



# Construction Management Plan

## Yaxley Synchronous Condenser Development

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Client: Conrad Energy (Developments) II Ltd  
Project Number: 6148  
Version: 2.0  
Date: 2023-04-14





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# 1. Introduction

## 1.1 Background

This Construction Management Plan (CMP) has been prepared to support the construction of the Yaxley Synchronous Condenser site (the “Synchronous Condenser”), operated by Conrad Energy (Developments) II Ltd (“Conrad Energy”).

The CMP addresses the requirements of the relevant conditions of the planning permission reference DC/22/04021, approved by Mid Suffolk District Council in February 2023.

Condition 13 notes the requirement for a CMP, fulfilled by this document. The sub-conditions discharged by this document are detailed within Table 1.1 Condition Discharge via this CMP below.

**Table 1.1 Condition Discharge via this CMP**

No.	Planning Condition	CMP Section
13.1 Bullet 1	Vehicle routing to be the same as for the Progress Power / Yaxley substation construction traffic (no right turn).	3.3
13.1 Bullet 2	Access, parking and timing arrangements for contractor and delivery vehicles.	3.3
13.1 Bullet 3	Measures to avoid the transfer of soil from the site onto the highway and a methodology for remediation should this occur.	3.5, 8.2
13.2	The development shall be constructed in accordance with the construction management plan as may be approved or as may otherwise be agreed in writing with the Local Planning Authority.	Whole CMP

## 1.2 CMP Structure

The CMP is structured as follows:

- Section 1 – Introduction
- Section 2 – The Development and Site Context
- Section 3 – Site Works
- Section 4 – Safety & Security
- Section 5 – Responsibilities
- Section 6 – Incident Response
- Section 7 – Environmental Monitoring
- Section 8 – Environmental Management Plans

## 1.3 Development Summary

The Planning Permission allows for (subject to the approval of matters specified in conditions) the construction and operation of the following buildings and infrastructure:

- Main sync con building;
- Outdoor cooler;



- Circuit breaker;
- Transformer;
- Welfare cabin; and
- Hardstanding and landscaping.

## 1.4 Construction Programme

The construction of the Synchronous Condenser has been spilt into two phases, enabling works and construction of the housing. A more detailed construction programme is provided in Section 3.

## 1.5 Implementation of the CMP

The CMP has been produced by ITP Energised with input from the Developer. The Principal Contractor, once appointed, will be responsible for the implementation of the CMP, which provides practical guidance to those involved in the construction works on management of the most significant potential risks and impacts associated with construction.

## 1.6 Purpose of the Document

The CMP is a key document assisting Conrad Energy and the Principal Contractor in complying with the set planning conditions. The Principal Contractor will keep the CMP updated to reflect specific proposed construction methods and the document reviewed and agreed with Mid Suffolk District Council before full construction works begin.

Throughout the construction phases of the proposed development, the CMP will be subject to continual review, for example to:

- Address conditions stipulated in the Planning Permission;
- Ensure it reflects good practice during construction;
- Update in the event of new material concerns following commencement of work; and
- Accommodate the working practices of the appointed Principal Contractor.

## 1.7 Document Control and Distribution

The CMP is a live document and will be updated as required throughout the preconstruction and construction process.

The document is intended for use Conrad Energy and the Principal Contractor specifically involved in the construction of the development. When this document is updated, the document control table provided on page 1 will be updated and it will be issued to all personnel named on the distribution list ([Table 1.2](#)). Contact details will be included and updated as the relevant appointments are made. As part of the review process, the impact of any changes will be assessed and, should they result in any variations to previously agreed mitigation or a potential increase in environmental risk, then the revisions shall be shared with the local authority.

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



*Table 1.2 Distribution List (for completion once roles confirmed)*

Organisation	Contact Name	Email	Telephone Number
Developer – Conrad Energy			
Principal Contractor			
Construction Site Manager			
Mid Suffolk District Council			



## 2. The Development and Site Context

### 2.1 Description of the development

The proposal is for a synchronous condenser (sometimes called a synchronous capacitor or synchronous compensator), which is a specialised piece of equipment that does not generate power, but provides stability and voltage support to the electricity network, particularly when system faults occur within the power grid.. The synchronous condenser will be contained in a portal frame structure on a parcel of land currently known as The Leys and Ivy Farm in the village of Yaxley, Suffolk. The synchronous condenser site is approximately 5.1 hectares (ha).

The Planning Permission allows for the construction and operation of the following buildings and infrastructure:

- Sync con buildings;
- Outdoor cooler;
- Circuit breaker;
- Transformer; and
- Welfare cabin

The area being developed will occupy around 2 hectares of total footprint with the balance being either hardstanding or low maintenance grass cover.

### 2.2 Site Context

The development site is on agricultural land just north of the village of Yaxley in Suffolk, England. It is a 5.1 ha land parcel next to the National Grid substation currently under development and a Site Access Track which was constructed for the development of the substation and will be retained for the construction of the synchronous condenser. The access track ties in to the northbound A140 road to the east of the site.

The site is relatively flat with an elevation ranging from 45 to 48 metres above ordnance datum (AOD). The site is bound by Leys Lane to the north and east, a recently installed wooden post and wire fence to the south, and a hedgerow with a mature deciduous tree to the north-west. The site's western boundary adjoins that of the National Grid Yaxley Substation.

### 2.3 Site Access

Access to the site will be direct from the A140 during construction via the Site Access Track. Following construction, the Site Access Track will be reinstated to its previous agricultural state.

During the operational phase of the development no heavy vehicles will need to visit the site and any light vehicle trips will be very few – the site is intended to be operated remotely. The site will be accessed via Leys Lane for these purposes. Any maintenance visits will be infrequent and be made by cars or light vans.

### 2.4 Sensitive Receptors

The site is located in Flood zone 1 and is therefore at low risk of flooding. The site lies within a Total Catchment (Zone 3) Groundwater Source Protection Zone (GWSPZ). There are no groundwater or surface water abstractions identified within 250 metres of the site boundary, nor any records of historical landfill sites or Pollution Incidents identified within 250m.

The site does not fall within a designated Conservation Area and there are no Scheduled Ancient Monuments in the locality. There are no listed buildings within the site itself although there are a number of listed buildings and undesignated heritage assets in the wider landscape and the nearby village of Yaxley. The site





lies within the impact risk zone of the SSSIs Gypsy Camp Meadows to the north. There are recorded priority species within the locality, and the Preliminary Ecological Assessment has recorded sightings of priority species on the site itself.

## 3. Site Works

### 3.1 Construction Programme

Construction of the proposed development will be undertaken over approximately 16 months. Peak vehicle activity will be around 96 movements (48 vehicles) per full working day, with a maximum of 16 of these (eight vehicles) being Heavy Duty Vehicles (HDV) .

### 3.2 Construction Hours of Works

To minimise the potential impacts on residents, the core construction working hours will be limited to weekday daytimes and Saturday mornings. Working hours have been agreed with Mid Suffolk District Council to be:

- 07:00 – 19:00 hours on weekdays;
- 07:00 – 13:00 hours on Saturdays; and
- No working on Sundays, or Bank or Public Holidays.

Should any essential work need to be undertaken outside of the agreed hours, dispensation will be obtained from Mid Suffolk District Council prior to the commencement of such works.

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

- An emergency demands continuation of works on the grounds of safety;
- Minor internal works, silent in nature, are being carried out within the confines of a building envelope; and
- Completion of an operation that would otherwise cause greater interference with the environment or general public if left unfinished.

Deliveries will be programmed to arrive during normal working hours where possible. Night-time deliveries will be prohibited. Care will be taken to minimise noise when unloading vehicles, and construction traffic will be prohibited from unnecessary idling within the site boundary or at the site access point.

### 3.3 Access management

#### 3.3.1 Leys Lane

Vehicles travelling to and from The Leys and Ivy Farm at the north end of Leys Lane shall have priority over site traffic at all times, as will pedestrians and equestrians making use of the bridleway which continues north as Leys Lane bears west around 100 metres north of the junction with the site access route. Road markings and signage will be installed to clearly indicate rights of way and to alert access route users to the junction of Leys Lane.

Contractors and delivery drivers will be informed of this arrangement.

#### 3.3.2 Site Access Track

All site traffic shall access the site via the dedicated access route from the northbound A140, constructed for the neighbouring National Grid substation site. Pedestrian and bicycle access shall be permitted via Leys Lane if required.



The access route has been designed and constructed for left in, left out manoeuvres only. Northbound vehicles on the A140 may turn directly on to the access route from the main carriageway; southbound vehicles must divert via the A140 / Castleton Way / Eye Road roundabout around one kilometre south of the access route junction.

Similarly, vehicles leaving the site and wishing to travel south must initially proceed on the northbound A140 and change direction at the A140 / B1077 roundabout one kilometre north of the access route junction.

### 3.3.3 Off-site parking

Staff parking shall at all times be within the site compound area. Parking on the Site Access Track and on Leys Lane by any contractor staff or delivery drivers shall not be allowed.

## 3.4 Pre-Commencement and Enabling Works

A summary of the construction activities to be undertaken is as follows:

- Site establishment; and
- Civil enabling works.

No access tracks will be located on unstripped vegetation or ground.

To prepare the site for the development, the following enabling works will be undertaken:

- Establishment of temporary works surfaces;
- Site levelling (where required);
- Establishment of a temporary construction compound; and
- Installation of temporary security and safety lighting.

### 3.4.1 Site Access Enabling Works

The enabling works have been completed with the development of the National Grid Substation Site Access Track.

## 3.5 Construction Activities

### 3.5.1 Construction Activity Details

The Principal Contractor will form a preliminary site compound area for use in the initial stages of construction during the mobilisation stage. Once the preliminary site compound area is established, site clearance operations will commence and any levelling work thereafter.

Foundation works will be completed first, and then steelwork will be erected, followed by the cladding and roofing. After the cladding and roofing is completed, the floor slabs will be constructed. The final tasks will be the interior fit-out and installation of the mechanical and electrical systems.

### 3.5.2 Construction Site Housekeeping

Good construction site housekeeping practice will be applied at all times. As far as reasonably practicable, the layout of the site will be designed using the following principles:

- All work areas will be secured;
- Any fuels or liquid materials will be stored and banded in compliance with the relevant regulations;
- Signage and boundary fences, where required, will be regularly inspected, repaired and replaced as necessary;
- All working areas will be kept in a clean and tidy condition;



- Wheel washing and dust suppression facilities will be provided to avoid trackout of mud onto the Site Access Track and/or the public highway;
- All practicable measures will be taken to minimise the risk of fire and the Principal Contractor will comply with the requirements of the local fire authority;
- Waste will be removed at frequent intervals;
- Construction waste susceptible to spreading by wind or liable to cause litter will be stored in secure containers;
- The Principal Contractor shall take all necessary and practicable precautions to prevent the occurrence of smoke emissions or fumes from site plant or stored fuel oils for safety reasons and to prevent, as far as is reasonably practicable, such emissions or fumes drifting into residential areas, nearby workplaces or areas of public open space. In particular:
  - Plant shall be well maintained, regularly serviced and measures taken to ensure that engines are not left running when not directly in use;
  - Plant which emits visible emissions after warm-up shall be taken out of service and either repaired or replaced; and
  - Vehicle exhausts will be directed away from the ground and other surfaces and preferably upwards to avoid road dust being re-suspended to the air and should be positioned at a sufficient height to ensure adequate local dispersal of emissions.
- Open fires will be avoided on site; and
- To minimise the production of black smoke particles minimum acceptable temperatures will be used e.g., when heating bitumen, avoiding heating with open flame burners where possible. Pots or tanks containing hot bitumen will be covered.

### 3.5.3 Welfare Facilities

Workers' Safety Information Sheets and control of substances hazardous to health (COSHH) safety data sheets will be kept on site.

Where portable generators are used, industry good practice will be followed to minimise noise and pollution from such generators.

Wastewater and foul water arisings from welfare facilities will be tankered from site by an appropriately licensed waste water management company for offsite disposal.

### 3.5.4 Artificial Lighting

At night and during periods of darkness, directional security lighting will be used. Lighting will be selected and sited so as to minimise visual intrusion to local communities, whilst maintaining the safe and efficient operation of the proposed development.

The Principal Contractor will comply with the requirements of the Environmental Protection Act (UK Government, 1990). Measures to reduce the impacts of artificial lighting include:

- Unnecessary lighting will be avoided and, following completion of the task, lighting will be switched off and/or removed. All lighting will be switched off during daylight hours;
- All lighting will be designed to avoid visual intrusion and/or light spillage. Lighting will be positioned and directed to avoid nuisance to residents and wildlife and/or causing distractions to drivers on adjacent roads; and
- Where mobile lighting relies on portable diesel generators for power, the containment of the diesel will be monitored to check for leaks and spills. Spill kits will be made available and staff provided appropriate training.



### 3.5.5 Crane Arcs

Crane arcs will be confined within the construction areas and cranes will be operated in accordance with the requirements of BS 7121, Code of Practice for Safe Use of Cranes.

### 3.5.6 Storage of Plant and Materials

Fuel, equipment and construction materials will be stored appropriately so as to minimise the risk of pollution. The following measures will be implemented to prevent spillage of hazardous materials:

- Development of a Spill Response Plan and provision and maintenance of spill response equipment;
- Storage of hazardous materials no less than 20 m away from a watercourse/drainage gullies;
- Completion of a Control of Substances Hazardous to Health (COSHH) assessment for any hazardous materials;
- Development of a COSHH Register documenting materials stored and handling requirements;
- Segregation of COSHH raw material stores and COSHH waste stores;
- Storage of hazardous material containers on secondary containment systems that will contain 110% of the contents of the largest container or 25% of the total, whichever is greater;
- Protection of hazardous materials in locked containers to minimise the ingress of rainwater and secure them against accidental damage;
- Staff training in the use of spill kits and the correct disposal of used material;
- Maintenance of a log of any incidents; and
- Inspection of all construction plant and machinery on a daily basis to check for fuel and oil leaks and, where necessary, drip trays or plant nappies will be used to collect leaks.

### 3.5.7 Wheel Washing

The Principal Contractor will implement a manual wheel washing system to reduce the amount of debris on the public road network. The Principal Contractor will provide an adequate area of hard surfaced road between the wheel wash location and the site exit, wherever site size and layout permits.

### 3.5.8 Parking

Parking for construction workers, deliveries and site visitors will be accommodated within the proposed development site and will not impact on the public road network.

### 3.5.9 Site Demobilisation

After the main construction activities have been finalised, permanent fencing will be installed, and temporary infrastructure will be removed.

## 3.6 Contractor Training

### 3.6.1 Inductions

All project personnel and sub-contractors will receive a site induction to communicate the contents of this CMP. No personnel, including sub-contractors, will be permitted to undertake any work on site without undertaking a site induction. The site induction will evolve to reflect changes in the CMP as the project develops.

### 3.6.2 Toolbox Talks

Toolbox Talks (TBT) on specific topics shall supplement the induction course. Toolbox talks shall be used to highlight issues of concern and to disseminate any new information or responsibilities. They will also be used as a mean to provide basic environmental training to crews on a specialised topic, e.g., dust control and management. The TBT also offer site personnel the opportunity to provide feedback.



## 4. Safety & Security

Site specific risk assessments and method statements will be undertaken in accordance with the applicable legislation prior to the commencement of construction activities; to identify any potential risks, assess their likelihood and significance, and to identify mitigation measures to be implemented to ensure the safety of workers and the general public.

Site security during the construction phase will be strict. Access to the site will be prevented by the use of temporary fencing to prevent unauthorised access. Compounds for the temporary storage of equipment or materials will be provided. These will be locked with restricted access. Security staff will be utilised as appropriate.

The Applicant will ensure that adequate arrangements are in place for the discharge of all duties under the Construction (Design and Management) Regulations 2015 (CDM).

A Permit to Work system (or equivalent) will be introduced during construction to ensure that only authorised construction personnel are allowed within the construction area and that an accurate record of site-based personnel is available in case of emergency.

The Principal Contractor will ensure that the construction sites are secure. Access to the proposed development will be limited to specified entry points only and all personnel entrances and exits will be recorded and monitored for both security and health and safety purposes.

Visitors to the proposed development site during construction will be required to report to the construction reception office (location to be confirmed) and will only be permitted to access the construction area under escort by appropriately authorised staff or following successful completion of specific safety induction training.

All working areas will be appropriately fenced off from members of the public and to prevent animals from straying onto working areas.

## 5. Responsibilities

### 5.1 Roles and Responsibilities

It is the responsibility of all staff involved with the proposed development, including the Applicant, Principal Contractor and sub-contractors, to ensure the correct implementation of the CMP and the environmental mitigation contained within.

During the construction phase of the proposed development the key environmental responsibilities are summarised below:

- **The Applicant** – responsible for ensuring that the proposed development is built in accordance with the planning conditions and that all environmental mitigation measures stated within the planning application pack and this CMP are implemented.
- **Principal Contractor** – responsible for regularly reviewing and updating the CMP and ensuring that all staff and sub-contractors abide by and implement the CMP. The Principal Contractor will be responsible for the implementation of the CMP and all the environmental mitigation measures outlined in the EIA Report.
- **Site Manager** – will be appointed as part of the Applicant or Principal Contractor team and shall have overall responsibility for the management of the construction phase. The Applicant and Principal Contractor will ensure that a suitable person with appropriate knowledge and experience of similar scale or type of projects will be employed.



- **All construction staff** – responsible for understanding the requirements of the CMP and the environmental and other local sensitivities of the proposed development. All staff have an obligation to abide by the CMP and the relevant environmental legislation for the protection of receptors.

## 6. Incident Response

### 6.1 Environmental Incidents and Corrective Actions

All environmental incidents and near misses shall be reported and investigated by the Applicant and Principal Contractor. Where relevant, the appropriate statutory authority (e.g., the Environment Agency) shall be informed immediately. Copies of incident investigation reports shall be retained by the Principal Contractor and the Applicant and action taken to prevent recurrence.

All corrective action, incident and near miss report forms shall be held in a register maintained at the construction site office base.

Any incident that may result in an environmental impact, will be reported immediately to the Environment Agency and Mid Suffolk District Council, together with details of date, time, location, type, potential impact and person calling.

Construction method statements will be written for each construction activity which will identify methods of minimising the risk of a pollution incident. All staff will be appropriately trained for the task they are undertaking and will have read the method statement before commencing work.

### 6.2 Response

Following any pollution incidence, the following will be undertaken:

- Construction work will halt immediately at the location of the incidence;
- Where safe to do so, the source of the incidence will be moved away from the receptor/turned off;
- Staff will deploy spill-kits as appropriate;
- The foreman at the location of the incidence will contact the Principal Contractor Site Manager and inform them of the incidence;
- The Site Manager will proceed to the location of the incidence to assess the health, safety and environmental risk;
- The Site Manager will request additional resources/equipment as required to mitigate the impact of the incidence; and
- The Site Manager will record the incidence and the actions taken and report to the Principal Contractor and Applicant.

The following equipment will be on-site to address a pollution incident:

- Spill kits;
- Plant nappies;
- Booms;
- Pumps; and
- Adsorbents.



### 6.2.1 Key Contacts

The tables below will (once appointed / confirmed) list of internal contacts and emergency contacts that should be contacted in the event that an incident needed to be escalated.

**Table 6.1 Internal Contacts for any Environmental Incident**

Contact			
The Applicant -			
Principal Contractor			
Principal Contractor Site Manager			

**Table 6.2 Emergency contacts following an Environmental Incident**

Contact	Office Hours	Out of Hours
Environment Agency	0800 807060	0800 807060
Mid Suffolk District Council	0300 1234000	N/A

## 6.3 Complaints Procedure

The Principal Contractor will provide details (postal details and email address) to which all written complaints should be addressed on or near the site entrance signage.

The Applicant will ensure that a system is introduced for the logging and recording of any complaints that will be collated and a copy made available to the Principal Contractor, Site Manager and the relevant departments of Mid Suffolk Borough Council. Any complaints received will be acknowledged within 24 hours during all hours when works, including deliveries, are taking place. The Applicant shall ensure that all complaints receive a written response, to include details of any action undertaken if such action is deemed appropriate. The Site Manager shall provide the Applicant with a monthly report that details all complaints, who they were filed by and the actions taken.

## 7. Environmental Monitoring

Monitoring will be undertaken during construction works to check compliance with set conditions and applicable environmental legislation. This will focus on the condition of the Site Access Track to guard against the trackout of mud onto the public highway.

The Principal Contractor will review all operations to ensure compliance with the CMP. Should deficiencies or opportunities for improvement be identified, the Principal Contractor will agree the actions required and the timescale for implication with the staff responsible. The Principal Contractor will be responsible for recording all deficiencies, the action taken to remedy the deficiency and the success of such action. They will report to the Applicant and to statutory bodies as required.



## 8. Environmental Management Plan

The following sections provides outline environmental management measures for the prevention and mitigation of pollution from construction activities, focussing on plant / machinery and measures to prevent the mobilisation of dust and trackout of mud onto the public highway, as well as to reduce noise impacts and impacts on nearby ecological receptors.

### 8.1 Plant and Machinery

All plant and machinery shall be regularly maintained to ensure good working order. Checks for leaks of fuel and lubricants will be conducted before works with plant and machinery is allowed to commence and maintenance and servicing records will be reviewed and updated as required. All plant items will be properly maintained in accordance with manufacturer's recommendations, so that excessive noise is minimised.

A suitable quantity of pollution control equipment, e.g., spill kits containing absorbent pads, absorbent granules, absorbent booms etc. will be kept on site in the event of an emergency.

Static plant such as pumps and generators will be self-bunded or placed on drip trays wherever practicable to prevent leaking materials, from contaminating the ground or surface waters.

Mobile plant to be in good working order and kept clean. Any static plant will be fitted with plant nappies when required.

No washing out of concrete and cement delivery vehicles will take place on-site without suitable provision for the washing out water and provision of a suitable location that is lined with a geotextile to prevent infiltration to ground. Such washing will not be allowed to flow into any drain. Wash water will be adequately contained, prevented from entering any drain, and removed from the proposed development site for appropriate disposal at a suitably licenced waste facility.

The Site is to be secure to prevent any vandalism that could lead to a pollution incident.

### 8.2 Dust and mud trackout management

This section the procedures and protocols that will be adhered to during site works, ensuring full compliance with environmental legislation and environmental contractual requirements.

Below are recommendations for mitigation measures to be implemented during construction to control dust and air quality impacts by the Principal Contractor; the Dust Management Plan (DMP). These mitigation measures are proportionate to the level of risk assessed using the methodology set out in Institute of Air Quality Management Guidance on the assessment of dust from demolition and construction (Institute of Air Quality Management, 2019).

#### 8.2.1 Site management

- Record all dust and air quality complaints, identify cause(s), take appropriate measures to reduce emissions in a timely manner, and record the measures taken;
- Make the complaints log available to the local authority when asked; and
- Record any exceptional incidents that cause dust or trackout either onto the Site Access Track or public highway, and the action taken to resolve the situation.

#### 8.2.2 Proposed mitigation for preparing and maintaining the site

- Plan site layout so that machinery and dust causing activities are located away from receptors, as far as possible;
- Erect solid screens or barriers around dusty activities or the site boundary that are at least as high as any stockpiles on site;





- Fully enclose site or specific operations where there is a high potential for dust production and the site is active for an extensive period;
- Keep site fencing, barriers and scaffolding clean using wet methods;
- Remove materials that have a potential to produce dust from site as soon as possible, unless being re-used on site; and
- Cover, seed or fence stockpiles to prevent wind whipping.

### **8.2.3 Proposed mitigation for site operations**

- Only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques such as water sprays or local extraction, e.g., suitable local exhaust ventilation systems;
- Ensure an adequate water supply on the site for effective dust/particulate matter suppression/mitigation, using non-potable water where possible and appropriate;
- Use enclosed chutes and conveyors and covered skips;
- Minimise drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment and use fine water sprays on such equipment wherever appropriate; and
- Ensure equipment is readily available on site to clean any dry spillages and clean up spillages as soon as reasonably practicable after the event, using wet cleaning methods.

### **8.2.4 Proposed mitigation for waste management:**

- Prohibit all fires on site, including for the burning of waste materials.

### **8.2.5 Operating vehicle/machinery and sustainable travel:**

- Ensure all vehicles switch off engines when stationary;
- Avoid the use of diesel- or petrol-powered generators and use mains electricity or battery powered equipment where practicable;
- Impose and signpost a maximum speed limit of 10 miles per hour (mph) on site; and
- Issue all suppliers and contractors with delivery routes and access times/restrictions.

### **8.2.6 Proposed mitigation specific to earthworks:**

- Re-vegetate earthworks and exposed areas/soils stockpiles to stabilise surfaces as soon as practicable;
- Use Hessian, mulches or trackifiers where it is not possible to re-vegetate or cover with topsoil, as soon as practicable; and
- Only remove the cover in small areas during work and not all at once.

### **8.2.7 Proposed mitigation specific to construction**

- Avoid scabbling (roughening of concrete surfaces) if possible;
- Ensure sand and other aggregates are stored in bunded areas and are not allowed to dry out, unless this is required for a particular process, in which case ensure that appropriate control measures are in place;
- Ensure bulk cement and other fine powder materials are delivered in enclosed tankers and stored in silos with suitable emission control systems to prevent escape of material and overfilling during delivery; and
- For smaller supplies of fine powder materials ensure bags are sealed after use and stored appropriately to prevent dust.



### 8.2.8 Proposed mitigation specific to trackout

- Use water-assisted dust sweeper(s) on the access and local roads, to remove, as necessary, any material tracked out of the site. This may require a sweeper being continuously in use;
- Avoid dry sweeping of large areas;
- Ensure vehicles entering and leaving sites are covered to prevent escape of materials during transport; and
- Inspect on-site haul routes for integrity and instigate necessary repairs to the surface as soon as reasonably practicable;
- Record all inspections of haul routes and any subsequent action in a site logbook;
- Implement a manual wheel washing system;
- Install the above trackout abatement at the interface between the site and the Site Access Track, NOT the Site Access Track and the main road so that any residual trackout is made before vehicles exiting the site joining the public highway; and
- In the event of a failure of measures and subsequent trackout to the public highway, a sweeper wagon will be dispatched as quickly as is safely practicable to go over the affected length of the A140. A single pass is anticipated to remove the majority of any tracked out material - additional passes may cause inconvenience to road users waiting for a slow-moving vehicle to leave the highway.

## 8.3 Noise

Construction noise emissions have been identified as a potential source of nuisance to the local population. Specific consideration will be given to nearby residential properties and noise sensitive premises situated close to the construction site.

Below are recommendations for mitigation measures to be implemented during construction to control noise emissions.

### 8.3.1 Proposed Noise Mitigation

- Normal working hours will be as follows:
  - 0700 to 1900 Monday to Friday;
  - 0800 to 1300 Saturdays; andNo work activities carried out on Sunday and Bank Holidays;
- Modern construction/plant equipment will be used during all phases of the construction process. Typical plant will include excavators, dozers, crushing machine, cranes and dumpers;
- All plant items will be properly maintained and operated in accordance with the manufacturers' recommendations, so that excessive noise is minimised;
- Plant known to emit noise strongly in one direction should, where possible, be orientated and located so that the noise is directed away from noise sensitive areas;
- Acoustic covers will be kept closed when engines are in use and idling;
- Stationary plant such as compressors and generators will be positioned away from sensitive locations within the confines of the operational use of the site;
- As per guidance contained in BS 5228-1 2009+A1:2014, other general measures that will be employed to reduce noise levels at source are:
  - Avoid unnecessary revving of engines and switch off equipment when not required;
  - Keep internal haul routes well maintained and avoid steep gradients;



- Use rubber linings in, for example, chutes and dumpers to reduce impact noise;
- Minimise drop height of materials; and
- Start plant and vehicles sequentially rather than all together.
- The movement of plant onto and around the site should have regard to the normal operating hours of the site and the location of any NSPs as far as is reasonably practicable.
- Mitigation measures specified in section 8 of BS 5228-1 2009+A1:2014 for controlling noise at the source will be employed at all times wherever possible and practicable, including (list is not exhaustive):
  - Impact noise during steel construction can be a nuisance, therefore, direct metal-to-metal contact should be minimised;
  - When vehicles are reversing, mobile plant and vehicles should travel in a direction away from NSPs wherever possible; and
  - Care should be taken to locate equipment away from noise sensitive areas. Where possible, loading and unloading should also be carried out away from such areas.

## 8.4 Ecology

Below are recommendations for mitigation measures to be implemented during construction to protect ecological receptors.

### 8.4.1 Proposed Ecology Mitigation

- A suitably qualified ecologist should be commissioned to carry out a check of the site immediately prior to commencement of construction works. This is especially relevant during the bird breeding season, when active nests may be present near the site, but also at other times of the year to check for the presence of leverets, hedgehogs and grass snakes which may be unable to evade moving vehicles and other construction activities.
- Care should also be taken, if practicable, to avoid impacts on adjacent hedgerows and on the pond in the extreme north west corner of the redline area, by establishing an exclusion zone sufficient to ensure that no inadvertent damage will occur as a result of construction activity. If this is not possible, an ecologist should be commissioned to devise an appropriate mitigation strategy.
- Excavations that are left open during construction have the potential to trap vertebrates that may be present on the site, which can be avoided by the overnight installation of escape ramps.
- Following standard regulatory requirements and good practice with respect to control of surface water should prevent harm to biodiversity from surface water runoff during construction.



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