

10 Draft Code of Construction Practice

Introduction

General

- 10.1 This draft Code of Construction Practice (CoCP) relates to the construction of the proposed FAB Link HVDC/HVAC interconnector UK cable. It sets out the standards to be implemented throughout the construction process to uphold FAB Link Limited's duties as an interconnector licence holder under Schedule 9 of the Electricity Act 1989.
- 10.2 The draft CoCP is a strategic document based on available outline design information. It provides a framework of key measures for managing the potential environmental impact of constructing the project that all construction staff will be required to follow. It covers the environmental aspects of the project's construction phase that may affect the interests of local residents, businesses, the general public and other sensitive receptors in the vicinity of the construction site.
- 10.3 The term 'construction' in the CoCP includes all site preparation, demolition, material delivery, excavated material disposal, waste removal and all related engineering and construction activities as defined in the planning application.
- 10.4 The CoCP incorporates legislative requirements, current guidance and best practice measures to define the standards of construction practice required by the client. However, compliance with this CoCP will not absolve the Principal Contractor or subcontractor from compliance with all legislation and byelaws relating to their construction activities.

Implementation of the Code

- 10.5 The CoCP will be implemented during the planning and undertaking of construction works through a series of detailed method statements to be prepared by the Principal Contractor. The method statements will build on the principles and standards from the CoCP and set out how the individual construction tasks will be undertaken, the plant/equipment required, the environmental controls that will be in place and the roles and responsibilities of the construction team.

Training and Competence

- 10.6 All levels of site staff will have a responsibility to minimise the risks to the environment from the activities on site and steps will be taken to make them aware of these duties and the environmental requirements of the CoCP. Contractors will be required to operate induction schemes for all personnel to ensure that they are aware of their individual responsibility to comply with the CoCP.
- 10.7 Contractors will also be responsible for employing an appropriately qualified workforce and for identifying the training needs of their personnel.

Supervision

- 10.8 Sufficient suitably qualified and experienced personnel will be appointed by the Principal Contractor to supervise the main construction works. This will include professionally qualified

environmental management staff, with relevant experience in the environmental disciplines included in this CoCP.

General Requirements

Approach to Construction

- 10.9 The project will be constructed in an environmentally sensitive manner and will meet the requirements of all relevant legislation, codes of practice and standards. The client will review the environmental performance of the main construction contractors as part of the tender selection process.

Health and Safety Principles

- 10.10 The client and its Principal Contractor will apply appropriate industry standards for the health, safety and welfare of its employees. It will ensure that adequate arrangements are in place for the discharge of all its duties under the Construction (Design and Management) Regulations 2015 (CDM).

Local Community Liaison

- 10.11 Prior to commencing main construction activities (e.g. earthworks) occupiers of premises in the vicinity of the work will be notified of the nature of the proposed works and contact details to which any enquiries should be directed.
- 10.12 The Principal Contractor will establish a system for dealing with enquiries or complaints from the public, local authorities or statutory consultees. Any complaints that may arise will be logged, reported and addressed.
- 10.13 All complaints will be logged and investigated. Where required, mitigation will be implemented and the action taken will be recorded.

Working Hours

- 10.14 The typical working hours will be from 07:00 – 19:00 hours (Monday to Friday) and from 07:00 to 13:00 on Saturday. Construction personnel and deliveries will arrive at, and depart from the site up to one hour before and after the typical hours.
- 10.15 From time to time specific elements or phases of the project by their nature may require work to be undertaken outside of the typical working hours, either to meet a construction sequence or to complete specific work processes. On these occasions the Principal Contractor shall provide details of the type and nature of the works in advance to the Local Authority and take all reasonable steps to ensure that the work is not audible within the nearest residential dwelling.
- 10.16 By exception, and only in the case of an emergency, work may be undertaken outside of the core hours without notification to the Local Authority.

Construction Site layout and Good Housekeeping

10.17 To reduce the likelihood of either an environmental incident or nuisance occurring, the following measures will be implemented, where relevant:

- Cleanliness of working areas, treatment of perimeters and provision of adequate staff facilities;
- Secure storage of waste on site to prevent wind blow. Regular collection of waste from the site;
- Effective preventative pest and vermin control, including arrangements for disposing of food waste. If infestation occurs, the Principal Contractor will take prompt action to eliminate the infestation and prevent further occurrence;
- Prohibition of open fires, and a requirement to take measures to minimise likelihood of fires;
- Maintenance of wheel washing facilities or other containment measures;
- The layout and where possible, the location of site accommodation to avoid overlooking residential property;
- Containing and limiting visual intrusion of construction sites, where reasonably practicable;
- No discharge of site runoff to ditches, watercourses, drains, sewers or soakaways without agreement of the appropriate authority;
- Provision of maps showing sensitive areas and buffer zones where no pollutants (e.g. fuels, oils and other chemicals) are to be stored or used.

Site Lighting

10.18 Site lighting and signage will be provided to enable the safety and security of the construction site. Lighting will be at the minimum luminosity necessary and use low energy consumption fittings.

10.19 External lighting will comply with the Institution of Lighting Engineers' *'Guidance Notes for the Reduction of Obtrusive Light'* (2005) and *'Reduction in Light Pollution'* (2000).

Site Security

10.20 The site boundary will be secured so that the opportunity for unauthorised entry is minimised. Access to the site will be limited to specified entry points and personnel entrances/exits will be recorded for security and health and safety purposes.

Hoardings, fencing and screening

10.21 The following measures will be applied as appropriate:

- Provision and maintenance of adequate fencing and hoardings to an acceptable condition to prevent unauthorised access to the construction site; and
- Providing site information boards with out of hours contact details, 24 hour telephone number (for comments/complaints), community information and information on the works programme, at key locations.

10.22 The type of screening or fencing used will be selected to suit the location and purpose. All boundary fences/screens will be maintained in a tidy condition and fit for purpose.

10.23 All construction areas will remain securely fenced at all times during construction. All temporary screening and fencing will be removed as soon as reasonably practicable after the completion of the works.

Pollution Prevention Measures

10.24 The Principal Contractor will develop and implement appropriate measures to control the risk of pollution due to construction works. This will include a pollution incident control plan which recognises the risk of pollution from construction activities and presents pro-active management practices to ensure that any pollution incident that may occur (e.g. a diesel spill) is minimised, controlled, reported to relevant parties and remediated.

Emergency Preparedness

10.25 The client and Principal Contractor will ensure that emergency procedures are developed for the site. The procedures will be appropriate to the anticipated hazards and the specific layout of the site. The emergency procedure will contain emergency phone numbers and the method of notifying statutory authorities. Contact numbers for the key staff of the nominated undertaker will also be included.

Fire Prevention and Control

10.26 All construction sites and associated accommodation and welfare facilities will have in place appropriate plans and management controls to prevent fires.

Management of Environmental Issues

Designated Sites

10.27 There are unlikely to be any direct impacts on designated sites, adjacent to or nearby the proposed cable route, but appropriate good practice construction methods would be sufficient to manage potential indirect impacts through dust deposition, impacts on hydrology and possible contamination incidents

Dust

10.28 Dust generated during construction would be suppressed by the use of damping using bowsers or other measures.

Drainage and Spillage Control

- 10.29 A temporary drainage plan would be designed and implemented to ensure that any run-off or other waters generated during construction were suitably contained and treated prior to discharge. This would prevent the deposition of water-borne solids onto designated areas (and possibly ponds) through the local field ditch system.

Habitats

Grasslands

- 10.30 The cable route avoids significant areas of sensitive habitats, although there are some small areas of better quality (in ecological terms) grassland which may be affected temporarily during construction. They are typically areas of semi-improved grassland or marshy rush pasture.
- 10.31 At these areas, the construction of the cable route would ensure careful reinstatement of the grassland, by using the following methods. Where possible, grassland top soils would be removed as turves and stored separately in a manner which will enable their return to the cable trace at the end of the construction period minimising disturbance and rapid over-colonisation by ruderals.
- 10.32 Works on rush pasture would utilise bog-mats, where appropriate, and be timed for periods of dry weather to minimise ground disturbance at key access routes.

Hedges

- 10.33 Devon hedges are the feature of most value which will be inevitably affected by the proposed cable route. These features are important both intrinsically and because of the shelter and support they offer to wildlife species.
- 10.34 Virtually all hedges to be affected were identified as “important” hedges under the Hedgerows Regulations 1997 and as such, a Hedgerow Removal Notice will be required from the East Devon District Council in order to remove sections of hedgerows and hedge banks.
- 10.35 Where possible, the detailed cable route would make use of existing gaps through hedges (gateways, etc.). The route would also seek to avoid single or groups of mature standard trees wherever possible.
- 10.36 Where it is not possible to use existing gaps, the width of passage through hedgerows would be minimised as much as possible by narrowing the width of the works required to pass through the hedgerows. For instance, soil storage runs would be avoided through the hedge line, and where possible, the use of the cable route as a haul route would also be avoided where viable alternative access routes are available.
- 10.37 When hedgerows are replaced, the nature of Devon hedges should be taken into account and every effort should be made to ensure that replacement is “like for like” for each individual hedge and should not provide a standard generic hedge replacement detail.
- 10.38 This should ensure that the structure of the hedge-bank is replaced (while most hedge-banks are simply earth, some are stone-faced, for example), including formation of ditches. This should be undertaken by suitably experienced contractors who are fully aware of the guidance provided by Natural England in their (2008) Technical Information Note 039: Devon Field Boundaries:

Restoration Standards for Agri-Environmental Schemes (Natural England, 2008), and guidance from the Devon Hedge Group (Devon County Council and Devon Hedge Group, 1998,).

Watercourses

- 10.39 Watercourses, especially wooded streams are an important ecological feature and will be encountered at several locations.
- 10.40 The preferred approach with wooded watercourses is to use a horizontal directional drill (HDD) or similar technique to avoid disturbance to the watercourse or its wooded margins.
- 10.41 Where this approach cannot be used, the construction design and detail will be developed to ensure that damage to banks side vegetation and features (such as naturally eroding banks) are avoided.

Invasive Plant Species

- 10.42 An appropriate scheme to avoid the spread of invasive species must be put in place. Of primary concern is Himalayan balsam, which may be encountered particularly along watercourses. Other species identified include montbretia and variegated yellow archangel although these are associated with residential gardens and are less likely to be encountered.
- 10.43 It will be necessary to carry out a survey for these and other invasive plant species along the route prior to commencement of the works, in order to inform the plan of the requirements for its avoidance/removal.

Protected and Notable Species

Badgers

- 10.44 A walk-over of the finalised route would be undertaken to map and assess current badger activity associated with the route. This would be undertaken sufficiently in advance of commencement of cable installation to allow opportunities to re-align the route to avoid any active setts identified at that point. Where this is not possible, it would allow time to obtain a licence under the Protection of Badgers Act 1992, including provision of a detailed and deliverable mitigation plan and method statement. Natural England is unlikely to grant a licence to close an active sett between December and end of June to prevent possible impacts on dependent young.
- 10.45 Throughout the route, where excavations over 1 m deep are left open overnight, a sloping plank would be left in them to aid badgers from escaping the excavation, in case they fall into any trenches.

Bats

Roosting Bats

- 10.46 The route alignment avoids all trees with potential for roosting bats. However, if there are any changes to the route which means that it will affect any mature trees, an assessment of the potential of the tree to support roosting bats would be undertaken by a suitably experienced ecologist.

- 10.47 Should such potential exist, further survey work would be necessary, as recommended in the Bat conservation Trust's guidance on bat surveys (Collins, 2016). This would require 2-3 survey visits (depending on the potential to support roosts of the tree in question), and consist of at least one evening emergence survey and one dawn returning survey.
- 10.48 Should the presence of a bat roost be identified in such a tree, a licence under the Conservation of Habitats and Species Regulations 2012 would be required prior to its removal.
- 10.49 As with all wildlife mitigation licences, such an application would require a detailed method statement including a full mitigation strategy, and include details and assurances on its deliverability.

Bat Activity

- 10.50 Hedgerows, woodland edge and similar linear features provide the predominant source of bat flight lines across the countryside, providing commuting routes and foraging resources in their own right.
- 10.51 Works would avoid lighting which spills onto adjacent hedges, both those through which the route passes, and any which may lie alongside and parallel to the route.

Birds

- 10.52 When the cable route has been finalised, surveys would be undertaken to confirm if any breeding territories of key species such as curlew and bunting would be affected.
- 10.53 In general, vegetation suitable for nesting birds should be removed outside of the main nesting season (March-August inclusive). When planning the construction schedule, it may be necessary to undertake clearance works ahead of the main construction works, in order to remove nesting opportunities for birds which might otherwise delay the construction programme. This should include removal of all upstanding hedgerow vegetation and where opportunities for ground nesting birds occur (mainly restricted to grassland fields with limited grazing), it may also be appropriate to clear the cable route trace of surface vegetation.
- 10.54 Where it is not possible to carry out clearance prior to commencement of the nesting season, it will be necessary to undertake nesting bird checks by a suitably experienced ecologist immediately prior to undertaking the clearance works. In this case, the construction schedule should allow for potential delays as any active nests must remain undisturbed until all the young have fledged naturally, which may take up to several months.
- 10.55 The extent of works in the River Otter floodplain is unlikely to have substantial impact on the wintering bird population which use the Otter Estuary. However, if additional work is required in this area, additional wintering bird survey may be required to inform an appropriate approach.

Dormice

- 10.56 Where hedgerow removal can be limited to 5 m in width, it may be possible for work to proceed under a method statement to protect any dormice that may utilise the wider landscape. This methodology consists of a two-phased clearance approach, which takes into account the ecology and behaviour of dormice to ensure that habitats likely to be utilised is retained and dormice are allowed to move away from the development naturally.

- 10.57 This is based on the fact that dormice hibernate between November and March, during which they spend their time in hibernation nests on the ground in cool, slightly damp locations among root-masses and other sheltered locations. Removal of upstanding vegetation by hand to a height of 300 mm during this period (or to ground level, after careful inspection of the area by a suitably experienced ecologist to ensure no hibernation nests are present) will encourage dormice to move into their preferred adjacent retained habitats when they emerge from hibernation in April or May. At that point, it will be safe to remove earth banks and root systems, as dormice typically spend most of their time when active in the vegetation canopy above ground.
- 10.58 A similar but alternative approach would be to completely remove upstanding vegetation to ground level outside of the sensitive breeding and hibernation periods (September/October).
- 10.59 If such avoidance measures cannot be implemented, it will be necessary to carry out dormouse surveys and obtain a European Protected Species Licence under the Conservation of Habitats and Species Regulations 2012.
- 10.60 Survey and licensing may also be appropriate if gaps in hedges are required which are significantly greater than 5 m; this is because it is likely that larger gaps would represent a significant percentage loss in the home-range of an individual dormouse. This is estimated to be up to 300 m when living in hedgerow.

Amphibians

- 10.61 Two ponds are located within 250m of the cable route which have with higher than average habitat suitability indices. These ponds have not yet been surveyed for the presence of great crested newts, so their presence cannot be discounted. There do not appear to be significant natural barriers between these ponds and the proposed cable route to prevent newts from utilising terrestrial habitats on the route. It will be necessary to carry out presence/absence survey for great crested newts in these ponds.
- 10.62 This may comprise eDNA analysis, carried out between mid-April – late June, or alternatively four pond survey visits between mid-March to mid-June with two visits between mid-April and mid-May. If presence of great crested newts is identified by either method, a total of 6 pond visits mid-March to mid-June will be required to assess population size.
- 10.63 Where such a population is identified, it will be necessary to carry out an assessment to determine whether the proposed cable route works would require licensing under the Conservation of Habitats and Species Regulations 2012. Such licensing would require a method statement which would include mitigation measures such as erection of amphibian-proof fencing to prevent newts accessing the construction areas, and capture and removal of newts to places of safety, as appropriate. Compensation for habitat losses would also be normally expected.

Reptiles

- 10.64 No areas have been identified with potential to support particularly high or interesting reptile populations. However all reptiles are protected under the Wildlife and Countryside Act 1981 (as amended) against intentional killing or injury.

10.65 Vegetation clearance would be undertaken carefully in areas likely to support reptiles, such as rough grassland margins, hedge banks, rush pasture, railway embankments (disused and operational), and log and brash piles. In these areas, vegetation should be cut to a height of approximately 150 mm and left for a period of 24 hours to allow any remaining reptiles to disperse. Thereafter a second cut reducing vegetation to ground level should be undertaken. Any log or brash piles or other features likely to shelter reptiles should be carefully dismantled under ecological supervision and any reptiles present removed to a suitable place of safety.

Otters

10.66 Trenchless technology would be utilised wherever possible when crossing watercourses and their bank-side vegetation. If this is not possible, it will be necessary to carry out a search for otter couches or holts sufficiently in advance of commencement of the cable installation to ensure that there is sufficient time to obtain a licence under the Conservation of Habitats and Species Regulations 2012.

10.67 Works within 100 m of larger watercourses would not be undertaken at night to avoid disturbance to foraging or dispersing otters.

10.68 Where excavations over 1 m deep are left open overnight, a sloping plank would be left in them to aid otters from escaping the excavation.

Water Voles

10.69 As a precautionary measure where watercourses cannot be crossed by trenchless means, a check for water voles between March and October (when water voles would be active) would be carried out.

Archaeology and Cultural Heritage

10.70 FAB Link Ltd, as a licence holder, has the following duties under Schedule 9 of the Electricity Act 1989:

- Have regard to the desirability of preserving natural beauty, of conserving flora, fauna and geological or physiographical features of special interest and of protecting sites, buildings and objects of architectural, historic or archaeological interest; and
- Do what he reasonably can to mitigate any effect which the proposals would have on the natural beauty of the countryside or on any such flora, fauna, features, sites, buildings or objects.

10.71 Mitigation with regard to impacts on buried archaeological remains will take the form of avoidance wherever possible. If this cannot be achieved in full then a programme of appropriate investigation and recording would be undertaken ahead of, and during, construction. The results of this programme would be assessed and disseminated in appropriate formats.

10.72 Prior to the appointment of a contractor to construct the proposed scheme, a programme of archaeological evaluation will be undertaken. This will comprise geophysical survey followed by, trial trenching where this is thought to be necessary. The location and extent of the areas of

geophysical survey will be discussed in advance with the Historic Environment Team at Devon County Council and will be undertaken in line with an agreed method statement. The survey will be carried out by a suitable specialist contractor.

- 10.73 Following a review of the results of the programme of geophysical survey, the locations of trial trenches will be discussed with the Historic Environment Team at Devon County Council. This work will be undertaken in line with an agreed method statement and carried out by a suitable specialist contractor.
- 10.74 Archaeological work required with regard to impacts within the Grade I Registered Park and Garden at Bicton would also be consulted on with Historic England as the Government's adviser on this type of heritage asset.
- 10.75 Details of further archaeological mitigation would be included within the tender documents prepared for the appointment of the contractor to construct the proposed scheme. This could include measures to avoid impacts on archaeological sites identified during the preceding phases of archaeological work along with proposals for more detailed archaeological investigations and/or archaeological monitoring during construction. Detailed examination would be made of available geotechnical information regarding the nature and character of the deposit sequence within the Limekiln car park at Budleigh Salterton where the Transition Joint Bays will be located.
- 10.76 Measures to avoid impacts on archaeological sites during construction could include relocation of construction activities - in the case of significant archaeological sites this could include realignment of the cable route or adjustment of work areas and/or accesses. Protective measures to avoid impacts on archaeological sites during construction include restrictions on topsoil stripping and placement of geotextiles and/or rigid temporary surfaces.
- 10.77 Where avoidance of impact is not possible, or for archaeological sites of lesser significance, mitigation would be in the form of further, more detailed, archaeological investigation. The nature and extent of such investigations would be agreed in advance of commencement with the Historic Environment Team at Devon County Council.
- 10.78 The results of the programme of archaeological work would be subject to analysis and assessment, leading to dissemination of the results in appropriate formats and permanent deposition of the archaeological archive with a suitable repository.

Transport

- 10.79 Traffic management measures would be adopted at various locations. These will consist of a range of measures to assist with the movement of vehicles along the local road network and to ensure road safety is not compromised.
- 10.80 The traffic management measures to be adopted will include the following:
- Construction HGVs will not pass through Dog Village during the start and end of the school day;
 - Suitable trimming of hedgerow at access locations to enable suitable visibility splays are provided;

- Advance warning signs for public vehicles at all accesses of construction vehicles turning and of slow moving vehicles;
- All road closure and diversions to be planned in close liaison Highway Officers and local stakeholders / interested parties;
- All constructions of the cable through roads on a half-and-half basis (half the carriageway is closed off to construct the cable whilst the other half remains open to traffic) to be planned in close liaison with Devon County Council and undertaken in accordance with health and safety guidelines;
- Where possible, haul road crossings to be provided rather than right turning movements onto the haul road. This eliminates HGVs waiting to turn right on the public highway and instead allows HGVs to cross the road safely under controlled procedures;
- Barring of right turn movements from the haul road onto the public highway when visibility to the left (oncoming vehicles) is constrained;
- Provision of left in / left out access junctions on roads with higher traffic volume and / or right turning is likely to be difficult;
- Temporary reduced speed limits along the public highway will be discussed with Highway Officers and implemented if considered appropriate;
- 'Holding' of HGVs within compounds if it is known an inbound HGV would otherwise meet it on narrow sections of road;
- Strict vehicle routeing in accordance with fixed routeing plans;
- Maximisation of loads, where practicable, so as to minimise HGV movement;
- Where practical, use of local suppliers so as to minimise the distance travelled by HGVs;
- Wheel wash facilities provided at key locations to ensure mud and dust is not deposited on the public highway;
- All HGVs to be sheeted to avoid dust and the spillage of materials onto the public highway;
- Use of local compounds to minimise the distance travelled by HGVs;
- Monitoring of HGV movement and adherence with agreed measures and parameters;
- Undertaking of road condition surveys in full liaison with Highway Officers to identify any extraordinary damage caused as a result of the construction HGVs;

Air Quality

- 10.81 The following measures are taken from the Institute of Air Quality Management's guidance (IAQM, 2014 'Guidance on the Assessment of Dust from Demolition and Construction Sites') based on a high dust impact risk.

Table 10.1: IAQM Proposed Mitigation Measures

Communications
<ul style="list-style-type: none"> ▪ Implement a stakeholder communications plan that includes community engagement before and during work on site. ▪ Display the name and contact details of person(s) accountable for air quality and dust issues on the site boundary. This may be the environment manager/engineer or the site manager. ▪ Display the head or regional office contact information
Dust Management Plan
<ul style="list-style-type: none"> ▪ Develop and implement a Dust Management Plan (DMP) (which may include measures to control other emissions), approved by the Local Authority. The level of detail will depend on the risk, and should include as a minimum the highly recommended measures in this document. The desirable measures should be included as appropriate for the site. The DMP may include monitoring of dust.
Site Management
<ul style="list-style-type: none"> ▪ 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. ▪ Record any exceptional incidents that cause dust and/or air emissions, either on- or off- site, and the action taken to resolve the situation in the log book. ▪ Hold regular liaison meetings with other high risk construction sites within 500m of the site boundary, to ensure plans are co-ordinated and dust and particulate matter emissions are minimised. If the site is within a large AQMA (i.e. larger than 500m from the site), this should be extended to include all other high risk construction sites within the AQMAs. It is important to understand the interactions of the off-site transport/deliveries which might be using the same strategic road network routes).
Monitoring
<ul style="list-style-type: none"> ▪ Undertake daily on-site and off-site inspection, where receptors (including roads) are nearby, to monitor dust, record inspection results, and make the log available to the local authority when asked. ▪ When activities with a high potential to produce dust are being carried out and during prolonged dry or windy conditions increase the frequency of inspections. ▪ Carry out regular dust soiling checks of surfaces such as street furniture, cars and window sills within 100m of site boundary. ▪ Agree dust deposition, dust flux, or real-time PM₁₀ continuous monitoring locations with the Local Authority. Commence baseline monitoring at least three months before work commences on site or, if it a large site, before work on a phase commences. A shorter monitoring period or concurrent upwind and downwind monitoring may be agreed by the local authority. Further guidance is provided by IAQM on monitoring during demolition, earthworks and construction.
Preparing and maintaining the site
<ul style="list-style-type: none"> ▪ Plan site layout so that machinery and dust causing activities are located away from receptors, as far as is possible. Use screening intelligently where possible – e.g. locating site offices

between potentially dusty activities and the receptors.

- Erect solid screens or barriers around the site boundary.
- Avoid site runoff of water or mud.
- Keep site fencing, barriers and scaffolding clean.
- Remove materials that have a potential to produce dust from site as soon as possible, unless being re-used on site. If they are being re-used on-site cover as described below.
- Depending on the duration that stockpiles will be present and their size - cover, seed, fence or water to prevent wind whipping.

Operating vehicle/machinery and sustainable travel

- Ensure all vehicles switch off engines when stationary – no idling vehicles.
- 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 15 mph on surfaced and 10 mph on un-surfaced haul roads and work areas (if long haul routes are required these speeds may be increased with suitable additional control measures provided, subject to the approval of the nominated undertaker and with the agreement of the local authority, where appropriate)
- Produce a Construction Logistics Plan to manage the sustainable delivery of goods and materials.
- Implement a Travel Plan that supports and encourages sustainable staff travel (public transport, cycling, walking, and car-sharing)

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.
- Use enclosed chutes, conveyors and covered skips, where practicable.
- 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.

Waste management

- Avoid bonfires and burning of waste materials.

High risk earthworks

- Re-vegetate earthworks and exposed areas/soil 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. Only remove the cover in small areas during work and not all at once.

Medium risk measures specific to construction

- 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 additional control measures are in place.

Medium risk measures specific to trackout

- Use water-assisted dust sweeper(s) on the access and local roads, to remove, as soon as practicable any material tracked out of the site. This may require the sweeper being continuously in use.

- Ensure vehicles entering and leaving sites are covered to prevent escape of materials during transport.
- Inspect on-site haul routes for integrity and instigate necessary repairs to the surface as soon as practicable;
- Implement a wheel washing system (with rumble grids to dislodge accumulated dust and mud prior to leaving the site).

Noise and Vibration

Construction Noise Impacts

10.82 Construction works would follow Best Practicable Means (BPM) outlined in Section 72 of the Control of Pollution Act 1974 (as amended) to minimise noise and vibration impacts. These details would be submitted to and agreed in writing with EDDC prior to commencement of construction activities and following the appointment of the Principal Contractor. These are based upon the guidance contained in BS 5228:2009+A1:2014 'Code of practice for noise and vibration control on construction and open sites - Part 1: Noise' and 'Part 2: Vibration' ((British Standards Institution, 2014a, 2014b):

- **Communication:** A Local Liaison Committee will be established, and occupiers of residential and business properties that are likely to be affected by the works will be notified in advance of the works. A named individual will be appointed to take primary responsibility for the day-to-day implementation of the CoCP during the construction phase and to act as the first point of contact on environmental matters for EDDC, other external bodies and the general public. Information regarding the nature and duration of the works, and named contact details for key members of staff will be displayed on a noticeboard near to the site.
- **Standard construction hours:**, core working hours would be 07:00 to 19:00 hours Monday to Friday, 07:00 to 13:00 hours on Saturday and at no time on Sundays or on public or bank holidays. In the event that noise generating works are required outside of core working hours, this would be agreed with EDDC prior to commencement of the activity. In such instances the contractor would apply to EDDC for written consent prior to work commencing by submitting either a Section 61 consent application or an agreed method statement in line with the Control of Pollution Act .
- **Equipment:** Quieter alternative methods, plant and equipment will be used, where reasonably practicable.
- **Worksite:** Plant, equipment, site offices, storage areas and worksites will be positioned away from existing NSRs, where reasonably practicable.
- **Screening:** Portable acoustic enclosures/screens will be used, as required.
- **Maintenance:** All vehicles, plant and equipment will be maintained and operated in an appropriate manner, to ensure that extraneous noise from mechanical vibration, creaking and squeaking is kept to a minimum.

Measures to Protect Water Quality

- 10.83 Potential impacts to the water environment have been avoided where possible through careful route selection.

Landfall and Main River crossings

- 10.84 HDD will be used for installing the cables between the intertidal area and the transition joint bay (TJB), as well as at Main River and significant 'ordinary' watercourse crossings. This method will allow the cables to be installed beneath the channels and sensitive habitats without impacting them.

Ordinary watercourses and drain crossings

Larger drains

- 10.85 For larger drain crossings, a section of the drain will be dammed using sand bags or straw bales and ditching clay or an alternative form of barrier. Water will be either pumped, piped or diverted between the dammed sections to maintain drainage flows where necessary. An appropriately sized culvert and necessary support and reinforcement will be installed into the drain. Ducts will be permanently installed across the top and the remainder of the drain will be backfilled. The drain will then be reinstated and flows re-established.
- 10.86 The final design of this type of crossing will be approved by the Lead Local Flood Authority as part of the consenting process.

Small drains

- 10.87 At the cable crossing point, ditches will be dammed using sand bags or straw bales and ditching clay or alternative form of barrier. Water will be pumped/piped between the dammed sections or diverted to maintain drainage if required. The cable trenches will be excavated through the ditches. When installation and reinstatement is complete the pipes and sand bags will be removed. The cables will be installed to provide a minimum of 0.6 m to 1.0m clearance between the hard bed level and the uppermost part of the protective duct to allow for any future maintenance requirements of the drain e.g. dredging.
- 10.88 It is estimated that the ducting operations within the vicinity of the drain crossing, and hence the water management period, is likely to be in the order of 2 weeks.
- 10.89 The final design of this type of crossing will be approved by the Lead Local Flood Authority as part of the consenting process.

Field drainage

- 10.90 Measures will be taken prior to construction to ensure that the existing land drainage systems, located within the agricultural land along the cable route, are not compromised as a result of cable installation during the construction phase. Prior to construction and during the detailed design phase of the project, the drainage in each field will be surveyed, identified and recorded and an appropriate drainage design will be developed taking into account soil type and topography, this will be agreed with the land owner. Where necessary, pre-construction drains may be installed, typically parallel to the cable route within the working area to ensure the

existing drainage network will continue to function, as well as carry water away from the cable trench.

Groundwater

- Undertake a hydrogeological risk assessment meeting the requirements of Groundwater Protection and Practice (GP3) (Environment Agency, 2012) where the cable route crosses a public water abstraction point ,and where trenchless techniques are proposed within SPZs and in locations underlain by the Principal Aquifer.
- No oil or fuel should be stored within 50m of a spring, well or borehole or within 10m of a watercourse.

Best Practice Measures

10.91 All construction work would be undertaken in accordance with the Code of Construction Practice, and guidance including:

- Environment Agency, Pollution Prevention Guidance Note 6 (PPG6): Pollution Prevention Guidelines – Working at Construction and Demolition Sites;
- Environment Agency, Pollution Prevention Guidance Note 5 (PPG5):– Working in, near or liable to affect watercourses;
- Control of Water Pollution from Construction Sites – Guidance for Consultants and Contractors CIRIA (C650); CIRIA – SuDS Manual;
- Prevent surface water being affected during earthwork operations. No discharge to surface watercourses will occur without permission from the EA (SuDS Manual);
- Wheel washers and dust suppression measures to be used as appropriate to prevent the migration of pollutants(SuDS Manual);
- Regular cleaning of roads of any construction waste and dirt to be carried out (SuDS Manual); and
- A construction method statement to be submitted for approval by the responsible authority (SuDS Manual).

Pollution Prevention Measures

- Refuelling of machinery would be undertaken within designated areas where spillages can be easily contained. Machinery would be routinely checked to ensure it is in good working condition.
- Any tanks and associated pipe work containing substances included in List 1 of the Groundwater Directive would be double skinned and be provided with intermediate leak detection equipment.

- Provide appropriate spill kits on the construction site and laydown areas and train staff in their use.
- Inform construction workers of the location of the infilled pond and the potential for localised contamination. Provide training on the olfactory and visual signs to be aware of and the procedure to follow if contamination is suspected.

10.92 The following specific mitigation measures for the protection of surface water during construction activities would be implemented:

- Management of construction works to comply with the necessary standards and consent conditions;
- A briefing highlighting the importance of water quality, the location of watercourses and pollution prevention included within the site induction;
- Areas with prevalent run-off to be identified and drainage actively managed, e.g. through bunding and/or temporary drainage;
- Areas at risk of spillage, such as vehicle maintenance areas and hazardous substance stores (including fuel, oils and chemicals) to be bunded and carefully sited to minimise the risk of hazardous substances entering the drainage system or the local watercourses. Additionally the bunded areas will have impermeable bases to limit the potential for migration of contaminants into groundwater following any leakage/spillage. Bunds used to store fuel, oil etc. to have a 110% capacity of the volume of fuel, oil etc. to be stored;
- Disturbance to areas close to watercourses reduced to the minimum necessary for the work;
- Excavated material to be placed in such a way as to avoid any disturbance of areas near to the banks of watercourses and any spillage into the watercourses;
- Construction materials to be managed in such a way as to effectively minimise the risk posed to the aquatic environment;
- All plant machinery and vehicles to be maintained in a good condition to reduce the risk of fuel leaks;
- Drainage works to be constructed to relevant statutory guidance and approved via the Lead Local Flood Authority prior to the commencement of construction; and
- Consultation with the EA to be ongoing throughout the construction period to promote best practice and to implement proposed mitigation measures.

Agricultural Land Use and Soils

10.93 The construction process would take into account the principles of good practice in soil handling and restoration set out in the following documents, wherever possible, to reduce the possibility of damage to soil materials during the construction process:

- DEFRA (2009) Construction Code of Practice for the Sustainable Use of Soils on Construction Sites (including Toolbox Talks); and
- MAFF (2000) Soil Handling Guides

10.94 Important principles to be included are:

- the identification and management of the soil materials on the site;
- separate stripping of identified topsoil and subsoil resources;
- separate storage of stripped topsoil and subsoil materials;
- location of topsoil and subsoil heaps to avoid cross contamination of materials and trafficking of soil heaps by construction traffic;
- maintenance of soil heaps to reduce the potential for losses of materials during storage;
- appropriate timing of soil handling operations;
- Choice of appropriate soil handling machinery; and
- careful supervision of soil handling operations on site.

10.95 A soil handling strategy would be developed by a specialist in advance of construction and implemented by a suitably experienced operative on site.

10.96 In terms of the agricultural use of the land affected by the route during construction, the following measures would be implemented during the construction period, as far as possible:

- the maintenance and reinstatement of existing water supplies and drainage systems;
- the maintenance of access routes across individual fields;
- the maintenance of wider farm access routes;
- appropriate fencing of the construction corridor, dependent upon the nature of the individual farm holding affected; and
- appropriate construction practices to be implemented to ensure that the potential risk for the spread of animal and plant diseases is reduced as far as practicable.

Recreation

10.97 Consultation will be undertaken with East Devon District Council (EDDC) in relation to measures to mitigate the temporary impacts on the following resources to ensure that public access is maintained during construction whilst ensuring that there were no risks to their safety:

- Lime Kiln Car Park; and
- Cranbrook Country Park.

10.98 FAB Link Ltd has already undertaken various surveys in Lime Kiln Car Park which required part of the car park to be temporarily fenced and closed. This was undertaken in full cooperation and agreement with EDDC Car Parks Division and enabled public access to be maintained to part of the facility.

10.99 The project proposals have been presented to Budleigh Salterton Town Council and Cranbrook Town Council and consultation will be ongoing. Consultation will also be undertaken with Devon County Council's Public Rights of Way Team, in relation to impacts on the public rights of way identified above, together with and Natural England and/or the South West Coast Path Team in relation to impacts on the South West Coast Path to discuss:

- the nature, location and programming of traffic management measures to be put in place to maintain the connectivity of the local highway network during construction;
- the mitigation measures to be put in place to address the temporary impacts on the eight local public rights of way affected by the construction works i.e. temporary stopping up or diversion; identification and signing of alternative routes; or temporary traffic management measures; and
- the mitigation measures to be put in place to address the temporary impacts on the South West Coast Path i.e. temporary diversion; identification and signing of alternative routes; or temporary traffic management measures.

10.100 Consultation will be undertaken with Budleigh Salterton Cricket Club in relation to the measures that will be put in place to mitigate the temporary impacts on access to the car park, pavilion and cricket field during the cable installation works.