Necton Greener Grid Park

Outline Construction Environmental Management Plan

Client:	DWD
Project/Proposal No:	5604
Version:	2.0
Date:	2023-07-24

Document Information

Project Name:	Necton Greener Grid Park
Document Title:	Outline Construction Environmental Management Plan
Client Name:	DWD
Client Contact:	J. Martin
Client Address:	6 New Bridge Street, London, EC4V 6AB
Document Status:	Draft
Author:	Various
Reviewed:	E. Stella
Approved:	E. Stella
Date:	2023-07-24
Version:	2.0
Project/Proposal Number:	5604
ITPEnergised Office:	4th Floor, Centrum House, 108-114 Dundas Street, Edinburgh, EH3 5DQ

Revision History

Version	Date	Authored	Reviewed	Approved	Notes
1.0	2023-01-16	E. Vrhunec	E. Stella	E. Stella	First Issue
2.0	2023-07-24	Various	E. Stella	E. Stella	Minor Revisions

Contents

Introduction

This Outline Construction Environmental Management Plan (OCEMP) has been prepared to support the construction of the Necton Greener Grid Park (the 'Proposed Development').

This OCEMP aims to:

- Ensure that relevant mitigation measures are implemented during the completion of the works;
- Ensure that any conditions relating to the works are adhered to; and
- Ensure that relevant legislation, Government and industry standards, and construction industry codes of practice and best practice standards are complied with throughout the implementation of the proposed works.

1.1 Legal Compliance

Considerable environmental legislation applies to the works to be undertaken. It is expected that all relevant legislation, including requirements for licences, permits and/or consents shall be identified. Statkraft (the Developer) will be required to provide details of how compliance is to be achieved, as part of the construction process.

For each significant environmental aspect, the relevant applicable environmental legislation and regulations will be identified from, but not limited to, the list provided in **Appendix 1**. The list of relevant legislation and its applicability to the proposed works will be reviewed and updated where necessary.

1.2 Structure of this OCEMP

This OCEMP details the environmental controls and procedures that will need to be adopted during the proposed works. It sets out roles and responsibilities for the management of these controls and procedures.

The OCEMP includes details of the following:

- The Site: including management structure, roles and responsibilities, location of any potentially sensitive receptors such as trees, watercourses, local residents, etc. and any designation with associated criteria;
- Proposed Works: a description of the works, works programme, proposed working hours and equipment to be used;
- Environmental Management: methods for managing environmental risks (includes mitigation), emergency procedures, waste and hazardous materials storage procedures, proposed liaison with the local neighbourhood and stakeholders, and outline specific management plans relating to dust, landscape, lighting, and noise; and
- Legal Compliance: a schedule of relevant and current environmental legislation and good practice, objectives and targets imposed by contract requirements.

1.3 Document Control and Distribution

This document is a "live" document and will be subject to periodic review and updating. The document is intended for use by the Developer and their contractors specifically involved in the construction of the proposed development (as detailed below). When this document is updated, the document control table will be updated (refer to **Table 1.2**) and will be issued to all personnel named on the distribution list below (refer to **Table 1.3**).

It is the responsibility of all users to ensure that they have the current version of the document.

Table 1.2 - Document Control

Status	Date Issued	Prepared by	Summary of Alterations
Version 1.0	January 2023	ITPEnergised	First Version of OCEMP
Version 2.0	July 2023	ITPEnergised	Minor revisions to Table 1.3

Table 1.3 - Distribution List

Role	Organisation	Contact
Developer	Statkraft	Name: Sacha Lloyd Rutherford

		E-mail: sacha.lloydrutherford@statkraft.com Mobile: 07442603962
Principal Designer (PD)	TBC	TBC
Principal Contractor (PC)	TBC	TBC
Project Manager (PM)	TBC	TBC
Environment Manager (EM)	TBC	TBC
Local Authority	Breckland Council	TBC
Parish Council	Necton Parish Council	TBC

Proposed Development and Site Context

2.1 Site and Surrounding Area

The Site is located approx. 0.6k northeast of Necton, and approx. 0.6km southeast of Little Fransham. The A47 runs northwest of the Site area with an access track of the road leading to the Site, adjacent substation, and surrounding fields. The surrounding area is dominated by arable fields.

2.2 Proposed Development

This OCEMP provides information on mitigation and BPM to be adopted during the construction of the Necton Greener Grid Park (The Proposed Development). Greener Grid Parks are a collection of buildings, usually located near substations, containing innovative technology designed to increase the amount of renewable energy transmitted through the national grid.

Construction Programme and Management

3.1 Management

The anticipated roles and responsibilities of the parties involved in the proposed works are set out in **Table 3.1** below. However, it should be noted that all members of staff are responsible for ensuring the requirements of the OCEMP are met.

Table 3.1 – Roles and Responsibilities

Role	Individual	Responsibilities
Principal Designer (PD)	TBC	Providing detailed designs of all infrastructure.
Principal Contractor (PC)	TBC	The day-to-day management of Health and Safety, Environmental and Quality performance during the works. The PC will be responsible for implementing the OCEMP, including monitoring the performance of sub-contractors and maintaining records to demonstrate compliance with and implementation of the OCEMP.
Project Manager (PM)	TBC	Directing the PC on the delivery of the OCEMP. This will include checking that the PC has allocated sufficient

Role	Individual	Responsibilities
		resources to allow delivery of the OCEMP, participating in communication with the Council and other third parties as required and arranging for the update of the OCEMP.
Environment Manager (EM)	TBC	An EM will be on-site supervising and monitoring sensitive locations, ensure implementation of the OCEMP, provide advice and deliver toolbox talk to all staff and subcontractors.
All Staff and Subcontractors	TBC	Responsibility to: ▪ Work to agreed plans, methods and procedures to minimise environmental effects and nuisance to receptors during the works; ▪ Understand the importance of avoiding pollution on-site, including noise and dust, and how to respond in the event of an incident to avoid or limit environmental effects; ▪ Report all incidents immediately to their line manager; ▪ Monitor the workplace for potential environmental risks and alert their line manager if any are observed; and ▪ Co-operate as required during site inspections and audits.

3.2 Construction Programme

Main construction works are anticipated to commence in Summer 2024 and would last until Summer 2026.

3.3 Pre-commencement and Enabling Works

Risk assessment and method statements (RAMS) to be reviewed and approved by the Developer. A daily brief will be read out to all members of the working party.

The work area will be barriered off for security and segregation.

Detail of the Proposed Works

4.1 Working Hours

The standard working hours for all construction activities will be:

- 07.00 – 17.00 Monday to Friday; and
- 08.00 – 13.00 Saturdays (TBC if required)

No work and ancillary operations, which are audible at the planning application boundary, will be permitted outside of these hours unless fully justified to the relevant Local Planning Authorities on the grounds of engineering necessity or for reasons of health and safety. Any such works should be kept to an absolute minimum.

No continuous 24-hour activities are envisaged at this stage and *no Sunday or Bank Holiday working is envisaged*. Any change to working hours will be agreed with the Local Planning Authority.

These hours will be strictly adhered to unless or in the event of:

- An emergency demands continuation of works on the grounds of safety; or
- Completion of an operation that would otherwise cause greater interference with the environment/general public if left unfinished.

4.2 Work Detail

Construction Method Statement(s) will be produced by the PC and will provide details of all on site construction works. These will be held with this OCEMP within the site office and will be made available for all site personnel.

4.3 Work Equipment

All plant and equipment shall be serviced and will have been inspected prior to use and be in calibration where applicable.

4.4 Waste and Materials Management

Waste produced on-site will be subject to a Duty of Care under the Environmental Protection Act (1990). Liaison with the Environment Agency (EA) will be undertaken to ensure that waste and materials handling on-site will be conducted appropriately.

The waste stream will be managed so far as is reasonably practicable to maximise the reuse of surplus materials and to ensure any adverse environmental effects are minimised.

The transportation of waste to and from the site will comply with the Duty of Care requirements. These include ensuring waste is transported by registered carriers, disposal to appropriately licensed sites and maintenance of appropriate waste transfer documentation.

If necessary, tests will be carried out to identified waste material. If this is required, it is proposed for the material to be transferred to a depot where the material will be quarantined until classification is made and disposal agreed.

The PC will audit waste carriers and disposal facilities and maintain documentary evidence that these requirements are being met, including a register of waste carriers, disposal sites (including transfer stations) and relevant licensing details for each waste stream. Waste contractors who remove waste will be registered with the EA.

A Material Management Plan will be compiled to ensure the correct storage and re-use of any excavated material (refer to Section 6.2).

4.5 Traffic and Access

The site will be inspected prior to starting work, to ensure that the site entrance/exit is suitable for the equipment to be used and a safe route to the work position is available. Vehicles will only enter and leave the site in the agreed working hours.

Access to the work area will be via designated access entrances which will be kept locked when not in use.

The welfare unit will be located within the work area. There will be no access to unauthorised personnel.

Any temporary road and footpath closures will be agreed with the Local Authorities and the local police. Notices will be posted to alert the public of any planned road closures and / or diversions.

4.6 Material Storage and Handling

All materials which are classed as hazardous shall be stored in suitable, secure and labelled containers. No more than 5 litres of fuel to be kept in vans.

A designated area, with plant nappies, spill kits and booms will be used when re-fuelling all plant/equipment.

4.7 Health and Safety and Security

- Only authorised persons will be allowed on the site. Any site personnel and visitor to the site will need to follow the guidance below: Everyone employed on the project will receive a site-specific induction to inform them of the health and safety and environment arrangements, welfare on site and to ensure they understand the requirements of the risk assessment and method statement relevant to their work. Workers will be informed of their legal obligation to comply with health and safety.

4.8 Emergency Procedures

Procedures will be set in place to respond to any emergency incidents which may occur on site. A site Pollution Incident Response Plan will be developed by the PC prior to any works commencing on site.

All appropriate staff will be trained and made aware of the spill contingency plan set in place, following the DEFRA Pollution Prevention for Businesses Guidance (https://www.gov.uk/guidance/pollution-prevention-for-businesses). In the event of any incident the PD will be notified. Additionally, the EA and any other interested bodies will be notified as required.

In the event of an emergency, the following number in **Table 4.1** can be used to call Necton Parish Council:

Table 4.1 – Necton Parish Council's Emergency Number

Relevant Council	Out of Hours / Emergency Number
Necton Parish Council	07483 412755 (voicemail facility for out of hours)

4.9 Contractor Training

Site specific inductions completed by the Site Management Team for all staff and contractors new to the development will include reference to the key sensitivities outlined in this OCEMP.

In order to ensure that environmental issues are communicated on site, the environmental training and on-going communication methods as detailed in **Table 4.2** will be carried out. This list is not exhaustive.

Table 4.2 – Training and Communication

Meeting / Briefing /Training	Frequency	Attendees
Induction training	On initial visit to site	All persons attending site
RAMS briefings	Every work task	All persons involved in task
Environmental toolbox talks (as relevant for work being undertaken)	Dependent on location	All persons undertaking work on site
Environmental briefings e.g. bulletins	As required	All persons undertaking work on site
Job specific training e.g. working near water	As required	Relevant persons with environmental responsibilities

Key Environmental Issues

5.1 Potential Environmental Effects

An EIA screening request was submitted to Breckland Council on 11th May 2023. An EIA Screening Opinion received on 13th July 2023 confirmed that the proposal does not fall within the scope of the EIA Regulations and an Environmental Statement is not required.

Environmental Control Measures

6.1 Environmental Procedures

The developer will ensure that all sub-contractors adhere to the relevant local policies and good practice guidelines for implementation during all site activities.

In order to avoid/mitigate against any significant environmental effects, a series of environmental procedures have been proposed and are detailed below.

Responsibilities for the implementation of each procedure will lie with the PC and EM.

6.2 Waste and Materials Management

The Site Waste Management Plan (SWMP) Regulations (2008) were repealed on the 1st of December 2013 by The Environmental Noise, Site Waste Management Plans and Spreadable Fats etc. (Revocations and Amendments) Regulations 2013.

The SWMP Regulations (2008) aim was to make the construction industry more sustainable by ensuring that those responsible for development projects are aware of the waste being produced so that it can be reduced. Although no longer required by legislation, it is recognised that a SWMP or Construction Waste Management Plan (CWMP) would support the identification of actions to minimise construction waste from the redevelopment of the site being sent to landfills.

Prior to commencement of the works, a SWMP will be prepared by the Developer. Generally, the disposal of all waste or other materials removed from the site will be in accordance with the SWMP Regulations 2008 and requirements of the EA, Control of Pollution Act (COPA) 1974, Environment Act 1995, Special Waste Regulations 1996, the Duty of Care Regulations 1991; and Environmental Permit requirements.

In general, and in accordance with the principles of the Government's "Waste Strategy 2000", and the SWMP Regulations 2008, a principal aim during construction will be to reduce the amount of waste generated and exported from site. This approach complies with the waste hierarchy whereby the intention is first to minimise, then to treat at source or compact and, finally, to dispose of off-site as necessary.

The generation of construction waste will, as the first priority, be avoided. Any packaging used for transporting of construction materials delivered to site will be sent back with the delivery vehicle whenever practicable. If waste is generated on-site, it will be sent for reuse and recovery in preference to disposal. Where practical, spoil, excavation materials and surplus construction materials or clean concrete arising from the works on site will be reused.

Waste produced during all activities on site will be subject to 'The Waste Duty of Care Practice' (November 2018) which sets out practical guidance on how to meet waste duty of care requirements. It is issued under Section 34(7) of the Environmental Protection Act 1990 (the EPA) in relation to the duty of care set out in Section 34(1) of that Act. It is the responsibility of the Developer to ensure that waste produced onsite is disposed of in accordance with legislation.

Waste for final disposal will be transported by Licensed Waste Carriers to local sites which operate in accordance with the appropriate Waste Management Licenses issued by the EA. Under the Duty of Care Regulations, the receiving site must be authorised to accept the type and quantity of waste generated. Transport of wastes will be minimised by the selection of local licensed sites where available. The only exception to this principle may be for the disposal of hazardous wastes (e.g. contaminated soil) where suitable landfill or other disposal sites may only be found further afield. No disposal of waste by open burning will be permitted on-site.

The Developer will audit waste carriers and disposal facilities and maintain documentary evidence that these requirements are being met. A register of waste carriers, disposal sites (including transfer stations) and relevant licensing details will be produced and maintained on site.

All relevant contractors will be required to investigate opportunities to minimise and reduce waste generation, such as:

- Agreements with material suppliers to reduce the amount of packaging or to participate in a packaging take-back scheme;
- Implementation of a 'just in time' material delivery system to avoid materials being stockpiled, which increases the risk of their damage and disposal as waste;
- Attention to material quantity requirements to avoid over-ordering and generation of waste materials;
- Segregation of waste at source where practical;
- Re-use of materials on-site wherever feasible. The Government has set broad targets of the use of reclaimed aggregate, and in keeping with current guidelines and relevant legislation, contractors will be required to maximise the proportion of materials recycled; and
- Re-use and recycling of materials off-site where re-use on-site is not practical (e.g. through use of an off-site waste segregation facility and re-sale for direct re-use or reprocessing).

Materials and waste will be stored in appropriate conditions to prevent damage or contamination of storage areas. All hazardous materials including chemicals, cleaning agents, solvents and solvent containing products will be properly sealed in containers at the end of each day, prior to storage in appropriately protected and bunded storage areas. Containers should be sited away from drains or unsurfaced areas and should be regularly maintained and inspected for damage.

Waste will be sorted into different waste types such as timber, copper, metal, paints, etc. and either disposed of into larger skips, or if suitable, placed into a compactor to reduce the volume of the waste before it is taken off-site.

Any spoil from excavations must be stored on areas of hardstanding, short grassland or bare ground adjacent to the works. If anything needs to be stored on vegetation (long grassland or scrub) then the spoil must be wrapped to prevent animal ingress and an Ecologist will be required to check the area first.

6.3 Noise and Vibration

The works will comply with BS 5228-1:2009 "Code of practice for noise and vibration control on construction and open sites. Noise" and BS 5228-2:2009 "Code of practice for noise and vibration control on construction and open sites. Vibration" and the following mitigation measures will be considered:

6.3.1 Plant and Equipment

- Plant will be certified to meet relevant current EU legislation and should be no noisier than would be expected based on the noise levels contained in BS 5228-1: 2009;
- The following threshold noise levels have been set using the 'ABC method' provided in BS 5228 (British Standards Institution, 2014): Weekday daytimes (weekdays 07:00 – 19:00 and Saturdays 07:00 – 13:00) – 65 dB;

- Noisy plant or equipment will be situated as far as possible from site boundaries and will be fitted with exhaust silencers, maintained in good and efficient working order and operated in such a manner as to minimise noise emissions. Plant will comply with the relevant statutory requirements;
- Equipment and vehicles to be shut down when not in use;
- Semi-static equipment is to be sited and oriented as far as is reasonably practicable away from noise sensitive receptors and will have localised screening if deemed necessary.

6.3.2 Methods of Working

- Site inductions will highlight the need for vehicle horns and alerts to only be used when absolutely necessary;
- No work which is audible at the site boundary will be undertaken outside the specified hours, except in cases of emergency where safety is an issue, or where a prior agreement has been reached with the local council Environmental Health Officer (EHO) and local residents have been informed;
- Works are within close proximity to public footpaths which cross the site. Appropriate signage must be in place prior to works commencing within this area;
- The PC will comply with the requirements of the COPA 1974 (with particular reference to Part III), the EPA 1990, the Health and Safety at Work Act 1974 and the Control of Noise at Work Regulations 2005;
- All trade contractors will be made familiar with current noise legislation and the guidance contained in BS 5228 (Parts 1 and 2) which will form a prerequisite of their appointment;
- Deviation from approved method statements will be permitted only with prior approval from the PC and other relevant parties. This will be facilitated by formal review before any deviation is undertaken; and
- A contact number which the public may use shall be displayed prominently on the site board.

6.4 Air Quality

The Developer will be required to control and limit dust, air quality, odour and exhaust emissions during the construction works as far as reasonably practicable and in accordance with best practice measures. This will include reference to publications on best practice including the following:

- Guidance on the Assessment of the Impacts of Construction on Air Quality and the Determination of their Significance, Institute of Air Quality Management, January 2014 (IAQM 2014);
- Air Quality Monitoring in the Vicinity of Demolition and Construction Sites, Institute of Air Quality Management, November 2012 (IAQM 2012); and
- Directive 2012/46 Requirements (amending EU Directive 97/68/EC) relating to measures against the emission of gaseous and particulate pollutants from internal combustion engines to be installed in non-road mobile machinery (NRMM).

6.4.1 Dust Management

A number of mitigation methods will be implemented to minimise the nuisance and impact arising from dust produced during construction and site preparation activities and maintain suitable air quality levels. These include the following:

- Utilise all reasonable means available to keep dust to a minimum, especially during dry weather conditions;
- Water sprays or sprinklers will be used when undertaking dust generating activities on-site, to suppress the levels of dust generated. Water runoff from dust suppression activities will be controlled;

- Sweeping of the road and footway will be completed following any delivery or waste removal as necessary, to ensure they are kept clear of any dust and debris from the site;
- Lorries removing materials from site will be properly covered to prevent spoil/dust from escaping;
- Burning of any material will be prohibited anywhere on-site;
- Vehicles on site will use hard standing areas for deliveries and removal of material(s) from site. These surfaces will be kept clean to avoid the build-up of dust and regularly damped down;
- Deposits of dust on external parts of the plant will be cleaned off at the end of each working day in order to minimise the potential for wind entrainment.
- Daily on-site and off-site inspections will be undertaken to monitor dust;
- Record all dust and air quality complaints and/or incidents, identify cause(s), take appropriate measures to reduce emissions in a timely manner and record the measures taken in the log book;
- Make the complaints log and/or daily logs available to local authority, when asked;
- As far as possible, fully enclose site or specific operations where there is a high potential for dust production and the site is active for an extensive period; and
- Remove materials that have a potential to produce dust from site as soon as possible, unless being re-used on site.

Measures will also be implemented to limit emissions from construction plant and vehicles. These measures will include:

- NRMM compliant equipment;
- All construction plant will be appropriately sized, vehicles and equipment will be maintained in good working order;
- Low emission vehicles will be used where possible and fit plant with catalysts filters or similar devices. Low sulphur fuels will be used where possible;
- Construction vehicles to conform to the current emissions standards pursuant to the Directive 2012/46 Requirements during any works;
- Vehicle and construction plant exhausts to be directed away from the ground and positioned at a height to facilitate appropriate dispersal of exhaust emissions;
- All plant when not in use and do not need their engines to be running will be turned off. There will be no idling;
- Operation of plant in accordance with the manufacturer's written recommendations; and
- Vehicle, plant and equipment maintenance records will be kept on site and reviewed regularly.

6.5 Hazardous Substances

The PC will set out any procedures to deal with contamination if any issues were to arise. Therefore, all the workers on-site will be made aware of potential contamination issues on the site and will use best practice techniques during all construction activities.

The operation of vehicles and the handling, use, and storage of hazardous materials will be undertaken as stated above and will also include the following:

- Construction vehicles and plant will be regularly maintained and supplied with spill kits and drip trays to reduce the risk of hydrocarbon contamination;
- Refuelling would be undertaken in specified areas. Drip trays will be installed to collect leaks from diesel pumps;

- The handling, use, and storage of hazardous materials will be undertaken in line with the current best practice;
- Adequate bunded and secure areas are to be provided for the temporary storage of fuel, oil and chemicals, as far away from drainage as possible; and
- Provision of spill containment equipment such as absorbent material on site.

A member of staff will be nominated to control and monitor the Control of Substances Hazardous to Health (COSHH) system, in compliance with the COSHH Regulations 2002. Suppliers must send data sheets for every hazardous substance to the site. The assessment information sheet is completed in conjunction with Supervisors and Safety Managers who then brief staff members who will be using the substance, on its safe use, disposal and any emergency procedures. Written records of these briefings will be kept in the COSHH file held on the site.

Any new substances hazardous to health brought on to the site will have suitable arrangements made for their safe storage, use and disposal.

6.6 Flood Risk

According to the Gov.UK website (https://flood-map-for-planning.service.gov.uk/), the Site has a low risk of flooding from surface waters, rivers and sea; it is located within a flood zone 1. More detailed information on flood risks is available in Phase 1 Geo-Environmental Desk Study prepared by ITPEnergised. Protection measures to control the risk of pollution to water will be consistent with the Environmental Permitting (England and Wales) Regulations 2018. Where reasonably practicable, the use of materials that could pollute groundwater will be avoided. This will include special consideration for the use of hazardous and non-hazardous substances as defined by the Environmental Permitting (England and Wales) Regulations 2018.

All works should also be undertaken with due regard to the DEFRA Pollution Prevention for Businesses Guidance (https://www.gov.uk/guidance/pollution-prevention-for-businesses).

6.6.1 Mitigation Measures for the Works

To reduce the risk of ground contamination and water quality issues during the works the following mitigation should be followed:

6.6.2 General mitigation

- Undertake a pollution risk assessment of the site and the proposed activities;
- Identify all Controlled Waters that may be affected by the works and temporary discharge points to the on-site drainage ditches and the marine environment;
- Implement a pollution control system during earthworks and construction; and
- Monitor construction procedures to ensure management of risk is maintained.

6.6.3 Proposed mitigation for excavations

- Take relevant precautions to ensure no services are struck during excavations. Ensure relevant emergency response and contacts are in place in the event services are stuck which could impact the water environment, e.g. oil line, water main, sewer;
- Scan excavation areas for potential unrecorded culverts/field drains. De-watering measures to be present in the event of a leak;
- Existing culverts/field drains to be protected to prevent potentially polluted site runoff discharging to them prior to treatment;
- Plan and design dewatering activities to minimise the local drawdown of perched groundwater in peatland habitat, and maintain the hydrology of identified sensitive habitats;

- Prevent site runoff entering excavations and regular de-water to prevent infiltration to groundwater. Ensure that dewatering of excavations is directed away from drainage ditches and the marine environment; and
- Any deep excavations (e.g. boreholes, piled foundations) must be protected to prevent infiltration of site runoff and a direct pathway to groundwater.

6.6.4 Proposed mitigation for concrete works

- If concrete is brought to site, provide dedicated concrete washout skip/basin to prevent any uncontrolled spilling of material in-site or nearby public roads;
- Concrete washout facilities to be regularly maintained and solids to be disposed of safely;
- If on-site concrete batching is needed, ensure necessary containment measures are in place and suitable disposal and cleaning methods;
- Robust emergency response in place for any concrete spillage on site;
- Correct disposal of any waste or surplus concrete in agreed suitable locations both on-site and off-site;
- Where applicable, shuttered pours should be used to prevent on concrete losses to ground;
- Ensure excavations are sufficiently dewatered before concreting begins and that dewatering continues while concrete sets; and
- Cover freshly poured concrete surfaces to prevent any polluted runoff attributed with wet weather.

6.6.5 Fuel and chemical storage measures

- Follow measures set out in the 'Storage of Plant and Materials' section of the OCEMP;
- Maintain oil booms and absorbent pads within all work areas;
- Fuel and oil deliveries to take place on an impermeable transfer area with a bunding facility capable of handling a major spill;
- Assign designated refuelling areas where appropriate and site them as far as practicably possible and at least 20 m from adjacent field drains and public sewers; and
- Install operational drainage as early as possible with the inclusion of oil separators.

6.6.6 Proposed mitigation for sediment management

- Control and divert surface water entering site from surrounding land (via cut-off drains) to reduce potential impacted water volumes;
- Minimise use of stockpiles and/or cover and contain stockpiles and provide sediment interception measures at their bases, e.g. silt fencing or cut-off drains and check dams;
- If topsoil is to be stored, avoid constructing stockpiles more than 2 m high. This will ensure anaerobic conditions do not occur and that the soil will remain fertile and capable of being re-seeded. It will also be less susceptible to erosion;
- Temporary drainage measures to be installed which provide filtration (filter drains or filter strips) and settlement (ponds/basins) to collect sediments prior to offsite discharge;
- Avoid mass overburden stripping on the site, expose parts of the site only when essential for operation;
- Temporary drainage measures and silt fencing to be installed around large areas of exposed soils;
- Ensure a robust site traffic management plan is in place to reduce sediment runoff risks. Good practices include; minimise turning of tracked vehicles where possible and manage dedicated turning areas appropriately (hard surfacing, silt fencing, etc.), avoid unnecessary turning of large site plant and minimise overall routes on site to better manage sediment runoff;

- Prevent/reduce offsite sediment impacts to public roads. Good practices include; wheel wash facilities, site-road sweeping, vehicles only permitted on site not to use public roads, formally surfaced site car park and separate access points for cars and plant/deliveries;
- Bowsers to be used to keep exposed earth and soils damp preventing dust generation reaching nearby watercourses (sediment build-up can be managed on-site); and
- Dedicated plant washing areas to control sediment runoff.

6.6.7 Contingency planning and emergency procedures

- All pollution prevention consumables and plant to be made readily available at all times. Keep spill kits in all vehicles to enable a rapid and effective response to any accidental spillage or discharge; and
- Train all construction staff in the effective use of spill kits and raise awareness of all preventative measures for water pollution.

6.7 Biodiversity

Any development within the site should ensure that valuable habitat areas are protected or reinstated and, where appropriate, enhanced to ensure opportunities for net gain in biodiversity, in line with the revised National Planning Policy Framework (NPPF).

Best practice guidelines should be followed throughout all stages of any development to protect existing wildlife within the site. Where applicable, this includes obtaining appropriate species licences prior to the commencement of works and implementing mitigation strategies to ensure compliance with relevant wildlife legislation.

Specific requirements for mitigation within the site would include standard embedded ecology measures (EEMs):

- Consideration of the presence of statutory and non-statutory designated sites in the vicinity of the site and any potential impacts development may have on these;
- Undertaking clearance works outside the breeding bird season (the breeding season is generally considered to be March to August inclusive) or following a survey for nesting birds immediately before work commences (not more than 24 hours prior);
- If an active bird nest is recorded, this must be left in place and works halted under nest has successfully fledged;
- All work in relation to or in proximity of trees must be carried out in accordance with the guidance provided within the Streetworks UK (National Joint Utilities Group) Volume 4: 2007;
- An Arboricultural report will be completed ahead of any vegetation clearance/pruning in order to establish condition of tree root protection zone (RPZ);
- The site will also be inspected by a competent person (i.e. tree surgeon) before any works on existing trees will be carried out;
- Toolbox talk to be delivered ahead of the vegetation clearance and supervision of operations by a competent person;
- Preventing unnecessary harm to wild mammals, as per UK legislation;
- Ensuring that, overall, a net gain in biodiversity is achieved through habitat creation, enhancement and protection measures included in any development plans;
- Ensuring the protection of trees in accordance with the recommendations of an arboricultural report and any TPOs; and
- The implementation of standard pollution prevention measures across the site.

Auditing, Monitoring and Review

Reporting procedures will be defined by the Developer who will hold overall responsibility for providing feedback on the environmental performance of the works.

All injury accidents occurring as a result of the Proposed Development's work activities or conditions are to be reported to the PM and recorded in the site Accident Book. First aid will be provided and where necessary, arrangements will be made to get the injured person to hospital.

The PM will report all injury accidents, 'near misses' and dangerous occurrences to Developer's representative Health and Safety Department who will carry out an investigation of all notifiable injury accidents and incidents as scheduled under The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) 2013. Minor injury accidents will be investigated where it is deemed beneficial.

The Developer will hold the responsibility for maintaining a register of all environmental monitoring, which will be made available for auditing and inspection.

7.1 Environmental Incidents

The PM will advise the Developer within 24 hours of any incidents of non-compliance with the OCEMP and will respond to any reported incidents within 24 hours, or as soon as reasonably practicable. In the event of working practices being deemed dangerous either by the Developer's representative or the Health and Safety Executive (HSE), immediate remedial action will be taken.

The formal procedure for handling Environmental Incidents will be developed and agreed by the Developer/PC but may include a procedure similar to that detailed below:

- Environmental Incidents are to be reported to PM;
- The PM (or nominated representative) will record full details of the Environmental Incident and ensure that they are responded to as soon as reasonably practicable (preferably within one hour but always within 24 hours);
- The PM (or nominated representative) will monitor and ensure that appropriate action is taken; and
- The PM (or nominated representative) will undertake an investigation to assess what corrective and preventive action, or further investigation is necessary to avoid recurrence of the Environmental Incident.

7.2 Communications and Complaints

The PM will define procedures for managing incidents. A centralised register of all reported complaints and incidents will be maintained by the PM.

Appendix 1

Environmental Legislation	Summary of Relevance to the Site
Hazardous Substances	
Control of Substances Hazardous to Health (COSHH) Regulations 2002 (and amended 2003, 2004)	The COSHH regulations provide a legal framework for controlling people's exposure to all 'very toxic, toxic, harmful, corrosive or irritant' substances and apply to all places of work. There are various requirements including an assessment of the risk to the health of employees arising from their work and what precautions are needed, introduction of appropriate measures to prevent or control the risk (ensuring that measures of control do not increase the overall risk to health and safety), use of control measures and maintenance of equipment.
Waste	
Controlled Waste (Registration of Carriers and Seizure of Vehicles) Regulations 1991 (amended 1988)	This legislation provides powers to control fly-tipping and prevents the unlicensed transport of waste materials. All carriers of controlled waste including the producers of building and demolition waste are required to be registered with the Environment Agency. Controlled waste is defined as household, industrial, radioactive or commercial waste other than agricultural, mineral/ quarrying or explosive wastes. This registration must be renewed every 3 years.
The Environmental Permitting (England and Wales) (Amendment) Regulations 2018	The Regulations consolidate the Pollution Prevention and Control and waste Management Licencing regulations to provide a more streamlined approach to environmental regulations, by allowing for a number of different activities to be regulated under one permit by the Environment Agency.
Hazardous Waste (England and Wales) Regulations 2005 (amended 2009)	The Regulations ensure the sound management, storage and safe disposal of hazardous wastes, to prevent environmental pollution and harm to human health. 'Hazardous' waste applies to wastes which contain any substance which: • is listed a hazardous waste in the List of Waste Regulations 2005 (see below); • is exceptionally classified as hazardous by the Secretary of State or any of the National Executives; or • is declared hazardous by virtue of any regulations under section 62 of the Environmental Protection Act (EPA) 1990. All hazardous waste movements require pre-notification to the Environment Agency prior to any hazardous waste being produced (where possible). Producers are required to know and document the quantity, nature, origin and final destination of the Hazardous Waste and to certify that the waste carrier is registered under the Controlled Waste (Registration of Carriers and Seizure of Vehicles) Regulations 1991. Copies of the completed consignment notes must be retained for at least 3 years by all those in the waste chain.

Environmental Legislation	Summary of Relevance to the Site
List of Waste (England) Regulations 2005 (amended 2005)	The List of Waste Regulations categorises wastes as hazardous, and provides a coding system of waste and hazardous waste. Wastes included in the list are subject to the provisions of Directive 75/442/ EEC. Under the List of Waste Regulations, a set of criteria are provided to determine whether or not a waste is classified as hazardous, e.g. if it has a flash point lower than 55ºC.
Environmental Protection (Duty of Care) Regulations 1991 (amended 2003)	A legal duty of care is imposed on anyone – from producers, to carriers and disposers of waste, to ensure that: • Waste is not illegally disposed of or dealt with without a licence or in breach of a licence or in any way that causes pollution or harm; • Waste is transferred only to an 'authorised person', i.e. a local authority, registered carrier or a licensed disposer; and • When waste is transferred, it is accompanied by a full written description which forms part of a waste transfer note (or consignment note for hazardous wastes). All persons subject to duty of care are required to ensure that neither they nor any other person commit an offence under the Regulations.
Environmental Protection Act (EPA) 1990: Part 2 – Waste on Land (amended 2010)	This Act builds on the system put in place by the Control of Pollution Act with stricter licensing controls and other provisions aimed at ensuring waste handling, disposal and recovery operations do not harm the environment. It reorganised Local Authority responsibilities for waste management, introduced a duty of care for producers and handlers of waste and described the offences of unauthorised storage, treatment and disposal of waste.
Environmental Protection Act (EPA) 1990: Part 2a	The section of the EPA created by the Environment Act 1995 setting out the legislative framework for identifying and dealing with contaminated land.
Environment Act 1995	Inserted Part '2a' to the EPA 1990 giving powers and responsibilities to Local Authorities regarding contaminated land.
The Site Waste Management Plan Regulations (2008)	The regulations set out the obligation for a Developer to produce and adhere to a Site Waste Management Plan (SWMP) with the purpose of minimising construction waste.
The Environmental Noise, Site Waste Management Plans and Spreadable Fats etc. (Revocations and Amendments) Regulations 2013	These revoke the Environmental Noise (Identification of Noise Sources) (England) Regulations 2007 (SI 2007 No. 415), the Environmental Noise (Identification of Noise Sources) (England) (Amendment) Regulations 2007 (SI 2007 No. 2458) and the Site Waste Management Plans Regulations 2008 (SI 2008 No. 314)
The Waste Duty of Care Practice (November 2018)	Under Section 34 of the EPA, sets out practical guidance on how to meet waste duty of care requirements.
Discharge to Water / Land	
Anti-Pollution Works Regulations 1999	Aimed at ensuring that site owners pay for the prevention and remediation of pollution arising from their activities. Notices can be served by the Environment Agency directing a site owner to carry out anti-pollution works where any poisonous, noxious or polluting

Environmental Legislation	Summary of Relevance to the Site
	matter is likely to enter, or to be, or to have been present in any controlled waters.
Water Industry Act 1999	The Act prohibits certain discharges to sewers including: Any matter likely to injure the sewer or interfere with the free flow of its contents or to affect the treatment, disposal of its contents; Liquid waste or steam at a temperature higher than 110ºF or any other chemical waste which is dangerous, a nuisance or prejudicial to health; • Any petroleum spirit; and • Calcium carbide. Trade effluents may be discharged into public sewers only with the consent, or by agreement with, the sewerage undertaker (i.e. local water company). The consent may stipulate conditions relating to: Nature or composition of the effluent; • Maximum daily volume allowed; • Maximum daily rate of flow; and • Sewer into which the effluent is discharged.
Water Resources Act 1991 (amended 2009)	The Act requires water abstractions to be licensed and certain discharges into controlled waters to be subject to Environment Agency consent. It is an offence under the Act 'to cause or knowingly permit': • Poisonous, noxious or polluting matter, or any solid waste matter, to enter controlled waters; • Matter, other than trade or sewage effluent, to be discharged from a sewer in contravention of a relevant prohibition; • Trade or sewage effluent to be discharged into controlled waters or through a pipe into the sea (beyond the controlled waters); • Unauthorised work in a water protection zone; • Trade or sewage effluent to be discharged onto land or into a lake or pond in contravention of a relevant prohibition; or • Any matter to enter inland waters so as to cause or aggravate pollution by impeding flow. Pollution from individual discharges into water is controlled by a system of discharge consents which set legal limits on the type, concentration and total volume of discharge which can be released. If a pollution incident occurs, a description of the nature and extent of harm must be produced.
Water Act 2003 and 2014	The Water Act replaces parts of the Water Resources Act 1991, and will be fully implemented by 2012. The Water Act introduces a new abstraction licence system which reduces the number of licences and encourages the development of Catchment Abstraction Management Strategies (CAMS).
Groundwater Regulations 1998 (amended 2009)	The Regulations transpose the requirements of the Groundwater Directive into UK legislation. The Regulations aim to prevent and limit the pollution of groundwater by certain listed substances or groups of substances. The listed substances are the same as those in the

Environmental Legislation	Summary of Relevance to the Site
	Groundwater Directive. The Regulations aim to prevent entry of List I substances into groundwater and prevent groundwater pollution by List II substances. The direct or indirect discharge of List I or II substances must be subject to prior investigation and authorisation. The Regulations also allow notices to be served to control activities which might lead to an indirect discharge of List I substances or groundwater pollution by an indirect discharge of substances in List II.
Control of Pollution (Oil Storage) (England) Regulations 2001	These Regulations require a person having custody or control of oil to carry out certain works and to take certain precautions and other steps for preventing pollution of any waters which are controlled waters for the purposes of Part III of the Water Resources Act 1991. The Regulations impose general requirements in relation to the storage of oil and the types of container used. Where the Environment Agency considers that there is a significant risk of pollution of controlled waters from the oil in question it has the power to serve a notice on the person having custody or control to minimise the risk.
Contaminated Land (England) Regulations 2000 (as amended 2006 and 2012)	Local Authorities have a duty to inspect land, to identify contamination and to decide whether any such land should be designated a 'special site'. Public registers of contaminated land and special sites are kept by the local authority and the Environment Agency. Following designation of land as contaminated or a special site, the enforcing authority can serve a remediation notice on the appropriate person(s) specifying what needs to be done and the period within which remedial work should be completed. The appropriate person will be the person(s) who caused or permitted the contamination of the land. If this person cannot be identified then responsibility falls to the current occupier or owner of the land.
Emissions to Air / Noise	
Control of Pollution Act (COPA) 1974 (Sections 60, 61) (amended 1989)	Section 60 of COPA gives powers to the Local Authority to control noise and vibration from construction sites. The basis of the COPA legislation is that Best Practical Means should be used to control noise and vibration pollution. Control is by service of an abatement notice (under S60) on the person responsible for the noise requiring specific controls to minimise noise and vibration. The notice may specify types of plant and machinery, hours of work, boundary noise levels, etc. Section 61 provides for OCU to apply to the Local Authority for consent before works commence. This protects the contractor from action by the local authority under S60, but not from individual residents' complaints.
Clean Air Act 1993	The Act prohibits, subject to certain conditions, the emission of dark and black smoke from chimneys serving boilers and other industrial plant. Limits also apply to dust, grit, sulphur and car fume emissions. All new furnaces shall be so far as practicable, smokeless. The Local Authority is empowered to undertake an examination of a plant likely to be causing air pollution, taking into account the possible relevance of statutory exemptions.

Environmental Legislation	Summary of Relevance to the Site
Noise and Statutory Nuisance Act 1993	This Act amends the Environmental Protection Act (EPA) 1990 to make noise emitted from vehicles, machinery or equipment in the street a statutory nuisance. It gives the Local Authority powers to serve an abatement notice on the person responsible.
Noise Act 1996	Introduces a new procedure for Local Authorities to seize noisy equipment, in relation to statutory nuisance offences under the EPA 1990.
Control of Noise at Work Regulations 2005	Requires that all employers must conduct an assessment of the exposure and therefore of the risk of their employees to noise where they have reason to believe that any of the specified action levels for various noise exposures is or could be exceeded.
Construction Plant and Equipment (Harmonisation of Noise Emission Standards) Regulations 1985 (as amended 1995)	Provides for examination and certification of construction plant that comply with noise emission standards. The Regulations require that plant is certified by approved bodies. Various types of plant manufactured after the dates of the regulations are to meet noise emission standards and are certified as such.
Environmental Protection Act (EPA) 1990: Part 3 – Statutory Nuisance (section 80)	When a complaint of statutory nuisance is made to the Local Authority by a person living in its area, the Authority has to take steps to investigate the nuisance. Statutory nuisances include any premises maintained in such a state to be prejudicial to health or a nuisance; any dust, steam, smell or other effluvia arising on industrial, trade or business premises and being prejudicial to health or a nuisance. Noise emitted from premises so as to be prejudicial to health or a nuisance.
BS 5228-1:2009 Code of practice for noise and vibration control on construction and open sites. Noise	Recommends basic methods to control noise on construction and open sites with significant noise levels arising from work activities/operations.
BS 5228-2:2009 Code of practice for noise and vibration control on construction and open sites. Vibration	Recommends basic methods to control vibration on construction and open sites with significant vibration levels arising from work activities/operations.
Health and Safety at Work Act 1974	The primary piece of legislation covering occupational health and safety in Great Britain. It's sometimes referred to as HSWA, the HSW Act, the 1974 Act or HASAWA. It sets out the general duties which: • employers have towards employees and members of the public; • employees have to themselves and to each other; and • certain self-employed have towards themselves and others.
Air Quality Monitoring in the Vicinity of Demolition and Construction Sites (IAQM, 2012)	This document provides updated guidance on air quality monitoring in the vicinity of demolition and construction sites.
Vehicles	
Road Vehicles (Construction and Use) Regulations 1986 (as amended 2015)	It is an offence to use a vehicle if it is emitting 'smoke, visible vapour, grit, sparks, cinders or oily substances' in such a way as is likely to cause 'damage to any property or injury to any person'. It is an offence to use a vehicle in such a way as to cause excessive noise.

Environmental Legislation	Summary of Relevance to the Site
Road Traffic (Vehicle Emissions) (Fixed Penalty) Regulations 1997 (as amended 2002 and 2003)	These Regulations give powers to Local Authorities to enforce vehicle emission standards at the roadside as part of the implementation of the national air quality strategy. Under the Regulations, Local Authorities may issue fixed penalty notices to users of vehicles that do not comply with emissions standards set in the Road Vehicles (Construction and Use) Regulations 1986 as amended. Appropriately trained Local Authority officers can test emissions from vehicles with the help of a uniformed police officer to stop the vehicle. The Local Authority officer may also issue a fixed penalty notice to drivers who leave their engines running unnecessarily.
EU Directive 97/68/EC Requirements relating to gaseous and particulate pollutant emission limits and type-approval for internal combustion engines for non-road mobile machinery	This Directive makes provision on emission standards and type-approval procedures for engines to be installed in non-road mobile machinery.
EU Directive 98/69/EC Relating to measures to be taken against air pollution by emissions from motor vehicles	Amends the Annexes to Directive 70/220/EEC relating to measures to be taken against air pollution by emissions from motor vehicles.
Biodiversity	
Wildlife and Countryside Act 1981	The Act deals with the protection of certain animals, birds and species of flora, as well as providing power to protect habitats, and sites of special scientific interest. It lists the protected animals and plants. Any activity that could result in the killing or injuring of animals or plants could breach the Act. When developing any site, care and caution must be taken to ensure habitats are not damaged. **Invasive non-native species** It is an offence to release or allow to escape into the wild, any; • animal; • plants or otherwise cause to grow in the wild any plant. Details are set out in Schedule 9, this includes species of crayfish, Japanese knotweed and Himalayan Balsam. When these species are present you must take reasonable steps to control them to stop them spreading.
Conservation of Habitats and Species Regulations SI 2017/1012	These Regulations provide for the: • designation and protection of European sites; • protection of European protected species; • adaptation of planning and other controls to protect European sites. They provide for the safeguarding of protected European animals and plants in Great Britain. In particular, they make it an offence, subject to exceptions, to: • capture, injure or kill any wild animal of a European protected species; • deliberately disturb wild animals of any such species; • deliberately take or destroy the eggs of such an animal; or

Environmental Legislation	Summary of Relevance to the Site
	• damage or destroy a breeding site or resting place of such an animal.
Conservation (Natural Habitats etc.) Regulations SI 1994/2716	The Regulations designate sites as special areas of conservation and introduce management agreements which maintain these sites and remove the threat of their degradation and destruction, by restricting potentially damaging operations. They also provide powers to make bylaws which prevent the entry or movement into a site and the killing or taking of wildlife protected by European law and the disturbance of their habitats, breading grounds and surrounding vegetation. Similar provisions are also issued for plants. There are exemptions to certain regulations, which are fully outlined.
Town and Country Planning (Tree Preservation) (England) Regulations SI 2012/605	Tree preservation orders can be created under the Town and Country Planning Act 1990. The Regulations contain, amongst other things, the procedure connected to making appeals against such orders as well as the procedure connected to applying for consent to cut down, top, lop or uproot trees protected by a tree preservation order. Applications for consent must be on a form issued by the Secretary of State and must include the required details and documents.
National Parks and Access to the Countryside Act 1949	The Act makes provision for: • national parks; • the maintenance of nature reserves; • the recording, creation, maintenance and improvement of public paths; and • access to open country.
Protection of Badgers Act 1992	The Act establishes provisions relating to badgers, which make it an offence to intentionally kill, injure, ill-treat or take them, unless under strict conditions.
Wild Mammals (Protection) Act 1996	This Act makes it an offence to mutilate, kick, beat, nail (or otherwise impale), stab, burn, stone, crush, drown, drag or asphyxiate any wild mammal with intent to inflict unnecessary suffering.
Countryside and Rights of Way Act 2000	The Act provides additional levels of protection for wildlife. Schedule 12 of the Act amends the Wildlife and Countryside Act 1981, strengthening the legal protection for threatened species. The provisions make certain offences 'arrestable', create a new offence of 'reckless' disturbance, confer greater powers to police and wildlife inspectors for entering premises and obtaining wildlife tissue samples for DNA analysis, and enable heavier penalties on conviction of wildlife offences.

ITPENERGISED

ITPEnergised is a leading international consultancy delivering expert energy, environmental, engineering, technical advisory and asset management services; facilitating the transition to net zero.

Visit the ITPEnergised group offices in:

Bristol, London, Edinburgh, Glasgow, Buenos Aires, Madrid, Delhi, Beijing, Canberra, Auckland

Sectors:

Onshore Renewables & Storage | Offshore Wind & Marine Renewables | Oil & Gas Transition
Property & Urban Regeneration | Corporate, Industrial & Manufacturing