition, a pre-construction land survey would be undertaken by a qualified Agricultural Liaison Officer (ALO) to record details of crop regimes, position and condition of field boundaries, existing drainage and access arrangements, and private water supplies.

Prior to the commencement of construction, the Principal Contractors will each nominate a senior member of their onsite construction team to manage the implementation of the CoCP. Contact details will be submitted to stakeholders (ESC and SCC) for their records prior to commencement of construction.

In addition to the arrangements under this CoCP, the appointed Principal Contractors will also be encouraged to register with the Considerate Constructors Scheme. The Scheme requires constructors to adhere to the Scheme's Code of Considerate Practice (Considerate Constructors Scheme undated) which is a voluntary code of practice that seeks to:

- Enhance the appearance of the site; Constructors ensure sites appear professional and well managed.
- Secure everyone's safety; Constructors attain the highest levels of safety performance.
- Respect the community; Constructors give utmost consideration to their impact on neighbours and the public.
- Care for the workforce; Constructors provide a supportive and caring working environment.
- Protect the environment; Constructors protect and enhance the environment.

[1] https://www.netregs.org.uk/environmental-topics/guidance-for-pollution-prevention-gpp-documents/

4. GENERAL PRINCIPLES

4.1 EA2L ENVIRONMENTAL MANAGEMENT PRINCIPLES

EA2L, the developer of the EA TWO Offshore Windfarm, is a wholly owned subsidiary of ScottishPower Renewables (SPR). SPR operates an Environmental Management System (EMS), based on the requirements of IS0 14001:2015, that describes the processes and procedures by which they identify and manage significant environmental risks associated with its operations. The EMS is a primary mechanism by which SPR Environmental Policy commitments, including compliance with relevant legislation and standards, pollution prevention and continual improvement in environmental performance, are delivered.

The EMS includes an Environmental Management Framework Plan (EMFP), which provides internal guidance to managers on the approach and framework of controls that will be adopted to manage the environmental risks associated with all phases of project activities. The EMFP includes reference to the preparation of environmental management documents at an organisational and project level, including the PEMP, CEMPs and the CoCP.

The PEMP, produced by EA2L, sets out how EA2L intends to manage environmental risks associated with the onshore development as a whole, including the Substations Stage and sets out specific control measures necessary to deliver the requirements of this CoCP and any other mitigation measures that have been committed to by EA2L that relate specifically to the construction phase of the project. The PEMP also includes the EA2L minimum requirements for inclusion within the CEMP to be produced by Principal Contractor and sets out guidance and best practice for their implementation at EA TWO construction sites.

Through the EMS, contractors undertaking work on behalf of EA2L are screened and selected, using a variety of criteria that include environmental credentials. Where works have the potential to impact the environment, contractors are required to prepare a CEMP, reflecting their identified environmental risks. Individual CEMPs will therefore be prepared for the Substations Stage by the Principal Contractor. The CEMPs will identify the specific construction work process/aspects, the environmental impact of each process/aspect, the mitigation measure/best practice to be used and the relevant procedure or method of work to be followed. Site specific sensitivities and requirements of the DCO, along with updates in legal requirements and construction best practice, will all be addressed in the production of the CEMPs.

A number of topic specific environmental plans and strategies for construction management have been prepared, (see Table 1-1 for details) and will be implemented. These plans will be developed and updated as work proceeds and will be, audited and enforced both by EA2L, and by their appointed Principal Contractor.

The PEMP and CEMP will provide for the preparation and implementation of a programme of suitable environmental monitoring and auditing to be implemented by EA2L and their appointed Principal Contractor, to ensure that EA2L's environmental standards are adhered to. A number of environmental roles are referred to within the CoCP, and in the other plans attached as appendices. The PEMP and CEMPs will contain a more comprehensive description of the environmental roles and responsibilities.

EA2L will publish this CoCP and provide a copy to Statutory Bodies and the Local Authorities. The measures and standards identified in the CoCP will then be implemented by the appointed Principal Contractor.

4.2 NGET ENVIRONMENTAL MANAGEMENT PRINCIPLES

The following documents will be in place to cover National Grid Electricity Transmission's (NGET's) environmental management during the construction of the Substations Stage and include environmental documents that are related to pollution risk. These are described below:

- Environmental Sustainability Policy;
- EA2L's Project Environmental Management Plan;
- Contractor Environment Management Plans (CEMPs);
- Project Emergency Response Plan;
- This CoCP.

4.2.1 Environmental Sustainability Policy

Since 2011 NGET have been certified to ISO14001, the international standard for environmental management systems (EMS), across all four of their licence areas. The EMS is externally verified by a third-party and promotes continuous improvement of environmental management. NGET's company wide ISO14001 EMS helps to ensure that any potential risk to the environment and the communities in which they operate is minimised, and that they continually manage and improve environmental performance.

NGET's Environmental Sustainability Policy highlights the business's commitments to:

- Identifying NGET's environmental risks, including climate change, and developing plans to mitigate them.
- Protecting the environment by ensuring prevention of pollution is a key consideration in the design of all our assets.
- Using resources more efficiently by using sustainable materials and reducing waste.
- Identifying opportunities to use alternatives to hazardous materials.
- Seeking ways to enhance the natural value of the areas NGET works in for the benefit of local communities and the environment.
- Ensuring all employees have the training, skills, knowledge and resources necessary to achieve the requirements of NGET's internal standards.
- Setting expectations of those who work on NGET's behalf to demonstrate the same commitment to the environment as we do and working with our supply chain to contribute to the delivery of 'Our Contribution' targets.
- Continually improving the Environmental Management System by reviewing and challenging our performance using feedback from stakeholders and benchmarking against our contemporaries.

4.2.2 Project Environmental Management Plan

The EA2L Onshore Project Environmental Management Plan (PEMP) (EA2-GEN-ENV-PLN-IBR-000005) will also apply to the construction of the National Grid substation. NGET will communicate this information to their Principal Contractor in advance, to allow method statements to be written and work activities planned in accordance with environmental constraints and conditions.

4.2.3 Contractor Environment Management Plans (CEMPs)

NGET will have a documented Contractor Environment Management Plan (CEMP) outlining how the construction of the NGET substation will avoid, minimise or mitigate effects on the environment and surrounding area. Additionally, third-party contractors will also produce their own CEMPs reflective of each respective works and risks and RDD requirements related to the project.

4.2.4 Project Emergency Response Plan

NGET will have a documented Project Emergency Response Plan that will cover any potential Health, Safety and Environmental incidents and also cover the emergency planning arrangements with respect to the Suffolk Resilience Forum Radiation Emergency Plan. This PERP will be used to inform the Project Emergency Response Plan which will detail the role and responsibilities of personnel required to respond to an incident and who needs to be informed following the incident. In addition, all appointed contractors will have their own emergency incident response plan relating to the activities they are undertaking.

4.2.5 Code of Construction Practice

This CoCP has been produced to set out control and management measures that will be undertaken during construction of the National Grid substation. The measures and controls set out here will be implemented by NGET's Principal Contractor to ensure the project minimises its environmental impacts. The CoCP commitments will be communicated to the NGET Principal Contractor, who shall be responsible for complying with the provisions. The NGET Principal Contractor shall produce separate method statements which take into account the approved CoCP.

4.3 EA2L Health and Safety Principles

EA2L recognises that its decisions and activities may have a direct impact on the health, safety and welfare of those working for them and on their behalf. All construction works will be undertaken in accordance with the Construction (Design and Management) Regulations 2015. EA2L will set project specific health and safety goals and monitor performance in relation to the construction, operation and maintenance of our renewable energy generating projects. By our commitments EA2L will:

- Demonstrate commitment to health and safety, by our actions and behaviours.
- Ensure that Health and Safety issues are fully considered, as an integral part of project management, throughout the project life; from design, through to construction, operation and maintenance and future decommissioning.
- Require all designers to consider and include the control measures necessary to minimise the risks to the health and safety of all those engaged in construction, maintenance (and demolition) of the project or to others who may otherwise be affected.
- Ensure that suitably competent employees and other designers, engineers, supervisors and contractors from other organisations are engaged to undertake the responsibilities associated with the project.
- Ensure that all products, materials and processes used in construction, operation and maintenance present no significant risk to the health and safety of persons carrying out those duties or to others who may be affected by that activity.
- Ensure that suitable and sufficient resources, (including labour, materials, time and finances), are made available to effectively manage the health and safety requirements.
- Require that all those parties involved in the construction or operation and maintenance or decommissioning of SPR's renewable energy generating projects (Principal Designer, Principal Contractor and Operator), fulfil their roles and responsibilities, both legal and organisational, to health, safety and welfare.
- Require that parties involved in SPR's renewable energy generating projects have, where appropriate, a readily available, valid, suitable and sufficient Pre-Construction Information document and Health and Safety Plan as defined in the Construction (Design and Management) Regulations 2015.
- Ensure that, upon completion of construction activity, a suitable and sufficient Health and Safety File is completed and transferred, where appropriate, to the ultimate owner.
- A separate Project Health and Safety Plan has been prepared for the East Anglia projects.
- Site access for members of the public shall be restricted during the construction phase of the development, to ensure public safety. The Site Construction Phase Plan(s) detailing all site access control measures and measures to prevent unauthorised access will be developed prior to commencement of construction. Site access for all parties involved in construction will also be managed through a number of actions, including signing in procedures, exclusion zones and induction certificates. A method statement detailing the safety measures to be imposed on site will be prepared prior to the commencement of the development.
- Where the construction of the Project interacts with Public Rights of Way, measures will be implemented as set out within the final Public Rights of Way Strategy (EA2-ONS-CNS-PLN-IBR-000015).

4.4 NGET Health and Safety Principles

NGET's aim is to have a safe, secure and incident-free workplace, and contractors are expected to meet or exceed these expectations. NGET will as a minimum, achieve full compliance with all relevant legislation and fully supports the aims of the Health and Safety at Work etc. Act 1974. Furthermore, NGET are committed to maintaining a path of continuous improvement in our health and safety performance and to operate a Safety Management System that is recognised and accredited to international standards.

NGET will have a system in place to ensure that the Contractor is competent to perform its scope of work and will adhere to the NGET Health and Safety Policy. The Contractor would identify the training needs of its employees and sub-contractors so that it can implement the requirements of the CoCP (and other management plans) into briefings and construction method statements.

Specific training needs would be developed for individuals to reflect the work to be carried out and the significant risks and opportunities identified.

All personnel would be aware of their general environmental management responsibilities and for those whose work may cause, or have the potential to cause, a significant impact on the environment, to receive specific environmental awareness briefings. Environmental awareness would be reinforced through information, such as poster campaigns, environmental/sustainability performance indicator reports and environmental alerts.

All Contractors would be responsible for ensuring the competency of their environmental staff. If environmental training is needed for staff, a Contractor would be responsible for ensuring this requirement is fulfilled. Any training provided to members of the Project team would be logged by the Project administrator, and any certification documents would be produced by the relevant members of staff as evidence that they hold the required competencies.

NGET is committed to ensuring the health and safety of persons working on the Project is maintained in accordance with the Construction (Design and Management) Regulations 2015 (CDM) and the principles and philosophy behind them.

The Contractor would prepare a construction phase Safety, Health and Environment (SHE) Plan prior to construction works commencing. The Contractor's documented HSE management system, as per ISO 45001 and ISO 14001 standards, will be required to detail all topics covered by the SHE plan via HSE policies, HSE procedures, HSE forms and all other necessary HSE documentation. A construction phase SHE Plan would be prepared by the Contractor for each element of the Project. The Plan would ensure that adequate arrangements and welfare facilities are in place to cover:

- the safety of construction staff.
- the safety of all other people working at or visiting the construction site.
- the protection of the public in the vicinity of the construction site.
- compliance with the Construction (Design and Management). Regulations 2015 and associated Health and Safety Executive (HSE) guidance documents.
- emergency procedures that are to be defined and adopted.
- appropriate training and information being provided to personnel.

The Contractor's Construction Phase SHE Plan would be reviewed and approved by NGET prior to construction commencing. All staff, site visitors and delivery drivers would receive the relevant level of project induction from the Contractor to ensure it is aware of site hazards and health, safety and environmental management requirements. Site staff would be briefed daily by the Contractor prior to work commencing. Site-specific risk assessments would be carried out to ensure the risk strategy of the frequently changing workplace remains relevant. The Contractor would be required to carry out audits and inspections.

5. GENERAL SITE OPERATIONS

5.1 CONSTRUCTION DETAILS

5.1.1 Introduction

The Substations Stage of the EA TWO onshore connection works will comprise the following with respect to both the EA TWO Substation and the NGET Substation:

- Foundations, earthworks and platforming (within Work Nos 30 and 41);
- Provision of drainage and a SUDS infiltration basin (within Work No 33);
- Building construction and equipment installation (within Work No.s 30 and 41);
- Landscaping and bunding (within Work No. 33);
- Permanent Access 13 and permanent access road (within Work No.s 31, 34, 38, 41 and 42);
- The National Grid CCS (within Work No. 42);
- Connection works between the EA2L substation and NGET substation (within Work No. 32);
- NGET overhead line works (Work No.s 39 and 40);

- Potential reinforcement works at Marlesford Bridge (Work No. 37) to enable its use by abnormal indivisible loads (AIL); and
- Balance of works at substation area (including Work No 43 (the overhead line works)).

Once operational, the EA TWO Substation will be known as Grove Wood West Substation.

Works will be located within Work No.s 30 to 34 and 37 to 43 with the substations being located some 890m to the northwest of the village of Friston as shown on Figure 1 Site Context Plan. These works will follow on from the construction of the Substations Haul Road (SHR), Substations CCS and Snape Road West CCS (all part of the SHR Stage) and are currently anticipated to begin in March 2026. The use of the SHR, Substations CCS and Snape Road West CCS are however addressed by the Substations Stage.

It is not currently known if any structural works will be required to Marlesford Bridge on the A12 to enable its use by the Special Order abnormal loads required for the substations. These works would only be required if the Special Order abnormal loads arrive by sea into the ports at Ipswich or Felixstowe. Once the nature of the works required, if any, has been determined, a Requirement 40 Amendment to Approved Details report will be prepared setting out the detail of the works required and any necessary additional mitigation measures over and above those set out in the Substations Stage RDDs. These works, if needed, would not be required until 2027 and will not commence until the Requirement 40 has been discharged.

The initial works associated with the Substations Stage will comprise the following:

- Erection of temporary site notices or advertisements;
- Erection of a temporary means of enclosure;
- Provision of welfare facilities;
- Pre-entry records and requirements for landowner condition records;
- Vegetation to be removed and taken off site, extent as defined by Tree Impact and Protection Plan (Appendix 3 of the Ecological Management Plan). The removed vegetation will be either disposed of offsite or used on site in the creation of hibernacula; and
- Tree Protective Fencing, at extents defined by Tree Impact and Protection Plan will be erected immediately after vegetation clearance.

The construction of the works associated with the Substations Stage are envisaged to be of 2 to 3 years duration and require a staff of around 190 on average with up to 225 at peak times (including NGET staff). The construction of the two substations will comprise a number of key activities, including earthworks, piling, foundations and building construction and equipment installation and commissioning. It is noted that temporary drainage works during construction will where possible utilise features that are proposed as part of the permanent drainage solution for the site but will also include measures such as temporary bunding, silt fences, etc.

The construction of the substations will require the permanent diversion of the public footpath E-354/006/0 which runs north/south through the site. In mitigation, an alternative permanent route is being created as part of the New Footpath Creation Works for the project, in advance of the Substations Stage works so that the route will be established and ready for use prior to the close of the PRoW. Further detail is provided in the New Footpath Creation Works Public Rights of Way Strategy (EA2-LDC-CNS-PLN-IBR-000050) and also the Substations Stage Public Rights of Way Strategy (EA2-ONS-CNS-PLN-IBR-000015).

The landscaping area will include a SuDs basin (i.e. infiltration basin), which has been sized in accordance with the detailed drainage design as set out in the Substations Stage Surface Water and Drainage Management Plan. This will be excavated at the start of the Substations Stage construction phase prior to commencement of the earthworks. Biodiversity improvements at the basin will be shared with ESC/SCC prior to completion of the works on the basin at the end of the construction phase.

A landscape framework will be established around the EA TWO and NGET substations (and also the EA ONE North Substation) with large areas of woodland planting which provide new habitat and connectivity between existing habitats as well as visual mitigation of views towards the complex. The woodland will be supplemented with individual tree planting, hedge planting, aquatic planting, and grass and wildflower seeding. The landscape works will involve the cultivation of soils, planting and seeding, protective fencing, and the establishment and maintenance of the completed works.

All EA TWO substation construction vehicles, with the exception of the Special Order Abnormal Indivisible Load (AIL) deliveries associated with the delivery of transformers/shunt reactors to site, will access the substations site via the SHR using Access 10 and the crossing point at Accesses 11 and 12 on Grove Road. No construction access will be permitted to access the substation area via Grove Road or via the permanent substation access road from Saxmundham Road (Access 13), other than the Special Order AIL. All other EA TWO and NGET vehicles travelling to the substations site will travel from the A12 via the A1094 before heading north to Access 10 on the B1069 (Snape Road). Vehicles will then travel via the SHR, crossing Grove Road at Accesses 11 and 12.

5.1.2 Earthworks

Once the surface had been cleared, the grading operations will begin to level the area of the three substations (EA TWO, EA ONE North and the NGET Substations), which currently have a height differential of 5.8m across the sites, with the highest area in the easterly corner of the EA TWO substation platform(+3.2m) and the lowest in the north westerly corner of the National Grid substation platform (-2.6m). A cut and fill exercise will be undertaken to provide a level platform and to reduce the need to remove material off site or bring material onsite compared to the substations earthworks being undertaken independently. The materials excavated will be reused on site as engineering fill or for landscaping bunds (as set out in the Landscape Management Plan (EA2-OND-CNS-PLN-IBR-000001)), depending on material properties (defined in Soil Management Plan (EA2-ONS-CNS-PLN-IBR-000008)).

Following formation of the earthworks platform, a circa 300mm thick imported capping layer will be laid. A further 300mm to 500mm imported platform make-up will then be added to the EA TWO and EA ONE North substation sites to achieve the required platform level. For NGET, a circa 450 mm thick granular or bound pavement will be laid to gradients to achieve the required platform level. The final platform levels (including these capping levels) for the three substations are set out in the Materials Management Plan (EA2-ONS-CNS-PLN-IBR-000009).

An earth flood bund will potentially be added to protect the NGET substation from pluvial flows. This would be in the order of 1m in height.

5.1.3 The Substations

The EA TWO GIS substation will be located within a fenced compound (up to 32,300m^2) (Work No. 30), with the NGET Kiln Lane GIS Substation (up to 16,800m^2) being constructed adjacent and to the north. The substations will contain electrical equipment including power transformers (EA TWO only), switchgear, reactive compensation equipment, harmonic filters, cables, lightning protection masts, control buildings, GIS building, communications masts, backup generators, access, fencing and other associated equipment, structures or buildings. The substations will have a compact layout, with the majority of the equipment contained in buildings not incongruous to their setting.

The construction site access will already have been constructed as part of the SHR Stage along with the EA TWO Substations CCS., however, an internal service road from this will require installation.

Following the completion of the site grading, works will commence with the excavations for ducting and the foundations for the buildings and external plant. The buildings will largely comprise steel, concrete or masonry and cladding materials. The structural steelwork will be fabricated and prepared off site and delivered to site for erection activities using cranes. The composite or cassette cladding panels (e.g. Kingspan) will be delivered to site ready to erect and be fixed to the steelwork.

The 400kV power and protection and control underground cables to link the EA TWO Substation to the National Grid Substation will also be installed.

The civil works will be followed by the installation and commissioning of the electrical equipment. The large transformers will be filled on site. The smaller electrical components will be installed on site using small mobile plant and lifting apparatus.

5.1.4 NGET Overhead Line Works

The NGET overhead line works will comprise the replacement of one tower (Ref 4ZW020) and installation of an additional terminal tower at the locations shown on Figure 1. Each tower will be up to 58m (in accordance with a maximum of 59.2m as set out in the DCO), with a footprint of approx. 350m^2.

In addition, modification works will be required to eight towers within the order limits (replacement of arcing horns) and during the construction phase two temporary Over Head Line (OHL) structures (58m) will be required to enable the continued operation of the overhead line exporting power from Sizewell B Nuclear Power Station.

5.1.5 NGET CCS

The NGET CCS will be located within Work No: 42 to the west of the NGET substation and will have an area of 14,500m^2 in area in accordance with Requirement 12 (17) of the DCO. The CCS will:

- Provide the main areas for the storage of materials and equipment; and
- House site administration and welfare facilities for the labour resources.

The CCS will be typically constructed as follows:

- Mark out the extent of CCS with use of Global Positioning Systems (GPS) (Real Time Kinematic (RTK) equipment;
- Set out and install drainage features as required. Any encountered existing field drains will be located, capped or diverted to areas where any outfall can be managed in accordance with the Surface Water and Drainage Management Plan (EA2-ONS-CNS-PLN-IBR-000004);
- Erect security fencing around the perimeter of CCS;
- Strip topsoil under conditions where the topsoil is within its plastic limit with regards to moisture content to minimise damage to the soils structure and texture and store in designated areas within the same field boundary, all in accordance with the Construction Code of Practice for the Sustainable Use of Soils on Construction Sites (Defra, 2009);
- Excavate to formation level and store any excess material. Topsoil and subsoil will be placed separately in bunds locally, the topsoil bund being seeded. Subsoil bunds will be kept weed free;
- Place imported stone in accordance with the CCS base structure design. Hardstandings will be installed in line with temporary works design assessments and may typically be circa 450-600mm thick; and
- Install prefabricated site offices, meeting room and welfare facilities, where required.

NGET will also have a temporary construction area to the north of the NGET substation for the transmission tower works which will be constructed in a similar manner to that outlined above.

5.1.6 Permanent Access 13

Access 13 will provide a permanent access to the onshore substation and National Grid substation and would therefore remain for the operational life of the EA TWO project. NGET and the EA ONE North projects will also use Access 13 as permanent access. The ES identifies that the proposed onshore substation and National Grid substation will not normally be staffed and that during the operational phase, vehicle movements will therefore be limited to occasional repair, maintenance and inspection visits at the substation.

The access will also be used for the delivery of the Special Order abnormal loads to the EA TWO Substation (and also EA ONE Substation). The route of the access road has been designed to avoid impacting important trees and hedgerows where possible.

The access road will be up to 7m in width (to facilitate two-lane construction traffic) and approximately 1.3km in length. The access road will be typically constructed as follows:

- Set out the site tracks with the use of GPS RTK equipment;
- Erect and maintain suitable signage and goal posts where the road runs under overhead lines in accordance with HSE GS6 "Avoiding danger from overhead power lines";
- Where works may interfere with land drains, these will be located, capped or diverted to areas where any outfall can be managed in accordance with the Surface Water and Drainage Management Plan (EA2-ONS-CNS-PLN-IBR-000004);
- Strip topsoil and subsoil material over the working width of the road. Stripped materials will be used in the landscaping works;
- Excavate to formation level and store any excess material;

- Test the existing ground conditions to ensure suitability of the works design and bearing capacity for the road;
- Layers of stone and geotextiles/geogrid will then be placed on the cleared surface in accordance with the design to form the road structure. The sub base will be finished with a bituminous bound pavement (asphalt) surface course.
- Drainage will be installed where necessary, concurrently with the stone and geotextile/geogrid layers and in accordance with surface water management requirements (as outlined in the Operational Drainage Management Plan (EA2-ONS-CNS-PLN-IBR-000016);
- Public Right of Way temporary alternative route creation will be undertaken progressively as the access road is constructed (see Public Rights of Way Strategy (EA2-ONS-CNS-PLN-IBR-000015));
- Where site tracks cross existing watercourses, install temporary watercourse crossings to maintain flows within the existing watercourse (see the Watercourse Crossing Method Statement (Appendix 11);
- Permanent gated crossing points of the access road will be required in locations identified on the landscape mitigation plans to provide access between existing agricultural fields; and
- The junction of the permanent access road and Saxmundham Road is subject to detailed design.

Based on the temporary works design and the soil bearing capacity, the typically 450mm thick haul road is likely to include one layer of non-woven geotextile and a layer of Geogrid 30/30 placed on the compacted sub-soil. The sub-base will be finished with a bituminous bound pavement (asphalt) surface course.

Any surface water that may potentially affect the Highway will be controlled in accordance with a Section 278 agreement with SCC (i.e., the Local Highways Authority).

5.1.7 Reinstatement

The NGET CCS and all temporary work areas will be reinstated and restored with the stored topsoil and subsoil in accordance with the Construction Code of Practice for the Sustainable Use of Soils on Construction Sites (Defra, 2009), IQ Good Practice Guide for Handling Soils in Mineral Workings and the Soil Management Plan (EA2-ONS-CNS-PLN-IBR-000008). Reinstatement will only take place under conditions where the topsoil is within its plastic limit with regards to moisture content to minimise damage to the soil's structure and texture. Post-construction restoration land drainage should be installed in all affected areas (where soil types dictate) with permeable fill. A suitable regime of subsoil loosening should then be carried out, including parallel pre-reinstatement ripping and ripping across the drains at suitable angles after topsoil reinstatement. Stone picking of stones >100mm is also required prior to topsoil reinstatement. Topsoil will be spread in such a way as to ensure that it does not become compacted.

PRoW will be reinstated to their original condition or a condition agreed by SCC (see PRoW Strategy (EA2-ONS-CNS-PLN-IBR-000015)).

The area will be planted in accordance with the Substations Stage Landscape Management Plan (EA2-OND-CNS-PLN-IBR-000001).

5.2 Working Hours and Timing of Works

The construction of the Substations Stage is proposed to start in Q1 2026 and expected to take approximately 2 years.

Permitted working hours are set out in Requirement 23 of the DCO with respect to onshore transmission works (i.e. Work No.s 6 to 37 (excluding Work No. 34)) and in Requirement 24 with respect to the grid connection works (i.e. the National Grid works and the new permanent access (Work No.s. 34 and 38 to 43)).

Both Requirement 23 and 24 define the construction hours in the first paragraph as:

(1) Construction work for the [transmission/grid connection] works must only take place between 0700 hours and 1900 hours Monday to Friday and 0700 hours and 1300 hours on Saturdays, with no activity on Sundays or bank holidays, except as specified in paragraph (2).

Paragraph (2) of each requirement contains the exceptions to these hours as follows:

For the onshore transmission works:

(2) Outside the hours specified in paragraph (1), construction work may be undertaken for essential activities including but not limited to—

(a) continuous periods of operation that are required as assessed in the environmental statement, such as concrete pouring, dewatering, cable pulling, cable jointing and drilling during the operation of a trenchless technique;

(b) internal fitting out works associated with the onshore substation;

(c) delivery to the transmission works of abnormal loads that may cause congestion on the local road network;

(d) the testing or commissioning of any electrical plant or cables installed as part of the authorised development; and

(e) activity necessary in the instance of an emergency where there is a risk to persons, delivery of electricity or property.

For the grid connection works:

(2) Outside the hours specified in sub-paragraph (1), construction work may be undertaken for essential activities including but not limited to—

(a) continuous periods of operation that are required as assessed in the environmental statement, such as concrete pouring and the installation and removal of conductors, pilot wires and associated protective netting across highways or public footpaths;

(b) internal fitting out works associated with the national grid substation;

(c) the completion of construction activities commenced during the approved working hours which cannot safely be stopped;

(d) the testing or commissioning of any electrical plant installed as part of the authorised development; and

(e) activity necessary in the instance of an emergency where there is a risk to persons or property.

Notwithstanding the above, core working hours will be limited to between 0800 hours to 1800 hours on weekdays (excluding bank holidays) and from 0800 hours to 1300 hours on Saturdays. EA2L and NGET will require that their contractors adhere to these core working hours during construction works in the area of the onshore substation and NGET infrastructure as far as is reasonably practicable. To maximise productivity within the core hours, a period of up to one hour before (Monday to Saturday) and up to one hour after (Monday to Friday) core working hours for start-up and close-down of activities will be used for such activities as deliveries, movement to place of work, unloading, maintenance and general preparation work. This will not include operation of plant or machinery likely to cause a disturbance to local residents or businesses.

Certain operations such as earthworks are season and weather dependent. In these instances, EA2L's Principal Contractors will seek to extend the core working hours and/or days for such operations to take advantage of daylight hours, with the consent of ESC.

Construction works shall be undertaken in accordance with the consented and core hours set out above, except under those circumstances set out in paragraph (2). The term 'essential activities' relates to such works that, if not completed within a particular sequence or within a particular time frame, would be of detriment to the safety or construction of the Substations Stage. This may include such activities as those that require continuous periods of operation and which have been assessed in the Environmental Statement such as, but not limited to those activities set out in paragraph (2) (a) to (e). This would be particularly relevant for the completion of continuous processes predicted to last more than 12 hours. Essential activities also include any activity necessary in the instance of an emergency where there is a risk to persons, delivery of electricity or property.

Where construction works are to be undertaken outside the consented or core hours, that are not specifically mentioned in paragraph (2) above, ESC will be advised, as soon as practical, prior to the works commencing, through the use of a formal application template, which will outline the nature and circumstances for the works, the likely timing and duration and any mitigation measures to be implemented. This template is included as Appendix 12. ESC will, thereby, retain control over the activities that can be undertaken outside the standard construction hours. Where ESC is to be notified in advance of out of hours works, it is proposed that as much notice as possible is provided to allow for further discussion, if required, prior to agreement, with the minimum being 3 working days' notice (with the exception of the emergency works).

Stakeholders (including residential and leisure) will be notified of the proposals, where relevant.

Where works are undertaken outside consented or core hours in response to an emergency or which, if not completed, would be unsafe or harmful to the works, staff, the public or the local environment, ESC will be informed, as soon as practical and within not more 24 hours following the event, including details on the nature of the emergency, the hours/duration that emergency works were undertaken and the management and mitigation measures implemented. Examples of the type of work envisaged include where unexpectedly poor ground conditions, encountered while excavating, which require immediate stabilisation

It has been agreed with ESC, that for the purposes of Requirement 23 and 24, that the following activities do not comprise 'construction works' and can therefore be undertaken outside of the above working hours without prior notification to ESC:

- Fuelling of generator servicing pumping equipment etc, where the need for this was not known during normal working hours and fuelling is required to enable the continued operation of the equipment
- Response to failure of the following to enable return of service:
    - Electrical Generator to Welfare Facilities
    - Site LAN/WAN
    - Utility Power Supply
- Security patrols and response to unauthorised access
- Response to incident on site e.g inclement weather damage
- Non scheduled maintenance of fencing[2] and access points, where the need for this was not known during normal working hours and immediate attention is required.

EA2L and NGET will use best endeavours to minimise the duration of, and sensitively time, construction activities. ESC will be advised of the likely timetable of works. This timetable will also be shared with affected communities through the local community liaison officer. Details of the way in which this would be done are set out in Appendix 9.

5.3 Construction Site Layout and Housekeeping

The Substations Stage will include the installation of the NGET CCS. The indicative layout of the CCS, which will include locations of welfare, offices, storage, access and waste management, is shown in Appendix 13. Any significant changes to site layout or design will be issued to ESC.

A good housekeeping policy will apply throughout the construction period, which will include the following requirements, as a minimum:

- All working areas will be kept in a clean and tidy condition.
- All site compound areas shall be non-smoking. Specific areas within the worksites will be designated as smoking areas and will be equipped with enclosed containers for smoking waste. These will not be located at the boundary of working areas or adjacent to areas deemed sensitive to local residents, workers or visitors.
- Open fires and burning of rubbish are prohibited at all times.
- Music shall not be played through speakers on any worksite;

[2] Where out of hours work associated with maintenance of fencing and access points has been required, ESC will be notified of these works the following working day"

- Radios (other than two-way radios used for the purposes of communication related to the works) and other forms of audio equipment (other than associated with safety mechanisms (such as reversing bleepers) will not be operated during construction activities.
- Site waste facilities will be suitable for the waste streams to be handled and the containers will be in good condition and well signed to identify contents.
- Site waste susceptible to spreading by wind or liable to cause litter will be stored in enclosed or covered suitable containers and waste will be removed at frequent intervals.
- Hoardings, if used, will be painted in a colour agreed with ESC;
- Any weeds will be appropriately managed;
- Regular litter picks will be undertaken around the site boundary;
- Drainage and surface water management measures will be routinely checked and rectified as required;
- Static plant will have suitable drip tray or plant nappy protection;
- Hoardings and boundary fences will be frequently inspected, repaired and repainted as necessary.
- Stockpiles will be covered, seeded or fenced to prevent wind whipping as appropriate; and
- Adequate welfare facilities will be provided for all site staff and visitors.

Prior to any intrusive works, all existing service plans would be consulted and a comprehensive service line location survey carried out in order to ensure that existing services are not disrupted. This would include radio detection, ground penetration radar and vacuum excavation where necessary.

As the Substations Stage is not located in either Flood Zone 2 or 3, no additional measures are considered necessary with respect to periods of extreme weather (i.e. flooding). However, a Surface Water and Foul Drainage Management Plan has been developed to outline the requirements for surface water management and is included here as Appendix 1 and a Flood Management Plan is included as Appendix 2. In addition, due to the presence of watercourses onsite, the following measures will be implemented:

- Spoil storage will be laid out with gaps at regular intervals and tightly compacted to minimise impact on flood waters. Neither topsoil or subsoil will not be stored in recognised surface water flow paths as delineated by available flood mapping or which can be discerned based on a visual site inspection (i.e. obvious hollows, or waterlogged areas.
- Any site fencing installed will have regard to possible flood risk and should be designed so as to not impede flows as necessary; and
- There shall be no storage of spoil directly on watercourse banks. Where possible, spoil will be set back from watercourses by 10m. This will prevent excessive loading on the watercourse banks and minimise the risk of stored material entering the watercourses.

Wherever practicable, appropriate planning and timing of works will be agreed with landowners and occupiers, subject to individual agreements. Temporary means of access will be provided to severed fields for vehicles and machinery in order to ensure access is maintained wherever practicable. Where these impact on the public highway, these would require a Section 278 agreement with the Local Highway Authority.

5.4 Site Induction

All personnel working on site will be required to have a site induction that includes an environmental protection and good practice component. Prior to commencing work on site, personnel must attend the site induction. Site inductions will include reference to:

- Compliance with relevant DCO Requirements and license conditions;
- EA2L and NGET environmental requirements (including this CoCP);
- Environmental management roles, responsibilities and contacts;
- The Pollution Prevention and Response Plan (Appendix 8);
- Site specific environmental sensitivities, including proximity to residents;
- The management of noise, nuisance, waste, water and wastewater, hazardous material, fuel, oil and chemicals;

- Spill contingency;
- Environmental emergency response, including the reporting of all incidents and complaints;
- Requirements of the EA2L Appendix to the Suffolk Resilience Forum Radiation Emergency Plan (EA2-GEN-CNS-REP-IBR-000002);
- Health and Safety;
- Interactions with the public;
- Construction (Design and Management) Regulations; and
- Relevant Personal Protective Equipment (PPE) requirements.

More specific information will be provided to staff according to their role.

5.5 SCREENING AND FENCING

Details of temporary fencing and any other means of enclosure to be installed during the construction and reinstatement of the Substations Stage are detailed in the Fencing and Enclosure Plan (EA2-ONS-CNS-PLN-IBR-000002) which is provided under separate cover. As such, detailed information does not form part of the CoCP, however a summary of fencing requirements is provided in Table 5-1 (taken from the Fencing and Enclosures Plan).

Table 5-1 - Summary of Fencing and Enclosure Requirements

Category	Fencing and Gateway Types
EA TWO Substation and National Grid Substation – permanent during operational phase	Palisade Fencing and Gateways
EA TWO Substation and National Grid Substation – temporary during construction phase	EA2L Substation - metal Hoarding with double gateways NGET Substation – heras fencing followed by CLD fencing Manual arm barrier Chapter 8 Signing, Lighting and Guarding
National Grid CCS	Heras fencing or metal hoarding with double gateways; Chapter 8 Signing, Lighting and Guarding Manual arm barrier
Permanent Access	Post and wire or heras fencing (as required by the CDM Regulations) during construction Gating of field accesses Hedging with post and rail fencing during operational stage
Public Rights of Way	Crowd control barriers Post and rail (where required for a longer duration)
Landscaping Protection	Stock proof timber post and rail fencing and/or timber post and wire fencing Deer control fencing and rabbit proof mesh fencing Post and wire/mesh for field enclosure while hedgerows establish
Trees and Hedgerows Protection	Heras fencing Crowd control barriers
Ecological Protection	Badger exclusion fencing and gates Two-way badger gates
Additional Screening Fencing – permanent during construction and operational phase	Vertical (Single) Slatted Fencing

5.6 SITE SECURITY

Adequate security will be provided by the Principal Contractors, working on behalf of EA2L and NGET, to protect the public and staff, prevent theft from or damage to the works and to prevent unauthorised entry to or exit from the site. Site gates shall be closed and locked when there is no site activity and appropriate security measures shall be implemented and maintained throughout the project work. Site security personnel will be available during the construction phase. CCTV will be installed for surveillance, where required, especially during off-peak hours. Security staff may be present outside of the set working hours, in accordance with Section 5.2.

5.7 WELFARE

The construction areas will be provided with temporary construction offices and necessary welfare facilities, including canteen area, locker rooms, drying rooms, showers and toilet facilities, plus additional facilities for the mobile construction teams. These shall be installed at the CCS and will be in compliance with relevant legislation and codes of practice. Small welfare facilities may be provided at areas outside the CCS to serve specific work activities

The potential for noise disturbance due to *inter alia* generators providing electricity to these facilities will be in accordance with the measures set out in the Construction Noise and Vibration Management Scheme (EA2-ONS-CNS-PLN-IBR-000006). It is expected, however, that it will be possible to install a mains connection to the Substations CCS at an early stage in the construction phase.

6. REINSTATEMENT

The reinstatement of land affected by the onshore construction activities is controlled under DCO Requirement 29, which states:

> **Restoration of land used temporarily for construction**
>
> *Any land landward of mean low water springs within the Order limits which is used temporarily for construction of the onshore works and not ultimately incorporated in permanent works or approved landscaping must be reinstated, in accordance with such details as the relevant planning authority in consultation with the relevant highway authority may approve, within twelve months of completion of the relevant stage of the onshore works or such other period as the relevant planning authority may approve.*

The reinstatement of the Onshore Cable Stage is described in Section 5.1.7 above.

7. PROTECTION OF SURFACE AND GROUNDWATER RESOURCES

7.1 INTRODUCTION

A Surface Water and Drainage Management Plan (SWDMP) (EA2-ONS-CNS-PLN-IBR-000004) has been prepared for the Substations Stage in fulfilment of DCO Requirement 22 (2) (a) and is attached as Appendix 1. The SWDMP sets out the methods for the collection, treatment and storage of surface water associated with the construction works to prevent any adverse impact on water quality. A summary of the objectives and control measures is provided below; however, please refer to Appendix 1 for full details.

A Flood Management Plan (EA2-ONS-CNS-PLN-IBR-000005) is included in Appendix 2 and a Watercourse Crossing Method Statement (EA2-ONS-CNS-REP-IBR-000006) is included as Appendix 11. In accordance with the Land Drainage Act 1991 and local byelaws, where required, the Principal Contractor will seek written consent from SCC on the final methodology for any temporary or permanent works associated with the Ordinary watercourses within the Substations Stage.

A Hydrogeological Risk Assessment (EA2-OND-CNS-PLN-IBR-000008) has been undertaken as an appendix to the SWDMP.

7.2 OBJECTIVES

The main objectives with regards to managing potential surface water and drainage are as follows:

- To protect surface and groundwater by ensuring that appropriate measures are in place to prevent contaminants (e.g. sediment release) from entering the surrounding environment and in particular pathways that might lead to water receptors. An overview of proposed controls for hazardous or contaminated materials is provided in Section 8 and 16 of this CoCP.
- To comply with relevant legislation and good practice in terms of managing surface and foul water abstractions and discharges.
- To maintain and protect private water supplies during construction.
- To protect and maintain existing land drainage systems; and
- To manage flood risk.

7.3 CONTROL MEASURES

Contamination of surface water runoff is the highest potential risk of pollution during the construction work. The construction work will minimise the production of runoff containing elevated levels of suspended solids using a combination of the following:

- On-site retention of sediment will be maximised by routing all drainage through the site drainage systems. Additionally, where required, soil bunds will be created along the edge of the working area to contain any overland flow paths and prevent sediment from being washed outside the working area.
- Where needed, attenuation or infiltration lagoons, in addition to the main SuDs infiltration basin will be established within the onshore development area to assist in surface water runoff.
- Containment of heavily silt laden water as near as possible to the source (e.g. silt fencing along toe of soil storage piles or other affected points, addition of filter bags on pump outlets). Additional silt fences and intercept ditches will be included in parts of the working area that are in proximity to surface drainage channels to manage water flow and encourage silt settlement.
- The drainage system will include drainage channels (or swales) along the length of the substations haul road, permanent access road and around the CCS to collect surface water runoff and direct it to a suitable point of discharge (e.g. the SuDS infiltration basin) or soak-away.
- Suitable filters will be used to remove sediment from any water discharged into the surface drainage network.
- Diversion of clean water away from working areas to reduce volumes of dirty water generation. Where significant surface flows are considered possible, this will involve the installation of drainage ditches (to divert flows around construction) upgradient of the soil storage areas, running parallel to the construction activities and soil storage bunds to intercept water that otherwise may flow into work areas from off-site.
- Appropriate silt traps would be proactively installed where their use is deemed effective to minimise sediment build up within basins or ditches.
- The permanent access road will be constructed with clean road stone with an asphalt surface. The contamination of runoff from this surface may potentially be minimal however filter strips along the road are suggested to aid the removal of pollutants.
- Avoidance of excessive vehicle or plant tracking directly over topsoil stripped areas and the setting of vehicular speeds to minimise soil dispersal. Use of trackmat, or similar, where temporary off-road access is required for excavator or other plant.
- Soil stored locally to temporary excavations or to final locations within landscaping bunds, to minimise handling and exposure. Soil to be bunded and sealed when stored for prolonged periods in order to shed rainfall and reduce silt laden runoff.
- Covering or seeding of stored topsoil bunds at first opportunity, to reduce surface erosion.
- Strips of undisturbed vegetation will be retained on the edge of the working area where possible.
- Once the topsoil strip has occurred on the temporary works areas, the construction material will be installed as soon as possible to reduce the area and duration of the exposure to rainfall scour and also ensure the existing drainage patterns are interrupted for the shortest duration possible.

- The surface of the CCS will generally comprise crushed Type 1 stone or aggregate laid on a geotextile membrane which is generally considered to be impermeable, with asphalt used in higher risk areas. Positive surface water collection systems for the management of rainfall-run-off to prevent the pollution of ground water will be considered where appropriate.
- Early consideration will be given to the types of activities undertaken and materials stored in the CCS. Any high pollution risk areas will be considered at the outset of the strategy and activities and storage of material in these areas would be restricted.
- All excavated soils will be stored at least 10m from the top of the bank of any watercourse and any potentially contaminated soil will be stored on an impermeable surface and covered to reduce leachate generation and potential migration to surface waters. Procedures for dealing with unexpected, contaminated materials are included in Section 11.
- Traffic movement would be restricted to minimise the potential for surface disturbance.
- Where systems require a discharge, these will be subject to consultation and in accordance with EA requirements. Waste silts and sludges will be removed in accordance with Duty of Care requirements.
- The minimisation of excavation volumes and disturbance to the surrounding areas, together with the replacement and reseeding (with the exception of arable crops), as required, of any soils inadvertently disturbed during excavations in general accordance with their original structure and location.
- Access 10 will have a wheel wash facility installed circa 30m from the road junction to prevent construction vehicles and plant carrying mud off site onto public roads. This will be a closed loop facility with self-contained water and silt collection systems. Collected silts/sludge will be regularly removed and the water topped up to retain function of the wheel wash. Its use, operation and maintenance will be monitored on site. Regular road-sweeping on the highway will also be undertaken to prevent sediment being washed into nearby watercourses.

Additional measures are included in Section 8 Storage and Use of Oils and Chemicals. Details on the management of each of the common pollutants (sediment; cement/concrete products; hydrocarbons; contamination land and organic waste) are provided in the SWDMP (Appendix 1).

The SWDMP also provides control measures relating to surface water flow management, abstractions, discharge, protection of water supplies and licensing requirements. Please see Appendix 1 for further details.

7.4 Water Framework Directive

Although originally proposed, the Substations Stage will no longer involve the installation of an outfall into the Friston Main River, a watercourse that is specifically assessed by the EA under the Water Framework Directive (WFD). A WFD Assessment will not, therefore, be required.

7.5 Watercourse Crossings

In addition, and in fulfilment of DCO requirement 22 ((2) (k) a detailed Watercourse Crossing Method Statement (EA2-ONS-CNS-REP-IBR-000006) has been produced and is presented as Appendix 11. The document provides information on the watercourses to be crossed, the different type of crossing which will be required and details of the proposed crossing method. A summary is provided below; however, please see Appendix 11 for full details.

There are also four watercourses that will, in part, be permanently removed by the earthworks for the substation platforms (WC3d, WC4, WC4b/c and WC9). The closure and diversion of these watercourses are addressed in the Substation Stage Surface Water and Drainage Management Plan (EA2-ONS-CNS-PLN-IBR-000004).

Permanent watercourse crossings will be required at two locations along the route of the permanent access road and the construction of these structures presents potential risks to the environment, including:

- Interference with habitats and with riparian and linear wildlife corridors.
- Alternation of the flow regimes.
- Harmful discharges during construction.

These impacts will be minimised by applying sound design principles to the structures, following best working practices and communicating this through a detailed method statement (see Watercourse Crossing Method Statement) during their construction. The general provisions as listed in Table 7-1 should be referred and adhered to, all watercourse crossings will require some level of consent either by the Environment Agency or SCC. The consent conditions associated with each crossing will be strictly followed.

Table 7-1 Contractor Checklist for Watercourse Crossings

Contractor Checklist for Watercourse Crossings
Ensure all necessary consent conditions from Environment Agency / ESWMB/ SCC are in place.
Comply with all permit/consent conditions from Environment Agency / ESWMB / SCC for watercourse crossings.
Ensure all required pre-construction ecological surveys have been completed and ecological mitigation undertaken as per licence conditions, where required, before starting works.
Take account of activities of other users of the water environment in planning works.
Appropriate signage and notices are to be fixed along the boundary of the works to inform members of the public as to the works being undertaken.
Vegetation will not be removed from the banks unless necessary to undertake the works; any vegetation removal would be restricted to the smallest practicable footprint
Have access constructed of suitable material and in a manner that will not give rise to rutting, ponding and silt run-off.
Works are to be undertaken from the banks of watercourses wherever practicable, in-stream access will be restricted to where absolutely necessary. All construction machinery operating in-stream should be mechanically sound to avoid leaks of oils, hydraulic fluid. Where practicable plant for in stream works should contained with bio- fuel and biodegradable hydraulic oils.
Ensure oil absorbent booms are in place downstream from where the culvert will be installed before the work commences.
Ensure all necessary silt controls are in place in accordance with Surface Water and Drainage Management Plan (EA2-ONS-CNS-PLN-IBR-000004). Measures to also be installed to control silt during use of watercourse crossing, including silt fencing along banks and crossing point to prevent splash back. All in-stream works must be carried out in accordance with an approved method statement and crossing consent conditions.
Trees that fall within the working area will not be removed unless for safety reasons, thereby minimising the area of disturbance as a result of the Project.
Check if there are any timing restrictions to works because of protected species (e.g. spawning salmonids, otter, water vole etc) or landowner commitments
Where waste cannot be treated and discharged on site under a Regulatory Position Statement or permit issued by the Environment Agency, it will be removed from the works and disposed of in accordance with the approved Site Waste Management Plan (EA2-ONS-CNS-PLN-IBR-000007).
Works within watercourses will ensure ecological watching briefs, specifically for example the removal of crossing points flumes and sandbags within which animals make have taken shelter.

7.6 LICENCES

Table 7-2 sets out the additional licences or permits necessary prior to construction in relation to water resources and flood risk.

Table 7-2 Licences or Permits Necessary prior to Construction in relation to Water Resources and Flood Risk

Issuing Body	Name of Consent	Applicable to
Environment Agency	Water Abstraction Licence (if needed)	For temporary abstractions (< 6 months) of more than 100 cubic metres / day (or 50 cubic metres in locations less than 500m from a designated nature conservation site, or 250m or less from a spring, well or borehole used to supply water) from main and ordinary watercourses, and groundwater and certain dewatering activities. For abstractions required for more than 6 months of more than 20 cubic metres / day from main and ordinary watercourses, and groundwater and certain dewatering activities.

Issuing Body	Name of Consent	Applicable to
	Environmental Permit for water discharge or waste operations / registration of exempt waste operations and water discharges (as necessary or registered exemption from such)	Discharge to surface water (main river or ordinary watercourse) or groundwater of anything other than clean, uncontaminated surface water run-off (e.g. treated concrete wash water)
SCC	Ordinary Watercourse Consent	For watercourse crossings and closure/diversion of watercourses
	Land Drainage Consent	For watercourse crossings

8. STORAGE AND USE OF OILS AND CHEMICALS

8.1 INTRODUCTION

The main objectives with regard to managing potential hazardous materials including oils and chemicals are:

- To ensure that appropriate measures are in place to prevent hazardous materials being released into the environment:
- Complying with relevant legislation and good practice associated with the storage and use of hazardous materials.

A Pollution Prevention and Response Plan (PPRP) has been produced for the Substations Stage, in fulfilment of DCO Requirement 22 (2) (h), attached as Appendix 8. The Substations Stage PPRP details the requirements for pollution prevention that the Principal Contractor will need to comply with, with regards to the delivery, storage and handling of hazardous materials and in particular oils and fuels. A brief summary of the control measures for appropriate storage of use of oils and chemicals is provided below however please refer to Appendix 8 for full details.

8.2 CONTROL MEASURES

The following best practice will be implemented:

- Oils and chemicals shall be clearly labelled and the contractor will retain an up-to-date Control of Substances Hazardous to Health (COSHH) inventory, including Safety Data Sheet (MSDS). Spillage kits or portable bund kits must be available at or near the delivery point for emergencies.
- Where portable storage is required at active working areas these shall be sited at appropriate distances from watercourses, possible routes to watercourses and drains. Storage areas shall be located in areas free from vehicle movements to minimise the risk of collision damage.
- Use of portable bowsers with built-in bunds for any refuelling activities required in the active working area, with the return of bowsers to the main construction compounds overnight.
- Inspection of all construction plant for fuel leaks before being delivered to the working area.
- Use of drip trays or plant “nappy” pads under plant and equipment when static and during refuelling.
- Selection of chemicals that have the lowest impact to the environment where practicable and volumes of hazardous substances stored to be limited to be fit for purpose and minimise risk;
- The Principal Contractors and all sub-contractors shall detail within their CEMPs specific controls necessary for the delivery, storage and handling of hazardous materials relevant to their works, and in particular oils and fuels, taking into account the requirements of the Control of Pollution (Oil Storage) (England) Regulations and best practice guidelines (such as Pollution Prevention for Business).

- Ensure that fuels, oils and chemicals dangerous to the environment are only ordered in manageable quantities and stored responsibly i.e. in a bunded area able to contain 110% of the volume of the largest container or 25% of the total volume or in a suitable container/storage area within designated areas and in accordance with relevant legislation.
- Store fuel, oil and chemical in areas that are secure with suitable built in containment such as bund walls or drip tray. Containment must be structurally sound and strong enough to prevent leakage. They must be locked and secured when not in use to prevent unauthorised access and to reduce the risk of vandalism.
- Ensure that containers are labelled with details of contents and spillage kits or portable bund kits are available at or near the delivery point for emergencies.
- Chemicals, oils and hazardous materials will be stored securely at least 30m from watercourses.
- Place plant nappies/drip trays to be used when handling all chemicals, fuels or oils.
- Activities involving the handling of large quantities of hazardous materials, such as deliveries and refuelling will be undertaken by designated and trained personnel.
- Where external storage is required, these should be located in designated areas taking into account security, the location of sensitive receptors and pathways such as drains and watercourses, and safe access and egress for plant and manual handling. Spill response materials shall be provided nearby and be readily accessible, with local project personnel trained in spill response. Storage areas should be located in areas free from vehicle movements to minimise the risk of collision damage.
- The storage of incompatible hazardous materials shall be appropriately segregated and stored a minimum of 30m from any watercourse or drain. If hazardous materials are stored in a confined space, the space must be properly ventilated
- Oil, fuel and chemical storage areas shall be inspected, at least weekly for signs of spillage, leaks and damage in accordance with the requirements of the relevant EMS. Rainwater, materials and general debris that collects in bunds and drip trays that compromise contingency storage shall be removed as part of the maintenance programme and in accordance with regulatory protocols.
- Spill kits specific to the type of chemicals/materials stored and of sufficient capacity to deal with volumes stored to be fully stocked and readily available. All plant/machinery will have spill kits available and also additional items according to works/ site sensitivities e.g. booms for working within watercourses.

A Hydrogeological Risk Assessment (EA2-OND-CNS-PLN-IBR-000008) has been undertaken for this stage and is appended to the Surface Water and Drainage Management Plan (EA2-ONS-CNS-PLN-IBR-000004)(Appendix 1).

8.3 MONITORING

The control measures described above will be monitored by the Principal Contractor's construction management team and the EnvCoW, throughout the construction phase. If non-conformity with any of the mitigation measures is identified, it will be recorded during a site audit and appropriate remedial actions will be implemented.

9. FLOOD MANAGEMENT PLAN

The Flood Management Plan (EA2-ONS-CNS-PLN-IBR-000005) (Appendix 2) sets out the procedures to be followed in the unlikely event of a flood emergency during the works associated with the Substations Stage. The aim of the plan is to provide contractors clear indicators confirming when the construction works area should be evacuated in the unlikely event of a flood emergency. The plan also provides the key information for planning and responding to an evacuation.

The Flood Management Plan has been informed by the findings of the Flood Risk Assessment (FRA)(Royal HaskoningDHV, 2019), along with Ordnance Survey LiDAR data and EA flood maps. The Friston Flood Study Report[3] has also informed this FMP to further understand potential flooding within Friston along the western most section of the Substations Stage (BMT, 2020).

[3] BMT, 2020, The Friston Flood Study Report, https://www.greensuffolk.org/app/uploads/2021/05/Friston-Flood-Study-Report2.0.pdf

The Flood Management Plan will be stored in an accessible location and be revisited on a regular basis. During the construction phase of the project, the contractors will be responsible for reviewing the Flood Management Plan, to ensure suitable preparation and protection of construction site personnel in the event of a flood.

A number of pre-occupation actions have been outlined within the Plan, including requiring the Principal Contractors to sign up to the Environment Agency's flood warning service and the Met Office's weather warning system so that when a warning is issued, an automated warning message will be sent to the nominated person/persons. The Plan also provides contact details for key contacts and emergency services and the relevant instances for contacting each service. Such information will be utilised in the training of construction site personnel to ensure a flood-safe working environment during the construction works.

The Plan sets out the Flood Warning and Evacuation Procedures which shall be implemented and are outlined in Table 9-1 (taken from the Flood Management Plan). Please see Appendix 2 for further details.

Table 15-1 Flood Evacuation Procedures

Warning Triggers	General Procedures	Specific Actions
Trigger Level 1	General actions include: • Communicate risk to all staff • Make sure you know who is on site • Take basic measures to prepare for flooding • Stay in a safe place with a means of escape. • Be ready should you need to evacuate.	• Place Staff on Green Alert • Check access and availability to, and condition of equipment: closed road signs, torches (check battery life/spares), high visibility jackets for all staff • Allow for handover should shift change occur before the warning is lowered • Check staff registers are complete and available to ensure all staff are accounted for post- evacuation • Speak to construction teams and request implementation of active measures to reduce the mobilisation of sediment and other pollutants in storm water runoff. This is likely to take the form of bringing forward basic house keeping measures such a road sweeping and clearance of intercept ditches. • No new work phases will be opened. • Reschedule (if reasonably possible and will not make situation worse) all engineering works which are liable to generate turbid runoff. This should include all earthworks. • Review active work programme and associated temporary drainage arrangements and confirm that these are all in place and functional. • Works areas will be secured and it will be ensured that the surface water system is clear and able to operate efficiently, as far as is reasonably practicable. • Undertake survey of all active surface water drainage arranagments to check for damage, blockages or other problems which could impair their correct function and, in the event that definciencies are identfied, action urgent remedial works. • Check storage basins regularly and where the option exists, draw down the water levels in basins and storage areas to create additional capacity for strom flows.

Warning Triggers	General Procedures	Specific Actions
		• Consider options for and if appropriate implement additional secondary drainage measures such as bunding, drainage channels or cut off ditches to better manage extreme flows. All bunding for containment would be properly constructd and sealed to act as a reliable barrier. • Implement regular (hourly while site opperational) checks on water levels in ditches and in Friston Main River at Church Road to provide additional and site specific warning if water levels are rising and flooding is likely.
Trigger Level 2	• Stay away from high risk areas • Turn off gas, electricity and water supplies if safe to do so. • Put flood protection equipment in place if safe to do so. • Cooperate with the emergency services. • Call 999 if you are in immediate danger. • Evacuate site in an orderly and controlled way.	• Stop active work on the site and communicate change in flood status to all staff. • If reasonably possible within a short timeframe (1 hour) relocate plant and equipment to an elevated area that is away from potential flooding. • Operate the emergency electrical shut off switches terminating the electricity supply and all power supplies to construction works sites/compounds, but only if safe to do so. • Place staff on Red Alert and begin evacuation of site (Trigger Fire Alarm) • Direct staff toward the flood Evacuation Point avoiding any areas that are flooded. • Take register to ensure all staff are accounted for. • Direct all staff to depart the area using the agreed flood evacuation route. • Contact EA2L/NGET personnel responsible for the site works to ensure that personnel expected to attend the site are informed of its closure.
Trigger Level 3	• Evacuate site as quickly as can be safely achieved. • Account for all personnel • Leave the area	• Immediately start evacuation of site if not actioned on receipt of the Flood Warning (Trigger Fire Alarm at compounds) • Direct staff toward the flood Evacuation Point avoiding any areas that are flooded. • Take register to ensure all staff are accounted for. • Direct all staff to depart the area using the agreed flood evacuation route. • Contact EA2L/NGET personnel responsible for the site works to ensure that personnel expected to attend the site are informed of its closure. • Notify EDF Energy, if needed, in accordance with the Appendix to the Suffolk Resilience Forum Radiation Emergency Plan
All Clear	• Be careful. Flood water may still be around for several days. • If you've been flooded, ring your insurance company as soon as possible.	Where the preceeding event related to rainfall or resulted in flood water entering or passing through the site storm water management systems, the Principal Contractor will: • Undertake a survey of all active surface water drainage arranagments to check for damage, blockages or other problems resulting from the storm / flood.

Warning Triggers	General Procedures	Specific Actions
		• Remedial works should be urgently undertaken on deficient drainage equipment. • Signficiant pollution of any surface waterbody should be reported to the EA. A review will be undertaken to identify measures that were effective in controlling surface water and any additional measures that could be reasonably undertaken to address surface water run off where required.

10. NOISE AND VIBRATION

10.1 INTRODUCTION

There is the potential for noise and vibration to be generated during the construction process, especially from the movement and operation of heavy plant and machinery. Measures will be implemented on site to minimise any effects and a programme of monitoring may be required.

A Construction Phase Noise and Vibration Management Plan has been produced for the Substations Stage in fulfilment of Requirement 22 (2)(c) of the DCO, attached as Appendix 3. The Substations Stage Construction Noise and Vibration Management Plan (EA2-ONS-CNS-PLN-IBR-000006) sets out the mitigation and control measures to be applied to the construction of the Substations Stage to minimise potential noise and vibration impacts on nearby residents and other sensitive receptors to acceptable levels in accordance with:

- BS5228 - Noise and vibration control on construction and open sites;
- BS4142:2014 – Rating and assessment of industrial and/or commercial sound;
- Control of Pollution Act 1974 (CoPA);
- Environmental Protection Act 1990; and
- Noise and Statutory Nuisance Act 1993.

A brief summary of the noise control measures is provided below; however, please refer to Appendix 3 for full details.

10.2 CONTROL MEASURES

Best practice noise mitigation measures, implemented and controlled through the Construction Noise and Vibration Management Plan, will include:

- Consideration of noise levels when selecting construction methods and equipment used.
- Management of construction operating hours (in accordance with those specified within the DCO and the Outline CoCP as set out in Section 5.2 above).
- Temporary noise barriers (i.e. noise cushions attached to perimeter fencing) will be installed adjacent to any works which fall within 100m of a building used as a dwelling-house to reduce construction noise impacts upon NSRs and users of the existing adjacent Public Rights of Way (PRoW), the temporary and permanent new alternative routes and the road itself (unless otherwise agreed with ESC). Noise barriers (i.e. fencing or bunds) will also be installed along the southern and western boundary of the EA TWO Substation CCS. Barriers will remain in place for the duration of construction works at these locations. Such measures are anticipated to achieve a noise reduction of between 5 and 10 dB, dependent on the positioning and specification of the screening in relation to the noise source and / or NSR.
- Training of construction workers on site to ensure noise is considered through all stages.

- Implementation of traffic management measures such as agreed routes and timing of movements for construction traffic. The Construction Traffic Management Plan (EA2-ONS-CNS-PLN-IBR-000014) contains measures to manage the daily profile of HGV movements and deliveries to site through a 'booking system', which aims to spread the number of HGV movements across the working day. An onsite speed limit of 30 mph will be enforced on the SHR and 10mph on unsurfaced haul roads and work areas.
- Use of modern low-noise emitting, fit for purpose, well maintained plant and equipment to minimise noise generation. Plant and vehicles will be fitted with mufflers / silencers maintained in good working order. Use of silenced equipment, as far as possible and low impact type compressors and generators fitted with lined and sealed acoustic covers. Doors and covers housing noise emitting plant will be kept closed when machines are in use. The positioning and specification of any generators used close to Noise Sensitive Receptors shall be so as to ensure compliance with the assessed noise guidance thresholds and shall be agreed with ESC, as required.
- Where reasonably practicable, vibrating and noisy equipment should be located as far from NSRs and nearby PRoW (including temporary and permanent alternative routes) as possible. If such equipment is located on a structure, this should not be continuous with that of the NSRs or PRoW; contractors and subcontractors should be trained to employ appropriate techniques to keep site noise to a minimum, and should be effectively supervised to ensure that best working practice in respect of noise and vibration reduction are followed.
- Minimise drop height of materials.
- All pneumatic tools should be fitted with silencers or mufflers.
- Construction site layout to minimise or avoid reversing with use of banksmen where appropriate. Output noise from reversing alarms set at levels for health and safety compliance.
- Start-up plant, equipment and vehicles sequentially rather than all together.
- No working during night hours except for specific activities which have been agreed with ESC and should be discouraged as much as possible.
- Radios (other than two-way radios used for the purposes of communication related to the works) and other forms of audio equipment (other than associated with safety mechanisms (such as reversing bleepers) shall not be operated during construction activities.
- Construction activities with the potential for significant impacts should be discouraged if possible, during night hours.
- Avoid shouting and minimise talking loudly and slamming vehicle doors.
- Ensuring engines are switched off when machines are idle.
- Noise and vibration should be controlled at source and the spread of noise and vibration should be limited.
- Use screens and noise barriers / acoustics screens where deemed necessary.
- Regular communication with site neighbours to inform them of the construction schedule, and when noisy activities are likely to occur.
- All residents who are likely to be affected by constructional noise that exceeds 64dB(A) expressed as a 1 hour L(A)eq value shall be notified at least 24 Hours in advance of the works and given an estimate of how long the elevated noise levels will continue
- Provisions and arrangements will be in place for dealing with an emergency situations, including notification of residents potentially impacted by any emergency event
- Implementation of management processes to ensure ongoing compliance, improvement and efficient corrective actions to avoid any potential noncompliance.
- During the detailed design of the construction consolidation sites, the received noise levels at Noise Sensitive Receptors will be reviewed and additional practicable measures to reduce noise at these locations will be further explored as appropriate.

- The noise assessment set out in Section 9.1 has been conducted with respect to the nearest NSRs to the works concluded and with best practice and mitigation measures in place, has concluded that the works are unlikely to exceed the SOAEL criteria of the Category A limit of 65 dB(A) and are therefore not deemed significant. As such receptors situated further from site are unlikely to experience levels higher than this and as such would not require further assessment. No other noise sensitive premises are therefore identified. Nevertheless, EA2L will engage with St Mary the Virgin Church in Friston in accordance with the Stakeholder Communication Plan.

The above is not an exhaustive list of Best Practicable Measures (BPM) and should additional, more appropriate, measures be considered appropriate then they will be included as reasonable steps to minimise noise. In particular, should a substantiated and justified complaint be received (i.e. compliance monitoring has been undertaken and further investigation of construction activities undertaken at the time of complaint confirms the complaint to be justified), a review of BPM will include consideration of the need for measures not included in the above list.

The Principal Contractors will also seek and obtain prior consent(s) from ESC for all works as defined by Section 60 of the Control of Pollution Act 1974 (COPA) (i.e. the erection, construction, alteration, repair or maintenance of buildings, structures or roads), under Section 61 of the COPA. The application(s) for Section 61 consent will include details of the works, the methods by which they will be carried out and the measures to be implemented to minimise the noise resulting from the works. This is a proactive approach and regarded as representing best practice for major infrastructure projects.

10.3 MONITORING

A scheme of noise monitoring will be implemented and maintained during construction in order to ensure compliance with the noise limits and to verify the effectiveness of the best practice and mitigation measures identified in Section 10.2. The frequency will be flexible (weekly during initial stages and monthly once compliance with levels established) and should cover all construction activities and stages. Monitoring will also be undertaken, as required, when working near sensitive receptors, or in response to complaints.

The purpose of the noise monitoring is to facilitate data acquisition to demonstrate that the Substations Stage is being constructed within the noise criteria set out in accordance with the BS 5228-1 2009+A1:2014 and in such a manner to minimise the noise impacts at nearby sensitive receptors, and if required in response to complaints.

The monitoring locations considered and set out in the Construction Phase Noise and Vibration Management Plan will be used. A review of these locations may be considered if changes or updates are observed.

11. WASTE MANAGEMENT

11.1 INTRODUCTION

A Site Waste Management Plan (SWMP)(EA2-ONS-CNS-PLN-IBR-000007) has been produced for the Substations Stage and is included as Appendix 4 to fulfil DCO Requirement 22(2)(d). The purpose of this SWMP is to encourage the review of waste reduction and recovery practice levels, highlighting areas where Best Practice in waste minimisation and management can be achieved through the implementation of the Waste Hierarchy and Circular Economy Principles. The SWMP also facilitates the identification and implementation of waste minimisation measures at the design stage and reuse and recycling opportunities during on site operations ultimately reducing the quantities of waste sent to landfill. Opportunities to share, lease, reuse, repair and refurbish materials and equipment will be prioritised. The design of the scheme has been optimised to reduce the amount of materials required and best enable their recycling or recovery.

The SWMP is a working document and as such information will continue to be added as the document remains live throughout the works.

This section provides a summary of the SWMP and summarises the objectives, control measures to be employed and monitoring that will be put in place. Please refer to Appendix 4 for full details.

11.2 OBJECTIVES

EA2L and NGET aim to manage waste in accordance with the Waste Hierarchy, their respective EMS and also the following objectives:

- Environmental Protection: The SWMPs help to manage and reduce the amount of waste produced, and therefore to be disposed of at landfill. Additional environmental benefits include: less harm to the local environment, avoidance of fly tipping, reduced energy consumption and greater opportunities for reusing and recycling materials.
- Cost Saving: Managing materials more efficiently will immediately cut costs. Better storage and handling of materials will reduce waste and enable better recovery. Reusing and recycling materials cuts disposal costs.
- Legal Requirements: Compliance with the SWMP will ensure compliance with relevant waste legislation, including all Duty of Care obligations. The Duty of Care also requires all parties (operator, Principal Contractor, subcontractors, waste management companies etc.) to ensure that waste is only transported and received by those licenced to do so. In addition, the written record of all waste movements will be retained for 2 years (where non hazardous) and 3 years (where waste is hazardous). The Duty of Care obligations also extend to ensuring that waste is stored and contained appropriately at all times.
- The SWMP names the Principal Contractors.
- EA2L, NGET and the Principal Contractors will take all reasonable steps to ensure that—
    a. all waste from the site is dealt with in accordance with the waste duty of care in section 34 of the Environmental Protection Act 1990(1) and the Environmental Protection (Duty of Care) Regulations 1991(2); and
    b. materials will be handled efficiently and waste managed appropriately.

11.3 CONTROL MEASURES

The Waste Elimination, Reduction, Minimisation and Management Actions will be identified and recorded throughout the onshore construction works. The key elements of waste management to be implemented are:

- A person responsible for producing, implementing and maintaining the individual sub-contractor SWMPs will be identified. This person will also be responsible for ensuring compliance with Duty of Care regulations in relation to the storage, transfer and disposal of waste and adherence to waste legislation for storage and handling on site and ensuring that the relevant regulatory controls have been applied to the reuse, recycling or recovery of waste on site.
- Target recovery rates for key waste types, along with some formal measurement will be identified.
- All waste streams (for example, stones, plastics and metals etc.) to be produced during construction and excavation, will be considered for their potential for reuse (on or off site) or for recycling.
- The most significant opportunities to increase reuse and recycling rates (termed Waste Recovery Quick Wins) and the realistic recovery rates will be identified.
- Suitable waste management contractors will be identified and the appropriate licences, permits, Waste Transfer Notes and Hazardous Waste Consignment Notes will be recorded and retained in a Waste Management Database.
- Appropriate site practices, such as identifying how waste materials will be segregated and measures that will be used to raise site operatives' awareness of waste reduction, reuse and recycling (e.g., Toolbox Talks) will be implemented. Separate containers for dry recyclables, such as paper and cardboard, plastic, glass, wood and metal will be provided within the Construction Consolidation Sites (CCS). This will encourage recycling and increase the potential value of the recyclable items by avoiding contamination.
- The method for measuring and auditing construction and excavation waste will be set out.
- No waste will be deposited outside the boundary of the site, unless it is at a facility that holds a valid environmental permit or suitable authorised exemption. Off-site waste management facilities are legally obliged to operate under an environmental permit (or an authorised exemption), which is in place to ensure that the site is operated in a manner to prevent emissions causing harm to human health or the environment;

- Site waste will be segregated as far as practical (and at a minimum to separate hazardous wastes) and stored in labelled and secure facilities; and
- Site waste management and environmental, health and safety plans will be prepared in advance of all construction or other disruptive site works.

All contractors will identify and appoint waste carriers and appropriate waste management facilities prior to the construction activities commencing, ensuring first that they are fully licenced.

Site waste will be segregated, as far as practical, (and as a minimum to separate hazardous wastes) and will be stored in in line with the following:

- Skips and containers used for waste must be secure, in good condition and suitable for use.
- The area to be used for waste storage shall be clearly signed and segregated.
- Clear signage/labelling shall be used to identify the contents of any waste container.
- Separate containers for dry recyclables, such as paper and cardboard, plastic, glass, wood and metal will be provided. This would encourage recycling and increase the potential value of the recyclable items by avoiding contamination;
- Materials stored on site will be protected, by whatever means necessary, to prevent any deterioration or contamination prior to use.
- The waste storage facilities provided will be located away from any sensitive locations (watercourses etc) and will be located on a suitable hard surface (e.g., paved or impermeable surfaces as considered necessary to prevent direct contact with the ground) to prevent spillage and to prevent surface run-off discharging onto the surrounding ground. Wastes will also not be stored in recognised surface water flow paths as delineated by available flood mapping or which can be discerned based on a visual site inspection (i.e. obvious hollows, or waterlogged areas).
- Hazardous waste will be stored separately from non-hazardous wastes to avoid contamination. The Hazardous Waste Regulations make it illegal to mix hazardous waste with non-hazardous waste;
- Any spilt or lost material will be immediately dealt with by the Contractor to prevent seepage into the ground.
- The location and details of the proposed material handling and storage facilities to be installed will be agreed in advance for acceptance.
- Waste to be scheduled to be regularly collected to ensure manageable volumes of waste on site, with more frequent removal of waste during adverse weather, to prevent water ingress degrading wastes beyond recoverable condition

EA2L, NGET and their appointed contractors will provide suitable on-site instruction on the appropriate segregation, handling, recycling, reuse, and return methods which will be used by all parties, during all stages of the onshore construction works. The SWMP will also be outlined in the site induction process. In addition to the site environmental inductions, targeted toolbox talks will be carried out, which will inform contractors and sub-contractors as to how they should be involved with the waste, reuse and recycling requirements of their works.

Alternative end destinations will also be sought for materials that can be recovered off site such as haul road stone and fence posts. Under a U1 exemption (under the Environmental Permitting (England and Wales) Regulations 2016), stone used for temporary haul roads, once no longer required on site, is permitted to be used for the same/similar use elsewhere. As part of SPR's East Anglia ONE Offshore Windfarm onshore works, it was possible to recover large volumes of stone for landowner's use such as track improvements/hard standing areas. Exemptions permitting the use of waste offsite will be sought where possible as another means of recycling, ensuring adherence to the relevant legislation requirements and conditions.

11.4 MONITORING

Waste arisings, transfers and disposals will be monitored by each appointed Contractor(s), through the SWMP, with this information being input by them into an online document management system to consolidate the waste figures for the onshore project works. Day to day monitoring of waste management and the storage facilities will be undertaken by both Principal Contractor's construction management teams and their EnvCoW throughout the construction phase.

12. SOIL MANAGMENT PLAN

12.1 INTRODUCTION

A Soils Management Plan (EA2-ONS-CNS-PLN-IBR-000008)(SMP) has been produced for the Substations Stage, in fulfilment of DCO Requirement 22 2 (e), attached as Appendix 5.

The SMP sets out the principles and procedures for general good practice mitigation for soil handling to be used for the onshore construction works associated with Substations Stage to minimise the adverse effects on the nature and quality of the soil resource. These soil handling operations include stripping, handling, storage and reinstatement. The SMP has been developed in conjunction with the findings of the Pre-Entry Soil Survey reports for the Substations Stage area, and is based on guidance contained within the Department for Environment, Food and Rural Affairs' (Defra's) Construction Code of Practice for the Sustainable Use of Soils on Construction Sites (2009), the Institute of Quarrying's Good Practice Guide for Handling Soils in Mineral Workings (2021) (which replaced the 2000 Ministry of Agriculture, Fisheries and Food's guidance) and professional experience.

The SMP, produced by Land Drainage Consultants, a competent soil science contractor, includes a template Construction Method Statement for Soil Handling . The method statement template sets out how the Method Statement for each activity will address separate phases or sections of land within the works area, which have been determined by the contractor and/or the Soils Specialist depending upon factors such as, but not limited to, the works to be undertaken, the machinery to be used, soil types and results of any additional survey works, and site constraints (for example, depth to water table, or ecological constraints).

A pre-construction land survey will be undertaken by a qualified Agricultural Liaison Officer (ALO) and a competent soil scientist and will record details of crop regimes, position and condition of field boundaries, existing drainage and access arrangements, and private water supplies. Land would be reinstated to its pre-construction condition as soon as reasonably possible following onshore cable installation.

12.2 CONTROL MEASURES

The SMP includes the following general soil handling principles:

- No trafficking of vehicles/plant or storage of materials to take place outside designated working areas (including areas that are designated as being untracked and topsoil retained in situ). Heavy plant and vehicles to be restricted to specific routes;
- The soils (topsoil and subsoils) will not unnecessarily be trafficked or trampled by vehicles;
- No trafficking of vehicles or plant on reinstated soils and trafficking of reinstated subsoil minimised;
- Plant and machinery to only work when ground or soil surface conditions allow handling of soils appropriately to mitigate against the risk of degradation and compaction of soil health and structure (e.g. when soil is not at risk of being smeared or compacted due to wetness);
- Plant and machinery will be maintained in good working order; low ground pressure and tracked vehicles only will be used where possible when working directly on bare or vegetated soils (this reduces the intensity of ground compaction);
- Stripping areas are to be protected from in flow of water and ponding.
- Topsoil should not be stripped when judged to be too wet to handle by authorised person (ALO or other);
- Soils will only be moved when they are in a suitable condition, based on field assessment of the soils' wetness in relation to its lower plastic limit;
- No mixing of topsoil with subsoil, or of soil with other materials.
- Double handling of soils should be avoided.
- Neither topsoil or subsoil will not be stored in recognised surface water flow paths as delineated by available flood mapping or which can be discerned based on a visual site inspection (i.e. obvious hollows, or waterlogged areas.
- A stripping log should be maintained across the site.
- Topsoil should only be stored on undisturbed topsoil.

- Subsoil should not be stored on topsoil.

In addition, the SMP includes measures relating to the following:

- Adverse Weather – Stop Conditions
- Determining Soil Condition
- Site Preparation
- Soil Characteristics
- Soil Stripping
- Soil Stockpiling
- Soil Erosion and Siltation
- Surface Water Drainage
- Pre-Construction Land Drainage
- Stockpile Maintenance
- Reinstatement
  - Temporary Infrastructure Removal
  - Subsoil Reinstatement
  - Post-Construction Land Drainage
  - Initial Subsoil Loosening
  - Topsoil Reinstatement
  - Secondary Soil Loosening
  - Reinstatement Standard
  - Aftercare
- Contaminated Ground and Bio Security

Please see Appendix 5 for further details.

12.3 MONITORING

Audits of the soil management at the construction sites will be undertaken on a periodic basis and records will be maintained. In addition to reviewing general compliance with the SMP the audits will review the following, where relevant:

- Soil Handling Procedures: erosion rills, water ponding, loss of protective vegetation, weeds, soil mixing, smearing, compaction, anaerobism.
- Soil Stockpiles: record of operations undertaken, weather and soil conditions, any problems and corrective actions undertaken.
- Verification of the Restoration Standard: has the soil profile been reinstated, to the same condition or better
- Aftercare Reports: Significant differences in crop performance, compaction and waterlogging between the reinstated and undisturbed land

Any observations relevant to the site works will be shared with the workforce through Toolbox Talks.

13. AIR QUALITY

13.1 INTRODUCTION

There is the potential for construction works to have an adverse impact on air quality. Measures will be implemented on site to facilitate the avoidance, remediation and mitigation of any adverse effects of emissions generated from the construction activities of the project.

An Air Quality Management Plan (EA2-OND-CNS-PLN-IBR-000005)(AQMP) has been produced for the Substations Stage, in fulfilment of DCO Requirement 22 2 (f), attached as Appendix 6. As the main pollutant potentially released during construction works will be particulate matter, the AQMP focusses on this parameter as a pollutant. The Substations Stage AQMP contains a characterisation of the air quality in the construction area and an identification of the air quality impacts and risks from the construction activities. It then describes the implementation of the control measures and mitigation to minimise any adverse effects and finally includes a monitoring plan to evaluate the efficiency of the control measures and mitigation. A brief summary is provided below; however, please refer to Appendix 6 for full details.

13.2 Characterisation and Assessment

A construction dust assessment was undertaken as part of the ES using guidance documents and associated methodologies relevant at that time. A separate dust assessment has now been undertaken on behalf of EA2L (in accordance with updated IAQM guidance (*Guidance on the Assessment of Dust from Demolition and Construction, 2024)*) which focuses solely on construction activities proposed at the Substations Stage, with the use of updated information from the Principal Contractors.

13.3 Control Measures

Table 13.1 (taken from AQMP) includes the recommended measures to be implemented in order to avoid potential impacts to air quality associated with the construction works. The mitigation measures described will be monitored by the Principal Contractor's construction management team and EnvCoW throughout the construction phase. If non-conformity with any of the control and mitigation measures is identified, it will be recorded during a site inspection or audit and appropriate remedial actions will be implemented.

Table 13-1 – Air Quality Control Measures

Mitigation Measure - Category	Description	Responsibility
Sustainable Travel and Machinery	Ensure all vehicles switch off engines when stationary - no idling vehicles.	All personnel
	Avoid the use of diesel- or petrol-powered generators and use mains electricity or battery powered equipment where practicable.	Principal Contractor
	Impose and signpost a maximum-speed-limit of 30mph on the haul road following completion of asphalt surfacing and 10mph on unsurfaced haul roads and work areas.	Principal Contractor
	Enforce a reduced speed limit of 10mph along the access track within 100m of a building used as a dwelling-house (i.e. SA2) (general speed limit on the haul road will be 30mph, following completion of asphalt surfacing	Principal Contractor
Operations	Only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques such as water sprays or local extraction, e.g. suitable local exhaust ventilation systems.	Principal Contractor
	Ensure an adequate water supply on the site for effective dust/particulate matter suppression/mitigation, using non-potable water where possible and appropriate.	Principal Contractor
	Use enclosed chutes and conveyors and covered skips (other than where materials are not dust-generating and the covering of the skips introduces risks for loading and unloading).	Principal Contractor
	Minimise drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment and use fine water sprays on such equipment wherever appropriate.	All personnel
	Monitor weather forecasts for prolonged dry or windy conditions (where potentially dusty site activities are upwind of receptors) and modify (or delay) potentially dusty site activities until the risk has reduced.	Principal Contractor

Mitigation Measure - Category	Description	Responsibility
	Ensure equipment is readily available on site to clean any dry spillages and clean up spillages as soon as reasonably practicable after the event using wet cleaning methods.	Principal Contractor
Preparing and Maintaining the Site	Plan the site layout so that machinery and dust causing activities (including stockpiles) are located as far from the sensitive receptors as possible, unless required for works.	Principal Contractor
	Actively manage dust generating activities, including where necessary the erection of effective solid screens or barriers around dusty activities or the site boundary that are at least as high as any stockpiles on site.	Principal Contractor
	Enclose site or specific operations where there is a high potential for dust production and the site is active for an extensive period.	Principal Contractor
	Runoff of mud and water will be prevented.	Principal Contractor
	Keep site fencing, barriers and scaffolding clean using wet methods e.g. fine water spray.	Principal Contractor
	Remove materials that have a potential to produce dust from site as soon as possible, unless being re-used on site. If they are being re-used on-site cover as described below.	Principal Contractor/all personnel
	Cover, seed or fence stockpiles to prevent wind whipping.	Principal Contractor
	Monitoring of haul road surface condition.	Principal Contractors
Site Management	Inspections and monitoring to be undertaken as set out in Section 9 of this AQMP.	Principal Contractor
	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.	Principal Contractor/
	Make the complaints log available to the local authority when asked.	Principal Contractor
	Record any exceptional incidents that cause dust and/or air emissions, either on- or off-site, and the action taken to resolve the situation in the logbook.	Principal Contractor
	If any high-risk construction sites are identified within 500m of the site boundary, liaison will be undertaken to ensure plans are co-ordinated and dust and particulate matter emissions are minimised, including with respect to interactions of the off-site transport/deliveries which might be using the same strategic road network routes.	Principal Contractor
	Temporary cover, screen or revegetate earthworks/stockpiles, if possible, as soon as is practicable. A low maintenance grass mix will be sown as soon as possible after creation of any soil storage mounds which are intended to remain in situ for more than 6 months or over the winter period. The optimum months for sowing grass seed are April or September to October.	Principal Contractor
	Avoid scabbling (roughening of concrete surfaces) if possible	Principal Contractor
	Ensure construction sand and other construction aggregates are stored in silos, bunded areas or in a controlled and well-managed manner.	Principal Contractor
	Re-vegetate earthworks and exposed areas/soil stockpiles to stabilise surfaces as soon as practicable.	Principal Contractor

Mitigation Measure - Category	Description	Responsibility
	Use Hessian, mulches or tackifiers where it is not possible to re-vegetate or cover with topsoil, as soon as practicable	Principal Contractor
	Only remove the cover in small areas during work and not all at once.	Principal Contractor
	Ensure sand and other aggregates are appropriately stored in neat stockpiles and covered where required. Stockpiles should not be allowed to dry out, unless this is required for a particular process, in which case ensure that appropriate additional control measures are in place.	Principal Contractor
	Wetting/dampening of dust generating stockpiles and/or work areas.	Principal Contractor
	Stockpiles would be kept in place for the shortest possible time.	Principal Contractor
	Dust-generating activities will be minimised.	All personnel
	Where diesel- or petrol-powered generators are used, best practice measures will be implemented including regular inspections with respect to black smoke and siting away from pedestrian areas.	Principal Contractor
	Fine powder material (e.g. bulk cement/grouts) to be delivered in enclosed tankers and stored in silos with suitable emission control systems to prevent escape of material and overfilling during delivery.	Principal Contractor
	For smaller supplies of fine powder materials, ensure bags are sealed after use and stored appropriately to prevent dust release.	Principal Contractor
Trackout	Use water-assisted dust sweeper(s) on the access and local roads, to remove, as necessary, any material tracked out of the site. This may require the sweeper being continuously in use.	Principal Contractor
	Avoid dry sweeping of large areas.	Principal Contractor
	Ensure all vehicles entering and leaving sites are covered to prevent escape of materials during transport.	Principal Contractor
	Inspect on-site haul routes for condition, integrity and instigate necessary repairs to the surface as soon as reasonably practicable.	Principal Contractor
	Record all inspections of haul routes and any subsequent action in a site logbook.	Principal Contractor/all personnel
	Install hard surfaced haul routes, which are regularly damped down with fixed or mobile sprinkler systems, or mobile water bowsers and regularly cleaned.	Principal Contractor
	Implement a wheel washing system (with rumble grids to dislodge accumulated dust and mud prior to leaving the site where reasonably practicable).	Principal Contractor
	Vehicles leaving site will be washed if necessary.	Principal Contractor
	Ensure there is an adequate area of hard surfaced road between the wheel wash facility and the site exit, wherever site size and layout permits. Locate site access gates at least 10m from receptors where practicable.	Principal Contractor
	Access gates to be located at least 10m from receptors where possible.	Principal Contractor
Waste Management	Bonfires and burning of waste will not be allowed on site	Principal Contractor/all personnel

Mitigation Measure - Category	Description	Responsibility
	Waste receptacles to be covered.	Principal Contractor
NRMM	All NRMM and plant should be well maintained. If any emissions of dark smoke occur, then the relevant machinery should stop immediately, and any problem rectified.	Principal Contractor
	Where diesel- or petrol-powered generators are used, best practice measures will be implemented including siting away from pedestrian areas.	Principal Contractor
	All NRMM will use ultralow sulphur diesel (fuel meeting the specification within EN590:2004 under EU Directive 97/68/EC or later.) where available.	Principal Contractor
	All NRMM to comply with either the current or previous EU Directive Staged Emission Standards. Use of NRMM which is not compliant with Stage IV emissions standards or later will be restricted to areas outside the 100m buffer of properties and outside designated habitat sites shown in Figure 2 Air Quality Sensitive Areas where practicable. Best endeavours will be used to hire/use only plant less than 2 years of age, where this does not impact on plant availability. Such plant will generally therefore be in compliance with Stage V requirements, which came into force 2019, noting that certain specialist plant may only be available as pre-2014 (i.e. pre-Stage IV) stock.	Principal Contractor
	The Principal Contractors will identify the positioning and orientation of any NRMM which does not comply with Stage IV or Stage V controls in consideration of sensitive air quality receptors where practicable. This will be undertaken with cognisance of the proximity of working areas in relation to sensitive human receptors and designated sites of nature conservation, with the aim of locating such NRMM as far away from sensitive locations as practicable. The justification and details of the use of such NRMM will be recorded and can be made available to the LPA on request.	Principal Contractor
	All NRMM will be fitted with Diesel Particulate Filters (DPF) conforming to defined and demonstrated filtration efficiency (load/duty cycle permitting).	Principal Contractor
	The on-going conformity of plant retrofitted with DPF, to a defined performance standard will be ensured through a programme of onsite checks	Principal Contractor
	Source clean powered plant and ancillary items as priority e.g. solar powered tower lights	Principal Contractor
	Implementation of fuel conservation measures including instructions to throttle down or switch off idle construction equipment; switch off the engines of trucks while they are waiting to access the site and while they are being loaded or unloaded, ensure equipment is properly maintained to ensure efficient fuel consumption	Principal Contractor
	Regular servicing and checks of all plant/equipment e.g. black smoke from exhausts	Principal Contractor

13.4 MONITORING

If the control and mitigation measures in Table 13-1 are implemented correctly, then dust production and other emissions from the construction site will be minimised. However, site inspections and visual monitoring will be undertaken as an effective way to verify that air pollution control measures have been properly designed and implemented.

Generally, visual monitoring and sites inspections will include, but not be limited to:

- Visual inspections for dust generated from haul trucks, vehicle traffic, earthworks and other relevant activities will be undertaken every morning and afternoon as part of the pre-works checks and observations recorded after each inspection.
- The frequency of site inspections to be increased when activities with a high potential to produce dust are being carried out and during prolonged dry or windy conditions.
- Check the weather forecast and if it indicates dry weather and strong winds are likely, this will be a trigger for preventive dust management action to be taken.
- Verify if vehicle traffic emissions are consistently black. This is a signal that an engine is not operating optimally.
- Check for the presence of deposited dust on cars, residences or vegetation within 100m of the project site, if site inspections indicate off-site deposition is a possibility and subject to landowner approval.

The implementation and effectiveness of the control measures will be monitored by the Principal Contractor's construction management team and EnvCoW.

14. MATERIALS MANAGEMENT PLAN

A Materials Management Plan (EA2-ONS-CNS-PLN-IBR-000009)(MMP) has been produced for the Substations Stage, in fulfilment of DCO Requirement 22 2 (g), attached as Appendix 7.

The MMP notes that, for the Substations Stage, there is no 'intention to discard' material at the site. The soils proposed to be excavated to form the substations platform will, at a later stage, be reused in a nearby location either as part of the cut and fill process to create a level platform or to form landscaping bunds. As such the MMP aids understanding of the principles that will be followed should waste, or materials that could be classified as waste based on the intention to discard, be repurposed for use, adhering to the process of the CL:AIRE DoWCoP.

The on-site bulk earthworks will be carried out for the EA2L, NGET and EA ONE North substations at the same time in order to provide a level platform for each of the three substations and take advantage of cut and fill opportunities. Topographical survey data indicates that the land is higher in the east with of the order of 3m to 4m of cut required. The land slopes down to both the northwest and southwest of the substations' platform area, with up to 3m of fill required in these locations (see Appendix 2 Earthworks Cut and Fill Summary of the MMP). It is intended that the fill required to bring the site levels up to the required formation level will be with site won material, thus reducing the number of HGV movements associated with the works.

Landscape bunds will be formed around the southern perimeter of the substation compound area to support the visual screening of the onshore substation and National Grid substation, as shown on Appendices 2 and 4 of the MMP and also the Landscape Management Plan (EA2-OND-CNS-PLN-IBR-000001). These bunds which will extend in height to a maximum of 10m above existing ground level will be formed with site won material comprising the topsoil (circa 15,800m^3) and the surplus weathered/unweathered glacial till deposits excavated during the bulk earthworks (circa 147,920m^3 (prior to compaction). The bunds will have a gradual external slope designed to appear natural and to complement the existing terrain (when looking towards the onshore substations). These side slopes will be formed at a maximum gradient of 1 in 3 where the material is suitable. Where the material is weathered and of a poorer quality, it will be used in areas where a more gentle gradient can be accommodated.

On completion of the onshore cable works and substations, the SHR, CCSs and all temporary work areas/accesses will be reinstated and restored with the stored topsoil and subsoil in accordance with the Construction Code of Practice for the Sustainable Use of Soils on Construction Sites (Defra, 2009) and the Substations Stage Soil Management Plan (EA2-ONS-CNS-PLN-IBR-000008).

Reinstatement will reuse all previously excavated topsoil and subsoil as far as practicable at the point of origin, as such there will be no waste soil generated.

The following guiding principles will be followed for the reuse of excavated materials on site:

- Factor 1 – Protection of human health and the environment. No risks of causing pollution;

- Factor 2 – Suitability for use. The material must be suitable for use without further treatment at the point it is placed;
- Factor 3 – Certainty of use. Use of the material must be guaranteed;
- Factor 4 – Quantity. Only the amount required must be used and no more.

Other than the potential use of recycled aggregate, waste materials are not anticipated to be used on site.

Should recycled aggregate be used, the Principal Contractor will be required to be able to demonstrate that any such materials are inert and will not physically or chemically react, biodegrade or give rise to environmental pollution or harm to human health. The Principal Contractor shall also be required to demonstrate that for any such material used, the total leachability, including pollutant content and that the ecotoxicity of its leachate is insignificant and will not endanger the quality of any surface water or groundwater. All imported materials will be validated in line with pre-agreed assessment criteria to ensure they are suitable for proposed end use.

Once construction works have finished and there is no further onsite use for the aggregate (eg elsewhere within the works or by the landowner under a U1 exemption), where possible this will be recycled to the original supplier (or potentially another supplier) for regrading and re-use.

As all excavated soils associated with the Substations Stage will be used for reinstatement and there is no 'intention to discard', the soils will not be considered to be waste, as defined by the EA or as set out in the DoWCoP. There will, therefore, be no requirement for an Environmental Permit or use of the CL:AIRE DoWCoP protocols. Should this situation change, the relevant contractor will apply for an Environmental Permit and/or comply with the CL:AIRE DoWCoP protocol as needed during the works. This would include completion of the template as provided in Appendix 1 of the MMP.

Where required, compliance with the CL:AIRE DoWCoP during the execution of this project would ensure that the excavated materials are suitable for use and represent no risk of pollution, that they are guaranteed to be completely recovered, that no excess materials are used and therefore that the material in question is not waste.

15. POLLUTION PREVENTION AND RESPONSE

15.1 INTRODUCTION

It is important to identify and document the controls and procedures that will be in place to respond to an environmental incident during the construction of the Substations Stage. A PPRP (EA2-ONS-CNS-PLN-IBR-000010) has been produced for the Substations Stage to fulfil DCO Requirement 22 (2) (h) and is attached as Appendix 8. This details the procedures for emergency incident response. The main objectives of the PPRP with regard to managing potential hazardous materials are:

- Ensuring that appropriate measures are in place to prevent hazardous materials being released into the environment; and
- Complying with relevant legislation and good practice associated with the storage and use of hazardous materials.

This section provides a brief summary of the PPRP, for further details see Appendix 8.

In addition, a Flood Management Plan (Appendix 2) has been produced to fulfil DCO Requirement 22 (2) (b) which sets out the procedures to be followed in the unlikely event of a flood emergency, as summarised in Section 9 above.

15.2 POLLUTION PREVENTION AND RESPONSE

The Substations Stage PPRP (Appendix 8) summarises the controls and procedures that will be put in place to respond to an environmental incident during the construction phase of the project and contains information on:

- Pollution Prevention Management
- Pollution Prevention Risks and Controls
- Key Site and Emergency Contacts

- Emergency Incident Response Procedure
- Staff Training

In addition to the measures set out in the CoCP with respect to Contaminated Land (Section 16) Storage and Use of Oils and Chemicals (Section 8), Protection of Surface and Groundwater Resources (Section 7), the PPRP contains the following control measures:

- A Stop Contain Notify Matrix and details how to report and deal with an environmental incident, including the measures available to contain/clean up an incident.
- A contact list for notifying relevant stakeholders.
- Personnel working on site, including any subcontractors, will be trained in the environmental emergency response procedures, so that they are prepared and able to respond to an incident promptly and effectively.
- Where appropriate, the environmental emergency response plans will be tested on-site in consultation with ESC and the Environment Agency.

16. CONTAMINATED LAND

16.1 INTRODUCTION

A Contaminated Land Mitigation Scheme (EA2-ONS-CNS-REP-IBR-000004) has been produced for the Substations Stage in fulfilment of DCO Requirement 18 (1). This document was prepared in accordance with best practice guidance i.e. the Environment Agency's Land Contamination Risk Management Framework 2020 and was based on site investigations undertaken in accordance with BS10175:2011+A2:2017. In summary, the report outlines the risks of contamination in relation to the proposed Substations Stage. Due to the low potential environmental impact to the receptors identified, no significant precautionary measures are required. In addition, to the discovery strategy (with watching brief) set out in Section 16.2 below, the Soils Management Plan (EA2-ONS-CNS-PLN-IBR-000008)(Appendix 5), best practice health, safety and environmental procedures will be followed to ensure risks to workers, site users and environmental receptors are not adversely impacted as part of the proposed site development. A further round of baseline groundwater monitoring is recommended to confirm the concentrations of dissolved phase contamination that have been reported. Please refer to the report for full details.

16.2 ENCOUNTERING UNEXPECTED CONTAMINATION

Site Managers will be instructed on the potential for encountering unexpected gross contamination and made aware of the procedure should such an event occur. The Site Manager will be provided with contact details of the EnvCoW who will contact an appropriate environmental specialist who can provide telephone advice as to whether construction needs to be halted to allow a site inspection to be undertaken.

In the event that unexpected gross contamination i.e. visual and olfactory evidence of hydrocarbons, spent oxide, tars or other unusual discolorations or odours) is encountered, work in the area will cease on instruction by the Site Manager or delegate and the affected area will be contained and made as safe as reasonably practical pending assessment. A suitably trained geo-environmental engineer will assess the visual and olfactory observations of the ground and the extent of the unexpected contamination. Consultation with EA2L/NGET, SCC, ESC (Environmental Health Department) and the Environment Agency will be undertaken as a matter of urgency, and agreement reached on plans for further investigation and remediation measures where necessary.

The suspected contaminated material will be investigated and tested appropriately in accordance with assessed risks. The investigation works will be carried out in the presence of a suitably qualified geo-environmental engineer. The investigation works will involve the collection of solid samples for testing and, using visual and olfactory observations of the ground, delineate the area over which contaminated materials are present. This should provide sufficient data and resource to devise a risk-based remediation strategy that breaks relevant pollutant linkages, minimises disruption to the programme and can be verified by soil or groundwater sampling during the works.

Any areas where unexpected visual or olfactory ground contamination is identified will be surveyed and testing results incorporated into a Verification Report. A photographic record will be made of relevant observations.

Where necessary, laboratory analysis will be completed (on an expedited turnaround, where possible), allowing conclusions to be reached as to whether material needs to be removed from the construction area. The testing suite will be determined by the independent geoenvironmental specialist based on visual and olfactory observations and the test results compared against current assessment criteria suitable for the future use of the area of the site affected. Note this may also need to include Waste Acceptance Criteria analysis for waste classification purposes if excavation and off-site disposal are a possible outcome.

The unexpected, contaminated material will either be left in situ or be stockpiled (except if suspected to be asbestos) whilst testing is carried out and suitable assessments completed to determine whether the material can be re-used on site or requires disposal as appropriate. Temporary storage stockpiles of any unexpected contamination will be appropriately located and designed to contain contaminants and will be isolated from any nearby surface water drains or similar receptors. Temporary stockpiles will be placed either on a prepared surface of clay, or on 2000-gauge Visqueen sheeting (or other impermeable surface) and covered to prevent dust and odour emissions. Where the material is left in situ awaiting results, it will either be reburied or covered with plastic sheeting.

The results of the investigation and testing of any suspect unexpected contamination will be used to determine the relevant actions. ESC will be consulted with respect to the nature and extend of any remedial work, before it commences. After consultation with ESC, materials should either be:

- re-used in areas where test results indicate that it meets compliance targets so it can be re-used without treatment; or
- treated on site to meet compliance targets so it can be re-used; or
- removal from site to a suitably licensed landfill or permitted treatment facility.

A Verification Report will be produced.

16.3 Measures for Working in Areas of Suspected or Unexpectedly Found Contamination

Risk of exposure of site workers or the public to contaminants at locations where contamination is unexpectedly found will be minimised through the adoption of good practice procedures as described in guidance documents such as the Protection of Workers and the General Public during the Development of Contaminated Land. HSE, 1991; A Guide for Safe Working on Contaminated Sites, R132, CIRIA 1996 and Control of Asbestos Regulations 2012. Interpretation for Managing and Working with Asbestos in Soil and Construction and Demolition Materials. Industry Guidance. CL:AIRE 2016. The following measures will be in place at areas of suspected or unexpectedly found contamination:

- Construction workers should minimise direct contact with the contaminated materials, including inhalation of dust. Appropriate PPE would include overalls and gloves.
- If unexpected contamination includes Asbestos then it is particularly important that the CL:AIRE guidance is applied in full, to ensure that workers and others are not exposed to asbestos as a result of work in, on or with such materials. It is important that persons designing, directing and undertaking work in areas of suspected or unexpectedly found Asbestos contamination are competent persons who are able to demonstrate that they have received adequate information, instruction and training relevant to the type of project being undertaken and be able to demonstrate that they have sufficient practical experience to apply this knowledge effectively. All works which are likely to disturb asbestos contaminated soils should be carried out in accordance with a dedicated asbestos risk assessment and plan of works, as required, in accordance with HSE guidelines and requirements with respect to licensable asbestos works.
- Prior to work being undertaken that may have an effect on workers, the public or the environment, an approved site specific Risk Assessment and Method Statement (RAMS) must be completed. The RAMS will identify risks associated with the proposed work at the site together with mitigation measures to adequately address the risks and embed these in the work Method Statement.
- Implementation of controls such as defining, demarcating and isolating the working area, use of designated access and egress routes, provision of hygiene facilities and maintenance of high hygiene standards, provision of first aid facilities and provision and use of appropriate PPE, together with any specific measures required and relating to the particular site environment.

- Where required, provision will be made for the safe storage of contaminated materials at designated locations. Where disposal of contaminated material is required, it is proposed that advice will be sought from suitably qualified environmental specialist who will advise on the best method of disposal (e.g. licensed landfill, tanker for liquids). Time will be allowed for suitable laboratory analysis of unexpected contamination so that classification of the waste for disposal purposes may be completed. Transfers will be undertaken by registered waste carriers to authorised disposal sites in accordance with Duty of Care requirements, under the Waste (England and Wales) Regulations 2011.
- Where material is to be removed from site due to contamination it will be undertaken by a suitably licensed contractor in a manner to prevent the generation of pathways and the egress of pollutants from the site. Appropriate and clean replacement fill material will be imported to site and where necessary, fill material will be analysed prior to import to site to ensure that it is suitable for use.
- Detailed diary logs, plans and photographic records of the nature and extent of the unexpected contamination, verification sampling and laboratory analyses will be retained and compiled to confirm residual contaminant conditions. Transfer notes and waste returns and imported fill records will also be compiled and retained as part of the documentation of the discovery, management and disposal (if required) of any unexpected contamination.

17. STAKEHOLDER COMMUNICATIONS

17.1 INTRODUCTION

Effective and consistent communication with the local community is essential for the successful delivery of our works. EA2L is committed to providing clear communication to local residents and will ensure proactive community liaison is maintained, keeping local residents and businesses informed of the type and timing of any works, paying particular attention to activities which may occur in close proximity to receptors and to potential evening and night-time works (where permitted).

A Project Stakeholder Communications Plan (EA2-GEN-CNS-PLN-IBR-000061) has been produced and is attached as Appendix 9. It sets out communication processes to be applied during all stages of the EA TWO onshore works as a whole and aims to ensure that relevant details of the construction works are fully communicated to interested parties. A brief summary of the processes is provided below; however, please refer to Appendix 9 for full details.

17.2 OBJECTIVES

The Project Stakeholder Communications Plan sets out the communication processes which EA2L, its contractors and also NGET will be required to adopt and implement. The purpose of the plan is to:

- Maintain a good working relationship with the local community;
- Ensure a clear understanding and consistent approach across the project and by all Principal Contractors;
- Ensure that the local community and stakeholders are informed in a timely manner of any works being undertaken.
- To reduce the likelihood that conflicts will occur between aspects of the project in terms of external relationships and internal resource;
- Maximise and take advantage of potential synergies in engagement/communication;
- Ensure a clear understanding and consistent approach across all ScottishPower Renewables' East Anglia projects (i.e. EA THREE and the East Anglia ONE NORTH and East Anglia TWO Offshore Windfarms) and also the National Grid substation works for EA TWO and EA ONE North; and
- Provide a record of communication activity for EA2L onshore construction works.

17.3 COMMUNICATION PROCESSES

A combination of communication mechanisms will be employed to keep communities informed, including:

- Direct communication from the Stakeholder Team via phone and email;
- Use of the ScottishPower Renewables' and National Grid's websites;

- Emails to the EA2L subscribed database;
- Distribution of Notices on and off-line;
- Public information days with presentations and information display boards;
- Parish council meetings (as and when required);
- ScottishPower Renewable's local community newsletter; and
- Use of an interactive map

A Community Liaison Officer (CLO) is already in post and will manage and respond to any public concerns, queries or complaints. The CLO will maintain a record of all correspondence. The name and contact details of the CLO and any subsequent change shall be provided to the local planning and highway authorities.

The CLO will review the contractors' programmes to identify potential community concerns, ensure that the appropriate notices/information is provided, identify solutions and work with the project/construction team to ensure these are in place. In addition, they will be mindful of activities taking place on other proposed ScottishPower Renewables' projects in the area, to ensure consistency of messaging and that synergies between projects can be maximised.

Internally, the CLO will work closely with the:

- Senior Stakeholder Manager
- CLOs for other SPR East Anglia projects
- The SPR and National GET Construction Management Teams
- Land Manager
- EA TWO Consent Compliance Team
- Substation Contractors and Sub-contractors
- Cable Contractor and Sub-contractors
- Agricultural, Arboricultural, Environmental and Ecological Clerk of Works etc.

Externally, the CLO will work closely with the:

- Suffolk County Council (SCC) Officers
- ESC Officers
- Local Communities, Interest Groups and Organisations
- Parish Councils, residents and businesses primarily within the parishes of Friston, Knodishall, Aldringham cum Thorpe, Leiston cum Sizewell, Aldeburgh and Snape and other interested parties as relevant.

17.4 ENQUIRIES

The CLO will be accessible directly via a personal email and mobile phone number. The CLO's name the contact details will be displayed on the Construction Site boundary. It is advised that all enquiries relating to the construction of the onshore works to be directed to the CLO and to the Project mailbox, where it can be managed by a colleague should the CLO be unable to respond due to holiday, sickness or other commitments. The CLO will ensure that there is a record of all issues raised for management and reporting purposes.

In the event of an emergency outside of normal office hours, the CLO's telephone number will be directed through to an on-duty member of the Principal Contractor's Management Team for resolution.

The CLO will aim to acknowledge emails within three working days and endeavour to provide a response to emails/phone calls within one working week. However, there may be instances when the response takes longer because information is required from other parties. NGET's policy is to acknowledge emails within a day of the inquiry, provide an update (if not a full response) within 10 working days and provide a response within 20 working days. (if it was necessary to send an update within 10 working days).

The CLO will aim to notify the ESC and SCC of any matters requiring action or consideration within two working days. In addition, a report on the occurrence will be raised with ESC and/or SCC as relevant, at the steering group/Implementation meetings.

Contact details for the CLO will be made available on the website and in any communications nearer to the start of the works.

It is advisable to copy/send queries to the Project mailbox (eastangliatwo@scottishpower.com), so that they can be picked up should the CLO be unavailable.

Queries relating to the other East Anglia projects can be sent/copied to the following mailboxes: eastangliaonenorth@scottishpower.com, eastangliathree@scottishpower.com; and eastangliaone@scottishpower.com.

Additional support and wider East Anglia project queries can also be directed to the Stakeholder Manager, Joanna Young. Mob: 07738 063 259; jyoung@scottishpower.com.

18. ARTIFICIAL LIGHTING

18.1 INTRODUCTION

During the construction works, the activities which may require temporary external artificial lighting at night are:

- Security purposes at the NGET and EA2L CCSs;
- Traffic management at road crossings/accesses, including Snape Road and Grove Road crossings, and Access 13 on Saxmundham Road;
- Delivery of abnormal loads;
- Potential emergency works; and
- Equipment such as stockpiles and emplacement areas, which will be carefully sited to ensure no light spillage.

Lighting from these sources has the potential to have the following impacts:

- Intrusive lighting impacting nearby residents causing disturbance and annoyance, particularly with regard to sleep patterns;
- Impact on ecological sensitive receptors from light spill;
- Impact on visual amenity due to the illumination of the night sky; and
- Lighting on surrounding roads distracting passing motorists.

A Construction Artificial Light Emissions Plan (CALEMP) (EA2-OND-CNS-PLN-IBR-000009) has been prepared for the Substations Stage in fulfilment of DCO Requirement 22 (2) (j), and is attached as Appendix 10. The plan sets outs mitigation measures to be applied to the construction activities to prevent significant impacts from light emissions. A brief summary is provided below; however, please refer to Appendix 10 for full details.

18.2 OBJECTIVES

The main objectives for managing artificial lighting emissions are:

- To ensure temporary lighting installations are positioned so as to avoid light spill directly towards roads, residences and other potential viewing locations or ecological receptors.
- To ensure the potential impacts from light emissions from mobile equipment along the haul road are negated.
- To utilise existing vegetation screens to further prevent any light spill in the direction of roads, residences and other viewing locations or ecological receptors.
- To use directional lighting to reduce light spill and prevent significant light emissions from night-time construction works to retain dark night skies.
- To ensure procedures are in place to record and effectively respond to any complaint in respect to lighting.
- Night time sky glow from construction external lighting is avoided.
- To record and report the effectiveness of lighting emission controls.

- To utilise appropriate mitigation measures to avoid obtrusive glare.

18.3 CONTROL MEASURES

The Substations Stage has been carefully designed to avoid the potential for significant impacts and to minimise impacts on the environment by the implementation of mitigation measures. Light spill from artificial lighting sources will be controlled to avoid impacts on sensitive receptors, in particular for nocturnal species. This includes the use of directional lighting, non-reflective surfaces and introduction of barriers and screens as required in accordance with the principles of best practicable means (BPM) to prevent light spill nuisance whilst maintaining safety and security obligations.

A summary of the control measures to be adopted during construction to minimise potential impacts are listed below:

- Site lighting will be positioned and directed to prevent nuisance, in accordance with BPM, to PRoW users and residents, to prevent distractions to drivers on adjoining public highways (i.e. Grove Road, Snape Lane and Saxmundham Road) and to avoid sky glow, so far as reasonably practicable. At the CCS, external lighting will be limited to internal access roads and walkways, security lighting and task related flood lighting. Lighting will be selected and positioned in accordance with guidance and standards provided in Section 6 of the CALEMP. Indicative lighting locations are shown in Appendix 1 of the CALEMP.
- Light spill will be avoided by directing the light to where it is needed and away from the identified potentially sensitive receptors. The design of the luminaires and accessories such as hoods, cowls, louvres will be used achieve this. Where possible asymmetric optics will be used such that the front glazing is kept at or near parallel to the surface being lit. In addition, where possible glare will be minimised by ensuring that the main beam angle directed towards any potential observer is no greater than 70° , in accordance with ILP guidance (ILP, 2021). Higher mounting heights allow lower main beam angles, which can assist in reducing glare. These measures will be in place to ensure that the lux level of the lighting at ground level at the highway boundary shall not exceed 1 lux. The exception to this being potentially during bell mouth construction in the winter months after dark where lighting during construction may be required but this would be turned off at the end of the working day.
- So far as is practicable, all power to temporary lighting will be taken from mains supplies rather than from portable generators. It is anticipated that it will be possible to install a mains connection to the Substations CCS and NGET CCS at an early stage in the construction phase. This is likely to comprise an underground 1KvA cable, routed west from Grove Road. Where portable generators are used, solar powered task lighting will be used where suitable (i.e. for short-term working in small areas). Where this is not practicable industry best practice will be followed to minimise noise and pollution from any diesel generators that need to be used.
- Non-reflective surfaces and barriers and screens will be used as required to minimise light nuisance.
- All lighting relating to the onshore construction works are temporary and will be removed as soon as possible on completion of the relevant element of works.

Additional mitigation specific to ecology, in accordance with the Bat Conservation Trust (BCT, ILP 2023) guidelines will be included as follows:

- LED luminaires will be used where possible due to their sharp cut-off, lower intensity, good colour rendition and dimming capability;
- All luminaires should lack UV elements when manufactured. Metal halide, compact fluorescent sources will not be used;
- Column heights will be carefully considered to avoid light spill;
- Narrow spectrum light sources will be used to lower the range of species affected by lighting;
- Light sources that emit minimal ultra-violet light will be selected;
- Lights will peak in wavelength higher than 550nm;
- White and blue wavelengths of the light spectrum will be avoided to reduce insect attraction and where white light sources are required in order to manage the blue short-wave length content, they will be of a warm / neutral colour temperature, ideally <2700Kelvin;
- Only luminaires with a negligible or Upward Light Ratio of 0% and with good optical control will be used;

- External security lighting will be set on motion-sensors with short (1 minute) timers;
- Internal luminaires to be recessed (as opposed to using a pendant fitting) where installed in proximity to windows to avoid glare and light spill;
- Waymarking inground markers (low output with cowls or similar to minimise upward light spill) to be used to delineate path edges;
- Column heights will be carefully considered to avoid light spill and glare visibility. This will be balanced with the potential for increased numbers of columns and upward light reflectance as with bollards;
- Luminaires should always be mounted horizontally, with no light output above 90° and/or no upward tilt;
- Where appropriate, external security lighting will be set on motion-sensors and set to as short a possible a timer as the risk assessment will allow.
- Use of a Central Management System with additional web-enabled devices to light on demand will be considered and applied where suitable. It is not, however, anticipated that this type of lighting control will be suitable for use on small scale sites and on short duration small construction areas with limited lighting required over smaller areas, as this is more applicable to permanent building projects.
- The use of bollard or low-level downward-directional luminaires will not be used on the Substations Stage construction works .
- Only if all other options have been explored, will accessories such as baffles, hoods or louvres be used to prevent light spill and direct it only to where it is needed. Due to the lensing and fine cut-off control of the beam inherent in modern LED luminaires, the effect of cowls and baffles is often far less than anticipated and so will not be relied upon solely.
- Micrositing of temporary infrastructure, where possible, to avoid identified bat roosts as directed by the relevant Ecological Clerk of Works (ECoW))(i.e. the EA2L ECoW or the NGET ECoW);;
- Ensure dark corridors are provided during construction. This will be managed by the ECoWs; and
- External security lighting will be set on motion-sensors with short (1 minute) timers
- Where needed to prevent nuisance in accordance with BPM, the above measures will also be employed to address potential lighting impacts with respect to visual/human receptors.
- Directional beams, non-reflective surfaces, barriers and screens will be used to ensure light spill and nuisance does not encroach onto adjacent areas including:
    - Woodland, so as not to disturb emerging or foraging bats, badgers or other nocturnal species (birds, hedgehogs). Flood lighting will be directed away from any potential roosts identified and 30m disturbance zone around badger setts.
    - Watercourses and ponds, so as not to disturb species such as amphibians;
    - Other high value foraging habitats and potential flight paths, such as connecting hedgerows and trees.
- External lighting at night will be avoided as far as feasible, particularly during the months of higher bat activity (August – October). When lighting at night is required, it will comply with the Bat Conservation Trust (BCT, ILP 2023) recommendations on external lighting (as set out above) as agreed with Natural England, as required. This will be designed to avoid light spill to woodland (flood lighting will be directed away from any potential roosts identified and 30m disturbance zone around badger setts), watercourses and ponds; and other high value foraging habitats and potential flight paths, such as connecting hedgerows and standalone trees.
- Should any Schedule 1 or other species of bird be found to be nesting within the vicinity of the proposed construction works, an exclusion zone will be implemented specific to that species in accordance with the Ecological Mitigation Plan (EA2-OND-CNS-PLN-IBR-000003).

18.4 MONITORING

Regular inspections of lighting mitigation measures will be undertaken by each Principal Contractor's construction management team, the EnvCoWs and ecological specialists where required, to ensure effective implementation and report any non-compliances. If non-conformity with any control and mitigation measures is identified, it will be recorded and appropriate remedial action will be implemented.

The frequency and the location of inspections will be determined by the EnvCoWs and will be included in their Construction Environmental Management Plan (prepared by contractors).

Any complaint regarding lighting of the construction works will be directed to the relevant EnvCoW who will in turn notify ESC. The EnvCoW will investigate the complaint and provide a response to the complainant and ESC within two working days. Investigation will include checking that luminaires remain directional and suitable for the application. If the complaint is justified a solution will be found to prevent reoccurrence, such as use of hoardings or other barriers to contain light spill. This may include investigation of alternatives, such as the use of lower wattage lighting, or re-direction of lighting or re-positioning shielding

19. UTILITY PROVIDERS

Utility providers potentially affected by construction works would be contacted prior to construction works commencing. Methodology for utility crossings would be agreed with asset owners in line with best practice.

The continuity of utilities during the construction works would be ensured. Prior to construction, the team on the ground would be made aware of existing service and utility records.

20. MONITORING AND SITE INSPECTIONS

20.1 INTRODUCTION

To ensure compliance, a programme of monitoring shall be established for the construction of the onshore Substations Stage. This is documented in more detail in the Principal Contractors' CEMPs. The general monitoring requirements are set out below. Detailed monitoring requirements are also identified with the topic specific plans attached as appendices, including the Air Quality Management Plan (Appendix 6).

20.2 SITE INSPECTIONS

EA2L, NGET and their Principal Contractors will undertake site inspections on a periodic basis. These site inspections shall include an environmental component which shall, as a minimum and where relevant, cover waste management, water management, management of hazardous materials, wastewater management, emergency response, incidents and complaints, nuisance, air quality visual monitoring, inspection of light mitigation measures and other issues arising.

An environmental inspection program will be agreed with the EA2L and NGET Principal Contractors prior to commencing work.

A responsible person will be allocated to each raised action to manage its close out. Records of the inspections carried out and any non-conformities will be retained onsite and any remedial actions required must also be recorded and implemented.

20.3 ENVIRONMENTAL AND CONSENTS INSPECTIONS AND AUDITS

EA2L's and also NGET's EMS and associated inspection and audit programme includes a requirement for environmental inspections and audits of their construction sites on a periodic basis; included in the audit scope will be the appointed Principal Contractors' monitoring and inspection regime.

Environmental audits will be completed by qualified members of the EA2L and NGET management teams and the EnvCoWs (in addition to the weekly inspections/audits undertaken by the Principal Contractors). A programme of Environmental Audits will be developed by both EA2L and NGET and these audits will be agreed and arranged with their contractors at least 2 weeks in advance. The programme will include a quarterly consent compliance audit undertaken by the SPR's and NGET's Consents Compliance Teams, against the commitments in the RDDs using an RDD Consent Compliance Register. The results of these audits will be reported to ESC, including any identified failings, and measures to address these. This will ensure the Principal Contractors' compliance with the commitments made in the RDDs.

A responsible person will be allocated to each raised action to manage its close out. The Principal Contractors' monitoring and inspection regime will be included in the audit scope. Records of the audits carried out will be retained onsite and any remedial actions required must also be recorded and implemented.

21. CONTINGENCY PLANNING

A PPRP detailing how to report and deal with an environmental incident, is included as Appendix 8. In addition, a number of potential scenarios have been considered and will be addressed as follows:

- If, during construction, human remains are found unexpectedly on a site not known to be a burial ground, they will not be removed in the first instance. In such circumstances, the local environmental health officer, SCC Archaeological Service and the EA2L Archaeologist will be consulted to assess the remains and the police and SCCAS will be consulted. If the police conclude that the remains are of no investigative significance and it is necessary to exhume the remains, then an application for a licence will be made to the Ministry of Justice and the remains will be excavated to a standard agreed with SCCAS. Should any animal remains be discovered during the construction phase that indicate a potential burial site, the main works contractor would cease all work in the vicinity and immediately advise the Animal Health Regional Office accordingly. Further information is presented in Section 8.13 of the Project -wide Archaeology Mitigation Works Written Scheme of Investigation (EA2-GEN-CNS-REP-IBR-000066).
- Unforeseen existing contaminated ground is addressed in Section 11 Contaminated Land.
- Extreme weather conditions: excessive rainfall which goes above what the site mitigation can handle leading to excessive run off from construction site. Such flows, which are extremely unlikely to occur within the limited lifetime of construction works, would drain following existing flow pathways away from the construction area. As the capacity of the mitigation would have been exceeded some mobilisation of sediment and other pollutants could occur, albeit would be restricted through, source control measures, good housekeeping and careful storage and handling of potential pollutants on the site. Following the event the areas downgradient of would be surveyed and, as necessary clear up and remedial works would be undertaken to restore obvious damage where this is reasonably possible is addressed in Section 6.5 of the PPRP;
- All construction site staff will be made aware of the Substations Stage Flood Management Plan, including the evacuation process and routes to take in the event of a flood;
- All construction site staff will also be made aware of the radiation emergency planning arrangements set out in the Appendix to the Suffolk Resilience Forum Radiation Emergency Plan (EA2-GEN-CNS-REP-IBR-000002);
- Fire causing release of contaminated firefighting water runoff -- In the unlikely event of a major fire, contaminated firewater would drain into the systems designed to receive and control storm water runoff from the site. Measures would be implemented (i.e. blocking outfalls) to hold water back on the site within attenuation/infiltration lagoons and testing would be undertaken to determine the chemical nature of pollution. Once this had been confirmed, in consultation with the Environment Agency, a decision would be made concerning whether the water could be released, as per storm water, or whether tankers would need to be mobilised to site to remove the contaminated flows. If prior to obtaining permission for the discharge of this water prevailing condition mean that water levels are approaching the storage limit of the settlement / balancing lagoons, tankers would be mobilised to remove water from the site. All water removed by tanker from the site would be directed to an appropriate licenced facility to treat and dispose of flows.
- Vandalism resulting in the release of a COSHH defined substances – any release of such substances will be managed in accordance with Section 6 of the PPRP. In addition, security measures will be reviewed to establish measures to prevent such vandalism recurring.

22. REFERENCES

BCT, ILP, 2023 Guidance Note GN08/23 Bats and artificial lighting at Night, https://theilp.org.uk/publication/guidance-note-8-bats and-artificial-lighting

Considerate Constructors Scheme, (undated) *Code of Considerate Practice*, https://www.ccscheme.org.uk/wp-content/uploads/2012/11/2020CodeofConsideratePractice-v3.2.pdf

DERFRA, 2009, Construction Code of Practice for the Sustainable Use of Soils on Construction Sites, DEFRA, London https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/716510/pb13298-code-of-practice-090910.pdf

Defra, (2009); 'Construction Code of Practice for the Sustainable Use of Soils on Construction Sites'. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/716510/pb13298-code-of-practice-090910.pdf

The Institute of Quarrying (2021). 'Good practice Guidance for Handling Soils in Mineral Workings' Available at: https://www.quarrying.org/soils-guidance

APPENDIX 1. SURFACE WATER AND DRAINAGE MANAGEMENT PLAN

[Appendix issued separately]

APPENDIX 2. FLOOD MANAGEMENT PLAN

[Appendix issued separately]

APPENDIX 3. CONSTRUCTION PHASE NOISE & VIBRATION MANAGEMENT PLAN

[Appendix issued separately]

APPENDIX 4. SITE WASTE MANAGEMENT PLAN

[Appendix issued separately]

APPENDIX 5. SOIL MANAGEMENT PLAN

[Appendix issued separately]

APPENDIX 6. AIR QUALITY MANAGEMENT PLAN

[Appendix issued separately]

APPENDIX 7. MATERIALS MANAGEMENT PLAN

[Appendix issued separately]

APPENDIX 8. POLLUTION PREVENTION AND RESPONSE PLAN

[Appendix issued separately]

APPENDIX 9. STAKEHOLDER COMMUNICATIONS PLAN

[Appendix issued separately]

APPENDIX 10. ARTIFICIAL LIGHT EMISSIONS MANAGEMENT PLAN

[Appendix issued separately]

APPENDIX 11. WATERCOURSE CROSSING METHOD STATEMENT

[Appendix issued separately]

APPENDIX 12. APPLICATION FORM FOR DISPENSATION UNDER SECTION 61 OF THE CONTROL OF POLLUTION ACT 1974 AND/OR OUT OF HOURS WORKING TEMPLATE

To:
Environmental Protection,
East Suffolk Council,
Riverside
4 Canning
Road
Lowestoft
NR33 0EQ

I/WE HEREBY MAKE APPLICATION for prior consent in respect of works to be carried out on the site(s) specified below, under Section 61 of the Control of Pollution Act 1974 and/or Out of Hours Working

Signed: Date:

Print Name:

Address of Applicant:

1. Address or Location of Proposed Works:
2. Name, Address and Contact Details of Main Contractor:
3. Works to be undertaken (short name):
4. Site name:
5. Location - Works No. and Address:
6. Access ID:
7. Landowner:
8. Local Planning Authority:
East Suffolk Council
9. Date of Section 61 Consent:
10. Proposed Dates of Works:
11. Time and Duration of Out of Hours Work to be completed:
12. Community Notification
Relevant Parish Council: Confirmation that Stakeholder Team have been informed:

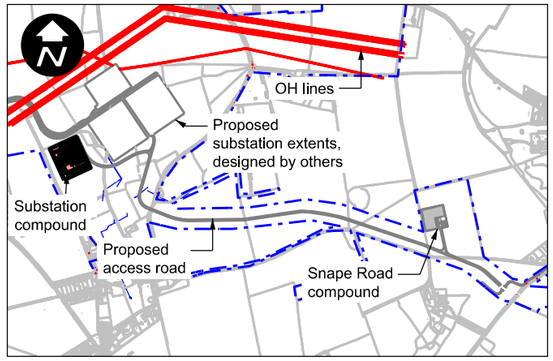
13. Methodologies and Working Times
14. Nature of the Works
15. Why do the works need to be carried out outside of normal working hours
16. Plant and Equipment
17. Predicted Noise Levels at Sensitive Receptors
To include figure showing indicative location of the construction works with respect to the considered sensitive receptors
18. Proposed steps to minimise noise and/or vibration levels:
19. Details of compliance monitoring and monitoring location/s:

Environmental Risk	Initial Risk Rating 1 to 5	Existing Control Measures	Additional Control Measures (if required)	Final Risk Rating 1 to 5

Task or Activity: *Example*				
Delivery of abnormal loads	*4*	*As set out in the Construction Traffic Management Plan*	*None needed*	*2*
Task or Activity:				

Name of Personnel to be on site:		Contact Details:	
Name of Site Manager/Supervisor:		Contact Details:	
Completed by:	Position:	Date:	Sign Off:
Checked and approved by EA2L:	Position:	Date:	Sign Off:
Checked and approved by Local Planning Authority:	Position:	Date:	Sign Off:

APPENDIX 13. INDICATIVE CCS LAYOUTS



Location Plan

Key:
- Welfare EcoGrid Surfacing (Table 4)
- 6F2/6F5 Surfacing (Table 1 or 2)
- Car Parking Bays (also EcoGrid) (Table 4)
- Access Road Centreline
- Site Boundary Line

01

Environmental Control

Drainage, Refueling Areas and Fuel Storage Specific Notes:
For areas of drainage, refueling and fuel storage the following mitigation and control measures are to be taken by site.

1. A site-specific risk assessment is to be carried out that must include identification of mitigation and control measures with regards to the management of fuel storage and spillages. Findings from the risk assessment must then be set out in the Environmental Management Plan and Pollution Incident Response Plan.

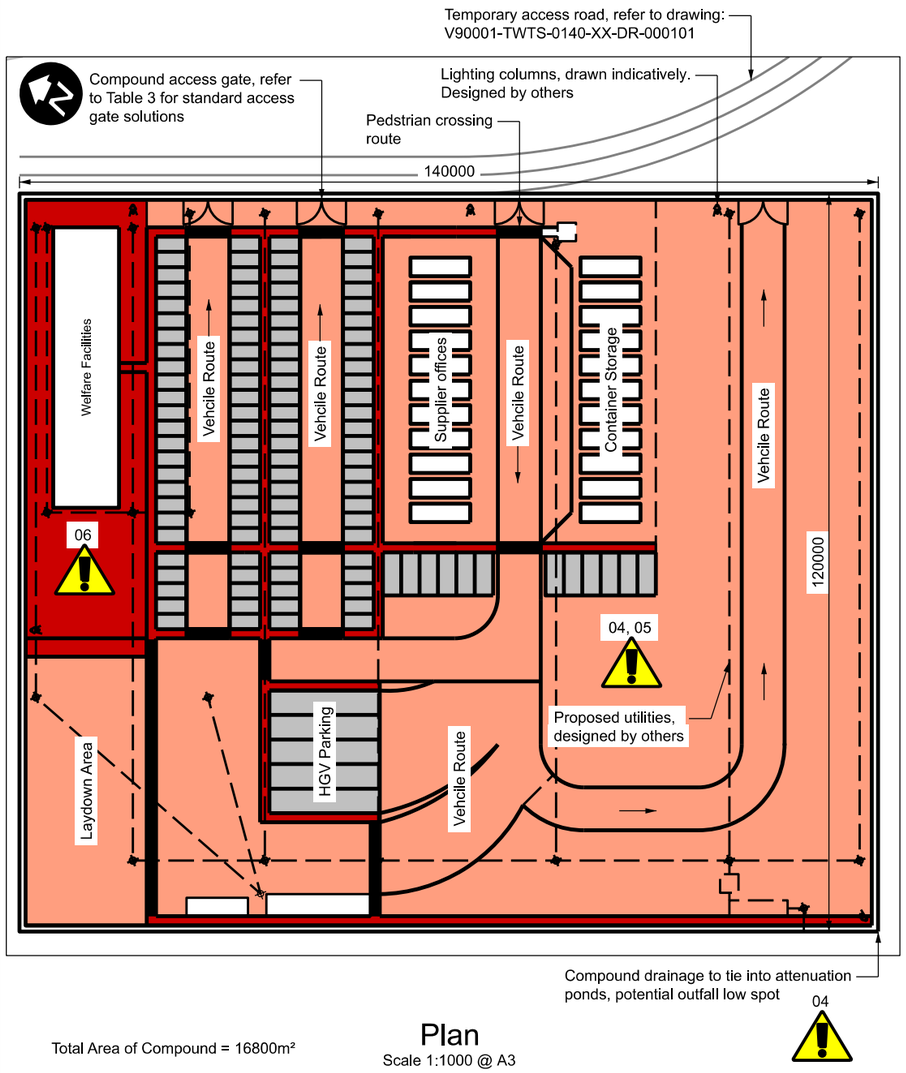
2. No consideration for fuel storage (oil interceptor etc) has been taken as part of this design. Ensure the appropriate size interceptor is selected to service the area of hardstanding shown in line with BS EN 858-2:2003. Or ensure fuel area is suitably bunded and monitored to control leaks and spillages.

3. Manually pump collected surface water drainage out of drainage ditch. No agreed discharge rate and point present on site. Discharge is to be agreed with local authority prior to works commencing. All discharge is to be filtered or similar prior to entering watercourse.

Significant Safety, Health and Environmental Information

The following notes highlight significant residual hazards identified by the designer. Typical hazards that should be identified by a competent contractor are not included. Further information on hazards can be found in the design risk assessment. further information on hazards can be found in the cdm hazard register.

#	Hazard	Action required by site team (Residual Risk)
01	Pollution Risk	See 'Environmental Controls" for details
02	Ground Conditions	Ensure that the ground conditions are to reach the min. CBR stated for either construction and use appropriate compound build-up thickness. All buried structures and voids in the area are to be located prior to works commencing. If any are found, then the Temporary Works Design Engineer must be contacted.
03	Vehicle Loading	Confirm that the design is sufficient for the expected vehicle volume. A max. 11.5 tonne axle load has been considered. If heavier plant loading is required, the Temporary Works Design Engineer must be contacted.
04	No Drainage or Crossfall	Drainage and Crossfall to be developed as part of detailed design and in line with site wide drainage requirements.
05	Damage to Buried Utilities	Locate all services within the compound influence area and either divert or remove them prior to works commencing.
06	EcoGrid Failure Under Cabin Load	Ensure that all cabins are placed on compacted fill as per standard solution notes. Ensure EcoGrid is not installed locally in these locations.

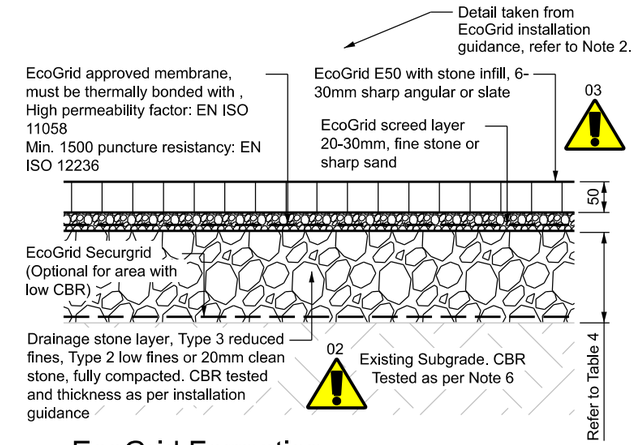


Total Area of Compound = 16800m²

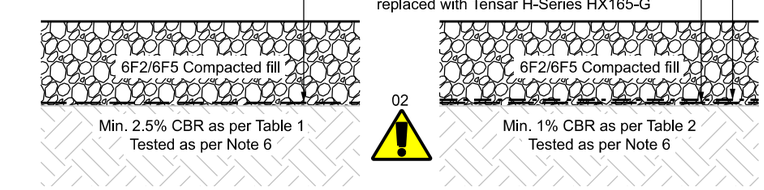
Plan
Scale 1:1000 @ A3

Table 3 Standard Solution Reference

Item	Description	Standard Solution Drawing Number
Cabins	Concrete Pad Foundation	V9N909-VCUK-XX-XX-DR-Y-020101
	WyseBase Proprietary Solution	V9N909-VCUK-XX-XX-DR-Y-020102
Fencing	Heras Fencing Solution < 39mph	V9N909-VCUK-XX-XX-DR-Y-020213
Access Gate	6.00m Wide Embedded Access Gate	V9N909-VCUK-XX-XX-DR-Y-020217
	10.00m Wide Embedded Access Gate	V9N909-VCUK-XX-XX-DR-Y-020219



EcoGrid Formation
Scale 1:10 @ A3



Buildup Detail - Unreinforced
Scale 1:20 @ A3

Buildup Detail - Reinforced
Scale 1:20 @ A3

Table 1 Unreinforced Thickness

CBR%	Thickness h_1 mm
2.50	575
3.00	510
4.00	425
5.00	370
6.00	330
7.00	300
8.00	275
9.00	255
10.00	240
15.00	225
20.00	225
25.00	225

Areas where there is no traffic, such as stockpiles or storage containers, thickness of surfacing may be reduced to 150-300mm dependant on ground conditions, the TWC is to judge ground conditions and anticapted loading.

Table 2 Reinforced Thickness

CBR%	Thickness h_2 mm	No. of Layers	Placement height mm
1.00	600	2	400
1.50	410	2	260
2.00	450	1	N/A
2.50	365	1	N/A
3.00	300	1	N/A
4.00	215	1	N/A
5.00	160	1	N/A
6.00	150	1	N/A
7.00	150	1	N/A
8.00	150	1	N/A
9.00	150	1	N/A
10.00	150	1	N/A
15.00	150	1	N/A
20.00	150	1	N/A
25.00	150	1	N/A

- Placement height refers to the height at which the second layer is placed from formation level. First layer should be placed at formation level

Table 4 EcoGrid CBR Guide

Application Loading	Subgrade CBR Value	Drainage Layer Thickness (mm)
HGV Access	>6	100
	4<6	200
	2<4	190
	1<2	380

- Table taken from EcoGrid Installation guidance, refer to Note 2

Notes:
1. Compound extents and levels are to be confirmed by the TWC prior to installation of compound.
2. The compound surfacing should be installed as per the manufacturers guidance. Refer to the following documents:
   - EcoGrid Installation Guide, Gravel Fill
   - EcoGrid Ground Reinforcement System, EcoGrid E50
3. For the rest of compound surfacing, the following design parameters have been considered:
   - Total Standard Axles = 65,000
   - Max. Axle Load = 11.5 tonne
   - Rut Depth = 40 mm
   - Design Life = 3 years
4. All top soil to be removed.
5. Sub-Grade Preparation:
   - Clear, grub and excavate to the design sub-grade elevation, strip topsoil, debris and unsuitable material.
   - Where fill is required, backfill to the design sub-grade elevation and compact within accordance with the MCHW Series 600.
   - Proof roll sub-grade to locate unsuitable material. Remove soft spots and reinstate with Type 6F2 compacted granular fill.
   - Backdrag to smooth out any ruts, smooth grade and compact soils. Create a surface that is uniformly smooth as possible.
6. CBR tests are to be carried out on sub-grade formation level prior to installation of compound. A minimum of 6№ tests are to be carried out on the sub-grade. All tests are to conform to BS 1377-9 "Methods for Test for Soils for Civil Engineering Purposes. In-Situ Tests".
7. Site compound build-up is formed with well compacted 6F2/6F5 granular materials with max 75mm aggregate size, with less than 12% fines, well graded material (D60/10 > 6) and free of any organic mater. Material shall have a certificate of conformity to MCHW Series 600.
8. The geotextile separator layer is to be Terram 1000 or similar, with a minimum 300mm overlap between sheets. Where a similar approved product is used, consult the manufacturers guidance for required minimum lap length.
9. Tensar reinforcement is to be installed as per manufacturers guidance. CBR Value dictates overlap, refer to installation guidance for overlap requirements.
10. Ground water is assumed to be at least 2.0m below existing ground level.
11. All edge slopes are to be no steeper than 1V:2H unless noted otherwise.
12. The compound surfacing is to be installed and maintained in accordance with BRE470 "Working Platforms for Tracked Plant".
12. This drawing is to be printed in colour.
13. Drawing to be read in conjunction with:
    a) V90001-TWTS-0140-XX-DR-C-000101
    b) V90001-TWTS-0140-XX-DR-C-000201

Rev.	Comment	By	Chk	Auth
P07	Compound Layout Change	AR		
16.01.25		AR		
P06	Client Alignment Changes	AR		
13.01.25		AR		
P05	Client Alignment Changes	AR		
10.12.24		AR		
Date		Des	App	

Originator: Taylor Woodrow Infrastructure Limited
Contract: V90001
Location: East Anglia 2 ONSS - IP17 1NY
Title: Scottish Power Renewables Substation
Site Compounds
Substation Compound
General Arrangement

TAYLOR WOODROW INFRASTRUCTURE LIMITED
Astral House
Imperial Way
Watford WD24 4WW
Tel: 01923-233433

By:	A. Robertson
Designed:	A. Robertson
Checked:	
Approved:	
Authorised:	
Names shown are valid for current revision	
Scale:	As noted
Size:	A3
Purpose of Issue:	Suitable for Information
Status:	S2
Drawing №:	V90001-TWTS-0140-XX-DR-C-000301
Revision:	P07

Vehicle gate

Compound access

Security hut

Office cabin

Parking area

Personnel turnstile

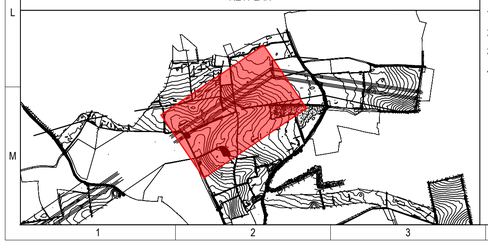
Field

NOT APPROVED

0 2.5 5 7.5 10 12.5 m

SCALE 1:250

KEYPLAN



1. Do not scale from this drawing.
2. All dimensions are in millimetres unless noted otherwise.
3. To be printed in colour.
4. Internal CCS compound layout is indicative only. To be developed during detailed design.

Legend

- 2.4m height CLD fence
- CDM Area (working areas within this zone will be fenced off as required)
- DCO Works No. 42 boundary
- Light
- Material/equipment storage

Rev.	Date	Comment	Des	Drw by	Check	Appr.
P01	24/10/25	Issued for information		JD	TG	GT

nationalgrid
National Grid plc, Warwick Technology Park, Gallows Hill, Warwick, CV34 6DA

Contractor
AECOM
ARUP

Site: Kiln Lane 400kV

Title: NGET CSS Indicative Site Layout

Purpose of issue: For Information

Status: S2

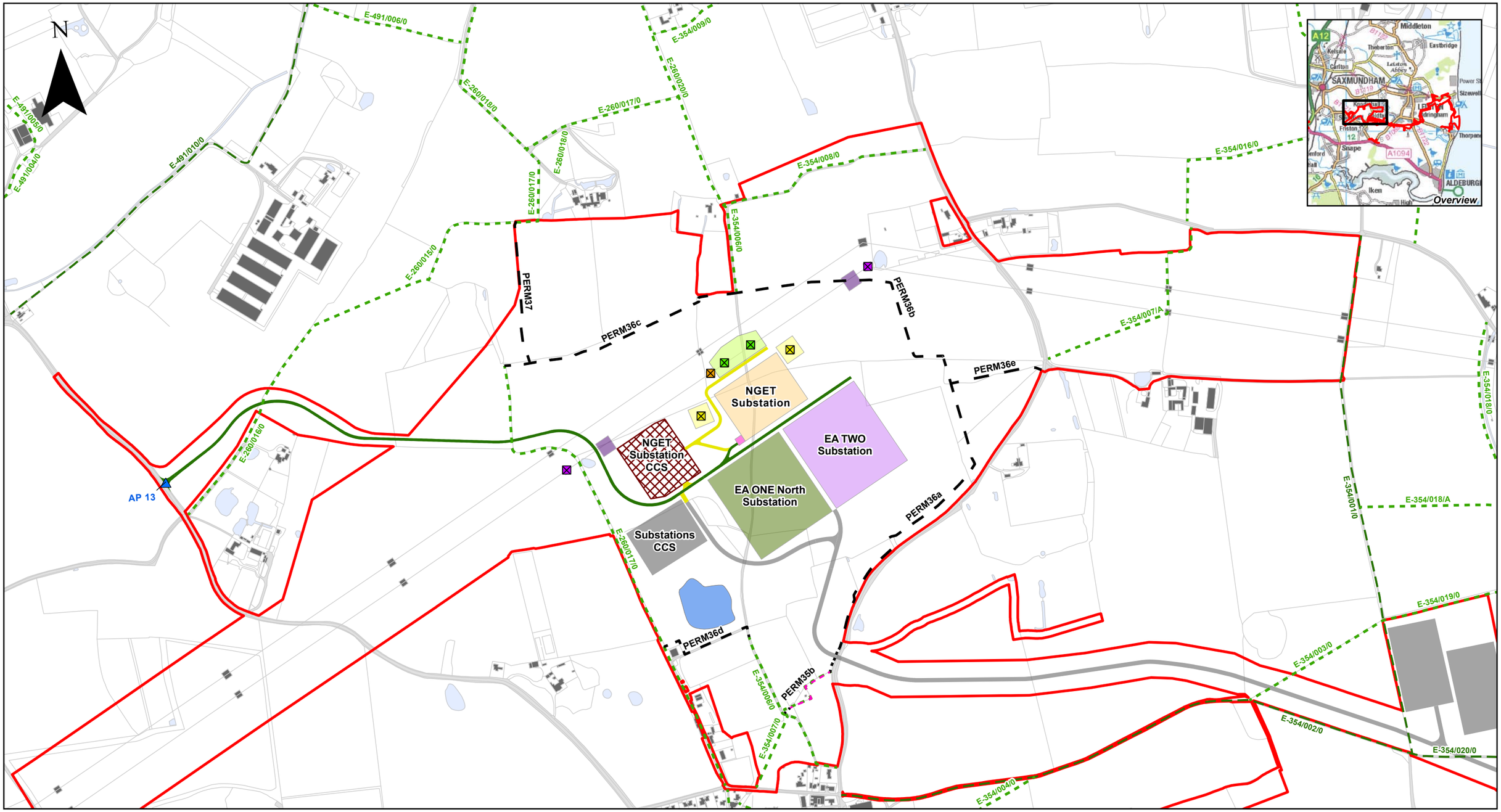
Drawing No.: KILN-AAJ-SS50-ZZZZZZ-DRW-CE-000005

NGET Drawing No.: tbc

Sheet 001 of 001

Size: A1

Designed	Drawn	Checked	Approved	Date	Scale	Revision
	J.DAXNER	T.GREENSTOCK	G.TIVEY	24/10/25	1:250	P01



DevelopmentOrderLimits

Proposed Substation

- EA ONE North Substation
- EA TWO Substation
- National Grid Electricity Transmission (NGET) Substation

- Proposed Access Point (AP)
- Proposed NGET Consolidated Construction Site (CCS)
- Proposed NGET Substation Access
- Proposed Sustainable Urban Drainage System (SuDS) Pond

- Proposed Permanent Access Route
- Proposed Temporary Access Route
- Substation Haul Road (SHR) Stage

NGET Plyon Work

- Proposed Temporary Plyon
- Proposed Temporary Plyon Working Area
- Proposed New Plyon
- Proposed New Plyon Working Area
- Proposed Existing Plyon Modification Work
- Proposed Working Area
- Proposed Pylon Removal

- New Permanent Public Footpath
- Upgraded Footpath

Public Right of Way (PRoW)

- Public Footpath
- Public Bridleway

ScottishPower Renewables

Rev	Date	By	Comment		
1	12/11/2025	PW	First Issue.	Checked:	LMC
				Approved:	KG

1:7,500 Scale @ A3

0 100 200 400 Metres

East Anglia TWO

Substations Stage

Site Context Plan

Drg No	404.V05356.00006.0123.0
Rev	1
Date	12/11/2025
Figure	1

Datum: OSGB 1936 Projection: Transverse Mercator

Y:\UK\053560 GoBe Consultants Ltd\404.V05356.00006 - East Anglia Hub CC\Tech\GIS\Dwgs\Wking\2025 01 Substation Stage\ Site Context Plan\404.V05356.00006.0123.0 Site Context Plan.aprx