# Dogger Bank C/Sofia
# Onshore Works Application

# Environmental Appraisal

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# 1 Introduction

## 1.1 Purpose of the Report

### *1.1.1 Overview*

This Environmental Appraisal is submitted in support of a planning application (the Application) made by Doggerbank Offshore Wind Farm Project 3 Projco Limited (the Projco) and Sofia Offshore Wind Farm Limited (SOWFL) (the Applicants), for consent pursuant to Section 62 of the Town and Country Planning Act 1990 as amended[1].

The Application includes five areas of alternative and additional infrastructure to the consented 9 kilometres (km) buried onshore grid connection, spanning from the landfall for Dogger Bank Wind Farm C (DB-C) and Sofia Offshore Wind Farm (Sofia) to the National Grid at Lackenby Substation (the Works). Figures 1.2 (a - c) show the location of the Works and the consented 2015 DCO.

A Development Consent Order (2015 DCO) was granted for Dogger Bank Wind Farm C (previously known as Dogger Bank Teesside A Offshore Wind Farm) and Sofia Offshore Wind Farm (previously known as Dogger Bank Teesside B Offshore Wind Farm) (the Applicants' Projects), including the onshore transmission works required to export electricity to the grid in August 2015. Combined, these Nationally Significant Infrastructure Projects (NSIP) will provide approximately 2.6 Gigawatts (GW) of installed capacity (Sofia at 1.4 GW and DB-C in the process of removing 1.2 GW capacity cap to maximise energy production). The Applicants' Projects will offer significant economic opportunities for the UK with potential supply chain benefits, infrastructure and associated jobs and contracts.

The onshore works of the Applicants Projects' are consented developments with certain compulsory acquisition powers by virtue of the 2015 DCO. For the purposes of this Application, the 2015 DCO forms part of the baseline for the assessment undertaken within this Appraisal.

### *1.1.2 The Need for the Works*

The Works are required to connect the Applicants' Projects to the National Grid at Lackenby Substation, to allow for the export of renewable electricity generated. The Works is required as a number of landownership and engineering constraints have been identified following the grant of the DCO in August 2015.

Further detailed site investigations undertaken post 2015 DCO consent have enabled design optimisations to be embedded within the engineering requirements of the export cable routing. This has required refinements which are the basis for this Application.

[1] UK Government (1990) Town and Country Planning Act 1990 [Online] Available at: http://www.legislation.gov.uk/ukpga/1990/8/contents (Accessed on 11/05/2020)

### *1.1.3 Environmental Appraisal*

This Appraisal presents information on the baseline of each environmental resource considered as pertinent to this Application and outlines the likely environmental effects of the Works. Therefore, technical assessments undertaken as part of this Application will assess the effects of the Works am against those predicted residual effects incurred in implementing the 2015 DCO.

The purpose of this Appraisal is to provide environmental information which will aid the determination of the Application by Redcar and Cleveland Borough Council (RCBC). The corresponding chapter of the 2014 Environmental Statement (ES) is included for reference and should be read in conjunction with technical assessments. The disciplines addressed include:

- Landscape (2014 ES Chapter 21);
- Hydrology (2014 ES Chapter 24);
- Land Quality (2014 ES Chapter 24);
- Ecology (2014 ES Chapter 25);
- Land Use (2014 ES Chapter 26).
- Archaeology (2014 ES Chapter 27);
- Traffic and Access (2014 ES Chapter 28);
- Noise and Vibrations (2014 ES Chapter 29); and
- Air Quality (2014 ES Chapter 30).

Every relevant assessment has been considered as part of this Application and those scoped out are noted with rationale below. The following technical chapters from the 2014 ES are scoped out of this Application:

- Chapters 8 – 20 – Offshore/marine Chapters;
- Chapter 22 – Socio-economics; and
- Chapter 23 – Tourism and recreation.

Given the Works are onshore only, Chapters 8 – 20 of the 2014 ES are scoped out as they relate solely to offshore elements of the Applicants' Projects and therefore, not appliable to the Application.

Chapter 22 of the 2014 ES states that the Applicants' Projects have the potential to have socio-economic benefits within the North-East region during construction and operation phases relating to expenditure and job creation. A socio-economic assessment has been scoped out of the Application as the Works have no effect on the socio-economic effects of the Applicants' Projects and will not change the conclusion of the 2014 ES.

Chapter 23 of the 2014 ES concludes that some minor, short-term impacts have been identified on onshore tourism and recreation features associated with disruption and reduced amenity (e.g. local towns and villages, National Cycle Trail, Public Rights of Way and other footpaths). These impacts will be managed through regular communications with the local community and representatives from the tourist attractions, minimising duration of any closures and agreement of a strategy with the Public Rights of Way (PRoW) Officer at RCBC. As the above mitigation will be implemented, it was not considered proportionate to assess the effects on tourism for the purpose of this Application. Effects on PRoW are considered in Appendix 5 – Land Use Assessment.

Regarding Biodiversity Net Gain, the biodiversity matrix does not need to be completed for the Application as the Environment Bill 2020 is not yet enacted.

## 1.2 Regulatory Context

### *1.2.1 Planning*

Under the Town and Country Planning (Development Management Procedure) England Order 2015[2], the Works constitutes 'major development'.

As required for major applications by RCBC's Statement of Community Involvement[3], the Applicants have agreed the approach to pre-application consultations with RCBC and the rationale is set out in Section 6 of this Appraisal.

As agreed with RCBC, a Design and Access Statement (DAS) and Statement of Community Involvement (SCI) will be provided within the Planning Statement which will accompany the Application. The Planning Statement will consider the potential environmental effects associated with the Works, proposed mitigation where appropriate to minimise environmental effects and assess the compliance of the Works against all relevant policies.

### *1.2.2 Environment*

The Works do not meet the criteria in Schedule 1 or 2 of the Town and Country Planning (EIA) Regulations[4] (the EIA Regulations) and therefore, do not constitute EIA development.

The Applicants have however, provided this Appraisal to aid decision making by RCBC, consistent with the approach adopted for the Outline Planning Permission granted by RBCB in 2015. It is acknowledged that environmental effects are a material consideration in the determination of the Application and this Appraisal is considered to provide an appropriate level of supporting environmental information for that purpose.

In order to undertake the appraisal, the consented 2015 DCO has been considered the baseline for the Application and is given due consideration as cumulative and secondary effects are assessed.

## 1.3 Document Structure

### *1.3.1 Environmental Appraisal*

- **Chapter 1: Introduction** – Sets out the intended purpose of this Appraisal and outlines the Works;

[2] UK Government (2015) the Town and Country Planning (Development Management Procedure) (England) Order 2015 [Online] Available at: http://www.legislation.gov.uk/uksi/2015/595/pdfs/uksi_20150595_en.pdf (Accessed 14/05/2020)

[4] UK Government (2017) Town and Country Planning (EIA) Regulations 2017 [Online] Available at: http://www.legislation.gov.uk/uksi/2017/571/contents/made (Accessed 02/06/20)

- **Chapter 2: Background to the Works** – Provides background information about the Works, highlighting the consenting history, the objectives of the Works and the associated Application;
- **Chapter 3: Methodology –** Description of the overarching methodology for the Appraisal;
- **Chapter 4: The Applicants** – Provides background information on the Applicants;
- **Chapter 5: Description of the Works** - Provides a detailed description of the Works, including details of the optimisation of the 2015 DCO and of the construction and operational arrangements;
- **Chapter 6: Consultation** – Outlines all relevant pre-application consultation with consultees, outlining particular areas of interest identified by consultees and where these have been addressed in the Application;
- **Chapter 7: Technical Assessment Summary** – This will include sub-sections on each technical area, comprising of the aforementioned environmental resources, will assess the effects of the Works against the DCO effects. The assessment will be undertaken in line with the resource-specific methodology stated within each technical appendix. This will include a description of any proposed mitigation or enhancement measures and a statement of predicted residual impacts; and
- **Chapter 8: Mitigation Measures Required for the Works** – Provides a summary of the findings of the Appraisal assessments, including a tabular summary of all proposed mitigation.

### *1.3.2 Environmental Appraisal Figures*

The Environmental Appraisal is supported by the following figures:

- Figure 1.1 - Site Location;
- Figure 1.2 (a – c) - Site Layout;
- Figure 1.3 (a – c) – Types of Ancillary Works;
- Figure 5.1 - Retaining Works;
- Figure 5.2 – CC C Indicative Layout; and
- Figure 5.3 – CC H Indicative Layout.

Where required, figures from the 2014 ES are referenced throughout this Appraisal. To avoid duplication, these are not included within the Application.

### *1.3.3 Technical Appendices*

The Environmental Appraisal is supported by the following Technical Appendices:

- Appendix 1 – Landscape and Visual Assessment (LVA);
- Appendix 2 – Hydrology Assessment;
- Appendix 3 – Land Quality Assessment;
- Appendix 4 – Ecology Assessment;
- Appendix 5 – Land Use Assessment;
- Appendix 6 – Archaeology Assessment;
- Appendix 7 - Traffic and Access;
- Appendix 8 – Noise and Vibrations Assessment; and
- Appendix 9 – Air Quality Assessment.

## 1.4 The Project Team

Table 1.1 details the consultants who have undertaken the assessment and preparation of the Application. Each is technically competent and holds appropriate qualification relevant to their role. All technical inputs have been peer reviewed by an external technical consultant to ensure assessments and findings are technically sound and form a robust Application.

***Table 1.1: Project Team***

| Technical Area | Author | External Technical Review |
|---|---|---|
| Landscape | Clare Horner, Arcus | Claire Smith, Royal HaskoningDHV |
| Hydrology | Ed Turner, Stantec | Liam Nevins, Arcus |
| Land Quality | David Ballentyne, Arcus | Maria Walentek, Royal HaskoningDHV |
| Ecology | David Hope-Thomson, Arcus | Claire Smith, Royal HaskoningDHV |
| Land Use | Ailsa Gray, Arcus | Maria Walentek, Royal HaskoningDHV |
| Archaeology | Peter Carne, Durham University | Heather Kwiatkowski, Arcus |
| Traffic and Access | David Young, SCP | Tomos Ap Tomos, Arcus |
| Noise and Vibrations | Rob Shepherd, Hayes McKenzie | Michael Reid, Arcus |
| Air Quality | Adam Price, Arcus | Charlotte Goodman, Royal HaskoningDHV |

# 2 Background to the Works

## 2.1 Consenting History

### *2.1.1 2015 DCO and Non-Material Changes*

The 2014 ES sets out the description of development for the 2015 DCO[5].

The 2015 DCO awards consent for all infrastructure required for delivering two independent offshore wind farms, including all offshore and onshore transmission infrastructure necessary to export the electricity generated into the existing Lackenby Substation. Both DB-C and Sofia are progressing towards construction following successful award of a Contract for Difference (CfD) in the UK Government's 2019 auction.

The landfall of the High Voltage Direct Current (HVDC) cables is between Redcar and Marske-by-the-Sea. The HVDC cables run through primarily agricultural land to the Onshore Converter Stations (OCSs) which are located on arable land, to the south of the Wilton Industrial complex ('Wilton International'), north east of the village of Lazenby.

The OCSs (one for DB-C and another for Sofia) will convert power from HVDC to High Voltage Alternating Current (HVAC). The HVAC cables continue for 2 km west to connect into the National Grid at Lackenby Substation, south of Grangetown. The total length of the onshore cables consented by the 2015 DCO is approximately 9 km.

The consented HVDC onshore route is approximately 36 metres (m) wide in total. The HVAC cable route is approximately 40 m-wide. The width of both the HVDC and HVAC cable routes is considerably reduced in some areas (as narrow as 18 m).

The Applicants have undertaken a detailed review of the 2015 DCO onshore cable corridors and identified proposals, which have been split into five areas (i.e. the Works) which will be the subject of the Application.

#### *2.1.1.1 Non-Material Changes*

Table 2.1 sets out the Non-Material Changes (NMC) to the 2015 and their status. Each of the NMCs as granted will comprise a series of Amendment Orders. The DCO will then require to be implemented by the Applicants as amended.

***Table 2.1: NMC to the 2015 DCO***

| NMC Reference | Change | Detail | Status |
|---|---|---|---|
| Sofia NMC July 2018 | Amend capacity cap to 1.4GW | Increase generating capacity cap to 1.4 GW and increase maximum | Approved (March 2019) |

[5] Forewind (2014) Environmental Statement – Chapter 5 – Description of Development [Online] Available at: https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010051/EN010051-000219-6.5%20ES%20Chapter%205%20Project%20Description.pdf (Accessed 11/05/2020)

| | | | |
|---|---|---|---|
| | | rotor diameter up to 288 m. | |
| DB-C (TSA) NMC November 2019 | Remove capacity cap | To maximise generation capacity and utilise newest turbine technology | Pending |
| Joint NMC (May 2020) | Amend project Staging and associated minor amendments | To split projects to allow for their separate implementation but also to facilitate joint enabling works and enhance flexibility of some cable laying engineering solutions | Pending |
| Sofia NMC (May 2020) | Offshore only - Increase Hammer Energy | To utilise the latest and most effective turbine installation solutions | Pending |
| DB-C NMC (May 2020) | Offshore only - Increase Hammer Energy | To utilise the latest and most effective turbine installation solutions | Pending |

### *2.1.2 Outline Planning Permission*

Outline planning permission was granted in 2015 for limited changes to the onshore cable route. This will not be taken forward in light of further design and engineering work.

## 2.2 Current Status

The Works will optimise construction and operation of the onshore works associated with the 2015 DCO.

The Works are required in light of more recent information relating to land use, technical and engineering constraints. The following factors have fed into the design review:

- Avoid new housing land allocation included in the Redcar & Cleveland Local Plan[6];
- Avoid future development proposals within Wilton International;
- Reduction in the number of sharp bends in the 2015 DCO to optimise engineering design;
- Facilitate earthworks and retaining works along a narrow section of the HVAC route to ensure long term stability of an existing landscape and screening berm;
- Relocated and additional temporary construction compounds to support construction works; and
- Utilising additional vehicular access points on private land to reduce the distance travelled by construction vehicles.

[6] Redcar & Cleveland Borough Council (2018) Redcar & Cleveland Local Plan [Online] Available at: https://www.redcar-cleveland.gov.uk/resident/planning-and-building/strategic%20planning/Documents/Local%20Plan%20Adopted%20May%202018.pdf (Accessed 22/04/2020)

# 3 Approach to Assessment

## 3.1 Overview

This Appraisal is intended to provide environmental information necessary to demonstrate that the Works will not result in environmental effects greater than those identified within the 2014 ES.

The approach taken for the methodology in this Appraisal has been developed as the Works:

- Are relatively minor in nature (as per Section 5);
- Do not constitute EIA development (which is consistent with the approach to 2015 Outline Planning Permission (RCBC Reference: R/2015/0678/OOM) detailed in Section 2.1.2); and
- Broadly consistent with the parameters of the 2014 ES (as per Section 3.4).

To ensure a responsible and open approach to development, the Applicants intend this Appraisal and supporting technical appendices to supply all pertinent information to facilitate decision makers and consultees to comment on the Application. This further demonstrates the Applicants commitment to high environmental standards and ongoing mitigation during construction.

## 3.2 Methodology

### *3.2.1 Assessment Methodology Overview*

As per Section 1.2.2, the Works do not constitute EIA development and therefore undertaking an assessment in accordance with the EIA Regulations is not required. However, in order to compare the effects of the Works to those identified within the 2014 ES, it is appropriate to consider the sensitivity of each receptor and the magnitude of any effect to determine any change in level of effect anticipated.

To this end, each technical assessment follows the below assessment framework:

- **Policy and Guidance Review**: A review of all guidance incorporated within the 2014 ES is undertaken. Any relevant updates to national policy and guidance, local policy or technical guidance are identified to establish any different assessment considerations for each technical area;
- **Scope and Study Area Identified:** Effects that have the potential to occur based on the scale of the Works proposed and their nature are identified. This determines the Study Area appropriate for the scale of Works proposed. Any effects that were previously assessed in the 2014 ES and not applicable to the location or scale of the Works can be scoped out of further consideration;
- **Baseline Identified:** For areas that could be affected by the Works, the 2014 ES baseline is reviewed and updated, if required, to take account of any changes to the existing conditions that have occurred since the 2014 ES;
- **Assessment of Potential Effects:**
    - **Receptor Sensitivity**: The sensitivity of any receptors within the Study Area for each technical assessment is established. Sensitivity is defined by each individual technical assessment and consistent with definitions of sensitivity within the 2014 ES to allow direct comparison;

- **Magnitude of Effect:** The magnitude of any potential effects is defined by each individual technical assessment and consistent with definitions of magnitude within the 2014 ES to allow direct comparison;
- **Level of Effect:** A conclusion on the level of potential effect is drawn based on the receptor sensitivity and magnitude of effects identified. This is informed by an assessment matrix and professional judgement;

- **Mitigation and Enhancement:** Mitigation measures defined in the 2014 ES are reviewed to determine if they are applicable to the Works. If required for the effects predicted, additional mitigation measures are identified specifically for the Works;
- **Cumulative Considerations:** The 2014 ES included an assessment of cumulative developments. A review is undertaken for any changes to the cumulative scenario that is relevant to the location and scale of the Works. Where applicable, additional cumulative effects specific to the location and scale of the Works are updated;
- **Comparison of the Works and 2014 ES Findings:** Each technical assessment considers whether the potential effects from the Works are different to those assessed and considered acceptable as part of the 2014 ES. A conclusion on whether the Works are likely to result in any new Likely Significant Effects, compared to the 2014 ES, is drawn.

The methodology detailed in this section is the general approach applied to assessing the effects of the Works. This methodology may vary subject to best practice and guidance requirements applicable to different specialisms. Further detail on individual assessment methodologies is contained in Technical Appendices 1 to 9 of this Appraisal.

### *3.2.2 Assessment of Effects – Realistic Worst Case*

The 2014 ES considered various construction scenarios (i.e. the manner in which the Applicants' Projects will be constructed), as well as the particular design parameters of each project (such as the maximum construction footprint). Scenarios identifying "worst case" have been addressed as part of the assessments.

#### *3.2.2.1 Construction Scenarios*

Chapter 5 of the 2014 ES provides details of the three overarching construction scenarios associated with the onshore construction of the Applicants' Projects.

The realistic worst-case scenario will be assessed within each Technical Appendix depending on the environmental receptor (e.g. realistic worst-case for land-use would be concurrent construction due to increased land take, whereas realistic worst-case for landscape would be sequential due to duration of effects).

# 4 The Applicants

The Applicants are Doggerbank Offshore Wind Farm Project 3 Projco Limited (the Projco) and Sofia Offshore Wind Farm Limited (SOWFL). The Applicants will where possible enter into joint working arrangements for enabling and construction works, this to minimise environmental impacts and disruption to the community

## 4.1 Doggerbank Offshore Wind Farm Project 3 Projco Limited

Dogger Bank C Offshore Wind Farm is part of the consented Dogger Bank Wind Farm, a Joint Venture between SSE and Equinor. Dogger Bank Wind Farm is the world's biggest offshore wind farm under development and when complete it will be able to provide over 4.5 million UK homes with renewable electricity from the wind – around 5% of the UK's electricity demand. Dogger Bank C was previously known as Dogger Bank Teesside A Offshore Wind Farm. Dogger Bank C is located within the eastern portion of the Dogger Bank Zone covering 560km$^2$ and is 196 km from shore at its closest point.

## 4.2 Sofia Offshore Wind Farm Limited (SOWFL)

The 1.4(GW) Sofia Offshore Wind Farm, sited on the shallow central area of the North Sea known as Dogger Bank, is the largest project in RWE's current renewables development portfolio. he consented projects is being developed 195 km off the UK's North East coast on a site of 593 square kilometres. It has an agreed connection point at an existing National Grid substation in Lackenby, Teesside. RWE is the sole owner of the project company, Sofia Offshore Wind Farm Limited (SOWFL).

# 5 Description of the Works

## 5.1 Consented Parameters of 2015 DCO

### *5.1.1 Overview*

The 2014 ES includes consideration of the onshore cable corridor, OCSs and ancillary works for both the Applicants' Projects.

The 2015 DCO onshore cable route extends from the landfall point between Redcar and Marske-By-The-Sea (approximate National Grid Reference (NGR): 463011, 523253) to the existing Lackenby Substation, near Eston (approximate NGR: 456308, 519515).

The 2015 DCO onshore cable route is orientated east to west/south west, and is approximately 9 km long, covering approximately 900 hectares (ha), as shown in Figures 1.2 (a - c). The 2015 DCO onshore cable route is predominately located within agricultural farmland (arable, woodlands and grasslands) between the heavy industry of Wilton International to the west and the coastline to the east.

Final design parameters will be provided prior to construction by discharge of the relevant requirements as set out in the 2015 DCO with the same provided for these works, secured by planning condition.

### *5.1.2 Cable Corridors*

An indicative onshore HVDC cable route working widths layout is provided in Figure 4.6 of Chapter 5 of the 2014 ES. The 2014 ES includes 7 km of HVDC cabling from the landfall to OCSs and 2 km of HVAC cabling from the OCSs to the National Grid at Lackenby Substation, totalling approximately 9 km (per project).The cable corridors include a haul road to facilitate construction.

Table 5.1 details the indicative working widths of the HVDC cable corridor for each project. Figure 4.4 of Chapter 5 of the 2014 ES shows a cutaway view of a typical onshore HVDC cable.

***Table 5.1: 2014 ES Indicative HVDC Cable Corridor***

| **Parameter** | **Quantity** |
|---|---|
| Indicative topsoil and subsoil storage width per project (m) | 7 |
| Indicative separation distance between trench and soil storage area (m) | 2 |
| Indicative separation distance between drain and cable trench (m) | 1 |

| | |
|---|---|
| Indicative temporary drain[7] width on the side of the haul road (m) | 0.5 |
| Indicative haul roads width per road (m) | 6 |
| Indicative separation between haul roads (m) | 0.5 |
| Maximum overall HVDC cable route width (two projects – concurrent construction) (m) | 36 |

For the HVAC cable corridor, an approximate 39 m overall width was assessed in the 2014 ES. The HVAC cable corridor is approximately 3 m wider than the HVDC cable corridor to take into account the greater number of cables to be installed and related excavation materials. Figure 4.5 of Chapter 5 of the 2014 ES shows a cutaway view of a typical onshore HVAC cable.

***Table 5.2: 2014 ES Indicative HVAC Cable Corridor***

| **Parameter** | **Quantity** |
|---|---|
| Indicative topsoil and subsoil storage width per project (m) | 7 |
| Indicative separation distance between trench and soil storage area (m) | 2 |
| Indicative separation distance between drain and cable trench (m) | 1 |
| Indicative temporary drain width on the side of the haul road (m) | 0.5 |
| Indicative haul roads width per road (m) | 6 |
| Indicative separation between haul roads (m) | 0.5 |
| Maximum overall HVDC cable route width (two projects – concurrent construction) (m) | 39 |

Where the HVDC or HVAC cable corridor traverses agricultural land, it is anticipated that ducted cables will be laid directly into the ground, some in trenches, some via HDD. Figures 4.10 and 4.11 of Chapter 5 of the 2014 ES provides indicative cross sections of ducted trench installation in agricultural land and the road respectively. Parameters for direct burial of cable trenches in agricultural lands are set out in Table 5.3.

***Table 5.3: 2014 ES Typical Direct Burial Cable Trench Dimensions in Agricultural Land***

| **Parameter** | **Quantity** |
|---|---|
| Indicative overall trench depth (m) | 1.5 |
| Indicative HVDC trench width (at base of trench) (m) | 1.0 |
| Indicative HVAC trench width (at base of trench) (m) | 1.5 |
| Typical minimum cable trench installation depth (arable land) (m) | 1.2 |
| Indicative warning tape depth (m) | 0.8 -0.9 |
| Indicative thickness of trench top soil backfilled material (m) | 0.2 |

[7] Temporary drains are required for the duration of the construction activities on the cable corridor. It is envisaged that these will run alongside the temporary haul roads.

HDD is being used for road and water crossings. The typical arrangement of a major HDD launch and reception site are shown in Figures 4.13 and 4.14 of Chapter 5 of the 2014 ES respectively. An illustrative visualisation of an HDD installation is provided in Figure 4.15 of Chapter 5 of the 2014 ES.

### *5.1.3 Construction Compounds*

The 2014 ES considers two construction compound types (in addition to the OCS construction compound), categorised as primary and intermediate compounds. The realistic worst-case scenario presented within the 2014 ES (i.e. when considering parallel concurrent working, each contractor would require their own compound areas and would generate their own traffic movements).

The larger primary compounds will form the main construction compounds. These will include welfare facilities, offices, parking for contractors and storage areas. The remaining smaller construction compounds are primarily for storage and laydown areas.

### *5.1.4 Accesses*

Access would be via an access road designed to accommodate heavily loaded vehicles and heavy plant. Generally, this will be the access road installed alongside the cable trench for the majority of cable corridor, and including watercourse crossings via temporary vehicle bridges or similar.

For compounds located adjacent to the public highway, the access arrangements will be designed by a highways engineer to ensure appropriate sight lines, turning radii, including swept path analysis where necessary post consent. Highways engineers will also provide for adequate signage, lighting and traffic management.

## 5.2 The Parameters of the Works

The Application relates solely to the Works (i.e. cable corridor (including HDD), construction compounds and access points) as presented in Figures 1.2 (a – c). All other infrastructure or ancillary works within the 2014 ES (e.g. landfall, OCS) are scoped out of this Appraisal as they are not relevant to the Application.

### *5.2.1 Cable Corridor*

As detailed in Table 5.6, in relation to the HVAC and HVDC cable corridors, the only parameters which have changed since the 2014 ES are the length of cable corridor required and the width. The length of cable corridor applied for in this Application is approximately 3.2 km and will be a maximum of 52 m wide.

***Table 5.6: Indicative Cable Corridor Parameters***

| Parameter | HVDC Quantity | HVAC Quantity |
|---|---|---|
| Indicative topsoil and subsoil storage width per project (m) | 7 | 7 |
| Indicative separation distance between trench and soil storage area (m) | 2 | 2 |
| Indicative separation distance between drain and cable trench (m) | 1 | 1 |
| Indicative drain width on the side of the haul road (m) | 0.5 | 0.5 |
| Indicative haul roads width per road (m) | 6 | 6 |
| Indicative separation between haul roads (m) | 0.5 | 0.5 |
| Maximum overall cable route width (two projects – concurrent construction) (m) | 52 | 52 |
| Approximate length of cable route associated with the Works (km) | 2.3 km | 0.9 km |

### *5.2.2 Construction Compounds*

The approach to construction compounds within this Application accords with the 2014 ES (i.e. differentiates between primary and intermediate compounds). CC C and CC H are considered 'primary' compounds which will be used for welfare and parking by the Applicants and contractors. All other construction compounds are considered 'intermediate' and will be used for soil storage, laydown areas and/or facilitating HDD.

Each construction compound has been identified for a specific engineering purposes (as detailed in Section 5.4 of this Appraisal) and therefore, varies in size. The assessment utilises the maximum size per compound proposed by the engineers. Following detailed design, should it be determined that smaller construction compound can be built, the assessment still considers the realistic worst-case.

### *5.2.3 Accesses*

The Application includes five temporary accesses as follows:

- Work No 10C (2) - A174 Access – detailed in Section 5.3.1.4;
- Work No 10E (2) - Grewgrass Lane – detailed in Section 5.3.1.5; and
- Work No 10J (2), No 10J (3) and No 10J (4) – detailed in Section 5.3.5.1.

## 5.3 The Works

The Works, as shown in Figure 1.2 (a – c), is split further into specific 'Areas' as below:

- Area 1 – A174 Crossing;
- Area 2 – South of Kirkleatham Memorial Park;
- Area 3 - Wilton East;
- Area 4 - Main Welfare Hub south of Wilton; and
- Area 5 - HVAC Cable Corridor.

Each of the above Areas is comprised of Work Nos. (as taken from the Work Plans accompanying the 2015 DCO) which have been adapted where necessary, to reflect the Works. Individual construction compounds are also included, though these identifiers are new, as construction compounds are not numbered in the 2015 DCO. Figure 1.3 provides a description of the Works.

A schedule has been developed for ease of referencing, as shown on Figure 1.2 (a – c). All technical assessments use these terms when referring to specific areas of the Works. Table 5.1 below provides an overview of all infrastructure/ancillary works included within the Application.

***Table 5.1: Infrastructure/Ancillary Works included within the Application***

| Reference | Type | Figures | 'Area' of Works | Approximate NGR | Permanent/ Temporary | Total Size (ha) |
|---|---|---|---|---|---|---|
| 6 (A&B2) | Cable Corridor | Figure 1.2 (a – c) | Areas 1, 3, 4 and 5 | Multiple sections | Permanent | 9.3 ha |
| 10C (2) | Access | Figures 1.2 (a) | Area 1 | 462079, 521858 | Temporary | 0.4 ha |
| CC B | Construction Compound | Figures 1.2 (a) | Area 1 | 462124, 521936 | Temporary | 0.45 ha |
| CC C | Construction Compound | Figures 1.2 (a) | Area 1 | 461826, 521959 | Temporary | 1.8 ha |
| 10E (2) | Access | Figures 1.2 (a) | Area 1 | 461113, 521540 | Temporary | 0.11 ha |
| CC D (2) | Construction Compound | Figures 1.2 (b) | Area 2 | 459933, 521440 | Temporary | 0.04 ha |
| CC D (3) | Construction Compound | Figures 1.2 (b) | Area 2 | 459882, 521419 | Temporary | 0.06 ha |
| CC E | Construction Compound | Figures 1.2 (b) | Area 3 | 458614, 520889 | Temporary | 1.5 ha |
| CC F | Construction Compound | Figures 1.2 (b) | Area 3 | 458456, 520840 | Temporary | 0.15 ha |
| CC G | Construction Compound | Figures 1.2 (c) | Area 4 | 457843, 520691 | Temporary | 0.15 ha |

| | | | | | | |
|---|---|---|---|---|---|---|
| CC H | Construction Compound | Figures 1.2 (c) | Area 4 | 457476, 520404 | Temporary | 3.4 ha |
| 8S (2) | Cable Corridor | Figures 1.2 (c) | Area 4 | 457266, 520336 | Permanent | 0.02 ha |
| RetainWork | Retaining Works | Figures 1.2 (c) | Area 4 | 457029, 520227 | Permanent | 0.07 ha |
| Profiling | Reprofiling area of retaining works | Figures 1.2 (c) | Area 4 | 457189, 520268 | Permanent | 0.35 ha |
| CC I | Construction Compound | Figures 1.2 (c) | Area 4 | 457013, 520240 | Temporary | 1 ha |
| Temp Haul | Haul Road | Figures 1.2 (c) | Area 4 | 457266, 520336 | Temporary | 1.4 ha |
| 10J (2) | Access | Figures 1.2 (c) | Area 5 | 456950, 520158 | Temporary | 0.02 ha |
| 10J (3) | Access | Figures 1.2 (c) | Area 5 | 456775, 519927 | Temporary | 0.02 ha |
| 10J (4) | Access | Figures 1.2 (c) | Area 5 | 456649, 519826 | Temporary | 0.02 ha |
| 8 (A&B2) | Cable Corridor | Figures 1.2 (c) | Area 5 | 456384, 519687 | Permanent | 0.55 ha |

For the purposes of this Application, temporary means for the duration of the construction period, though in practice some temporary works will be for a shorter duration.

### *5.3.1 Area 1 – A174 Crossing (Figure 1.2 (A))*

The part of the Works within Area 1 are required due to land allocation as suitable for housing development within the Redcar & Cleveland Local Plan (2018). The allocated land includes the section of the 2015 DCO which contained both a temporary construction compound and cable corridor. The Works within Area 1 avoid this housing allocation and also reduces the number of sharp bends in the HVDC cable route which de-risks installation and minimises the number of cable jointing bays.

#### *5.3.1.1 Work No 6 (A&B2) –Cable Corridor*

The cable corridor remains unchanged within the 2015 DCO through the semi-improved grassland north of Cat Flatt Lane. South of Cat Flatt Lane the cable corridor has been realigned to the east (NGR: 462034, 522200) within the same arable fields as the 2015 DCO.

Work No. 6(A&B2) then cross the A174 (likely via HDD) at approximate NGR 462056, 521855. There are a number of hedgerows (tall ruderal vegetation) along the northern and southern edges of the A174, which will remain intact due to the HDD below the A174. The cable corridor will continue through arable fields before re-

joining the 2015 DCO at approximate NGR 461383, 521573. The total length of amended cable corridor in Work No. 6(A&B2) is 1.15 km and will be approximately 52 m wide.

Construction methods for the cable corridor is detailed in Section 5.4.1 of this Appraisal and in Sections 4.2, 4.4 and 4.5 of Chapter 5 of the 2014 ES.

#### *5.3.1.2 CC B – Construction Compound*

CC B is a temporary construction compound, accessed via a new access (Work No. 10C (2)) from the A174. CC B is located within arable fields and road side verges (composed of semi-improved grassland and tall ruderal vegetation) to the north of the A174, located at approximate NGR: 462124, 521936. CC B measures approximately 55 m x 85 m with an area of approximately 0.45 ha.

CC B will be used to facilitate civil works and cable installation. As detailed in Section 5.4.2 of this Appraisal, construction compounds will be constructed in accordance with 2014 ES.

#### *5.3.1.3 CC C – Construction Compound*

CC C is an alternative temporary construction compound, accessed from the A174 via an existing access (Work No. 10D) and was included in the 2015 DCO, located at approximate NGR: 461826, 521959. CC C will include welfare facilities as well as parking and laydown area. It is located within arable fields and road side verges (composed of semi-improved grassland and tall ruderal vegetation) to the south of the A174. CC C measures approximately 1.8 ha. CC C will be provided with suitable hardcore surfacing and constructed in accordance with the 2014 ES. An indicative layout for CC C is provided as Figure 5.2.

#### *5.3.1.4 Work No 10C (2) – A174 Access*

Work No. 10C (2) is an alternative temporary access to the north of the A174 approximately 200 m north-west of a roundabout with the A174, Gurney Street and Longbeck Road (approximate NGR: 462079, 521858) and replaces previously consented Work No. 10C. Work No. 10C (2) is located within the verges of the A174 composed of semi-improved grassland and tall ruderal vegetation. The area required to facilitate construction of Work No. 10C (2) is approximately 0.35 ha.

Work No. 10C (2) is required to access CC B, an alternative temporary construction compound. Work No. 10C (2) will be utilised by both Applicants.

As Work No. 10C (2) connects to the public highway, the access arrangements will be designed by a highways engineer to ensure appropriate sight lines, turning radii, including swept path analysis where necessary. Highways engineers will also provide for adequate signage, lighting and traffic management.

#### 5.3.1.5 *Work No 10E (2) – Grewgrass Lane Access*

Work No. 10E (2) is an additional temporary access to the west side of Grewgrass Lane (in the vicinity of the consented access Work No. 10E, to the east of Grewgrass Lane), approximate NGR: 461113, 521540. Grewgrass Lane is surrounded on both sides by arable fields. A grazed semi-improved grassland field is situated to the north-west of the road, this is bounded by hedgerow.

Work No. 10E (2) is required to access the cable corridors consented by the 2015 DCO. The area required to facilitate construction of Work No. 10E (2) is approximately 0.11 ha.

As Work No. 10E (2) connects to the public highway, the access arrangements will be designed by a highways engineer to ensure appropriate sight lines, turning radii, including swept path analysis where necessary. Highways engineers will also provide for adequate signage, lighting and traffic management.

### 5.3.2 *Area 2 – South of Kirkleatham Memorial Park (Figure 1.2 (B))*

#### 5.3.2.1 *CC D (2) and CC D (3) – Construction Compounds*

CC D (2) and CC D (3) are located within agricultural land to the east of Fishponds Road (B1269), at approximate NGR 459933, 521440 and 459882, 521419 respectively. CC D (2) and CC D (3) are two small areas of infill enclosed by construction compounds and access (Work No. 10F) consented by the 2015 DCO. These will be temporary construction compounds, with an area of approximately 0.04 ha and 0.06 ha respectively.

CCD (2) and CC D (3) are required to facilitate civil work and cable installation and will be accessible via Work No. 10 F, an access consented under the 2015 DCO.

As detailed in Section 5.4.2 of this Appraisal, CC D (2) and CC D (3) will be provided with suitable hardcore surfacing and constructed in accordance with the 2014 ES.

### 5.3.3 *Area 3 – Wilton East (Figure 1.2 (B))*

Neither the 2015 DCO or extant Outline Planning Permission that provides an alternative cable route to the 2015 DCO in part of Wilton East will be implemented due to land availability and technical constraints.

#### 5.3.3.1 *Work No 6(A&B2) – Alternative Cable Corridor*

The amended cable corridor deviates from the 2015 DCO at approximate NGR 459115, 521106 where it passes through arable farmland before it is anticipated that the cable will be installed via HDD below mixed woodland with a ditch and hedge separating the woodland and the A174 to the west. The proposed HDD section of cable corridor passes below approximately 135 m of woodland before crossing the A174. The vegetation above the HDD will not be affected by the Works.

Work No. 6(A&B2) then continues below ground via HDD to cross the A174 at approximate NGR 458850, 520965, exiting the HDD and entering the grounds of Wilton International. The amended cable corridor then proceeds in a north westerly direction until it re-joins the 2015 DCO at the main access route into Wilton International (NGR 458376, 520902).

The total length of amended cable corridor within this section of Work No. 6(A&B2) is 820 m.

Work No 6(A&B2) represents an engineering solution that minimises bends in the cable corridor which de-risks installation and mnimises the number of cable jointing bays. An area of land within the 2015 DCO has future economic development potential and rerouting the cable corridor avoids constructing permanent infrastructure on this land and allowing it to be developed for purposes which could benefit the wider community.

#### *5.3.3.2 CC E – Construction Compound*

CC E is located within agricultural land to the north of the amended cable corridor (Work No. 6 (A&B2)) at approximate NGR 458614, 520889. CC E is a temporary construction compound measuring approximately 1.5 ha. CC E is required to access Work No. 6 (A&B2). It will be provided with suitable hardcore surfacing and constructed in accordance with the 2014 ES.

#### *5.3.3.3 CC F – Construction Compound*

CC F is located within agricultural/scrub land to south-west of the Work No. 6 (A&B2) at approximate NGR 458456, 520840. CC F is a temporary construction compound measuring approximately 0.15 ha. CC F is required to facilitate civil work and cable installation. It will be provided with suitable hardcore surfacing and constructed in accordance with the 2014 ES.

### ***5.3.4 Area 4 – Southway and Main Welfare Hub south of Wilton (Figure 1.2 (c))***

#### *5.3.4.1 Work No 6 (A&B2) –Cable Corridor*

Wilton Southway runs east-west through Wilton International where it meets a cross roads at the western extent (and location of the OCSs access). The 2015 DCO cable corridor runs under Wilton Southway however, it is constrained due to existing buried infrastructure (e.g. steam pipe) and a narrow cable corridor.

Work No. 6 (A&B2) will widen the cable corridor at various points along the Wilton Southway to align the installation corridor between the road verges from NGR 458378, 520889 in the east to 457773, 520612 in the west. The cable corridor will be widened by 2.5 m at its widest point (Figure 1.2 (c)).

Wilton Southway is hard standing with wide amenity grassland verges and several small junctions. All permanent infrastructure will be located within the road and kept way from verges and footways.

Work No. 6 (A&B2) will widen the cable corridor to the north of Wilton Southway at NGR 457773, 520636. The cable corridor will be widened by approximately 20 m and is within rough scrub land. The length of Work No. 6 (A&B2) in this section is 700 m.

Work No (A&B2) will facilitate the HDD across the Southway road junction. This is required to enable adequate bend for the cable to bring it back into the 2015 DCO as this will be HDD.

Construction methods for these works are detailed in Section 5.4.1 of this Appraisal and in Sections 4.2, 4.4 and 4.5 of Chapter 5 of the 2014 ES.

#### *5.3.4.2 CC G – Construction Compound*

CC G is located within rough scrub land to north of Wilton Southway and the north of Work No. 6 (A&B2) at approximate NGR 457843, 520691. CC G is a temporary construction compound measuring approximately 25 m x 100 m (although part of this included No 6 (A&B2) as detailed in Section 5.4.1.2) and is approximately 0.15 ha in size.

CC G is required for material storage, and enabling works associated with the HDD across Southway road junction. It will be provided with suitable hardcore surfacing, geotextile or similar temporary surfacing material and constructed in accordance with the 2014 ES.

#### *5.3.4.3 CC H – Construction Compound*

CC H is located between the OCS consented by the 2015 DCO and the existing bund which acts as a landscaping feature minimising visibility of the Wilton International Works from Lazenby. It is at approximate NGR 457476, 520404. The land is currently used for agricultural purposes.

CC H is a temporary construction compound with an area of 3.4 ha. CC H will be used as the principal welfare and parking area for works within the OCS area as well as the HVAC cable corridor. It will be provided with suitable hardcore surfacing and constructed in accordance with the 2014 ES. An indicative layout for CC H is provided in Figure 5.3.

#### *5.3.4.4 Work No 8S (2) – Amended Cable Corridor*

Work No. 8S (2) is located on agricultural land beside the road verge to the north-west of the OCSs, at approximate NGR 457215, 520298. The cable corridor will be widened by approximately 12 m with an area of 0.02 ha to ensure appropriate cable configuration before cables pass through the narrow corridor at 2015 DCO Work No 8S.

#### 5.3.4.5 *Retaining and Reprofiling Works*

This is a narrow section of the consented HVAC cable corridor as it leaves the OCS to the north-west (approximate NGR: 457271, 520349) which is constrained by existing features such as drainage ditch to the north and berm to the south.

Permanent retaining work is required to be constructed at approximate NGR 457029, 520227 upon land which is currently rough grazing beside the track verge. The retaining works could comprise of reprofiling along the bund or gabion baskets. Engineering design, to determine the most suitable retaining solution, is ongoing and therefore the worst-case scenario is assessed.

The retaining works will be approximately 200 m in length, as shown in Figure 5.1. The area required for the construction of the retaining works is approximately 0.07 ha with associated reprofiling to ensure land stability of approximately 0.35 ha.

#### 5.3.4.6 *Haul Road*

A temporary haul road is included within the Works, located at approximate NGR 457266, 520336. The temporary haul road is consented under the 2015 DCO and was assessed as part of the 2014 ES. It is included in this Application to ensure availability of access between CC H and CC I.

#### 5.3.4.7 *CC I – Construction Compound*

CC I is located within agricultural land to the north of Wilton Southway at approximate NGR 457013, 520240, immediately adjacent to two large industrial units (Grainco and Ensus UK). CC I is a temporary construction compound measuring approximately 150 m x 60 m with an area of approximately 1 ha. CC I is required for material storage, will be finished with suitable hardcore surfacing and constructed in accordance with the 2014 ES.

### 5.3.5 *Area 5 – HVAC Cable Route (Figure 1.2 (c))*

#### 5.3.5.1 *Work No 10J (2), No 10J (3) and No 10J (4) – Additional Accesses*

Along the HVAC cable corridor between the OCSs and Lackenby Substation, the access consented by the 2015 DCO (Work No. 10J) is separated from the cable corridor by a hedge.

To provide access to the cable corridors during civil engineering and HVAC cable installation works, three new temporary accesses through the natural breaks in the hedge are proposed. Each access will require some widening and will have an area of approximately 0.02 ha.

Work No. 10J (2), Work No. 10J (3) and Work No. 10J (4) are located at the following approximate NGRs:

- No 10J (2) – 456950, 520158;

- No 10J (3) – 456775, 519927; and
- No 10J (4) – 456649, 519826.

Work No. 10J (2), Work No. 10J (3) and Work No. 10J (4) will be finished with suitable hardcore surfacing and constructed in accordance with the 2014 ES.

#### *5.3.5.2 Work No 8 (A&B2) –Cable Corridor*

The land is currently used for agricultural purposes where it deviates from the 2015 DCO at approximate NGR 456392, 519667. The Works No. 8 (A&B2) are routed south-west where they enter Lackenby Substation and re-join the 2015 DCO at approximate NGR 456356, 519544. Work No. 8 (A&B2) is approximately 0.55 ha.

Works No. 8 (A&B2) straighten the corridor de-risking HDD and cable pulling activities. This will accommodate the HDD rig footprint and enabling works. The total length of Work No. 8 (A&B2) is approximately 140 m.

Construction methods are detailed in Section 5.4.1 of this Appraisal and in Sections 4.2, 4.4 and 4.5 of Chapter 5 of the 2014 ES.

## 5.4 Construction Methods

This section is intended to provide details of construction methods for the purposes of the Application, as per the parameters outlined in Section 5.2.

### *5.4.1 Cable Corridor*

The construction methods of the cable corridors remain unchanged from Sections 4.2, 4.4 and 4.5 of Chapter 5 of the 2014 ES.

All cables will be buried and are based upon:

- An open trench installation of cables at an indicative depth of approximately 1.2 m. The cables will be mainly laid in open cut trenches in ducts. Trenches will be backfilled with material of adequate thermal resistivity, to dissipate the heat generated in the cables made of either native soil or stabilised material such as CBS (Cement Bound Sand); and
- Two HDD crossings are required for the purposes of this Application, in order to minimise disturbance to woodland, watercourses, buried infrastructure, road and rail infrastructure along the cable corridor.

An example of a typical HVDC cable is shown in Figure 4.4 of Chapter 5 of the 2014 ES. Table 4.2 of the same Chapter shows indicative parameters for the HVAC cables that may be used for each project, with the typical structure of an HVAC cable illustrated in Figure 4.5 of the 2014 ES.

The setting out of works and erection of hoarding (where necessary) will be as detailed in Sections 4.5.11 – 4.5.14 of the 2014 ES. Cable delivery, storage and installation will be as detailed in Sections 4.5.28 – 4.5.36 of the 2014 ES.

The construction technique is applicable to Work No. 6 (A&B2), Work No. 8S (2) and Work No. 8 (A&B2) as detailed in Table 5.1.

### *5.4.2 Construction Compounds*

The contractor responsible for the installation of the Works will establish construction compounds for the location of offices, storage areas, welfare facilities and lay-down areas at several points along the cable corridor, as detailed in Section 5.3 of this Appraisal.

Construction compounds will be provided with suitable hardcore surfacing. Typically, this would be constructed from stone in a similar way to the haul roads for the main cable laying activities. Construction compounds will be surrounded by security fencing and provided with lockable gates to control access to the compounds. Where necessary, suitable site drainage will be provided to deal with surface water run-off from construction compounds.

For both practicality and health and safety reasons it is envisaged that construction compounds will be lit during the Works. The lighting will be switched off during periods where the natural lighting levels are adequate. It is envisaged that the lighting will be left on overnight for security purposes. Any compound lighting will be designed to minimise light spillage.

### *5.4.3 HDD*

For sections of the Works that require HDD activities, there shall be a requirement for launch and reception sites for the HDD unit containing within the cable corridor or construction compound as appropriate. The HDD techniques are as identified in Sections 4.4.29 – 4.4.56 of the 2014 ES.

## 5.5 Expected Construction Traffic

The construction activities will generate Heavy Goods Vehicles construction traffic that will add to the existing ordinary traffic affecting the access roads in the proximity of the works, as per the 2015 DCO. Construction traffic access options have been selected to avoid smaller local roads and built up areas.

## 5.6 Expected Construction Programme

The below programme provides indicative dates for construction activities:

- Q1 Year 1 -Ecology and erection of associated fencing;
- Q2 Year 1 - Mobilise to site, establish construction welfare and main access to site works crossing existing buried services;
- Q2 to Q3 Year 1 - Excavation works, permanent drainage and formation of platform at the two OCS permanent works areas and enabling works area such as welfare, haul roads;
- Q2 to Q3 Year 1 - Soil movement on site for reprofiling landscaping bund at OCS site;
- Q4 Year 1 - Landscaping earthworks complete at OCS;
- Q4 Year 1 – Sofia OCS commences;

- Q3 Year 2 – DB-C OCS construction commences.
- Year 4 - Commissioning/First generation
- Year 4 – Reinstatement works and completion.

The construction programme is subject to change and is not tied to a particular year. It will be finalised in a Construction Environmental Management Plan (CEMP) which will be secured by planning condition.

# 6 Pre-Application Consultation

### *6.1.1 Consultation with Technical Bodies*

Where appropriate, the Applicants have carried out pre-application consultation with statutory and/or technical consultees to inform the scope of assessment required for the Application.

As the landscape, land quality, archaeology, noise, air quality and land-use assessments are considered to be appropriate for the Application, consultation will be undertaken with the relevant technical bodies while drafting documents to comply with any necessary planning conditions or in response to consultation received on the Application.

A technical overview and summary of consultation responses is provided in Table 6.1.

*Table 6.1: Summary of Pre-Application Consultation with Technical Bodies*

| Technical Area | Engagement | Response |
|---|---|---|
| Ecology | A meeting was held in January 2020 between Arcus and Natural England to discuss the Application and the 2015 DCO requirements. Subsequent emails were exchanged confirming the validity of and requirement for ecological surveys in relation to the Application.<br><br>A consultation letter was issued to Natural England on 10th June 2020 detailing the rationale, methodology and programme of ecology surveys being undertaken to inform the Application. | Natural England responded on 26th June 2020 to confirm the survey scope would satisfy their requirements. Natural England welcome the commitment to undertake new breeding and wintering bird surveys (to inform the 2015 DCO requirements) to update those previously undertaken, and have no specific comments in relation to the proposed protected species surveys. |
| Hydrology | Pre-application consultation was undertaken with the Environment Agency and the Lead Local Flood | An email was issued to the LLFA RCBC on 15th May 2020 summarising the discussions on the content of the technical report to |

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|---|---|---|
| | Authority (LLFA) (RCBC) to clarify and confirm:<br><br>• The proposed greenfield discharge rate for the OCS area; and<br>• The requirement for Land Drainage Consent for crossing ordinary watercourses not bypassed by HDD. | accompany this Application and land use drainage details.<br><br>The request to ensure the report identifies the temporary nature of the impacts and where possible provides some indication of durations were noted. |
| Traffic and Access | SCP consulted RCBC and Highways England on 20th March 2020 to agree requirements for supporting documentation. This included proposed methodology which set out the parameters/approved baseline and the proposed changes/approach to assessing the amended cable corridor. | Following discussions, RCBC Strategic Transport Team confirmed they were satisfied with the approach to the Transport Assessment which has informed the Application. |

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At the time of submission of the Application, the Applicants are limited in their ability to carry out wider consultation with the local community owing to the Covid-19 restrictions (e.g. ability to hold face to face meetings is restricted.

Following submission of the Application, supporting information on the Works will also be available on the Projects' websites and queries or requests for information can be made by telephone or email. Documents relating to the DB-C NMC (May 2020) application to BEIS have been made available for consultation in this way.

The nature of the Works is predominantly underground with associated above ground works largely of a temporary nature (i.e. required solely during construction of the Applicants' Projects). The community were engaged extensively during the 2015 DCO process and information will continue to be made via the Applicants' websites and newsletters throughout construction.

### *6.1.2 RCBC*

Pre application meetings were held between the Applicants and RCBC in February and June 2020 to discuss and agree the nature and scope of the Application. A letter detailing the pre-application consultation for the Works was submitted to RCBC on 28th May 2020. The letter detailed consultation with technical bodies and the public.

# 7 Technical Assessment Summary

The methodology for each technical assessment is summarised in Section 3 of this Appraisal and Technical Appendices 1 to 9 present the findings of each technical assessment.

Table 7,1 summarises the findings of each technical assessment and states whether there is a change in effects identified within the 2014 ES.

***Table 7.1: Summary of Assessments***

| **Environmental Topic Assessed in 2014 ES and relevant to the Works** | **Potential Effects Considered** | **Effects Identified from the Works** | **New Likely Significant Effects to those presented in the 2014 ES** | **Report Reference** |
|---|---|---|---|---|
| Landscape and Visual Assessment | Any changes from the 2014 ES with respect of landscape and visual impacts during construction. | There would be no additional landscape effects arising from the Works. The Works represent a negligible magnitude of change to the 2014 ES in localised areas, with temporary significant landscape effects anticipated during the construction phase only.<br><br>The 2014 ES LVIA identified significant visual effects arising from the 2015 DCO works which would be experienced at 10 viewpoints. These would be experienced during the construction and decommissioning phases of the consented 2015 DCO reducing to negligible in the medium term once disturbed areas are reinstated. There is only one location, at Viewpoint 12 Junction of A174 and PRoW at Tunstall Gardens, where the level of visual effect would be slightly reduced by these proposals, with the construction activity being located further from the nearest residential and recreational receptors. There would be no change to predicted visual effects arising from the Works. | None | Appendix 1 |
| Hydrology | Any changes from the 2014 ES with respect of construction impacts on hydrological resources. | Construction, operational and decommissioning activities for the Works are anticipated to be similar to those previously proposed in the 2014 ES.<br><br>No new waterbodies affected outside of the 2015 DCO. The waterbodies affected previously will be affected in broadly the same way, albeit some crossings will be located further upstream or downstream than in the 2015 DCO, however the methods for crossings are not expected to change.<br><br>There are no additional effects in relation to water quality, water resources, flood risk and drainage that have been identified as a result of the Works. | None | Appendix 2 |
| Land Quality | Any changes from the 2014 ES with respect of construction impacts on geology, land quality and waste receptors. | Excavation activities will result in direct low magnitude impacts to geology underlying the Works as there will be very minor disturbance of the surface soils. With adherence to mitigation (e.g. CEMP and best practice), there will be a negligible residual impact on geology receptors.<br><br>Although it is not expected that soils will be highly contaminated, the risk remains that there will be areas of unsuspected contamination. The likelihood of contact with contamination is low, and any adverse effects are likely to be temporary. Therefore, the magnitude of these impacts prior to mitigation is low, resulting in a negligible impact. | None | Appendix 3 |
| Ecology | Any changes from the 2014 ES with respect of construction impacts ecological resource (habitats and protected species). | The area of Works contains a much more limited resource of species-poor, intact and defunct hedgerows as assessed for the 2014 ES and so the effects of their removal will not be greater than those identified in the 2014 ES. | None | Appendix 4 |

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|---|---|---|---|---|
| | | The 2014 ES identified loss of hedgerows and construction disturbance as the principal impacts to breeding birds (medium sensitivity). Hedgerow removal during the bird nesting season could potentially lead to the loss of nests, eggs and chicks. Construction noise and visual disturbance could also deter birds from nesting close to the working area. These effects were assessed to be low magnitude and not significant. The area of Works contains a more limited resource of hedgerows (and other bird habitats) and the Works will be more limited in extent and duration compared with those assessed in the 2014 ES. Consequently, the effects to birds will not exceed those detailed in the 2014 ES.<br><br>No bat roosts (medium sensitivity) will be affected by the Works. Some habitats, such as hedgerows, ditches and woodland, have the potential to support foraging and commuting bats, but these habitats are relatively limited in extent; the majority of the area of Works is open arable and built-up land with only limited potential to support bats. The area of Works contains a much more limited resource of the same types of habitats as assessed for the 2014 ES and so the effects of their loss will not exceed those of the 2014 ES.<br><br>Mitigation and enhancement measures are proposed in the 2014 ES to safeguard hedgerows, bats and breeding birds during construction, and these measures will also be applied to the Works. | | |
| Land Use | Any changes from the 2014 ES with respect of construction impacts on land use receptors including PRoW. | During construction it is unavoidable that land within the Works will temporarily be taken out of its existing land use. There is no permanent change to land use as a result of the Works, with only temporary restrictions to current agricultural activities. Based on a high/medium sensitivity of receptor and a low magnitude of effect, there will be a moderate/minor effect on land use during construction of the Works. With the application of mitigation measures detailed in the land use assessment in the 2014 ES, the residual impacts are assessed as minor adverse or less.<br><br>In terms of recreational land use, temporary disturbance to public footpaths 129/29/1, 129/30/1 and 106/190/1 (medium sensitivity) is considered low magnitude and therefore, no notable adverse effects anticipated on PRoW due to the Works. | None | Appendix 5 |
| Archaeology | Any changes from the 2014 ES with respect of construction impacts on known and unknown archaeological receptors. | There are no additional significant operational, construction or decommissioning effects on non-designated or designated heritage assets situated within the Study Area outside the construction footprint of the Works. The potential effects relating to the 2015 DCO are the same as for the areas within the Works. These effects are temporary and minor adverse, and comprise the visual effect on the setting of designated heritage assets during construction on five assets listed in Section 4.2 of Appendix 6.<br><br>There are no known new non-designated heritage assets within the Works. The Works have the potential to contain archaeological assets relating to historic landscape features and as yet unidentified archaeological remains. These types of assets were also considered for the 2014 ES, and the same potential effects therefore apply to the Works. The effects, resulting from the potential removal though construction of the archaeological assets, remain minor adverse following mitigation. | None | Appendix 6 |
| Traffic and Access | Any changes from the 2014 ES with respect of construction impacts on transport receptors (in terms of severance, pedestrian amenity, highway safety and driver delay). | The change in total traffic as a result of the Works, for both the Applicants' Projects in isolation and also the concurrent scenarios, for all links is less than the 30% change in traffic threshold and therefore the impact is assessed as negligible against this measure as a result of the Works regardless of whether the Projects are concurrent or sequential.<br><br>The volume of HGV's using Grewgrass Lane is will have a negligible impact as a result of the Works, even if the Applicants' Projects are constructed concurrently. | None | Appendix 7 |

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|---|---|---|---|---|
| | | The highway safety review also considered the access points proposed as part of the Works and identified that there is no emerging pattern of collisions at these locations. Notwithstanding, it is recognised that whilst there may not be an existing collision problem, the increase in turning manoeuvres and slow-moving vehicles could lead to an increased risk of collisions. Embedded mitigation measures have been developed to reduce the risk to the travelling public and construction employees at these locations. With these measures in place (e.g. access mitigation strategy), the magnitude of effect at points of access is assessed as low on low value receptors resulting in a negligible impact.<br><br>The increase in traffic as a result of the Works is likely to be indiscernible in the context of daily traffic fluctuations. Therefore, resulting in a negligible impact on all receptors. | | |
| Noise and Vibration | Any changes from the 2014 ES with respect of construction noise and vibration impacts on noise receptors. | Where noise sensitive receptors are more than 80 m from the Works, the noise impact is determined to be negligible.<br><br>The only receptor location where the potential magnitude of effect is greater than negligible is the property on Fishponds Road near to CC D (3). The preparation of CC D (3) would be of short duration (less than one month) and would be noisier than during its use during the construction period, and therefore the effect has been determined to be negligible at the property on Fishponds Road. | None | Appendix 8 |
| Air Quality | Any changes from the 2014 ES with respect of construction impacts on air quality receptors including due to dust and traffic. | With mitigation measures proposed and given the short-term nature of construction, this will constitute no change from the findings of the 2014 ES with regard to the potential impact of construction phase dust emissions. All other onsite works (e.g. earthworks and construction) are considered to have low impacts due to dust soiling and on human health.<br><br>The air quality effects arising as a result of traffic emissions associated with the Works will be negligible at existing residential receptors. This represents no change from the findings of the 2014 ES with regards to traffic emissions from the Works. | None | Appendix 9 |

As shown in Table 7.1, whilst there is the potential for effects to occur as a result of the Works, the assessments presented in Appendices 1 to 9 demonstrate that although there will be environmental effects occurring directly as a result of the Works, these effects are not new or materially different to those identified within the 2014 ES, and will not give rise to any new likely significant effects.

Further detail on the localised effects from the Works is presented within the relevant technical appendices of this Appraisal.

# 8 Mitigation Measures Required for the Works

The 2014 ES sets out the mitigation measures approved as part of the 2015 DCO. As shown in Table 7.1, there are no additional likely significant effects to those identified within the 2014 ES, and therefore no new mitigation measures required as a result of the Works.

Mitigation measures proposed as part of the 2014 ES, where appropriate, will also be applied to the Works. The Applicants' are voluntarily seeking to impose substantively the same mitigation on the Works as for the relevant onshore elements of the 2015 DCO (both in terms of condition content and staging). The mitigation measures from the 2014 ES which are relevant to the Works are set out in Table 8.1.

***Table 8.1: Mitigation Measures applicable to the Works***

| Environmental Topic | 2014 ES Mitigation Measures applicable to the Works | Mitigation Necessary for the Works |
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| Landscape | • Where required, temporary hoarding would be erected prior to construction;<br>• Standard construction works would be conducted during daylight hours and under normal circumstances, no task lighting would be required during construction. Some specific construction works would need to be performed continuously and may need to be carried out outside of daylight hours. Should this be the case, suitable task lighting would be employed;<br>• All areas of disturbed earth would be cultivated and seeded with appropriate grasses and wild flora and planted with an appropriate mix of native tree species (to be agreed with the RCBC);<br>• No unnecessary tree or shrub removal would be undertaken, and vegetation which is to be removed would be marked and agreed prior to any felling;<br>• Where removal of sections of hedgerows are unavoidable, appropriate hedge species would be replanted along the line of the existing hedge, and managed so as to restore the existing hedgerow;<br>• Materials and machinery would be stored tidily during the works;<br>• Operations would be designed so that progressive restoration of finished areas can occur where appropriate, and so that stored topsoil can be replaced on graded areas as these are finished;<br>• Naturalistic and sympathetically designed landscape profiles would be created once the works are complete. Slopes in the area are very | No. |

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| | gentle and this would be reflected in any grading of soils associated with restoration;<br>• Topsoil would be replaced (using topsoil stored prior to the construction period) and evenly spread. Areas of disturbed earth would be re-graded to blend with the surrounding land form, cultivated and seeded or encouraged to regenerate naturally; and<br>• A restoration plan would form part of the CEMP. It would be implemented to restore landscape earthworks, soils and surface vegetation including alongside tracks and along cable routes. This would also include new woodland planting, wild flora seed mixes and an extension to existing bunds to screen the Convertor Station. | |
| Hydrology | • Good operational practices should be adopted in the construction phase;<br>• Store oil and fuel within designated areas in impervious storage bunds with a minimum of 110% capacity to contain any leakages or spillages;<br>• Entry into water will be avoided where possible;<br>• A temporary haul road bridge should be constructed if repeated crossings are required;<br>• Straw bales and sandbags will be incorporated to prevent silty runoff entering the watercourse;<br>• Silt traps will be used when required to prevent silt polluting downstream reaches of the watercourses;<br>• Specific consideration of the Water Resources Act 1991 (and associated Land Drainage Byelaws) will be required where the cable corridor passes within 8 m of a main river;<br>• If cement etc is likely to be batched on site, a suitable area should be designated, located at an appropriate distance from the watercourse;<br>• Adherence to best practices and guidance to ensure the risk of pollution is minimised;<br>• Where earthworks are undertaken, soil and water will be managed with sufficient care to prevent surface water runoff;<br>• Stockpiles will be designed and positioned in order to minimise erosion, pollution of watercourse or increase flooding;<br>• If there is a requirement for dewatering of excavations, water will be pumped out and | No. |

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| | passed through a settlement tank or lagoon to allow suspended solids to settle out before being discharged to an appropriate location;<br>• Appropriate treatment methods will be adopted prior to discharge of the water from any land drains uncovered during the construction phase;<br>• In accordance with best practice, the HDD will commence at a safe distance from the edge of each watercourse. The distance will be agreed with the EA prior to commencement of the works;<br>• The process of HDD involves the use of bentonite (used as a lubricating agent and grout), in order to reduce the risk of pollution of surface waters and / or break out in the river bed the use of these materials should be carefully controlled;<br>• In order to reduce the likelihood of pollution from bentonite and / or grout when working near rivers, hydrophobic (water repelling) grout and quick setting mixes should be used;<br>• Adherence to the CDM Regulations where applicable;<br>• Best site management practices, such as those set out in the EA's PPG notes, will be adopted during the operational phase to prevent such spillages and leakages;<br>• A suitable drainage system will be developed with sufficient volume to attenuate the 1 in 100-year (plus climate change) volumes; and<br>• The buried cable systems will be fully underground, and crossed watercourses will be fully reinstated; therefore, there will be no residual flood risk issues associated with the cable route. | |
| Land Quality | The mitigation measures proposed in the 2014 ES to reduce the impacts to underlying geology from general trenching and construction activities including spills and leakages to geological features included:<br>• The implementation of properly designed shoring systems to avoid unstable excavations;<br>• The removal of superficial deposits should be minimised wherever possible; | No. |

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| | • Storage of oils and fuel within designated areas in impervious storage bunds with a minimum of 110% capacity to contain any leakages of spillages;<br>• Limiting of refuelling activities to designated, impermeably surfaced areas and use drip traps where possible;<br>• Checking and maintain equipment regularly to ensure that leakages do not occur;<br>• Having spill kits available on site at all times; and<br>• Ensuring site inductions are completed for all staff including contractors and sub-contractors; include the above procedures and the locations of spill kits.<br><br>Mitigation for construction workers:<br>• Construction workers including sub-contractors will follow good site practices and hygiene rules as set out in BS5930 and BS10175:2011;<br>• Appropriate PPE will be worn by construction workers including sub-contractors and health and safety measures undertaken to mitigate any short-term risk during construction; and<br>• Gas risks will be considered for all construction workers whenever there is a requirement to enter confined spaces as part of the construction works, this will be managed through the Construction Phase Health and Safety Plan and CEMP.<br>Mitigation in relation to site waste management:<br>• The waste hierarchy will be used to determine the most sustainable option for all wastes that are generated on-site;<br>• Topsoil will be stored separately from subsoil. The stockpile dimensions will be designed such that they do not result in erosion, pollution of watercourses or increased flooding in order to reduce the impact to the topsoil and subsoil through stockpiling;<br>• Sustainable procurement methods, e.g. just in time delivery and just enough quantity of raw materials, will be used to minimise the amount required to be stored on-site; thereby lowering the risk of potential waste arisings from out of specification or excess materials; | |

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| | • Waste packaging will be returned to suppliers where possible;<br>• All topsoil will be reinstated wherever possible;<br>• Waste subsoil that will be sent off-site will be segregated from subsoil suitable for reinstatement onsite;<br>• Suitable local schemes will be identified where possible, as appropriate receiving sites to encourage the off-site reuse of surplus subsoil – this promotes the waste hierarchy and will reduce vehicle emissions caused by longer journeys;<br>• All other wastes for off-site waste management will be stored in skips or other impermeable containers, preferably with lids (all waste liquid containers must have a lid);<br>• Plastic, paper and card, metal and other dry residual wastes will be segregated in different containers in the contractor's compound to maximise dry-recyclable collection where possible;<br>• Any hazardous wastes will be stockpiled or stored separately from any non-hazardous stockpiles;<br>• Stockpiles of soil will be covered or stored in bunded areas or up-gradient from drains and control waters or stored in impermeable containers (e.g. skips), to prevent pollution from run-off;<br>• The CL:AIRE CoP will be followed to demonstrate that excavated material is not waste at the point of reuse. Where the CoP cannot be followed, the use of waste material will be covered by an environmental permit, or appropriate exemption from environmental permitting (e.g. re-use of waste hardcore for temporary roads);<br>• Stockpiles of excavated soil will not be stored for more than 12 months; and<br>• A SWMP will be prepared to monitor wastes arisings on-site. This will also promote sustainable waste management practices by maximising waste prevention, re-use and recycling for material destined for off-site waste management. This will actively discourage sending waste to landfill. | |
| Ecology | Hedgerows: | |

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| | • The working areas will be clearly marked out to prevent any unnecessary damage or disturbance to land outside the Works footprint;<br>• Vegetation clearance shall be undertaken outside of the breeding bird season (early March to end of August inclusive, with seasonal variation). If this is not possible, an ecologist will check the area prior to clearance for active nests. Any active nests will be left in situ with an appropriate buffer within which no works will be undertaken until the nest is no longer occupied; and<br>• Following construction, hedgerows will be reinstated as soon as possible. Hedgerows will be replanted with native, regionally appropriate, species-rich planting grown locally.<br><br>Bats:<br>• The working areas will be clearly marked out to prevent any unnecessary damage or disturbance to land outside the construction footprint;<br>• For night-time lighting at the converter stations site, cable route construction corridor and for any occasions where task lighting is required, low pressure sodium lamps will be used (instead of mercury or metal halide lamps). The lighting should be directional and spill minimised through the use of hoods, cowls, louvres or shields. Ideally, movement sensors will be used to reduce the overall duration that lighting is on each night;<br>• Following construction, hedgerows will be reinstated as soon as possible. Hedgerows will be replanted with regionally appropriate, species-rich planting; and<br>• Should any trees require removal, a bat visual assessment and surveys (if required) will be undertaken. Mitigation will be designed and a licence (if required) obtained from Natural England prior to works.<br><br>Breeding birds:<br>• The working areas will be clearly marked out on Site to prevent any unnecessary damage or disturbance to land outside the construction footprint; | |

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| | • Ideally, any vegetation clearance will be undertaken outside the breeding bird season (early March to end of August inclusive, with seasonal variation). If this is not possible, a suitably qualified ecologist or ornithologist will check the area prior to clearance for active nests;<br>• Should an active nest be found during construction, works will cease immediately and a minimum exclusion zone of 10 m will be set up around the nest until the young have fledged;<br>• If the bird is a Schedule 1 species (not anticipated since none have been recorded during surveys), then work will cease and Natural England consulted with regard to an appropriate course of action to avoid disturbance to this species;<br>• Ensure construction plant and traffic activity is kept to designated access road to avoid disturbance to ground nesting birds;<br>• Following construction, reinstatement to their former condition all habitats including hedgerow replanting with regionally appropriate, species-rich planting; and<br>• At the converter stations site, as part of screening, areas of additional native woodland and copses will be planted. This will improve the existing woodland habitat within the converter site and provide further opportunities for breeding birds.<br><br>Badger:<br>• A walkover survey will be undertaken within 50 m of all construction areas to ensure that no new badger setts have been constructed prior to works beginning;<br>• Should a badger sett be identified, appropriate mitigation (e.g. licensing) would be implemented prior to works commencing; and<br>• A means of escape (e.g. plank of wood) will be provided in any excavations left open overnight.<br><br>Otter:<br>• During the construction phase of works, the site compounds will be securely fenced to prevent otters entering the compounds. There will be strict adherence at all times to pollution | |

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| | prevention guidelines, in order to minimise the risk of pollution;<br>• During a pre-construction survey for otters, the watercourses that will be crossed by the cable will be re-assessed for their potential to support otter; and<br>• Should any watercourse be considered suitable for the species, an otter survey will be undertaken and if otter signs are detected, appropriate mitigation would be implemented and a licence (if required) obtained from Natural England in advance of works taking place. | |
| Land Use | The construction footprint will be minimised where possible and land reinstated to its former condition as soon as reasonably possible following cable installation, dependent on weather condition.<br><br>During the site selection process, a number of design decisions were made that will inherently reduce the impact on land use and agriculture. Most importantly these were:<br>• Burial of cables at a depth to allow current land uses to continue;<br>• HDD will be utilised at road and railway crossings to maintain access; and<br>• Underground Inspection pits located at field boundaries to avoid restricting current land use practices. | No. |
| Archaeology | The 2014 ES proposed an archaeological mitigation strategy to be undertaken as a condition of planning consent. This was based on, where an archaeological resource would be removed, preserving the resource by record. This comprised a systematic programme of archaeological investigation comprising one or all of the following stages to the relevant parts of the 2015 DCO:<br>• Detailed desk-based research (where applicable);<br>• Trial trench evaluation;<br>• Detailed excavation, post-excavation assessment and analysis;<br>• Watching brief during specific construction activities, recording and reporting; and<br>• Deposition of archive.<br>The archaeological mitigation strategy was to be implemented in accordance with a Written Scheme | No. |

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| | of Investigation (WSI) agreed with the planning authority. The mitigation strategy will be revised for the Works so that it includes geophysical survey. This will be conducted as the first stage of the mitigation strategy. This work will inform the design of the later stages of the mitigation works. | |
| Traffic and Access | • Access to the Works primarily from A or B roads, thereby minimising the impacts upon local communities and utilising the most suitable roads;<br>• Access routes located close to the main A and B roads to reduce the impact upon local communities;<br>• The use of a remote haul route to reduce trips upon the highway network to distribute materials as well as reducing the number of points of access on to the highway network;<br>• The use of a haul route from the Wilton International under the A1053 (via an underpass) to the existing Lackenby Substation to reduce traffic movements upon the B1380 where possible;<br>• Infrastructure/ancillary works located away from sensitive receptors to reduce the traffic impact upon local communities;<br>• The use of HDD for all (public highway) road and rail crossings to reduce the disruption to traffic from more conventional cut and cover techniques;<br>• The linear nature of the project will allow for the even distribution of activities and associated daily HGV demand; and<br>• The implementation of car-sharing amongst construction staff at a minimum ratio of 2.5 employees to a vehicle to reduce LGV traffic. | Access management at 10E (2) – Grewgrass Lane. The current speed limit is 40 mph and it is proposed to provide an advisory 30 mph speed limit in the vicinity of the site accesses throughout the duration of the Works. Temporary direction and warnings signs to advise of turning vehicles will be provided in accordance with Chapter 8 of the Traffic Signs Manual. |
| Noise and Vibration | Mitigation was presented in the 2014 ES where the magnitude of the effect was predicted to be medium or higher.<br><br>A set of potential mitigation measures were set out in Table 6.3 of the 2014 ES, which states that 'to reduce potential construction noise impacts at receptors where the magnitude of impact is predicted to be greater than low, a solid site boundary hoarding fence, approximately 2.4 m in height, could be erected prior to commencement of cable installation and remain in place until the works | No. |

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| | are complete in the relevant section of the cable route. Any fence would be located as close to the receptor as possible but still remaining within the easement'. The assessment assumed that a solid hoarding would reduce the impact by 10 dB. Hoarding will be erected where identified as required by the Works (i.e. within the vicinity of sensitive noise receptors). | |
| Air Quality | The 2014 ES identified potential mitigation measures for the effects of construction dust arising from earthworks, track out and Non-Road Mobile Machinery to be included in a CEMP to ensure that the impact of any potential dust impacts from the Works on the surrounding environment remain negligible.<br><br>As the 2014 ES predicted impacts of construction traffic emissions at exiting offsite receptors to be negligible, it concluded that it was not necessary to propose any mitigation for road vehicle exhaust emissions. | No. |