



# Kirkby Battery Storage Facility

## Construction Environment Management Plan

Prepared for



Pelagic Energy

January 2026  
2569-02-CEMP\_V3



# Document Control

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## **APPENDICES**

**Appendix A – Indicative Construction Layout Plan**

**Appendix B – Water Vole RAMS**



## 1.0 INTRODUCTION AND PROJECT DESCRIPTION

### 1.1 Introduction

- 1.1.1 Axis has been commissioned by Pelagic Energy to prepare this Construction Environment Management Plan ('CEMP') for the consented Kirkby Battery Energy Storage System ('BESS') scheme. The Kirkby BESS scheme is located on land at Coopers Lane, Knowsley Industrial Park, Kirkby, Knowsley, L33 7TT ('the site').

### 1.2 Project Description

- 1.2.1 Planning permission was granted on 30<sup>th</sup> April 2024 for the Kirkby BESS (planning application reference 23/02008/FUL).
- 1.2.2 The Kirkby BESS will be capable of importing (storing) electricity from the grid at times of excess supply in the system and exporting it back to the grid at times of high demand/reduced generation capacity. It will provide grid balancing services to National Grid and help support efforts to reach net zero.

### 1.3 CEMP Planning Condition

- 1.3.1 Planning condition 7 of the Kirkby BESS permission requires a CEMP for the scheme to be submitted and approved by Knowsley Council:

#### Condition 7

*Prior to commencement of development a Construction Environment Management Plan, including Pollution Risk Assessment and Method Statements, shall be submitted to, and agreed in writing by the Local Planning Authority that details the means of mitigation of construction effects. This shall include but not be limited to the following:*

- a) Layout of the site compound including identification of areas for the storage of plant and materials, loading/unloading and turning areas for delivery vehicles [for each phase as necessary];*
- b) Management of deliveries including prevention of waiting/layover of construction related traffic on the highway, measures for the control of traffic to and from the site and consideration of any temporary traffic management arrangements which may be necessary during periods of*

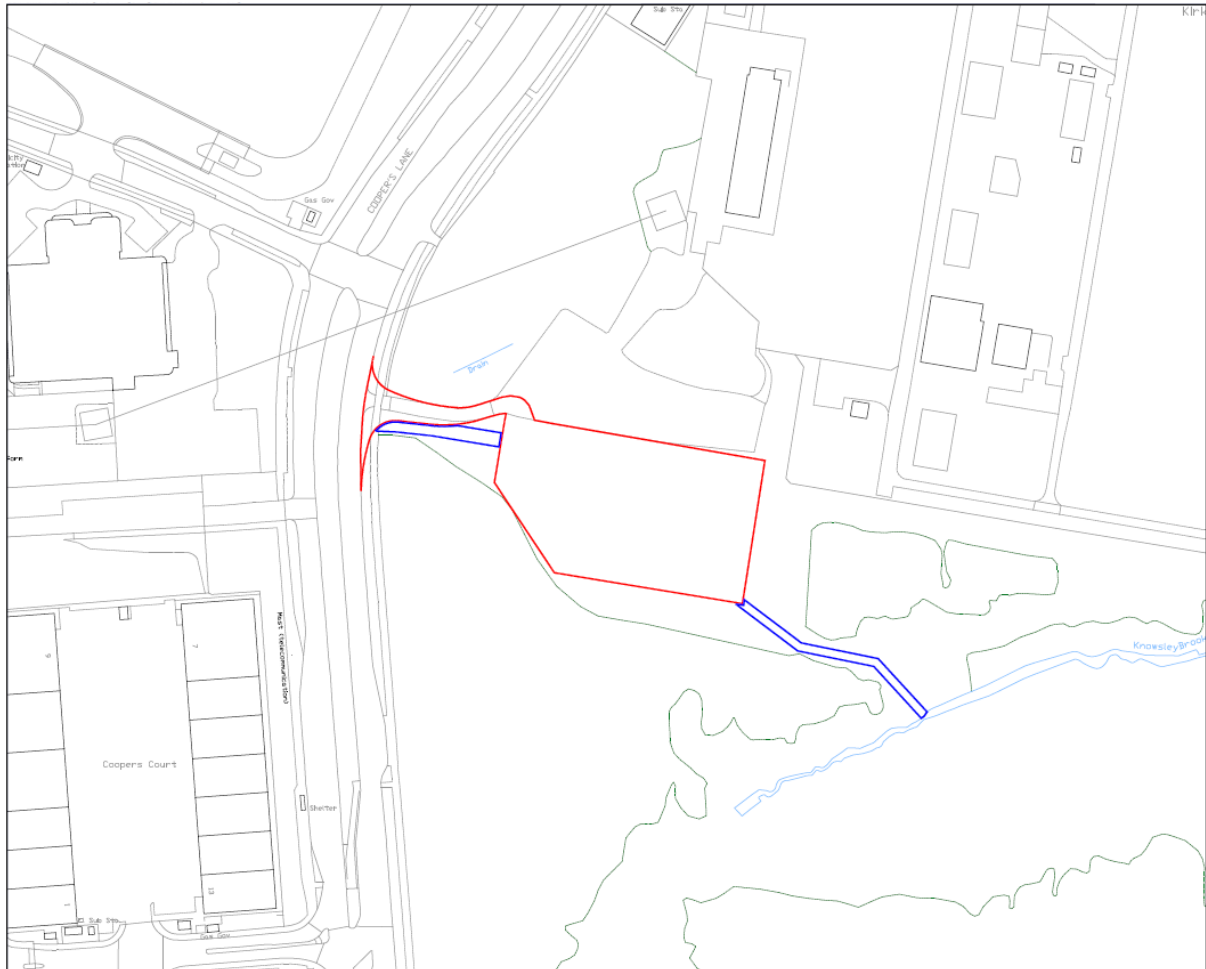
*construction. Note reversing on the highway is not permitted without a trained Banksman (RoSPA or equivalent);*

- c) Construction staff parking arrangements.*
- d) Control of transfer of mud out of the site - details of wheel washing facilities including location and type.*
- e) Methods for dust control and suppression.*
- f) A programme of works including phasing, if applicable.*
- g) Details of proposed temporary highway modifications to facilitate access into the site by construction vehicles, including adequate provision for addressing any abnormal wear and tear to the highway, if applicable.*
- h) Methods for the mitigation of noise and vibration from building works, including any piling works, and also from the operation of any temporary power generation or pumping plant which will operate overnight.*
- i) Protection of Surface and groundwater resources.*
- j) Best Practice on the use and storage of fuels, oils and chemicals, to remove the risk of causing pollution during construction; and*
- k) A scheme for recycling/disposing of waste resulting from demolition and construction works.*

*All site works shall then be carried out in accordance with the approved Plan unless otherwise agreed in writing beforehand with the Local Planning Authority.*

## **1.4 Existing Site Location**

- 1.4.1 The site lies to the east of Coopers Lane, Kirkby and approximately 1.5km north of Knowsley. The existing site is identified on Figure 1 below.



**Figure 1: Existing Site Location**

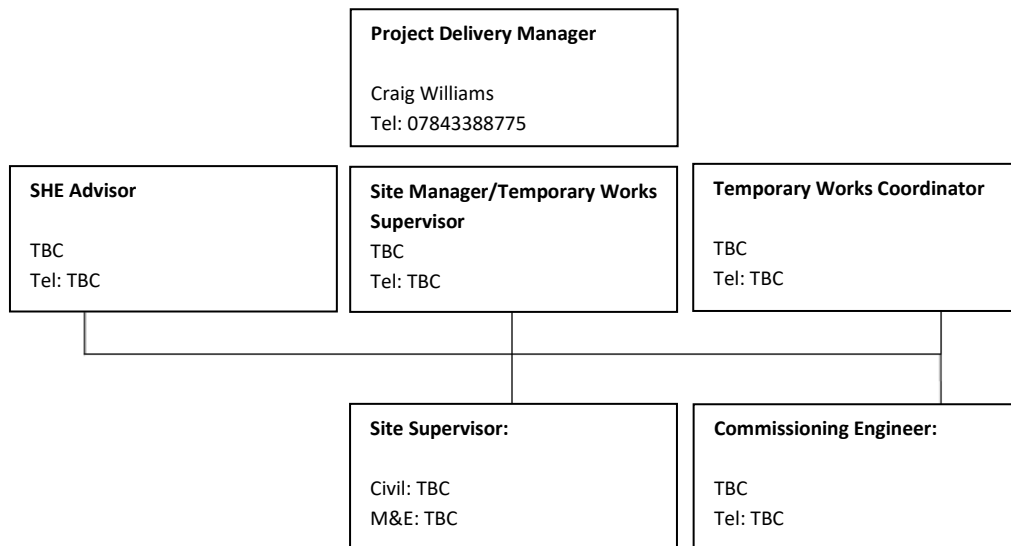


(Google Maps, 2024)

## 2.0 SITE MANAGEMENT STRUCTURE

### 2.1 PMO Structure

2.1.1 The Construction Contractor (which for the purpose of this CEMP has been assumed to be GTDS / Constantine) shall operate a Project Management Organisational structure on the Kirkby BESS project as follows:



#### ***Site Manager & Principal Contractor Representative – TBC***

2.1.2 The Site Manager shall be responsible for the following health and safety matters on site but may delegate any or all of these to the SHE Advisor as appropriate.

- Maintain, monitor, and implement the Construction Phase Health, Safety and Environmental Plan, including its development to include emerging issues, in liaison with the Project Manager and SHESQ Manager.
- Ensure the access gate is locked at all times and no unauthorised access to site is permitted and maintain a site Attendance log.
- Ensure all site operatives and visitors receive a site induction briefing.
- Develop the emergency plan. Display the plan and provide the contractor with a copy. Implement the plan, test and review periodically and update as the need arises. Record the test results.
- Advise the SHESQ Manager and the Project Manager of any incident or near miss.
- The contractor verbal reporting process MUST be followed initially.

- Report accidents, incidents and near misses to the reporting system and assist with any investigations into causes and provide reports to contractor with recommendations to prevent any recurrence such that incidents can be closed out.
- Elevate any safety issues to the Project and SHESQ Management functions.
- Provide information to the Engineering Function to enable the project drawings to be updated.
- Ensure the F10 is prominently displayed in the site office.
- Chair and minute weekly co-ordination and HS&E meetings.
- Co-ordinate the contractor's activities on site.
- Ensure compliance with the QHS&E management system.
- Ensure compliance with client Safety Rules as appropriate.
- Liaise with others as appropriate.
- Establish and maintain a register of Risk Assessments and Method Statements.
- Rigorously review Risk Assessments and Method Statements to ensure safe systems of work are both appropriate and effective and hence allow activities to be undertaken safely. Reference should be made to product specialists for technical input.
- Ensure compliance with Method Statements and communicate the need for amendment as the need arises.
- Receive, review and record reports and inspections of lifting equipment and accessories, plant and equipment, scaffolding, excavation and contractors training qualifications and competency details.
- Receive, review and record waste transfer documentation and issue quarterly waste log to the client.
- Develop the Site Hazard Plan
- Develop an Environmental Emergency Response Plan. Implement the plan, monitor and review periodically and amend as the need arises.
- Ensure adequate facilities are on site for the containment of substances hazardous to the environment (e.g., spill kits, drip trays, integral bunded fuel storage facilities etc.).
- Develop a Traffic Management Plan. Implement the plan, monitor and review periodically and amend as the need arises.
- Carry out daily HS&E tours and or safety walks.

- Carry out and formally record weekly site HS&E walk.

### ***Project Management – TBC***

#### **2.1.3 Responsible for ensuring that:**

- Up-to-date information is made available to the Site Manager.
- Regular and effective communication is maintained with the Site Manager.
- Change control procedures are carried out and that changes are communicated to all interested parties.
- Appointed contractors including designers have been selected with due regard to Health, Safety and Environmental considerations and that they are issued with this Health, Safety and Environmental Plan as well as other related HS&E documentation.
- Information is provided for inclusion into the Health and Safety File.
- Ensure that the flow of health and safety information between client, designers and contractors is effectively managed.
- Co-ordinate design works, planning and other preparation for construction where relevant to health and safety.

### ***Lead Commissioning Engineer –TBC***

#### **2.1.4 Responsible for ensuring that: -**

- Site commissioning activities of all the commissioning engineers is coordinated.
- Commissioning is carried out safely and in line with Risk Assessments and Method Statements.
- Commissioning is undertaken in accordance with the GTDS Permit for Low Voltage work or client safety rules as appropriate.

### ***Temporary Works Coordinator – TBC***

- Review the Schedule of Temporary Works Designs on a regular basis (Monthly or as required) and revise and issue as necessary to the Project Design Engineer (PDE) and other involved personnel and parties.

- Forward all design briefs to the PDE ensuring completeness of brief; and approval.
- Ensure temporary works designs are approved prior to the commencement of the works.
- Ensure design information is sufficient and clear enough for construction to proceed.

#### ***Temporary Works Supervisors – TBC***

- Ensure temporary works are installed in accordance with the design requirements.
- Ensure temporary works have been inspected and deemed satisfactory to load prior to loading.
- Ensure temporary works are dismantled in accordance with the design requirements.

#### ***Supervisor (s) – TBC***

##### **2.1.5 Responsible for ensuring that:**

- All working party members have been briefed on the contents of the Risk Assessment and Method Statement and have signed to acknowledge their understanding of the safe system of work.
- Work is undertaken in compliance with the documented safe system of work.
- The task is stopped when any deviation from the safe system of work is observed and immediately to the Site Manager.
- The task is stopped when circumstances do not allow compliance with the documented safe system of work and immediately to the GTDS Site Manager.
- An adequate number of operatives are available to perform the task safely.

## **3.0 DESCRIPTION OF WORKS**

### **3.1 Main Work Elements**

3.1.1 Detailed works programmes and works descriptions have not yet been set out for the scheme and it is anticipated that these will follow once the Construction Contractor has been mobilised to commence the works. Furthermore, at time of writing, the scheme is undergoing the detailed design phase and amendments are anticipated to be made to the site layout. Accordingly, details of works will be influenced by these design changes. The CEMP shall be updated to incorporate these details as and when they become known.

3.1.2 The site works will consist of design and construction work associated with the BESS site. The key elements of this will include:

- Construction of civil structures/bases and systems to accommodate the battery subsystems;
- Cable troughs for all the main 33kV and 415v power cables;
- Offloading and positioning the battery modules;
- Offloading and positioning the power skids (Power Conversion Systems);
- Offloading and positioning the switchgear building and control building;
- HV and LV cabling;
- Construction of the access road; and
- Fence installation.

### **3.2 Storage of Plant and Materials**

3.2.1 The Site Manager shall allocate each contractor an adequate area for storage of material and equipment (locations indicatively shown on the Indicative Construction Layout Plan at Appendix A). These storage areas shall be kept safe, clean and tidy with all material, plant, equipment and tools etc. being securely stored.

3.2.2 Advance notification of materials and equipment to be delivered to site shall be provided to the Site Manager 2 weeks prior to the intended arrival date. This notification shall include details of the company, the date and time of the delivery, the type and size of the vehicle, and an itemised list of material or equipment.

- 3.2.3 Gas bottles not in use must be stored in a lockable cage and sited in a safe area. Flammable materials shall be store with due regard to fire risks. Highly flammable liquids and liquefied petroleum gases shall not be allowed into the substation/site without the express permission of the Site Manager, who, where such permission is given, will specify the storage requirements and fire precautions to be enforced.
- 3.2.4 Materials must not be stored within 2 metres from the perimeter fence.
- 3.2.5 Hazardous materials or substances shall be subject to strict controls regarding handling, storage, transport and use. The Site Manager shall maintain an up-to-date COSHH register, to record a site inventory of hazardous materials held on site. Appropriate COSHH cabinets or storerooms shall be used to ensure safe storage of hazardous materials. Handling and use of hazardous substances shall be in compliance with contractors COSHH assessments. A complete portfolio of safety data sheets shall be held, in respect of each hazardous material or substance held on site by the Site Manager.
- 3.2.6 Flammable storage / pressurised gas bottle containers will be provided on site.
- 3.2.7 No bonfires are permitted on site during construction works.

## 4.0 PROGRAMME OF WORKS

### 4.1 Construction Phasing

- 4.1.1 The construction program for the Kirkby BESS is anticipated to take approximately 30 weeks. As discussed previously, a detailed program of works is to be set out within further versions / updates to this CEMP. The construction program will be carried out over three broad phases:

**Phase 1: Enabling Works.** Initial site clearance including laying of permeable geotechnical membrane, such as Terram. The permeable hard surfacing and access track would then be built up on top of this membrane using hardcore aggregates;

**Phase 2: Main Construction Phase.** Laying of support foundations and installation of the containers, which are pre-fabricated off-site and delivered as complete units; installation of the energy related components (e.g. transformers, inverters, switchgear etc), which would also arrive at the Site pre-fabricated; and

**Phase 3: Finishing Phase.** Installation of fencing, completion of all electrical engineering connections and remedial landscaping works.

- 4.1.2 The table below sets out the programme details (dates to be inserted when known in updated versions of the CEMP).

| Milestone                                                  | Target Date |
|------------------------------------------------------------|-------------|
| First Access to Clients BESS Site                          | Tbc         |
| BESS Design Approval                                       | Tbc         |
| BESS site ready to receive delivery of BESS equipment      | Tbc         |
| User Works Completed to Facilitate Commissioning Programme | Tbc         |
| Commencement of Commissioning Programme                    | Tbc         |
| Indicated Energisation Outage                              | Tbc         |
| Completion of Commissioning & Energisation                 | Tbc         |
| Demobilisation                                             | Tbc         |

## **4.2 Construction Site Layout**

4.2.1 An Indicative Construction Layout Plan is provided at Appendix A to this CEMP. The plan sets out the likely temporary construction areas for the development. These will sit within the approved application boundary. Accordingly, these areas and the associated activities can be carried out under permitted development rights. The areas as shown on the plan include for:

- Site contractor parking;
- Construction material laydown and storage (also where loading and unloading of materials will take place);
- Site office area and welfare facilities; and
- Wheel washing facilities.

4.2.2 The CEMP is a working document and these broadly drawn construction areas may be required to alter to suit the needs of construction teams (once mobilised).

4.2.3 The temporary construction areas shall be removed following completion of the construction phase and either returned to their existing condition or incorporated into the approved planning drawing layouts.

## **4.3 Construction Site Access Arrangements**

4.3.1 The site shall be accessed during construction works via the existing entrance to the site off Coopers Lane (A5208).

4.3.2 The site entrance will need to be widened in order to accommodate the HGVs accessing the site and this would be on a permanent rather than temporary basis.

## **4.4 Construction Traffic Route and Signage**

4.4.1 Appropriate signage shall be erected to clearly direct construction drivers to the site entrance. The signs will also make other road users aware of the construction traffic site entrance. All signs associated with the site shall be kept clean, legible, and free from overgrown vegetation.

- 4.4.2 The entrance to the site taken from the A5208 will be marked by a 'Site Entrance' sign as per the below image, or similar.



- 4.4.3 It is not anticipated that further temporary signage or lights will need to be erected, other than site entry signage.
- 4.4.4 All construction vehicle drivers shall be made aware of the proposed route they are required to take to the site. It is anticipated that all HGVs and the majority of other construction vehicle movements shall gain access to the site via the A580 to the south.
- 4.4.5 Figure 2 below illustrates the main access route to and from the site for construction traffic.



Figure 2: Main Site Access Route for Construction Traffic

## **4.5 Construction Hours**

4.5.1 Construction operations shall generally be limited to the hours of:

- 08:00 - 18:00 Monday to Friday
- 08:00 - 13:00 on Saturdays
- No works to be carried out on Sundays or Bank Holidays

4.5.2 Any construction activities required outside of these hours will require prior approval from Knowsley Council.

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## **5.0 ENVIRONMENTAL MANAGEMENT**

### **5.1 Overview**

- 5.1.1 Good practice measures shall be followed during the construction works to ensure that impacts on the environment are minimised. Specific environmental management measures are set out in the following sections.

### **5.2 Protection of Water Resources**

- 5.2.1 Measures need to be put in place to protect the water environment during the construction period from pollution and other adverse impacts, including changes to flow volume, water levels and quality.

- 5.2.2 The water environment relative to the Site comprises of:

- Knowsley Brook; and
- Surface and Groundwaters.

- 5.2.3 Rainfall and associated surface water run-off during construction works can mobilise and transport pollutants such as sediments, oils, chemicals and other building materials into the water environment, causing harm to plants and animals. Pollution from sediment and other pollutants can come from a number of sources on construction site, these include:

- Direct disturbance of the river bank
- Run-off from exposed ground and material stockpiles
- Run-off from roads
- Wheel washing areas

- 5.2.4 Due to the relatively short construction period (circa 30 weeks) and the low intensity of construction activities anticipated on the Site (due to most components being fabricated offsite), the opportunity for pollutants to enter the surrounding environment will be limited.

- 5.2.5 Nevertheless, good practice guidance measures are to be taken during the construction phase to ensure that potential pollutant pathways are avoided and that

resultant negative impacts do not occur in the local water environment. Further measures to achieve this will be:

- Wheel washing facilities will be located away from water courses to avoid silts and other materials entering the water environment.
- Visual inspections of potential pollutant pathways into the water environment will be carried out by the site Management Team over the course of the construction period.
- Washing out concrete mixers / plant etc will be undertaken using a controlled washout system which can remove suspended solids and neutralise the pH. This will provide treatment of the water to ensure that the pH has been corrected and all fine particles are removed.
- Stockpiled material will be stored away from drainage systems and watercourses to avoid run-off into such locations.
- Construction vehicles will not be parked nearby to watercourses to avoid petrol/oil pollution run off.
- Any and all hazardous substances will be stored within impermeable, bunded areas/containers, to remove risk of migration to groundwater or to the nearby watercourse/canal.

5.2.6 These proposed measures will assist in avoiding or minimising the potential for contaminants and suspended solids to migrate to surface and groundwater and protect water quality of the nearby river and the ecosystem which it supports.

### **5.3 Noise and Vibration Levels**

- 5.3.1 Construction related noise shall be reduced wherever possible through choice of machinery, ensuring machinery is maintained correctly and ensuring it is switched off when not in use.
- 5.3.2 Construction deliveries will be kept to within normal working hours (as set out under section 4.5).
- 5.3.3 Vehicles used regularly on site, for example forklift trucks / JCB's / MEWPs, must have white noise / broadband reversing alarms fitted.

- 5.3.4 In all other cases, good practice measures shall be employed to minimise noise during working hours. This includes the following:
- i) not slamming vehicle doors;
  - ii) not shouting during early hours of the morning;
  - iii) where possible, situating amenity areas away from receptor directions; and
  - iv) care taken when loading/unloading materials and plant and minimise drop heights.
- 5.3.5 Operatives exposed to noise will wear suitable hearing protection in line with the Control of Noise Regulations.
- 5.3.6 The construction site shall operate under restricted working hours to mitigate noise in evenings / night and at weekends, as set out in Section 4.5 of the CMP.
- 5.3.7 It is not anticipated that any engineering works associated with the construction will cause significant vibrations offsite. As such, monitoring will not be required.
- 5.3.8 No piling works are anticipated to take place during the construction period.
- 5.3.9 Although not anticipated to be required, no overnight generators shall be used overnight during the construction works.

## **5.4 Dust Nuisance**

- 5.4.1 The generation of dust outside of the site boundary is a potential source of statutory nuisance and can lead to complaints being received. Dust can also have an impact on human health and local ecology.
- 5.4.2 Good environmental practices shall be deployed to control dust emissions and mitigate against any nuisance problems arising. This includes:
- Dampening access roads and areas within the site during warm / dry weather to reduce dust and particulates becoming air-bound. A bowser stored on site and transported to where needed via site plant / a HGV would likely be used to spray necessary surfaces.
  - Wheel washing facilities onsite would be utilised to minimise the transfer of soil onto the local road network. The anticipated wheel washing facilities would

consist of either a drive-over ramp system or jet spray, depending on the site ground conditions (i.e. if mud is wet it can usually be jet sprayed off, but if it 'clings' to wheels, a ramp system may be required). Hence, the chosen method used would be dependant on the site conditions and the most efficient method would be used. The wheel washing facilities would be located as shown on the Indicative Construction Layout Plan (see Appendix A).

- Use of sheeting to cover soil mounds.
- Cutting or grinding of materials on site, with the potential to cause dust, shall be done whilst using an effective water suppression system.

## **5.5 Lighting**

5.5.1 Construction works will typically be undertaken in daylight hours and therefore would not routinely require artificial illumination; however lighting may be required for certain tasks or during winter months. There is the potential for poorly aimed or controlled lighting to cause environmental pollution.

5.5.2 All lighting on site during the construction period will be kept to a minimum (whilst ensuring safety or workers is achieved / security of site). Lighting installed on site during construction will be downward facing to avoid excess spill into the surrounding environment.

5.5.3 The lighting design shall incorporate the following measures to minimise impacts on bats and other nocturnal wildlife:

- Light spill beyond the site boundary to be avoided where reasonably practicable, including through the use of cowls/ hoods where appropriate.
- All lighting to be directed away from boundary habitats, mature trees and woodland areas.
- Where used lighting should be task specific (i.e., general site lighting should be avoided where reasonably practicable).

## **5.6 Energy Usage**

5.6.1 Best practice measures shall be followed to reduce energy usage on site (e.g. turning off lights and site equipment when not in use). Car sharing will be encouraged where the potential to do so.

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## 5.7 Sustainability

- 5.7.1 Sustainability is a core metric which Pelagic Energy works on with their contractors. All practical measures to reduce road mileage, re-use materials, recycle waste, and operate using sustainable practices will be employed during the construction works. In addition, the following measures shall be taken.

### *Locally Sourced Resources*

- 5.7.2 Wherever possible, sustainably sourced construction materials and practices shall be utilised. This includes sourcing materials and work forces locally (where practical to do so).

### *Freight Consolidation*

- 5.7.3 Where practical to do so, site delivery vehicles will also serve to remove waste / recyclable products from the site (e.g. utilising empty wagons that have delivered stone to take away excavated soils).

## 5.8 Pollution Prevention Plan

- 5.8.1 The measures set out below address the potential pollutant pathways during construction works. Related measures are described within section 5.9 regarding the site Waste Management Plan.

### *Air Emissions*

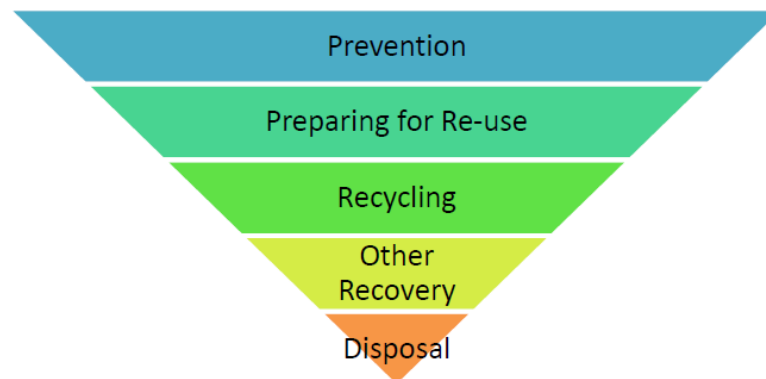
- 5.8.2 Polluting emissions from plant on site (SO<sub>2</sub>, NO<sub>x</sub>) are considered to be in insufficient quantities to have a measurable adverse air quality impact. Plant will be inspected regularly and maintained in line with the manufacturers' instructions. Should any exhaust emissions be deemed smoky, the machine will be removed from service; the machine will only be reintroduced into service following a satisfactory repair.

### *Spillages*

- 5.8.3 Any chemical / fuel spillages on site shall be cleared using appropriate spill kits to prevent pollutants entering the local environment. Appropriate bunding around stored chemicals / fuels shall be utilised where necessary.

## 5.9 Waste Management Plan

- 5.9.1 A Waste Management Plan will be adopted for the construction works. The key controls and processes are set out below. The Waste Management Plan will be used to manage materials efficiently and reduce the amount of waste disposed of to landfill by identifying opportunities to reduce, re-use and recycle. Waste management will follow the hierarchy shown below:



- 5.9.2 All waste produced at the Site will be managed in accordance with the company's waste handling procedures. Where appropriate, waste will be segregated in suitable and clearly identified containers / skips. Where possible, a waste collection area shall be established with due consideration given to access / egress of collection vehicles, possible contamination of adjacent watercourses etc.
- 5.9.3 All waste with the potential to leach (e.g. general, waste oil, waste water) shall be held on a nonpermeable base, and at least 10m away from surface drains. All chemical storage will follow the 10m rule from surface water drains.
- 5.9.4 Transfer notes will be stored on site along with any permits.
- 5.9.5 Records of Waste Carriers Registration Certificate, Waste Disposal Site licenses and limitations on type and quantities of waste shall be available from Head Office on request. A report will be run each month via Head Office to record all site skip empties, if any other waste is removed from site, the site manager / supervisor shall send a copy of all paperwork to the Head office for record purposes.
- 5.9.6 A contractor such as GTDS would fully comply with the requirements of the National Grid SCIP system, and input all waste removals, aggregate deliveries, re-used

materials, energy and water usage, deliveries of diesel and fuels. All appropriate entries are supported by a waste transfer note or delivery note.

5.9.7 In September 2016 products containing Hexabromocyclododecane (HBCD). Regulation (EU) 2016/460 came into force and all products containing HBC should not be landfilled or recycled. This applies to material containing >1000mg/kg. HBCD can be found in a range of Extruded Polystyrene (EPS) and Expanded Polystyrene (XPS) products including insulation boards and blocks. Waste should be destroyed in accordance with the Persistent Organic Pollutants Regulations 2007.

5.9.8 Further information on the disposal requirement can be found at <https://www.gov.uk/guidance/disposal-of-waste-containing-persistent-organic-pollutants-pops>

#### *Waste Movement and Monitoring*

5.9.9 All waste removed from site will be covered by a Waste Transfer Note or Hazardous waste Consignment Note containing all the legally required information, including the correct waste code. The waste Transfer Notes for general waste will be kept for three years plus the current year.

#### *Waste Carriers*

5.9.10 All waste will be transported using registered waste carriers and will be disposed of at licensed waste disposal sites or in accordance with a valid Environmental Permit (formally Waste Exemption). All Waste Carrier Licences and all Waste Management Licences / Permits are valid and appropriate, shall be available within the site environmental file.

#### *Waste Disposal Sites*

5.9.11 Only Waste Disposal Sites and Waste Transfer Stations that hold a valid Waste Management Licence or Permit (formerly Exemption) will be used.

#### *Waste Reporting*

5.9.12 The Waste Coordinator for the Site will summarise the waste report and review every three months against performance, waste forecast and to identify opportunities for improvement.

### *Waste Transfer Training*

- 5.9.13 The contractor's Environmental Advisor will conduct waste training to all relevant staff as required. This will be dependent upon the individual's job function. Examples of waste related training that may be provided include:
- 5.9.14 Copies of the Toolbox Talk Register forms will be held at the site office and to the contractor's Training Department.
- 5.9.15 In addition, as legislation changes, specific Environmental Bulletins will be produced and issued to relevant staff.
- 5.9.16 A copy of the Site Waste Management Plan comprising of a waste forecast and the quarterly Waste Returns Report will be retained for three years after the completion of the works.

## **5.10 Water Vole RAMS**

- 5.10.1 The BESS development includes A drainage route which will discharge surface waters from the site to Knowsley Brook. Merseyside Environmental Advisory Service (MEAS) has noted that sections of Knowsley Brooke are designated a local wildlife site for water vole (approx. 1.15km south-west of the Site). Accordingly, water bowl reasonable avoidance measures have been prescribed within appendix B of this CEMP. The measures include a pre-construction check of Knowsley Brook by an experienced Ecologist.

## **6.0 COMPLAINTS PROCEDURE**

- 6.1.1 It is important that members of the public or interested parties are able to make valid complaints about the construction works. Such complaints can provide a valuable feedback mechanism which could help reduce potential impacts on sensitive features and also allow the construction techniques to be refined and improved.
- 6.1.2 Contact details shall be placed at the entrance to the construction site to allow complainants to contact the site management team.
- 6.1.3 Any other complaints made by members of the public regarding construction activities will be reported in the first instance to the site management team. Complaints shall be reviewed and documented appropriately within a logbook.
- 6.1.4 The site manager shall instruct corrective / mitigation actions if required.

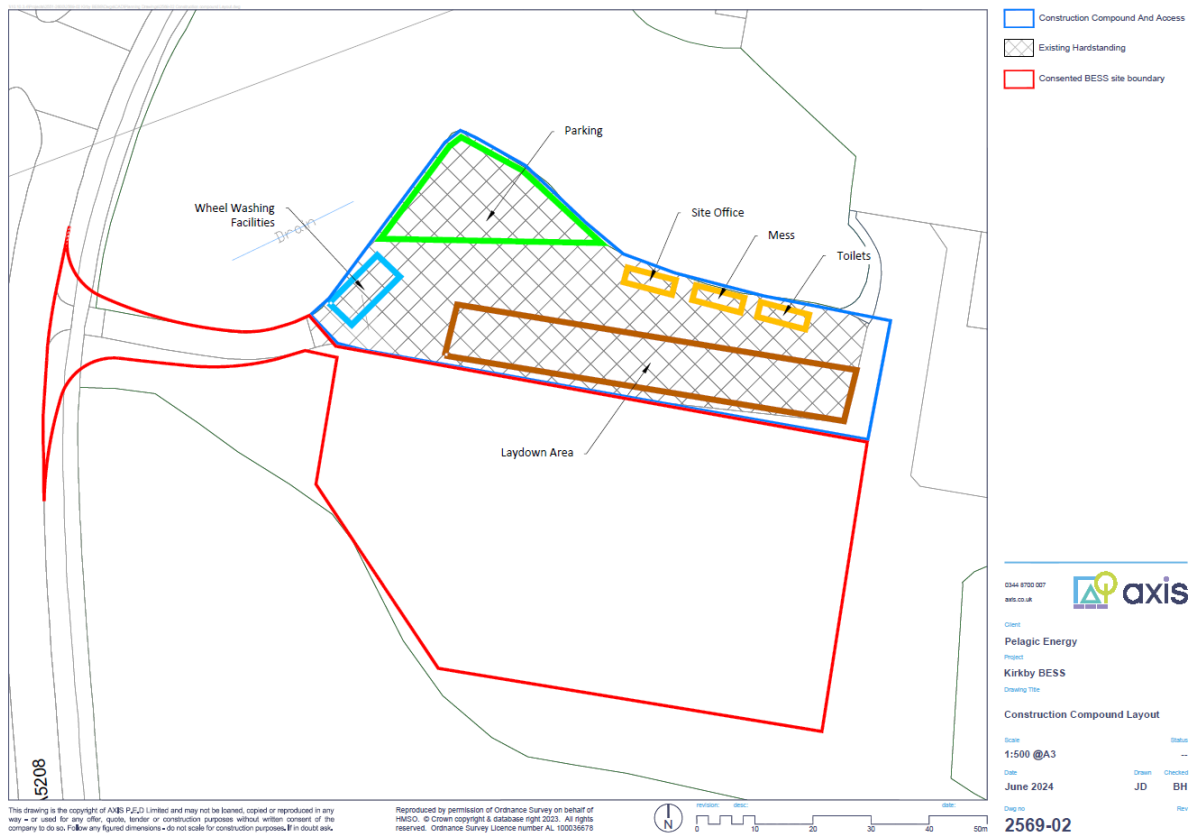
Site manager: Craig Williams (Constantine Energy Storage)

Contact: 07843388775 / [craig@constantineenergystorage.com](mailto:craig@constantineenergystorage.com)

## **7.0 NEIGHBOURHOOD LETTER DROP**

- 7.1.1 It is important that local communities are kept informed about construction works which may affect them, to enable a level of transparency and allow any issues arising from such works to be dealt with appropriately.
- 7.1.2 The contractor shall provide a letter drop to properties and businesses near to the site informing them of key work construction stages and potential disruptive works involved, the anticipated start and finish date, as well as providing a means of contact to site management teams, should complaints be raised.

# Appendix A – Indicative Construction Layout Plan



## Appendix B – Water Vole RAMS

## Water Vole Reasonable Avoidance Measures



| Document Control |            |                                          |                       |                           |
|------------------|------------|------------------------------------------|-----------------------|---------------------------|
| Project Name:    |            | Kirkby BESS                              |                       |                           |
| Project Number:  |            | AxisL-043-003339                         |                       |                           |
| Report Title     |            | Water Vole Reasonable Avoidance Measures |                       |                           |
|                  |            |                                          |                       |                           |
| Issue            | Date       | Notes                                    | Prepared              | Reviewed                  |
| V1               | 20/01/2026 | Draft for Client Comment                 | J. Stevens BSc (Hons) | A. Littlechild BSc (Hons) |
| V2               | 21/01/2026 | First issue                              | J. Stevens BSc (Hons) | A. Littlechild BSc (Hons) |

This report has been prepared in accordance with the terms and conditions of appointment [on request]. Avian Ecology Ltd. (6839201) cannot accept any responsibility for any use of or reliance on the contents of this report by any third party.

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# 1 INTRODUCTION

## 1.1 Report Purpose

1.1.1 Avian Ecology were commissioned by Axis on behalf of their client Pelagic Energy to prepare a Reasonable Avoidance Measures (RAMs) Method Statement for water vole in relation to the development of a Battery Energy Storage Systems (BESS) (the 'Development', Knowsley Council planning ref: 23/02008/FUL) on land off Coopers Lane, east of the Knowsley Industrial Estate, Knowsley, Merseyside (the 'Site').

1.1.2 This document has been prepared to address comments made by Merseyside Environmental Advisory Service (MEAS) on a Section 73 application (Knowsley Council planning ref: 25/00285/FUL) for the variation of conditions 2 (approved plans), 3 (drainage assessment), 4 (fire statement), 7 (Construction Environmental Management Plan), 8 (build over agreement) and 13 (battery safety management plan) of the Development. Specifically, the requirement for these RAMs relates to the variation of condition 3 (drainage).

1.1.3 Comments provided by MEAS state:

*"The applicant should provide a water vole method statement which considers impacts from the construction and operation phase. This should consider impact of access, headwall construction, excavation and laying of pipeline and impact to woodland/scrub and grassland habitat between the development site and watercourse. The method statement should also consider impact of pollution transfer through the operational phase of the outfall."*

## 1.2 Legislation

### **Water Vole**

1.2.1 Water voles are protected in England under the provisions of the Wildlife and Countryside Act 1981 (as amended). The species is listed on Schedule 5 of the Act and is protected under Section 9, which makes it an offence to:

- Intentionally kill, take or injure a water vole;
- Possess or control any live or dead water vole or any part or derivative;
- Intentionally or recklessly damage or destroy a water vole's place of shelter or protection;
- Intentionally or recklessly disturb a water vole while it is occupying a structure or place which it uses for shelter or protection; or,
- Intentionally or recklessly obstruct access to a water vole's place of shelter or protection.

1.2.2 It may be used as a defence where disturbance occurs as an incidental result of a lawful operation that could not reasonably have been avoided.

1.2.3 The Act also prohibits the selling, offering of sale, or possessing or transporting for the purposes of sale, any live or dead water vole, or any part or derivative, or advertising any of these for buying or selling, however this is irrelevant in relation to this report.

- 1.2.4 It is generally agreed that a place of shelter or protection used by water voles includes a network of activity burrows and/or any nests that have been constructed within the burrow system or above ground amongst dense vegetation.

## **2 RATIONALE**

### **2.1 Need for RAMs**

- 2.1.1 The BESS development includes a drainage route which will discharge surface waters from the site to Knowsley Brook. The works will be highly localised, consisting of a 225mm outfall, set within a pre-cast concrete headwall. It is anticipated that the headwall would be less than 2m in width.
- 2.1.2 The Knowsley Brook is described in the Ecological Assessment Report (EAR)<sup>1</sup> submitted with the Development as '*considered to offer suitable opportunities for both [otter and water vole]*'. No field signs of either species were observed.
- 2.1.3 No desk study records of water vole were identified during the desk study for the Development, however the MEAS response noted sections of the Knowsley Brook to the southwest are designated as a Local Wildlife Site for water vole. It is understood the designated section of the Knowsley Brook lies approximately 1.15km south-west of the Site.
- 2.1.4 It is not considered that works are of a sufficient scale where removal of a small area of habitat would affect the viability of the local population, however there is a residual risk of direct impacts to water vole burrows, should the species and any burrows be present within the working area.
- 2.1.5 The drainage system has been designed with integrated water quality treatment mechanisms, including porous surfacing and filter trenches to reduce pollution. Further measures are also proposed for the containment of firewater in the event of such an incident. As such it is not considered that the discharge of water into the Knowsley Brook would result in adverse impacts to water vole.
- 2.1.6 As such, given that the presence of water vole cannot be ruled out, and considering the small scale of works, RAMs are considered an appropriate mitigation measure to direct works.

### **2.2 Pre-construction Survey**

- 2.2.1 A pre-commencement check of the Knowsley Brook by an experienced ecologist will be undertaken prior to works commencing to confirm that water vole are absent from the working area. Only when the ecologist is satisfied that no offence will occur under the legislation should works be permitted to proceed.
- 2.2.2 The survey should follow the methodology outlined in the water vole mitigation handbook<sup>2</sup>, as summarised below. survey should be undertaken between mid-April and September when water vole are typically active.

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<sup>1</sup> Avian Ecology (2023). Coopers Lane Substation Kirkby Ecological Assessment Report.

<sup>2</sup> Dean, M., Strachan, R., Gow, D. & Andrews, R. (2016) The Water Vole Mitigation Handbook (The Mammal Society Mitigation Guidance Series). Eds Fiona Mathews and Paul Chanin. The Mammal Society, London.

- 2.2.3 A search of the watercourse network will be undertaken by wading along ditch channels or where this is not possible (e.g., excessive water depth), undertaking spot checks and searches from the bankside to record the location of any water vole field signs. Searches for field signs will be undertaken from the toe of the watercourse bank within each section, up to at least 1m out into the water and at least 1m up the bank.
- 2.2.4 Searches should look for the following field signs of water vole presence:
- Sightings;
  - Droppings/Latrines;
  - Burrows;
  - Footprints;
  - Pathways;
  - Feeding stations; and,
  - Lawns.
- 2.2.5 Note that only latrines and feeding remains can be taken as definitive evidence of water vole presence. Other field signs have the potential for confusion with other species (e.g., brown rat) and as such, cannot alone be attributed to water vole.
- 2.2.6 If new presence of water vole in the vicinity of the proposed works is identified, the project ecologist will advise on necessary next steps to ensure the protection of this species. Potential options would include micro siting of works to avoid water vole burrows, or if necessary, working under licence which would need to first be sought from Natural England.

## **2.3 Method Statement**

- 2.3.1 The below method statement applies only to small scale works affecting less than 5m of bank. Should works be larger, further pre-construction surveys would be required to rule out presence of water vole prior to commencement of works.

### ***Method Statement Objectives***

- 2.3.2 Any development related activities on the Site, such as works required in or within 5m of a ditch/watercourse may potentially affect these species. As a result, safeguards must be implemented to protect these and other species, and the Method Statement below details measures to be implemented to ensure these objectives are achieved. If these measures are followed, then no impacts are likely to occur.

### ***Method Statement***

- 2.3.3 This Method Statement should be followed for small scale works in or within 5m of a ditch and/or water course to ensure legal compliance and that the objectives are achieved.
- 2.3.4 The following measures will be adopted throughout the construction period of the Development:

- The developer, Site contractor or their representatives will appoint a suitably qualified ecologist to oversee works completed under this Method Statement for the duration of the construction period.
- A pre-construction water vole and otter survey will be carried out if small scale, localised works are required in or within 5m of a ditch. If the pre-construction survey were to confirm presence of water vole in the vicinity of the proposed works, a licence may be required if disturbance cannot be avoided.
- Site operatives will be informed by a 'tool box' talk of the potential for water vole and otter species to occur on-site, what to look out for and what to do in the event that animal is found. The tool box talk will be provided by a suitably experienced ecologist.
- A suitably experienced ecologist will be present during all works affecting land within 5m of the Knowsley Brook to provide advice and an ecological watching brief. The ecologist will be contactable by the Site Manager at all other times and available to further advise on Site, if necessary, as a contingency measure.
- Works affecting land within 5m of the Knowsley Brook must only commence after a careful visual inspection by a suitably experienced ecologist, when they have determined that no animals or their burrows are present. Vegetation should be reduced to a height of no less than 150mm prior to works commencing to aid visual searches. The ecologist will then search the areas prior to the vegetation being taken back to ground level / bare ground.
- Should evidence (or potential evidence) of water vole be found at any point during construction, works within suitable habitat and/or potentially disturbing works in close proximity must cease immediately and the ecologist will advise on the appropriate actions, including applying for a licence, if required.
- No tools, vehicles, or materials will be stored within 5m of watercourses/ditches and stand-off buffers will be clearly marked by fencing (or similar), with appropriate signage.
- Should any trenches and excavations be left open, particularly overnight, an escape route for animals that enter the trench must be provided. Ramps should be no greater than 45 degrees in angle. Ideally, any holes should be covered.
- If not covered, then excavations left open overnight or longer should be checked for animals prior to the continuation of works or infilling.

**If an otter or water vole is found, or evidence of either species is found, work must stop immediately and the on-Site ecologist consulted to advise on next steps.**