

- All hard banks and bed added during construction will be temporary and the bankside will be returned to its original state after construction;
- Design details for outfalls into watercourses will need to be reviewed and confirmed through consultation with the respective regulating authority.

### 18.6.5.8 Converter station

The converter station will be provided with permanent surface water drainage designs consistent with local and national regulatory requirements. An outline drainage design has been produced which includes partial sub-base storage and attenuation pond for flood storage and treatment of site runoff. The outline design will form the basis of the detailed drainage design to be prepared prior to construction. The detailed drainage design will ensure waters are controlled in quality and volume during construction and at operational stage. Discharge will be pumped/gravity fed to a local watercourse at a controlled rate which is to be agreed with the relevant regulator with details provided in the detailed CEMP.

The Contractor will ensure that the ground level at the converter station in Section 4 are raised to ensure that the Finished Floor Level (FFLs) are at a level of 6.18 mAOD, which is the maximum modelled flood level in the 0.1% + 50% Climate Change uplift Annual Exceedance Probability (AEP) event. This is to ensure that the structure remains outside the modelled flood extents and depths from nearby watercourses to the 1% + 39% Climate Change AEP event, as required by the Environment Agency.

Although this has potential to displace flood water into other areas (which can result in an increase in local flood depths, hazards and time of inundation) hydraulic modelling (**Appendix 11C**) has shown this to be negligible, and as such it is expected that floodplain compensation will not be required for this scheme. This would need to be reviewed by the Contractor if there are design changes to the FFLs.

### 18.6.6 Agriculture and Soils

Measures to minimise the potential for impacts related to the contamination of soils through spillages of oils and chemicals are outlined in Section 18.5. These include, but are not limited to, measures to prevent vandalism and fly-tipping, pollution prevention measures and provision of spill materials, oil and fuel storage, and details of environmental management in relation to plant and machinery.

Good practice principles to minimise any disruption to agricultural activities during construction are described at 18.5.11.

This section specifically relates to the measures required to ensure the sustainable management of soil resources and the quality of land restoration. The good practice soil management measures are based upon industry guidance such as Defra's Code of Practice (Ref 18-22) and the Institute of Quarrying's Good Practice Guide (Ref 18-23) and will ensure that impacts to the structure and function of the soils are minimised so that soil quality is maintained. Maintaining soil quality also enables reinstated/restored soil profiles to deliver the same level of ecosystem services (for example supporting biodiversity and plant growth, as a filter and store for water and as a store for carbon) hence enabling temporarily disturbed agricultural land to be restored to the same Agricultural Land Classification (ALC) grading (measure of land quality) as prior to development. These measures are summarised below and are described in greater detail in the Outline Soil Management Plan (SMP) at **Appendix 12B**. The detailed SMP will be an appendix to the detailed CEMP.

To inform the detailed SMP (to be prepared by the Contractor prior to construction) detailed pre-construction soil and Agricultural Land Classification (ALC) surveys for areas of temporary development (e.g., cable routes, compounds and temporary accesses) will be undertaken when the precise routing and placement of infrastructure are known, ensuring the surveys are targeted to areas directly impacted by the English Onshore Scheme. The surveys will be undertaken by experienced soil scientists in line with Natural England guidelines (Ref 18-24). Detailed survey of the converter station site has already been undertaken, as described in **Chapter 12: Agriculture and Soils**.

The Contractor will engage a specialist soil scientist to prepare the detailed SMP based upon the Outline SMP (**Appendix 12B**) and incorporating the detailed survey data. No works will be undertaken until the Detailed SMP is in place.

The detailed ALC surveys will also serve as a baseline against which restoration success, in terms of the agricultural quality of the restored land, can be measured to ensure that the commitment of reinstatement of land to the same quality or better has been met.

The general good practice measures which will be applied by the Contractor during construction will include, but not be restricted to, the following:

- Construction traffic/plant movements will be restricted to operating on the designated access roads and not on unprotected soils;
- No materials storage (including soil storage) to occur outside designated areas;
- No trafficking/driving of vehicles/plant on reinstated soil (topsoil or subsoil);
- Topsoil stripping will be restricted to the extent of the permanent and temporary elements of the English Onshore Scheme (where required);
- Appropriate geotextile membranes, wooden matting (bog mats) or aluminium trackways will be used over particularly sensitive areas;
- Topsoil, subsoil and different superficial deposits will be stored separately to prevent mixing and will be reinstated in reverse order of excavation;
- Soils should only be moved under the driest practicable conditions, and this must take account of prevailing weather conditions;
- Soil stabilising methods will be undertaken to reduce the risk of erosion, the creation of leachate and potential water quality issues;
- Early re-seeding of the reinstated ground will be undertaken to help re-establish and stabilise the structure of the topsoil;
- As stated in section 18.6.5., a minimum 15 m separation will be maintained from watercourses unless where crossed or discharged into, this includes storage of soil. For surface water features which are crossed by the works, soils will not be stockpiled 5 m unless a greater distance of separation is required to respect ecological buffers (for example standoffs for water vole mitigation (section 18.6.1.3).
- Stockpiled soils will be protected by appropriate measures, for example, membranes, spraying or seeding to reduce the risk of windblown dust, surface water run-off and to reduce the risk of overland migration of silt and sediment to surface waters;
- Any potentially contaminated soils will be stored separately on an appropriate impermeable surface material and covered prior to testing and removal from site via a suitable licenced contractor (if required);
- A buffer strip will be left along watercourse/ ditch banks to prevent the sediment yield generated by the works to enter the water environment. Silt and sediment control and trapping measures would be used as appropriate;
- Construction will not be undertaken during extreme wet weather where it may lead to erosion of sediments or could increase the risk of flooding.
- Only direct movement of soil from donor to receptor areas (no triple handling and/or ad hoc storage);
- No soil handling to be carried out when the soil moisture content is above the lower plastic limit;
- No mixing of topsoil with subsoil, or of soil with other materials;
- Stockpiles which are to be in place for longer than six-months will be seeded with appropriate low maintenance grass/clover mixture (to be agreed with landowner and subject to the conditions/restrictions within the contract). This will protect the soil against erosion, minimise soil nutrient loss, maintain soil biological activity, and help prevent colonisation of the stockpile by nuisance weeds that could spread seed onto adjacent land;
- Any soil found to be contaminated will not be used for reinstatement, and will be disposed of in accordance with procedures set out in the detailed CEMP (see also section **Error! Reference source not found.**);

- The soil surface will be decompacted and cultivated as required prior to replacement of soils to prevent the creation of an impermeable or slowly permeable layer. Such a layer would lead to impeded drainage and waterlogging;
- Stripped soil will be reinstated as close to where it was removed as possible. This will help to maintain a local seed base and the local geological/hydrological characteristics;
- Ecologically important soils, for example hedgerow soils or soils from the SSSI will be stripped and stored separately and reinstated at the point of origin to maintain the seed bank and ensure the restoration of pre-development habitats;
- Plant and machinery only work when ground or soil surface conditions enable their maximum operating efficiency;
- Daily records of operations undertaken, and site and soil conditions should be maintained; and
- Low ground pressure (LGP models) or tracked vehicles should be used where possible.

Detailed methodologies for the removal stripping and reinstatement of soils are provided in upon the Outline SMP (**Appendix 12B**).

Currently, the majority of soils within the boundary of the English Onshore Scheme are identified as being at very small to small risk of erosion meaning that they can be protected by the application of standard good practice measures such as those set out in Defra's Code of Practice (Ref 18-22) and the Institute of Quarrying's Good Practice Guide (Ref 18-23), and as summarised above.

Soils at moderate, high and very high risk of erosion requiring a greater level of mitigation (bespoke mitigation) in addition to these standard measures, have also been identified within the boundary of the English Onshore Scheme. These have been identified from the Soil Survey of England and Wales' 1:250,000 scale strategic mapping and include:

- Section 1: Moderate risk soils of the Wick 1 and Bishophampton associations;
- Section 2: Moderate risk soils of the Andover association, high risk soils of the Everingham association, and very high risk soils of the Newport 1 association;
- Section 3: Moderate risk soils of the Holme Moor association, high risk soils of the Everingham association, and very high risk soils of the Newport 1 association; and
- Section 4: Moderate risk soils of the Wick 1 association.

The targeted pre-construction soil surveys would accurately define the presence and geographical extent of these soils (or other soils requiring bespoke mitigation) within the areas to be directly disturbed by the English Onshore Scheme. The data would then be used to identify specific field scale mitigation measures which will be defined in the detailed SMP. These bespoke measures may include but are not limited to:

- Suitable location of stockpile on a flat area of ground away from areas where there may be high runoff or water ponding;
- Covering of the soil stockpiles in a suitable geotextile to stabilise soils and reduce the chance of erosion from water and wind until the vegetation cover becomes effective;
- The use of specialist surface run-off control systems;
- Erection of wind barriers; and
- Stand-off procedures for adverse weather conditions (for example prevention of soil handling on windy days for soils with a high risk of wind erosion).

The importation of topsoils and/or subsoils to the English Onshore Scheme is not expected to be required. Should soil importation be required, a certificate of suitability (compliance with British Standards and soils being of an appropriate type for the desired end use) will be obtained by the Contractor. This will be reviewed by the ECoW and/or Technical Specialist Advisor and be sent to NGET and the landowner for acceptance at least one week prior to the planned delivery date. Soils will only be imported to site with the agreement of NGET and the landowner. Should excess clean soil be generated, for example at the converter station a range of potential options for sustainable reuse have been identified and are further described at section 18.6.10.

## 18.6.7 Noise and Vibration

No major vibration sources are envisaged to be introduced as part of the English Onshore Scheme and as such no measures beyond the standard good practice in section 18.5 are proposed to mitigate vibration effects.

Measures to mitigate noise will be implemented during the construction phase of the English Onshore Scheme in order to minimise impacts at local noise sensitive receptors (NSRs) and ecological receptors, particularly with respect to any activities which may be required to take place outside of normal working hours (such activities would need to be agreed in advance with ERYC and SDC). Mitigation measures covered in this CEMP represent the adoption of best practicable means (BPM), as defined in Section 72 of The Control of Pollution Act 1974 (CoPA).

The assessment presented in Chapter 13: Noise and Vibration suggested a potential for Moderate adverse construction noise to be received at receptors Rec23 (Route Section 1), and Rec60 and Rec62 (Route Section 4) due to airborne construction noise effects during Phase 1 of construction. As this Phase of works is the establishment of access roads and site compounds, effects will therefore be temporary and of a short duration whilst the works are established. These effects will require bespoke mitigation through further detailed assessment and monitoring once the contractor is appointed and further design details are known, and good communication with residents (see below). Prior to the commencement of works, the Contractor will complete a noise and vibration risk assessment to assess the requirement for any noise and vibration monitoring during the construction period. The Contractor will agree the scope and detail of any noise and vibration monitoring required with ERYC and SDC in advance.

Noise/vibration monitoring would allow periods where elevated levels arise to be identified and allow works to be halted or alternative working practices to be explored. If required, additional baseline monitoring will be undertaken by the Contractor to establish the existing levels of noise and/ or vibration prior to the commencement of the construction works, however it is not expected that this will be required.

The need for monitoring of noise levels during construction will be determined through the detailed assessment undertaken by the Contractor prior to works commencing and will be the subject of discussion between the Contractor, ERYC and/or SDC, as the local planning authority. Noise monitoring would allow periods where elevated noise levels arise be identified and allow works to be halted or alternative working practices to be explored. The Contractor will need to adhere to any site-specific noise monitoring related conditions imposed by ERYC/SDC. Any incidents of noise limits being exceeded will be reported by the Contractor to the Applicant to forward to ERYC/SDC as soon as is practical.

There is also potential for significant noise effects if work were to take place at the same intensity during evenings/ night-time and/ or other weekend periods (i.e., outside of the normal working hours set out in section 18.5.2). Such activities would therefore need to be agreed in advance with ERYC/SDC, however it is intended to avoid construction works and especially noisier activities outside of normal working hours as far as is practicable, limiting them to those which are unavoidable e.g. HDD or jointing which require continuous working. Measures would be put in place to control or restrict activities during evenings/ night-time so as not to exceed the SOAEL. By timing construction works and avoiding noisier activities being undertaken outside core hours, significant adverse effects can be avoided.

The effect of noise and vibration at nearby sensitive receptors can be minimised through a good communication strategy. As described in section 18.4, the Contractor will develop and implement a Stakeholder Communications Plan to make sure that the public, residents and nearby businesses are kept fully informed over the scale and nature of the works, when they are to take place, and who to contact if they are disturbed. Effective liaison prior to works being undertaken, providing information on the construction works and advance notice of when high noise generating activities are taking place can reduce adverse effects.

The preferred approach for controlling construction noise and vibration is to reduce levels at source, where reasonably practicable. Sometimes a greater noise or vibration level may be acceptable if the overall construction time, and therefore length of disruption, is reduced. The embedded mitigation measures which will reduce the impacts of noise and vibration are taken from the relevant British

Standard (Ref 18-25). Many of these measures are covered by the general mitigation measures set out in section 18.5. These include, but are not limited to, the choice, use and maintenance of vehicles and plant (Section 18.5.13), minimising drop heights, and the maintenance of haul routes and imposition of site speed limits to minimise noise and vibration from site traffic (Section 18.5.15). In addition to these the Contractor will also:

- Plan the site layout so that machinery and dust causing activities are located away from receptors, as far as possible;
- Avoid the unnecessary revving of engines and equipment will be switched off when not in use;
- Plant will always be used in accordance with manufacturers' instructions. Care will be taken to site equipment away from noise-sensitive areas. Where possible, loading and unloading will also be carried out away from such areas;
- Use rubber linings in, for example, chutes and dumpers reduce impact noise where required;
- Stipulate that plant and vehicles will be sequentially started up rather than all together;
- Ensure care is taken when erecting or striking scaffolds to avoid impact noise from banging steel;
- Use pre-fabricated components where practicable;
- Use mobile acoustic barriers located close to any noisy works during night-time;
- Minimise the duration of night-time activities by undertaking preparations during daytime or evening periods, when higher noise levels may be tolerated; and
- As described in section 18.4, the Contractor will ensure that noise management is communicated to all staff and operatives via induction training, toolbox talks etc.

The measures listed above will be implemented and supplemented as necessary with further bespoke measures identified through further detailed assessment as part of the detailed CEMP.

The Contractor will adhere to any site-specific noise and/or vibration monitoring related Conditions imposed by ERYC/SDC.

The Contractor will report any exceedances of agreed noise limits or vibration levels to NGET and ERYC/SDC as soon as is practicable, adhering to any reporting requirements or timescales set out in Conditions or other agreements. Reporting requirements will be detailed in the Incident Response Plan (IRP) to be prepared by the Contractor (in agreement with NGET) prior to construction.

### 18.6.8 Traffic and Transportation

General measures related to the prevention of traffic generated dust, debris and fumes; road cleaning; and vehicle maintenance are described in section 18.5.

The Contractor will undertake a Road Condition Survey (also referred to as a dilapidation survey) prior to any enabling works or construction commencing. The results of this survey will determine the areas which require remedial works to ensure they are suitable to accommodate construction traffic associated with the English Onshore Scheme whilst maintaining accessibility and safety for existing road users. Furthermore, the current condition of the highway network will be documented that will allow a 'Wear and Tear Agreement' to be made with the Local Highways Authority (LHA) to ensure that the condition of the highway network is kept to a similar level pre and post construction.

Construction traffic will be managed according to the Detailed Construction Traffic Management Plan (CTMP) to be prepared by the Contractor prior to the commencement of traffic movements associated with the English Onshore Scheme. The Detailed CTMP will be developed in consultation with ERYC., SDC, National Highways (as necessary), North Yorkshire Police, Humberside Police, and other stakeholders (if required) following award of consent. The structure of the detailed document will expand upon the information included in the Outline CTMP presented at **Appendix 14E**.

As well as setting out traffic routing and general traffic management measures for the English Onshore Scheme (including details of communications, inspection/monitoring and reporting; speed limits; temporary traffic management; and assigning roles and responsibilities), the Detailed CTMP will also clearly define any traffic restrictions as identified and agreed with Local Highways Authority in advance

of construction (if required). Examples of restrictions on the movement of construction traffic on routes directly passing or passing close to sensitive areas include, but are not limited to, avoidance of school drop-off and pick-up periods due to the potential for children to be on the road and congestion caused by waiting vehicles, avoidance of loading times at named commercial premises to minimise disruption and congestion; and in relation to any local special events (for example cycle races) which may be organised during the construction period.

The Contractor will produce a Construction Route Hazard Risk Register (or similar) as part of the process of finalising the construction routes for the English Onshore Scheme. This will identify risks and locations along with possible additional mitigation measures to be considered further during detailed design and Detailed CTMP implementation.

The Detailed CTMP will also detail the hours for which movements of construction traffic/ deliveries, can take place. At present, this is assumed to be 08:00 – 18:00 Monday to Saturday with no construction taking place on Sundays, however this is yet to be confirmed and is subject to an agreement between all relevant parties before construction commences. Should (other) construction work be required to take place on a Sunday, approval from would be required from the LHA prior to any work taking place. Additionally, where practicable and desirable, night deliveries will be undertaken where required, to minimise disruption and maintain safety on the local road network.

Prior to works commencing, the Contractor will also produce a detailed Construction Logistics Plan to manage the sustainable delivery of goods and materials, and a Travel Plan that supports and encourages sustainable travel by workers (public transport, cycling, walking and car-sharing), along with the CTMP these documents will form part of the detailed CEMP. Through the Travel Plan, the detailed CTMP will include measures that will seek to reduce single occupancy trips by stipulating the need for minibus or coach style services to and from accommodation areas and promoting car sharing when travelling outside of the planning application boundary. A Code of Good Practice in relation to transport and traffic movements will also be prepared.

The Contractor will commission/produce an Abnormal Indivisible Load (AIL) report to assess the transformer delivery to the converter station. This will demonstrate that a suitable route is available from the Port of import to the proposed converter station site and will be agreed with key highway authorities. ALL deliveries will not be allowed to occur until such agreements are in place. However, given the location of the converter station, adjacent to the existing Drax Power Station, means it is considered that the local highway network will be able to accommodate AIL movements.

The Contractor will ensure that all access points that require the creation of a junction bellmouth are designed based on the relevant standard from DMRB CD 123 Geometric Design of at grade priority and signal-controlled junctions and in consultation with the Local Highways Authority thereby negating any potential safety impact associated with the construction activity associated with the English Onshore Scheme and the existing road safety.

The monitoring and enforcement of the English Onshore Scheme's CTMP will be a key responsibility of the Contractor to ensure that any negative impacts associated with construction traffic are quickly addressed and that suitable action is taken. Details of the English Onshore Scheme's Stakeholder Communications Plan are given in section 18.4.2, this will ensure effective communication between the English Onshore Scheme and the public.

Mitigation measures in relation to Traffic and Transport are discussed in more detail in the Outline CTMP presented at **Appendix 14E**, but some key points are summarised below:

- Where reasonable and practicable, construction vehicles (including AIL) will avoid travelling in convoys on public roads;
- Where required, suitably qualified personnel will be present at key locations during construction to guide traffic, the public and to enhance safety;
- Where reasonable and practicable, AIL deliveries will be programmed to cause minimal disruption i.e., at night or during off-peak hours. All AIL deliveries will be accompanied by escort vehicles with suitable signage and warning beacons;



- Where required, Temporary Traffic Management methods will be used to enhance safety conditions on the road network and where physical mitigation measures are impractical or cannot be accommodated during the construction phase of the English Onshore Scheme;
- Only pre-agreed traffic routes and site Access Points will be used;
- Winter maintenance (including de-icing and snow clearing) will be carried out on public roads which will be used by construction traffic to maintain road user safety. These works may be undertaken by the Contractor, or a contribution agreement may be reached with LHA (to be described in the Detailed CTMP);
- Through the implementation of the Travel Plan, the Contractor will encourage staff to utilise public transport and to car share to reduce the number of vehicle movements;
- There will be no parking of English Onshore Scheme related vehicles (including private vehicles used for commuting) on public roads within a two-mile radius of the Site (unless within the limits of an English Onshore Scheme traffic management scheme);
- The Contractor will provide adequate on-site parking close to the place of work, where feasible, or implement 'park and ride' measures to ensure compliance with the above statement;
- The Contractor will use clear signage to show construction traffic routes and Access Points;
- A consistent arrangement of signage will be in place at and/ or near to each Access Point during its use in order to provide relevant warnings and information to other road users (including pedestrians) of the likely presence of high volumes of construction traffic (HGV) in the area. Further information related to the type and location of any road signs will be provided in the detailed CTMP and agreed with the LHA; and
- All construction traffic will abide by the posted speed limits (or any temporary speed limits which may be in place) for the roads travelled, or by any advisory speed limit as defined by the Contractor in the Detailed CTMP.

### 18.6.9 Socio-economic, Recreation and Tourism

Impacts to Socio-economic, Recreation and Tourism receptors are largely mitigated through the measures described in section 18.5 and also in the discipline specific measures described to minimise impacts in relation to landscape and visual amenity (section **Error! Reference source not found.**), agriculture and soils (section **Error! Reference source not found.**) noise and vibration (section **Error! Reference source not found.**) and traffic and transportation (section **Error! Reference source not found.**).

Direct impacts to land use will be managed through on-going negotiations and communications via the NGET English Onshore Scheme Lands Team with stakeholders including landowners and owners of businesses to mitigate impacts.

The Contractor will implement the measures to minimise impacts on users of Public Rights of Way (PRoW) during the construction as set out in the PRoW Management Plan. A detailed PRoW Management Plan is to be prepared prior to construction, based upon the Indicative PRoW Management Plan included as **Appendix 15A** of this ES. The PRoW Management Plan sets out appropriate measures to ensure accessibility to recreational routes and PRoW is maintained throughout construction, with temporary crossings and minor managed diversions to routes provided where required where routes cross the proposed cable corridor to ensure routes remain accessible and operational throughout.

#### 18.6.9.1 Recreational Routes and Public Rights of Way (PRoW)

Appropriate measures will be implemented to ensure accessibility to recreational routes and PRoWs, community facilities, private assets and development land in the study area is maintained. This will be achieved through the use of best practice measures, regard to phasing of works and if necessary, providing diversions for users. Temporary diversions will be supported by clear signs and, where possible, will be planned and programmed to minimise disruption to users.

Through careful siting of the construction compounds and laydown areas, and careful planning of construction activities through consultation with landowners, severance of recreational routes and

PRoWs has been limited as far as reasonably practicable. Where temporary disruption to PRoWs, National Cycle Network or other recreational routes during construction is unavoidable, suitable diversions would be agreed with ERYC and SDC and implemented where temporary diversions are required, to ensure routes remain accessible and operational throughout construction. Where applicable, PRoW diversions will “dog-leg” the original route before a perpendicular crossing of the corridor. The management of recreational routes and PRoWs will be further described within the detailed CEMP (potentially reported as an appended Public Rights of Way Management Plan, if required).

## 18.6.10 Materials and Waste

### 18.6.10.1 Materials

To minimise the need for the importation of (virgin or recycled) fill materials to site and to reduce the volume of waste generated, the Contractor will maximise the reuse of site-won materials, where suitable, as far as practicable. To aid this, the Contractor will prepare a Materials Management Plan (MMP) setting out how excavated materials are to be managed in accordance with CL:AIRE: Code of Practice (Ref 18-26). This will ensure that the quality of site-won soil resources is maintained during construction so that they remain suitable for re-use, do not become contaminated, and ultimately do not become waste.

Opportunities to reduce the amount of imported material required for temporary works (for e.g. haul roads) through the use of alternative construction methods will be considered by the appointed Contractor. Where construction materials are imported to site the Contractor will take the following measures into account during procurement, delivery, storage and handling.

#### 18.6.10.1.1 Procurement

- A procurement strategy that takes into account the environmental lifecycle of materials will be developed;
- Locally sourced materials and suppliers will be identified and used where practicable;
- The use of hazardous materials will be minimised as far as is practicable;
- Where site-won material is not available or suitable for reuse, the use of secondary or recycled materials and products will be prioritised, where available and practicable. Such materials will undergo chemical testing (as detailed in the detailed CEMP), in order to demonstrate that the material is suitable for use on site and does pose a risk to construction workers or the environment;
- Packaging materials that will assist in effective and secure storage and movement of materials on site will be selected, where available and practicable;
- Take-back schemes for surplus materials will be arranged with suppliers where possible;
- Use sustainably sourced materials from local sources and local suppliers, where available and practicable; and
- Pre-cast elements will be used where practicable to ensure efficient use of materials and avoid the generation of waste arisings from off-cuts.

#### 18.6.10.1.2 Managing Deliveries

- Prior to delivery an appropriate storage location will be identified;
- Where practicable, materials will be delivered on an ‘as required’ basis to avoid damage or contamination (and therefore also limit the likelihood of waste);
- Appropriate plant will be used to upload materials to avoid damage;
- Deliveries will be received by appropriately trained staff who will undertake a quality inspection and check delivery paperwork is correct before unloading; and
- Deliveries will be scheduled to minimise impact to local residents and the local road network, where practicable (see section 18.6.8 and **Appendix 14E**).



### 18.6.10.1.3 Storage

Measures regarding the storage of potentially polluting oils and chemicals and measures to deter theft of materials are presented in sections 18.5.8. and 18.5.5. Additionally:

- Suppliers' instructions will be followed to prevent spoilage and waste;
- Storage areas will be planned and set out so that frequently used items are easy to access;
- Materials will be stored away from waste storage containers and from vehicle movements that could cause accidental damage. Protective fencing or barriers will be installed where required;
- Lightweight materials will be secured to protect them from wind damage or loss;
- A 'first in first out' rule for the storage and use of perishable items (e.g., bags of cement) will be implemented;
- Potentially polluting materials (such as cement) will be stored away from watercourses and drains to avoid potential pollution from spillages;
- Depending on how long materials are to be stockpiled, measures to prevent dust pollution may be required (see **Section 8.5**).

### 18.6.10.1.4 Handling

- The handling of materials will be minimised wherever practicable to reduce the risk of damage, spillage, or injury to site-based staff; and
- Materials will only be handled using appropriate plant apparatus including cranes, trucks, fork lifts and manual handling.

### 18.6.10.2 Waste

Measures regarding the identification and management of contaminated land/ contaminated excavated materials are described in section **Error! Reference source not found.** These will be stored separately and securely and sent for either treatment, where appropriate, or disposal at appropriately permitted facilities

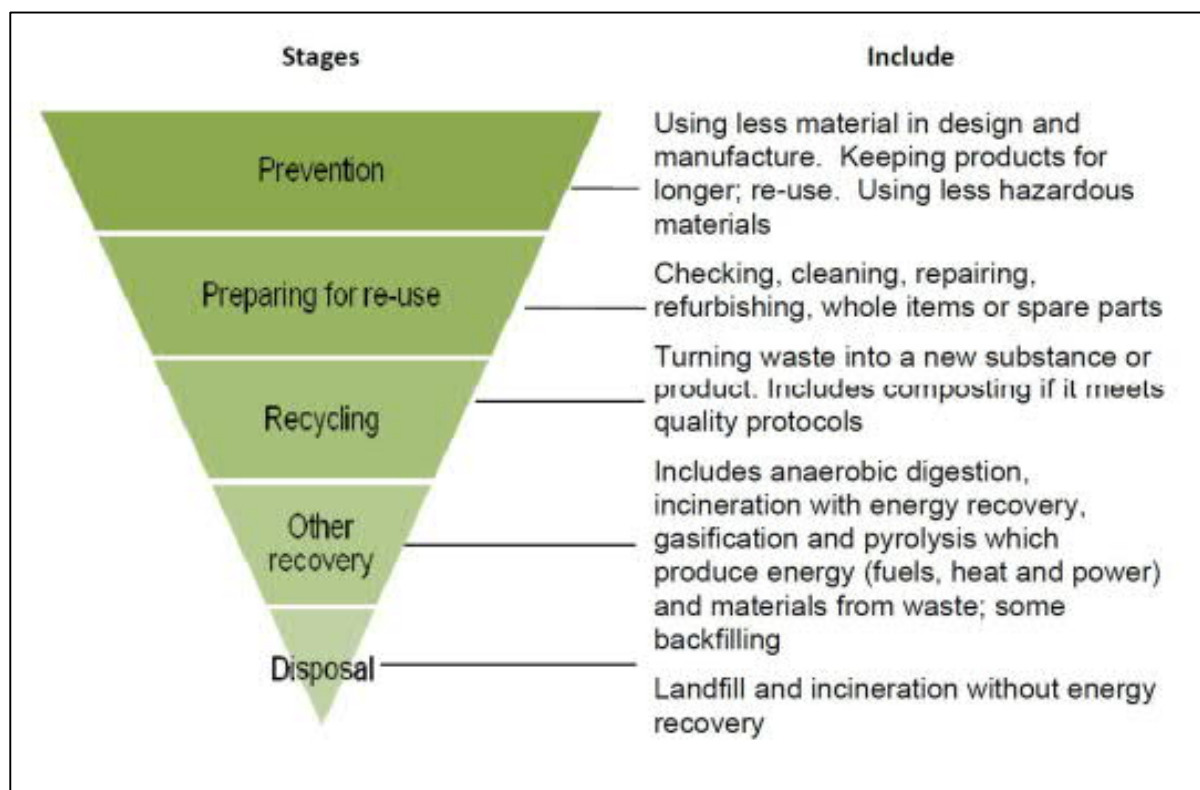
In line with best practice, the Contractor will develop and implement a Site Waste Management Plan (SWMP) to ensure that waste is managed in accordance with the waste hierarchy and other relevant legislative requirements. The SWMP will be agreed with ERYC and/or SDC in advance of construction.

The SWMP will detail information on the waste carriers and waste management facilities and include an audit programme to be undertaken by the Contractor to demonstrate compliance with statutory requirements, including Duty of Care. The SWMP will be kept as an active document and updated throughout the period of construction.

Typical measures that will be incorporated within the SWMP include, but are not limited to:

- Implementing the principles of the waste hierarchy (Figure 18.3),
- Provide information on how the construction waste is managed, stored and disposed of in an appropriate manner, by approved contractors, in accordance with the waste hierarchy and all relevant legislation.
- The management of the volume and types of hazardous waste generated.

**Figure 18-3: Waste hierarchy**



The sustainable management of topsoil and subsoil materials (i.e., the upper layers of soil where plant root growth occurs, maximum depth of 1.2 m, but often shallower) is described in Section **Error! Reference source not found.** and described in greater detail in the Outline Soil Management Plan (SMP) at **Appendix 12B**. This will ensure that the quality of soil resources, won from the site, is maintained during construction so that they remain suitable for reuse, do not become contaminated and ultimately do not become waste. This outline SMP will be developed into a full SMP by the Contractor.

The preparation of detailed versions of the SWMP, and SMP will ensure that any adverse effects associated with material resource use and waste generation are managed.

The Contractor will also adhere to the following waste management procedures during the construction phase:

- The waste hierarchy will be implemented throughout the construction to minimise disposal and maximise re-use and recycling of waste arisings. Opportunities for re-use and recycling of waste include (but are not limited to):
  - Re-using excavated soils for back filling the cable trench and reinstating temporary accesses (where excavation is necessary).
  - Options for use of surplus excavated soil that may be generated in the converter station site include:
    - Visual bunds;
    - Retain soil for reuse elsewhere within the English Onshore Scheme if additional soil is required for restoration (see section 18.8.8 regarding landowner agreements and suitability);
    - Increase topsoil depths (<5cm assuming topsoil depths will not become much greater than 30 cm) in the converter station site or nearby fields of the English Onshore Scheme (in agreement with the landowner)

- A wider search locally to identify potential areas requiring restoration – where the soil could be sustainably re-used off-site; and
- Soil could be banded in a suitable fashion for storage over the medium term for resale and re-use on another project (pending testing and certification, and where required permitting). This would facilitate storing and selling in batches as and when there is a demand, subject to the topsoil being managed by a local topsoil trader.
  - Recycling of inert material by crushing, blending and subsequent re-use, as an aggregate.
- Temporary stockpiling of fill materials prior to incorporation into the English Onshore Scheme will be avoided where possible, to ensure double handling and damage are minimised, therefore avoiding waste. However, where required, materials will be stockpiled in accordance with best practice and managed appropriately to limit the likelihood of damage or contamination.
- Pre-cast elements will be used where practicable to ensure efficient use of materials and avoid the generation of waste arisings from off-cuts.
- Re-use/ recycle of all aggregates that have been used for temporary construction works.
- Where waste must be taken to a recycling or disposal site, the appointed Contractor will ensure that the sites have the appropriate permits. In addition, the suitable facility will be located as close to the works as possible to minimise the impacts of transportation, in particular the release of carbon emissions. The appointed contractor will identify the closest and relevant treatment and disposal sites. A non-exhaustive list of waste infrastructure sites within 10 km of the English Onshore Scheme is provided in **Table 18-2**. The ability for waste arisings to be deposited at these sites will be dependent on the conditions imposed on the sites by the relevant licence or permit. There may be other facilities in the vicinity of the English Onshore Scheme that may be used.
- Skips and storage receptacles will be sheeted, or otherwise remain lidded or closed, during times when waste is not being deposited into them. They will also be covered to prevent the escape of waste whilst in transit and loaded (but not overloaded) for maximum payload efficiency;
- Skips and storage receptacles will be inspected on arrival to make sure they are fit for purpose. Those identified as not being fit for purpose should be immediately rejected and not brought on site;
- Disposal of wastes will be by licensed waste carriers, to licensed sites and handled in accordance with the Waste Duty of Care Code of Practice (Ref-18-27);
- All documentation including copies of certificates, Hazardous Waste Consignment Notes (HWCNs) and Waste Transfer Notes (WTNs) will be held on site and retained in accordance with the Waste Duty of Care Code of Practice (Ref-18-27);
- Site supervision staff will have asbestos awareness training. Asbestos awareness will also be included in site inductions and toolbox talks; and
- If asbestos is encountered during the works, the Contractor will engage an asbestos specialist to manage the removal.

**Table 18-2: Permitted Waste Sites in 10 km of the English Onshore Scheme**

Site Name	Treatment Facility Type	Distance from central point (km)
Permitted waste operation sites within 10km (Section 1 – Landfall to Bainton)		
Lowthorpe Quarry	SR/12: Treatment of waste to produce soil <75,000 tpy	3.16
Gransmoor Quarry (site B)	SR/12: Treatment of waste to produce soil <75,000 tpy	5.14
Gransmoor Quarry	A05: Landfill taking Non-biodegradable Wastes	5.29
Unit 2 Danes Grave Industrial Estate	A11: Household, Commercial & Industrial Waste T Stn	6.49
Permitted waste operation sites within 10km (Section 2 – Bainton to Market Weighton)		
D J Cleaning Limited	S0809: Asbestos Waste Transfer Station	6.87

Site Name	Treatment Facility Type	Distance from central point (km)
Middleton Quarry	SR/12: Treatment of waste to produce soil <75,000 tpy	7.04
Station Road Site	A25: Deposit of waste to land as a recovery operation	7.06
R N H Skiphire	S0803: HCI Waste TS + treatment	7.61
Gallymoor Landfill Site	A04: Household, Commercial & Industrial Waste Landfill	8.97
Beechwood Services	A20: Metal Recycling Site (mixed MRS's)	9.68
Permitted waste operation sites within 10km (Section 3 – Market Weighton to River Ouse)		
Burse Lane Farm	S1506: 75kte household, commercial and industrial waste transfer station with treatment	0.83
Allensway Recycling Ltd	A23: Biological Treatment Facility	2.52
Chrispin's	SR/21: 75kte metal recycling site (existing permits)	3.59
Mallard Grange	S1506: 75kte household, commercial and industrial waste transfer station with treatment	5.25
Changing Waste	A16: Physical Treatment Facility	5.43
Beechwood Services	A20: Metal Recycling Site (mixed MRS's)	6.12
Gilberdyke Landfill Site	A06: Landfill taking other wastes	6.22
Gallymoor Landfill Site	A04: Household, Commercial & Industrial Waste Landfill	6.82
Brighton Airfield	SR/12: Treatment of waste to produce soil <75,000 tpy	6.89
Brighton Airfield	A22: Composting Facility	7.25
Brighton Airfield	A16: Physical Treatment Facility	7.31
G B P Skips & Waste Ltd	S1506: 75kte household, commercial and industrial waste transfer station with treatment	7.53
North Cave Wetlands	A25: Deposit of waste to land as a recovery operation	8.68
North Cave Quarry	S0908: Management of inert or extractive waste at mine	8.76
Ryedale Farm Organics Recycling Facility	A22: Composting Facility	8.89
North Cave Fame Plant	A17: Physico-Chemical Treatment Facility	9.03
R N H Skiphire	S0803: HCI Waste TS + treatment	9.12
Anytime Waste Transfer Station	S0803: HCI Waste TS + treatment	9.53
Permitted waste operation sites within 10km (Section 4 – River Ouse to Drax Substation)		
Lightweight Aggregate Manufacturing Plant	A15: Material Recycling Treatment Facility	1.62
Catcon UK	A16: Physical Treatment Facility	6.51
Goole Transfer Station	S0803: HCI Waste TS + treatment	6.71
Station Road Business Centre	SR21: 75kte metal recycling site (existing permits)	7.38
Taperell Environmental	A11: Household, Commercial & Industrial Waste T Stn	7.43
Commons Farm	A22: Composting Facility	7.86
Van Werven UK Ltd	A11: Household, Commercial & Industrial Waste T Stn	7.92
Whitemoor Business Park	A11: Household, Commercial & Industrial Waste T Stn	7.97
Strong Skips Waste Recycling Ltd	S1506: 75kte household, commercial and industrial waste transfer station with treatment	8.13
Changing Waste	A16: Physical Treatment Facility	8.17
Goole Recycling Facility	A09: Special Waste Transfer Station	8.21
Brighton Airfield	A16: Physical Treatment Facility	8.46
Anytime Waste Transfer Station	S0803: HCI Waste TS + treatment	8.47
Brighton Airfield	SR/12: Treatment of waste to produce soil <75,000 tpy	8.70

Site Name	Treatment Facility Type	Distance from central point (km)
Brighton Airfield	A22: Composting Facility	8.71
Park Lodge Shooting School	A25: Deposit of waste to land as a recovery operation	9.58
Hensall Quarry	A05: Landfill taking Non-Biodegradable Wastes	9.96
Lightweight Aggregate Manufacturing Plant	A15: Material Recycling Treatment Facility	1.62

## 18.7 Summary

Provided the measures detailed within this Outline CEMP are developed into the Detailed CEMPs by the appointed Contractor, ahead of and/or during construction, environmental impacts associated with the English Onshore Scheme will be avoided or reduced.

## 18.8 References

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