

The Great Grid Upgrade

Chesterfield to Willington

Preliminary Environmental Information Report

Non-Technical Summary

March 2026

nationalgrid

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1. Introduction

1.1 Overview

- 1.1.1 The Chesterfield to Willington Project (the 'Project') is a proposal by National Grid Electricity Transmission (NGET) plc (hereafter referred to as National Grid). National Grid is responsible for ensuring electricity is transported safely and efficiently from where it is produced to where it is needed and for developing upgrades to the network, as agreed with the industry regulator, the Office of Gas and Electricity Markets (Ofgem).
- 1.1.2 As the Project is still in development, the detailed design has not yet been finalised. However, it is expected to include an approximately 60 kilometre (km) 400 kilovolt (kV) overhead line, a new Chesterfield Substation, and limited replacement works to sections of existing overhead line, together with related changes to the local electricity distribution networks.
- 1.1.3 It is anticipated that the new Chesterfield Substation would be delivered as part of a separate National Grid project (Chesterfield to High Marnham project). However, the new Chesterfield Substation works have been included as part of the development consent order (DCO) application for this Project to provide an alternative consenting mechanism to remove reliance on that separate planning application/consent.
- 1.1.4 A Preliminary Environmental Information Report (PEIR) has been prepared as part of the Stage 2 (statutory) consultation. It presents the findings of the preliminary environmental assessments to give consultees (which include the public, statutory bodies and other stakeholders) an understanding of the potential likely significant effects (beneficial or adverse) associated with the Project. This will allow the consultees to prepare well-informed responses during statutory consultation.

1.2 Purpose and Structure of this Non-Technical Summary

- 1.2.1 This Non-Technical Summary presents a summary of the preliminary information which is set out in more detail in the PEIR for the Project. The aim of this NTS is to enable local communities and stakeholders to understand the likely significant environmental effects that could arise from the Project (as reported in the PEIR) in a concise form.
- 1.2.2 **Table 1.1** sets out details on the sections presented within this Non-Technical Summary.

Table 1.1: Structure of this Non-Technical Summary

Section of Non-Technical Summary	What is it about?
Introduction	This section presents an introduction to National Grid, what the Project entails, why the Project is needed and the consenting process for the Project.
Main Alternatives Considered	This section explains the main alternative designs that have been considered to date and provides a summary of how the design has developed to the current stage.
Description of the Project	This section presents the Project in more detail including what new infrastructure would be implemented and how long it is anticipated that construction would take.
Approach to Preliminary Environmental Information Report	This section explains the approach to the PEIR and how the preliminary assessments have been undertaken.
Preliminary Summary of Environmental Effects	This section presents a summary of the findings of the preliminary environmental assessments for each environmental topic. It provides the key potential environmental effects arising from the Project that have been identified to date.
Looking Forward	This section explains what happens next in the EIA process and how you can provide feedback to National Grid on the Stage 2 (statutory) consultation material.

1.3 What is Chesterfield to Willington?

- 1.3.1 Our proposals for Chesterfield to Willington include constructing approximately 60 km of new 400,000 volt (400 kV) overhead line supported by steel lattice pylons, and also includes a new substation in the Chesterfield area. In addition, the Project would include modifications to existing overhead lines and local changes to the lower voltage distribution networks.

1.4 Who is National Grid?

- 1.4.1 National Grid owns, builds and maintains the electricity transmission network in England and Wales. Under the Electricity Act 1989, National Grid holds a transmission licence under which it is required to develop and maintain an efficient, coordinated, and economical electricity transmission system.
- 1.4.2 National Grid Electricity Transmission Plc, part of National Grid, is applying for development consent for the Project and owns the high voltage electricity transmission system in England and Wales which transports electricity from generators (such as power stations and wind farms) to local distribution network operators (DNOs). DNOs are the companies that own and operate the local power lines and infrastructure that delivers electricity to individual properties. National Grid's transmission network does not connect directly to homes and businesses, because the voltage is too high for domestic and commercial properties.

1.5 Why is Chesterfield to Willington Needed?

- 1.5.1 The way we generate electricity has changed and is continuing to change. More electricity now comes from renewable sources in Great Britain, with an increased growth forecast in offshore wind capacity in Scotland and the North East of England.
- 1.5.2 This means National Grid needs a stronger network to carry that clean energy from where it is produced to where people live and work, including in the East Midlands. Small-scale change is not enough. The current electricity system was mostly built in the 1960s to connect inland coal and nuclear power stations in the North and Midlands to regional networks, cities and industry. It was not designed for the type and location of today's power sources or future demand.
- 1.5.3 Demand for energy is rising. As the way homes, businesses, industry and transport are powered changes, demand for electricity is set to increase significantly. In response, the UK Government has set a target of 50 gigawatts (GW) of offshore wind by 2030, rising to up to 140 GW by 2050, and 70 GW of solar generation by 2035.
- 1.5.4 To deliver more of this home-grown clean power and increase the UK's energy security, National Grid will need a grid that is able to carry all this extra electricity to wherever it is needed.
- 1.5.5 The Great Grid Upgrade will connect more clean, home-grown energy to the homes, businesses and public services that need it.
- 1.5.6 Projects like Chesterfield to Willington will help make more secure, cleaner, home-grown energy from more affordable sources.
- 1.5.7 The need for additional power flow in the region was identified by the National Energy System Operator (NESO)¹ in Electricity Ten Year Statement 2019 and the need case for the Project is set out in the Strategic Options Report (SOR) which has been updated as part of this Stage 2 (statutory) consultation.

¹ Energy Act 2023 set the legislative framework for an independent system planner and operator to help accelerate Great Britain's energy transition. Therefore, what was formerly known as the 'Energy System Operator' (ESO) is now called the 'National Energy System Operator' (NESO), taking a whole system view, beyond electricity, inclusive of all energy sources and uses.

1.6 The Consenting Process for the Project

- 1.6.1 Due to its size and strategic importance, the Project is defined as a Nationally Significant Infrastructure Project (NSIP). Due to this, National Grid needs to make an application to the Secretary of State for Energy Security and Net Zero for development consent to build and operate the Project. Development consent is granted through a DCO.
- 1.6.2 When a DCO application is submitted, the Planning Inspectorate will decide (on behalf of the Secretary of State) whether to accept the application for Examination. If accepted, the Planning Inspectorate will appoint an Independent Inspector or panel of Inspectors (known as the Examining Authority) to examine the application on behalf of the Secretary of State. The examination is a public process in which interested parties will be able to participate.
- 1.6.3 Following the examination, the Examining Authority will make a recommendation to the Secretary of State, who will then decide whether development consent should be granted. The timescale between acceptance of the DCO application and a decision is typically approximately 18 months.
- 1.6.4 National Grid expects to submit its DCO application for the Project to the Planning Inspectorate in summer 2027.

1.7 Environmental Impact Assessment (EIA)

- 1.7.1 EIA is the process of compiling, evaluating and presenting information about the likely significant environmental effects, both adverse and beneficial, of a given project. The key aim of the EIA process is to understand the current environmental conditions and how those conditions may change as a result of the Project. Those changes are assessed in terms of how 'significant' they would be, and EIA is primarily concerned with 'likely significant effects' and not those considered unlikely to be significant. The EIA process also identifies and incorporates mitigation measures to avoid, reduce or offset any likely significant adverse effects, which includes opportunities to enhance the environment through design.
- 1.7.2 The Project is classified as an EIA development under the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (described throughout the PEIR as 'EIA Regulations'). Therefore, National Grid is required to undertake EIA for the Project.
- 1.7.3 There are three main documents produced at different stages of the EIA process:
- Scoping Report: The Scoping Report defines the scope of the EIA and the Project's potential likely significant effects to be assessed.
 - Preliminary Environmental Information Report (the current stage of the Project): Prepared to provide the preliminary environmental assessments to give consultees an understanding of the potential likely significant effects (beneficial or adverse) associated with the Project. The PEIR is published alongside statutory consultation.
 - Environmental Statement (ES): This forms part of the submitted DCO application and reports on the findings of the EIA, outlining the likely significant effects of a project and proposed mitigation measures.

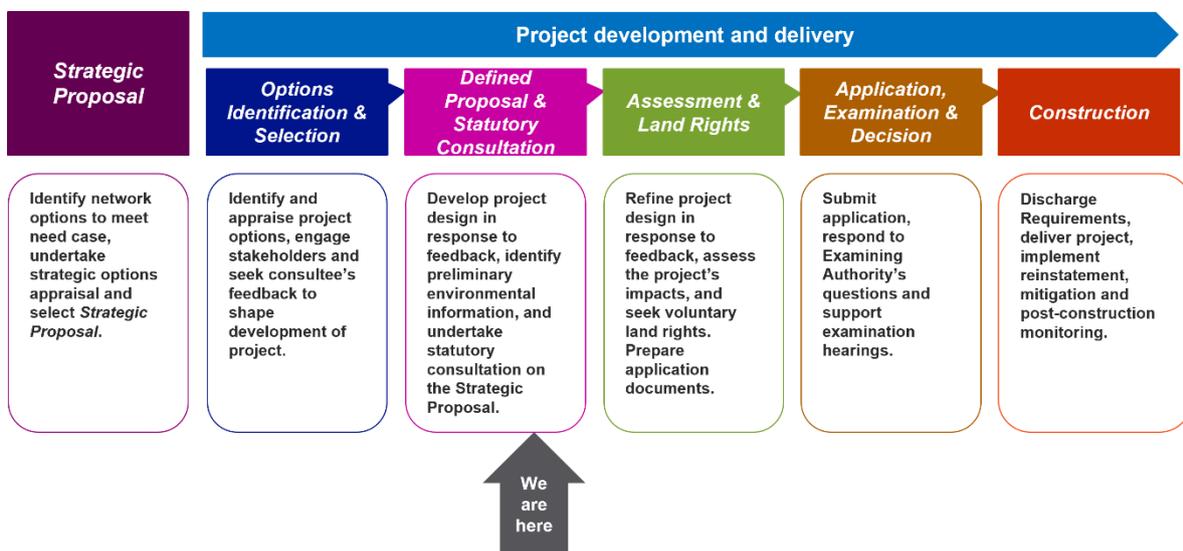
- 1.7.4 A Scoping Report was prepared and submitted by National Grid to the Planning Inspectorate in October 2024. The Planning Inspectorate provided a Scoping Opinion on behalf of the Secretary of State in December 2024, which detailed an opinion on what should be included within the EIA.

2. Main Alternatives Considered

2.1 Introduction

- 2.1.1 National Grid undertakes an options appraisal for its projects, accounting for the various approaches that a project can consider, involving different locations, technologies or designs. Each project requires judgements and decisions about the most appropriate way to achieve the required outcome. The options appraisal process provides information to help inform those judgements.
- 2.1.2 An options appraisal is a robust and transparent process that is used to compare options, and assess the likely negative and positive effects in terms of environmental, socio-economic, technical, and cost factors. The aim is to find the most appropriate design solution that accords with the relevant national planning policy, taking into account National Grid’s statutory duties. Further details can be found in National Grid’s ‘Our Approach to Consenting’ document.
- 2.1.3 National Grid’s ‘Our Approach to Consenting’ document outlines the development process for its projects. The approach is divided into six stages, as detailed in **Image 2.1**.

Image 2.1: National Grid’s consenting process



2.2 Strategic Proposal

- 2.2.1 Following the identification of the need for the Project, National Grid undertook a Strategic Options Appraisal at the Strategic Proposal stage which identified the most appropriate strategic solution to bring forward, considering a wide range of options for providing the necessary north–south power flows for reinforcement of the electricity transmission system within the East Midlands.
- 2.2.2 For each strategic option, a Study Area was established within which the strategic option could reasonably be expected to be developed. Each strategic option was subject to an appraisal of environmental, socio-economic, technical and cost factors.

The appraisal concluded that the establishment of a new 400 kV transmission connection between a new Chesterfield Substation and the existing Willington Substation was the preferred strategic option.

2.3 Options Identification and Selection

- 2.3.1 Having identified the preferred strategic option being between Chesterfield and Willington, National Grid undertook an Options Identification and Selection process which identified and assessed preliminary and refined (comprising various sections and links) route corridors (the latter comprising various sections and links) culminating in the development of an Emerging Preferred Corridor.
- 2.3.2 All preliminary and refined route corridors identified were subject to an options appraisal process in accordance with the document 'Our Approach to Consenting', taking into consideration environmental, socio-economic, technical and cost factors.
- 2.3.3 The appraisal resulted in the Emerging Preferred Corridor and graduated swathe which were presented at the non-statutory (Stage 1) consultation, which was undertaken between 14 May 2024 and 17 September 2024.

2.4 Consideration of Stage 1 (non-statutory) Consultation Feedback

- 2.4.1 The feedback received during the non-statutory (Stage 1) consultation has been carefully reviewed and taken into account, informing ongoing surveys, technical work on the engineering design and the EIA process.
- 2.4.2 Feedback that contained requests for changes or considerations relevant to design elements of the Project were identified and considered in the context of environmental and socio-economic constraints and opportunities, engineering feasibility and cost, and planning policy. Following this consideration, the request was either taken forward as a design change as part of the development of the proposals or a justified decision was taken not to consider it further.
- 2.4.3 Further details of how the feedback received has been considered is presented within the **Stage 1 Consultation Feedback Report**.

2.5 Back Check and Review of Strategic Proposal and Options Identification

- 2.5.1 The development of any project is always evolving iteratively as knowledge about it, and the potential areas in which it will be sited, grows and/or alters. A back check of the strategic proposal was undertaken, and confirmed that the Project – the connection between Chesterfield to Willington – remains the optimal option.
- 2.5.2 Feedback received during the Stage 1 (non-statutory) consultation included suggestions that the Project should be routed away from Pilsley and Lower Pilsley and away from the River Amber valley. In addition, further engineering studies undertaken after the Stage 1 (non-statutory) consultation indicated that routing through this area would be more technically difficult due to the nature of the terrain, accessibility and the recorded mining history.

- 2.5.3 A back check of the route corridors presented at the Options and Identification stage was undertaken, which confirmed that the conclusions remained valid with the exception of some of the technical assumptions made in relation to a section of the Emerging Preferred Corridor between North Wingfield/Lower Pilsley and Alfreton.
- 2.5.4 This back check considered information received from the Stage 1 (non-statutory) consultation as well as further engineering and environmental considerations. As a result of this back check the alternative corridor was defined. The consideration included, but was not limited to:
- engineering challenges to construct pylons in the River Amber valley including topography and accessibility;
 - stakeholder feedback being against routeing through the River Amber valley;
 - an approximately 1.4 km shorter route; and
 - moving further away from Ogston Reservoir Site of Special Scientific Interest and the Grade II* listed Ogston Hall.
- 2.5.5 In light of the above, it was decided that the section of the corridor between Astwith and Alfreton should be revisited, and alternative options should be considered for this part of the route which went outside the Emerging Preferred Corridor.

2.6 Selection of the Draft Order Limits

- 2.6.1 The draft Order Limits (shown in the **Non-Technical Summary Environmental Constraints Plan (nationalgrid.com/chesterfieldtowillington)**) is the required area identified for the construction and operation of the Project. **Chapter 4 Description of the Project** presents the latest iteration of the design for the purposes of the Stage 2 (statutory) consultation. As outlined above, the chosen option for the indicative overhead line, draft Order Limits and design development considered:
- the 2024 Stage 1 (non-statutory) consultation feedback;
 - the Strategic Proposal back check exercise;
 - the options appraisal and selection back check exercise; and
 - ongoing design work, appraisal and survey information.
- 2.6.2 Further information surrounding the development of the design and draft Order Limits is presented within the **Design Development Report**.

2.7 Siting of the New Chesterfield Substation

- 2.7.1 Similarly to the proposed overhead line, an optioneering process was completed to consider potential sites for the new Chesterfield Substation within a substation siting Study Area. The siting of the proposed new Chesterfield Substation has been determined by the separate Chesterfield to High Marnham project.
- 2.7.2 A number of sites were appraised during the selection process, with an option to the south of the existing Chesterfield Substation being taken forward for the proposed consent and construction of the new substation. Further information is presented within the **Design Development Report**.

3. Description of the Project

3.1 Key Components of Chesterfield to Willington

- 3.1.1 The Project is still in development, therefore the detailed design is yet to be completed; however, the Project is likely to comprise the following principal components:
- a new 400 kV overhead line, approximately 60 km in length between a proposed new Chesterfield Substation and the existing Willington Substation. It is anticipated that this would comprise steel lattice pylons in accordance with National Grid's guidance and national planning policy;
 - a new 400 kV Chesterfield Substation, to be built in the vicinity of the existing Chesterfield Substation; and
 - replacement of short sections of existing overhead line and local changes to the lower voltage distribution networks to facilitate the construction of the Project.
- 3.1.2 The Project would include enabling works, for example, temporary and permanent diversions for works on existing overhead line routes, temporary access roads, highway works, temporary works compounds, work sites and other ancillary works. The Project would also include utility diversions and drainage works. There would also be land required for mitigation, compensation and enhancement of the environment including Biodiversity Net Gain (BNG).
- 3.1.3 As previously outlined, it is anticipated that the new Chesterfield Substation would be delivered as part of a separate National Grid project. However, it is possible that it will be decided to include the new Chesterfield Substation works as part of the DCO application for this Project to provide an alternative consenting mechanism to remove reliance on that separate planning application/consent and therefore reduce the risk of delay to the delivery of the Project. In view of this potential inclusion, the new Chesterfield Substation and its potential environmental effects were considered within the PEIR and other relevant documents (where applicable) as part of this Stage 2 (statutory) consultation.
- 3.1.4 The existing Willington Substation was built in the 1990s and would form the southern connection point for the Project. National Grid Customer and Network Development is developing plans for an extension to the existing substation to facilitate new customer connections separately from this Project. It is anticipated that these extension works would be delivered via permitted development rights and they are expected to be completed by 2029.
- 3.1.5 **Chapter 4 Description of the Project** presents a detailed description of the Project including activities associated with the construction, operation, and maintenance (where known).
- 3.1.6 The Project has been divided into six geographical sections, running from north to south, which comprise:
- Section 1: Chesterfield Substation to Tibshelf;
 - Section 2: Tibshelf to Ripley;

- Section 3: Ripley to Morley;
- Section 4: Morley to Ockbrook;
- Section 5: Ockbrook to Aston-on-Trent; and
- Section 6: Aston-on-Trent to Willington Substation.

3.2 Construction Programme

Proposed 400 kV Overhead Line

- 3.2.1 Construction of the proposed 400 kV overhead line is expected to begin in 2029, subject to obtaining development consent, with the Project anticipated to be operational by the end of 2031. Reinstatement works would likely continue beyond that. Prior to the construction phase, certain advanced activities, such as archaeological investigations and/or environmental mitigation, may be carried out.
- 3.2.2 The construction programme will be refined as the Project progresses, with consideration given to seasonal limitations.
- 3.2.3 Given that the Project is linear in nature, construction works are expected to move sequentially along the proposed route alignment, resulting in relatively short durations of work within any specific location compared to the overall programme. Additional information regarding the phasing of construction will be provided in the ES. An indicative schedule outlining the proposed construction timeline is shown in **Image 3.1**.

Image 3.1: Indicative construction programme for overhead line works

Activity	2029				2030				2031				2032			
	Q1	Q2	Q3	Q4												
Site Mobilisation	■	■	■	■												
Enabling Works	■	■	■	■	■	■										
Foundations		■	■	■	■	■	■									
Pylon Assembly & Erection			■	■	■	■	■	■	■	■	■					
Stringing Works						■	■	■	■	■	■	■				
Commissioning												■	■			
Project Operational													■			
Reinstatement													■	■	■	■

New Chesterfield Substation

- 3.2.4 Construction of the new Chesterfield Substation is expected to start in 2026, with demobilisation works to complete by the end of 2031. An indicative schedule outlining the proposed construction timeline is shown in **Image 3.2**.

Image 3.2: Indicative construction programme for the new Chesterfield Substation

Activity	2026		2027				2028				2029				2030				2031			
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	
Site Establishment	■	■																				
Construction Works (including drainage, foundations and substation building construction)		■	■	■	■	■	■	■	■	■	■	■	■	■			■	■	■	■		
Substation Works (Plant Installation)								■	■	■	■	■	■	■	■		■	■	■	■		
Commissioning of Substation														■	■							
Cabling works (including cable sealing end compounds)			■	■	■												■	■	■	■		
Overhead Line Modifications (including foundations, tower erection, commissioning and demolition)		■	■	■	■												■	■	■	■		
Demobilisation																						■

3.3 Construction Working Hours

- 3.3.1 The proposed core construction working hours for the overhead elements are:
 - 7am to 7pm on Monday to Friday; and
 - 8am to 5pm on Saturday, Sunday and bank holidays.
- 3.3.2 The proposed core construction working hours exclude start up and close down activities which would take up to one hour before or after the core construction working hours.
- 3.3.3 The proposed core construction working hours for the new Chesterfield Substation are:
 - 7am to 7pm on Monday to Friday; and
 - 8am to 1pm on Saturday, with no works on Sunday and bank holidays.
- 3.3.4 Deviations from the proposed core construction working hours may be required for some activities and these would be agreed with the local planning authority. Further details are provided in **Chapter 4 Description of the Project**.

4. Approach to Preliminary Environmental Information Report

4.1 PEIR Approach and Methodology

- 4.1.1 The purpose of the PEIR is to enable the public, statutory bodies and other stakeholders to develop an informed view of the potential likely significant effects of the Project and comment on aspects of interest. Feedback received through the consultation process will be used by National Grid to inform the ongoing development of the Project design, and additional measures to address any identified significant environmental effects. The responses from consultees will shape the ongoing design and development of the Project, including any necessary mitigation, compensation, or enhancement measures to address environmental impacts.
- 4.1.2 Within the PEIR, separate chapters present the preliminary assessments for each environmental topic that has been assessed for the Project. The preliminary assessments are based on a reasonable worst-case scenario as currently known. The assessments, where able to, consider the level of significance of each effect on each 'receptor' (the receiving environment such as water, air, land or specific species).
- 4.1.3 Each chapter presents a detailed description of the existing conditions within the draft Order Limits² and the area around it (referred to as the Study Area), through a combination of desk-based studies, engagement and consultation and site-specific surveys. Based on this, each chapter identifies potential environmental effects (both adverse and beneficial) and determines the significance associated with each effect. The general approach to determining 'significance' of an effect is to consider the sensitivity of a receptor alongside the nature and severity of the change (known as the magnitude of impact). Details of how effects have been determined to be significant or not significant are provided in each topic chapter of the PEIR.
- 4.1.4 Consideration has also been given to how any potential effects could be avoided, reduced or offset, which is referred to as mitigation and is described further in section 4.2 below.
- 4.1.5 Following the identification and consideration of mitigation, residual effects arising from the construction and operation of the Project have been identified.
- 4.1.6 The PEIR has been prepared at a point in time during the Environmental Impact Assessment (EIA) process when the design of the Project is still being refined. Therefore, the likely significant environmental effects are still being assessed and the potential for mitigation measures identified, with recommendations fed back to inform further design refinements. Therefore, all effects identified within the PEIR are a preliminary assessment at this stage and will be updated based on the evolving design, surveys and assessment works within the ES.

² Draft Order Limits is the term given to the boundary within which the Project (including construction and operation, and maintenance) is located.

4.2 Mitigation

4.2.1 A number of measures would be adopted to avoid and reduce the effects of the Project on the environment. These fall into three categories: design embedded mitigation measures, good practice measures, and additional mitigation measures.

- Design embedded mitigation measures are those that are intrinsic to and built into the design of the Project, such as routing to avoid designated sites.
- Good practice measures comprise management activities, control measures and techniques that would be implemented during construction of the Project to minimise impacts as far as practicable. Proposed good practice measures to address construction-related impacts are described in each of the topic chapters and are detailed in **Appendix 4A Draft Outline Code of Construction Practice**.
- Additional mitigation measures comprise measures over and above any embedded and good practice measures, for which the EIA has identified a requirement to further reduce significant environmental effects.

4.2.2 At this stage the design, surveys and assessment work have progressed to differing degrees for different technical assessments, and therefore mitigation measures have not all been fully defined or designed. As the Project progresses, mitigation measures will be refined.

4.3 Structure of the PEIR

4.3.1 The PEIR comprises the following:

- Volume 1: Main Report;
- Volume 2: Figures; and
- Volume 3: Appendices.

4.4 Preliminary Environmental Assessments

4.4.1 The following sections provide a summary of the preliminary assessments which have been undertaken to identify likely significant effects associated with the following topic chapters within the PEIR:

- **Chapter 6 Landscape and Visual;**
- **Chapter 7 Ecology and Biodiversity;**
- **Chapter 8 Historic Environment;**
- **Chapter 9 Hydrology and Land Drainage;**
- **Chapter 10 Geology and Hydrogeology;**
- **Chapter 11 Agriculture and Soils;**
- **Chapter 12 Traffic and Transport;**
- **Chapter 13 Air Quality;**
- **Chapter 14 Noise and Vibration;**

- **Chapter 15 Socio-economics, Recreation and Tourism;**
- **Chapter 16 Health and Wellbeing;** and
- **Chapter 17 Cumulative Effects.**

4.4.2 The following sections should also be read in conjunction with the **Non-Technical Summary Environmental Constraints Plan**.

5. Landscape and Visual

5.1 Scope

5.1.1 **Chapter 6 Landscape and Visual** presents a preliminary assessment of the potential effects of the Project on landscape and visual receptors during construction and operation.

5.1.2 In relation to landscape, the following key sensitive receptors have been identified and assessed as part of the preliminary assessment:

- National Character Areas (NCAs);
- Landscape Character Areas (LCAs); and
- Landscape Character Types.

5.1.3 In relation to visual, the following key sensitive receptors have been identified and assessed as part of the preliminary assessment:

- residential receptors in settlements;
- recreational receptors at visitor attractions;
- recreational receptors using Public Rights of Way (PRoWs); and
- recreational receptors using other recreational routes such as Long Distance Paths (LDP).

5.2 Study Area

5.2.1 The Study Area is defined by the draft Order Limits, plus a 5 km buffer limit for identification of landscape and visual receptors. Where high sensitivity receptors are identified outside the 5 km buffer, these have been included within the assessments, where deemed appropriate.

5.3 Existing Baseline

5.3.1 Baseline conditions have been determined through desk-top studies using desk-based information from existing publicly accessible records (including Natural England, Government / planning authority publications and local planning authority pages). The baseline conditions have also been informed by various site walkovers.

5.3.2 The landscape is variable throughout the Study Area of the Project. In the north of the Study Area it is predominantly agricultural and coalfield landscapes with urban fringe land uses to the south of Chesterfield. The central parts of the Study Area transition into undulating farmland and small stream valleys, with scattered towns, villages and farmsteads. To the south of the Study Area, the landscape transitions to a low-lying landscape of the Trent Valley, which is characterised by rivers and their floodplains, with an extensive canal network and the urban fringes of settlements such as Derby.

- 5.3.3 The Amber Valley Special Landscape Area is present in the Study Area within Sections 2 and 3. The Derwent Valley Mills World Heritage Site (heritage designation) is present in the Study Area within Sections 2, 3 and 4.

5.4 Mitigation

- 5.4.1 Where practicable, the design and routing of the Project sought to avoid areas of high landscape and visual value, and minimise effects on receptors.
- 5.4.2 A range of standard good practice mitigation measures for the Project would be adopted throughout the design, construction and operational (including maintenance) phases. **Appendix 4A Draft Outline Code of Construction Practice** presents the likely good practice mitigation measures relevant to landscape and visual.

5.5 Preliminary Assessment

- 5.5.1 The preliminary assessment in relation to landscape features concludes the Project has the potential to present **significant** effects on the character of the surrounding landscape.
- 5.5.2 In relation to people within the vicinity of the Project, the preliminary assessment concludes that the Project has the potential to present **significant** effects to people within settlements, people visiting recreational areas and people using PRowS and other recreational routes (such as LDPs).

Landscape

- 5.5.3 The construction and operation of the Project would impact the character of the surrounding landscape. However, none of the landscape designations at the national or local level would be directly affected. From the Peak District National Park, the overhead line would be distantly visible from the southeasternmost part of the National Park where it would be viewed against the backdrop of countryside. Overall, it would not fundamentally alter the composition or indirectly influence the character of the landscape within the National Park. The effects would be moderate adverse although **not significant**.
- 5.5.4 Moderate visual effects on Amber Valley Special Landscape Area are expected to be **not significant**.
- 5.5.5 Construction would likely require the removal of some vegetation, where this is unavoidable. Lost vegetation would be replaced where it does not conflict with the new overhead line or other constraints. Potential landscape effects could result from the establishment of construction compounds, as well as the permanent introduction of the overhead line and new Chesterfield Substation.
- 5.5.6 The preliminary landscape assessment suggests that both construction and operation would have adverse **significant** effects on the character of the landscape across all sections of the Project. The anticipated effects are influenced by the scale of the Project, geographical extent, duration of construction and permanent introduction of the overhead line. The effects are also influenced by the characteristics of the receiving landscape, including the presence of similar infrastructure and the level of transformation by the existing man-made influences.

Visual

- 5.5.7 The Project would result in changes to views experienced by people due to construction activities, including the establishment of construction compounds, vehicle movement, construction of pylons and overhead line, the introduction of the new Chesterfield Substation, and the undergrounding of existing overhead lines at various locations along the proposed route alignment. Once operational, the presence of infrastructure associated with the Project would continue to affect these views.
- 5.5.8 The preliminary visual assessment indicates that **significant** effects from the construction and operation of the Project are anticipated to affect people within the Study Area. These include changes to views experienced by residents within settlements and recreational users of PRowS and other recreational routes (such as LDPs), or visitors to various attractions such as Hardwick Hall. People living in settlements and undertaking recreational activities close to the Project may experience **significant** effects to their existing views.
- 5.5.9 During construction and operation of the Project, people using recreational areas, PRowS and other recreational routes (such as LDPs) would likely experience **significant** visual effects. In some locations further away from the draft Order Limits, **significant** visual effects have been identified for some residents or recreational users, where there would be unobstructed views toward the Project.

5.6 Potential Additional Mitigation Measures

- 5.6.1 At this stage of the assessment no additional mitigation measures have been identified. Once further details regarding the proposed route alignment and construction methods have been confirmed, further assessment would be carried out at the ES stage.

5.7 Monitoring

- 5.7.1 No monitoring is currently proposed for landscape and visual, however, this will be revisited as part of the ES.

5.8 Residual Effects

- 5.8.1 As there are no additional mitigation measures, the effects identified at the preliminary assessment remain unchanged.

6. Ecology and Biodiversity

6.1 Scope

6.1.1 **Chapter 7 Ecology and Biodiversity** presents a preliminary assessment of how the Project might affect ecology and biodiversity during construction and operation. The assessment focuses on potential impacts to:

- sites which are designated for biodiversity (of international, national and local importance);
- ancient woodland;
- protected/notable habitats; and
- protected/notable species.

6.2 Study Area

6.2.1 The Study Area varies for each of the ecological features considered and is currently defined as follows:

- Sites designated for biodiversity which are of international importance – draft Order Limits plus 20 km, extended to 30 km for selected sites where bats or birds are a qualifying interest.
- Sites designated for biodiversity which are of national and local importance – draft Order Limits plus 5 km.
- Non-statutory designated sites for biodiversity – draft Order Limits plus 5 km.
- Habitats listed on the Ancient Woodland Inventory and Habitats of Principal Importance in England – draft Order Limits plus 500 m.
- Protected/notable species – draft Order Limits plus 2 km.

6.2.2 These Study Areas informed the desk-based assessment. The Survey Areas adopted for the field surveys differ based on habitat assessments and recommended best practice guidance for the ecological features which are present.

6.3 Existing Baseline

6.3.1 Baseline conditions have been gathered from both desk-based sources and field surveys of the Study Area. Within the draft Order Limits, sites designated for local importance for biodiversity have been identified; these included Local Wildlife Sites. In addition, protected/notable habitats have also been identified within the draft Order Limits, with areas of ancient woodland in the surrounding area. Habitats within the draft Order Limits have been noted as suitable to support a range of protected/notable species, including amphibians, breeding and wintering birds, bats, badger, reptiles, otter, water vole, other mammals such as brown hare, fish, aquatic macroinvertebrates, and protected/notable flora and fungi.

6.3.2 Surveys commenced in 2024 and are ongoing throughout 2026. Full details of all survey data will be reported in the ES, following their completion.

6.4 Mitigation

6.4.1 The design of the Project has aimed to avoid sensitive sites and habitats where practicable.

6.4.2 A range of standard good practice mitigation measures for the Project would be adopted throughout the duration of the construction phase. **Appendix 4A Draft Outline Code of Construction Practice** presents the likely good practice mitigation measures relevant to ecology and biodiversity. Any protected species licences required would be obtained to comply with relevant legislation.

6.5 Preliminary Assessment

6.5.1 Baseline surveys are still ongoing. A full assessment of the potential effects to ecology and biodiversity, along with any additional mitigation measures which may be required, will be presented within the ES and supporting appendices.

6.5.2 On a precautionary basis in the absence of a full survey and assessment dataset at this stage, there is the potential for **significant** effects to sites designated for biodiversity, ancient woodland and protected/notable habitats, and protected/notable species during construction. This may be as a result of habitat loss or damage, habitat fragmentation, and disturbance (from noise, lighting, vibration and human or machinery presence). Effects as a result of direct mortality/harm, changes in air quality (dust or vehicle emissions), changes in hydrology, or pollution events, are predicted to be **not significant**.

6.5.3 During operation, there may be **significant** effects to sites designated for biodiversity, ancient woodland and protected/notable habitats, and protected/notable species. This may be as a result of harm/mortality from collision with the overhead line, disturbance (noise and lighting) from permanent infrastructure, and habitat fragmentation where there is ongoing management of vegetation (pruning or trimming of trees and hedgerows) to maintain operational safety.

6.6 Potential Additional Mitigation Measures

6.6.1 It is anticipated that further mitigation measures will be added and/or refinement of existing measures will be made in response to further baseline data collection and developments to the Project design. These will avoid or reduce the significance of effects as far as practicable and will be presented within the ES.

6.7 Monitoring

6.7.1 An Ecological Clerk of Works (ECoW) would be present during construction (when required) to monitor the Contractor to ensure compliance with measures prescribed within the ES and outlined within **Appendix 4A Draft Outline Code of Construction Practice**, including any permits or exemptions, protected species licences, and best practice construction guidelines and standards.

6.7.2 As baseline data collection is yet to be completed, the requirement for any other monitoring is currently unknown. The requirement for any monitoring will be assessed further following completion of all surveys and assessments and will be presented within the ES.

6.8 Residual Effects

6.8.1 At this stage, no additional mitigation measures have been developed, therefore, the residual effects remain unchanged for all potential effects reported in the preliminary assessment. As the Project design progresses, the assessment will be updated and will consider additional mitigation measures, where required and where practicable. These will be presented within the ES.

7. Historic Environment

7.1 Scope

7.1.1 **Chapter 8 Historic Environment** presents a preliminary assessment of how the Project has the potential to affect heritage assets during construction and operation through:

- direct disturbance of heritage assets during the construction phase; and
- changes within the setting of heritage assets during the construction and operational phases.

7.1.2 The assessment of effects through direct disturbance has been informed by a desk-based review of available data sources including the Historic Environment Record, historic maps, aerial photographs and site walkovers. Further investigation and surveys are planned to be undertaken as the assessment progresses.

7.1.3 Heritage assets include features designated for their heritage value, such as world heritage sites, scheduled monuments, listed buildings and conservation areas as well as those which are non-designated but are of identified, local importance.

7.2 Study Area

7.2.1 The Study Area for assessment of effects through direct disturbance extends to 500 m from the draft Order Limits. This is deemed to be an appropriate distance from the draft Order Limits to describe the historical and archaeological baseline, and to undertake an assessment of archaeological potential.

7.2.2 A Study Area of 2 km from the draft Order Limits is defined to consider the likelihood of changes to the setting of heritage assets. This is considered to be appropriate based on the nature of the Project, the character of the surrounding landscape and the asset types. However, more distant assets have also been considered where longer-distance views may contribute to their historic significance.

7.3 Existing Baseline

7.3.1 A wide range of heritage assets are present within the draft Order Limits and the Study Area. These include below ground archaeological remains from the Neolithic period onwards, including ceremonial and settlement sites within the Trent Valley. There is evidence for medieval settlement and agricultural activity, including extensive areas of ridge and furrow representing former ploughing. There are a large number of post-medieval farmhouses, many of which are designated as listed buildings; and a number of prominent country houses set within designated landscapes. Hardwick Hall is the most prominent of these but the parks of Locko Park and Elvaston Castle are also within the Study Area. In addition, the Derwent Valley Mills World Heritage Site is within the Study Area.

7.4 Mitigation

- 7.4.1 The design of the Project has sought to avoid areas of known archaeological interest where practicable, with the routeing also designed to minimise effects on the settings of assets where practicable.
- 7.4.2 Where avoidance of disturbance to archaeological remains is not practicable, there would be measures in place to ensure appropriate recording of heritage assets which would be disturbed or lost as a result of construction of the Project. This would be undertaken by qualified archaeologists and may be achieved through a mix of intrusive investigation and watching briefs as required, with the results made available to the public.

7.5 Preliminary Assessment

- 7.5.1 There are three locations within the Trent Valley where the Project crosses through areas of archaeological interest and adjacent to scheduled monuments. In these locations there is potential for the construction of the Project to significantly affect archaeology. The areas are identified on the Historic Environment Record as:
- Swarkestone Lowes Barrow Cemetery and Field System (MDR4378);
 - Iron Age/Romano-British settlement, west of Lowes Lane, Barrow upon Trent (MDR4371); and
 - Prehistoric landscape, Frizams Lane, Twyford and Stenson (MDR4303), which includes the scheduled monument known as 'Cursus and mini henges, of Neolithic date, round barrows of Neolithic/Early Bronze Age date, and settlements, enclosures and fields of late Iron Age/Romano-British date, immediately East of Willington either side of the A5132' (NHLE1007028).
- 7.5.2 These areas will be included within planned further surveys which will aim to develop a better understanding of their significance. The results of the surveys will be used to inform the detailed design with the aim being to minimise effects upon them.
- 7.5.3 Given the anticipated heights of the proposed pylons, they may be seen from buildings and sites designated for their historic interest. These views may significantly change the setting of individual (or groups of) historic features. Potentially up to ten may be significantly affected during construction although this would reduce to eight during the operation of the Project.

7.6 Potential Additional Mitigation Measures

- 7.6.1 There is no identified additional mitigation at this stage, over and above the embedded or good practice measures identified. This will continue to be reviewed as the assessment progresses and the preliminary design develops further.

7.7 Monitoring

- 7.7.1 No monitoring is currently proposed for historic environment, however, this will be revisited as part of the ES. Further surveys (geophysical surveys and trial trenching) are planned to be undertaken as the assessment progresses, and the findings will be reported in the ES.

7.8 Residual Effects

- 7.8.1 At this stage, no additional mitigation measures have been developed, therefore, the residual effects remain unchanged for all potential effects reported in the preliminary assessment. As the Project design progresses, the assessment will be updated and will consider additional mitigation measures, where required and where practicable. These will be presented within the ES.

8. Hydrology and Land Drainage

8.1 Scope

8.1.1 **Chapter 9 Hydrology and Land Drainage** presents a preliminary assessment of how the Project might affect the water environment including water bodies, drainage systems, and flood risk during construction and operation. The assessment focuses on potential impacts to:

- surface water (including rivers, ditches, streams, canals and floodplains);
- surface water abstractions/drinking water protected zones;
- flood risk receptors; and
- designated/protected sites.

8.2 Study Area

8.2.1 The Study Area covers the draft Order Limits plus a 500 m buffer. It includes rivers such as the Trent and Derwent, canals, and many smaller watercourses and ditches across Derbyshire.

8.3 Existing Baseline

8.3.1 Baseline conditions have been established for climate, topography, flood risk, and water resources across the Study Area. The area has a mix of agricultural land and villages, as well as a range of water bodies. Some rivers in the Study Area are protected or used for drinking water and irrigation. Flood risk varies, with some areas prone to flooding from rivers, surface water and reservoirs.

8.4 Mitigation

8.4.1 The Project is being designed and routed to avoid sensitive hydrological receptors as far as practicable.

8.4.2 A range of standard good practice mitigation measures for the Project would be adopted throughout the duration of the construction phase. **Appendix 4A Draft Outline Code of Construction Practice** presents the likely good practice mitigation measures relevant to hydrology and land drainage. These include securing the relevant environmental permits and consents where the works require them, and working in accordance with Environment Agency guidance as appropriate.

8.5 Preliminary Assessment

8.5.1 From this preliminary assessment, no significant effects are anticipated on water quality, flood risk, land drainage or water resources during construction or operation of the Project. Minor risks such as sediment runoff, temporary changes to drainage,

or pollution would be controlled through design embedded and good practice mitigation measures. All identified effects are assessed as **not significant**.

8.6 Potential Additional Mitigation Measures

- 8.6.1 Based upon the preliminary assessment, additional mitigation measures are not anticipated to be required within the Study Area in relation to hydrology and land drainage. However, the requirement for additional mitigation will be reviewed subject to the completion of further assessment and development of the ES.

8.7 Monitoring

- 8.7.1 Although no significant effects have been identified within this assessment, given the hydrological sensitivity, it may be necessary to undertake monitoring during the construction phase for assurance purposes. The requirements for monitoring will be assessed further and confirmed within the ES.

8.8 Residual Effects

- 8.8.1 At this stage, no additional mitigation measures have been developed, therefore, the residual effects remain unchanged for all potential effects reported in the preliminary assessment. As the Project design progresses, the assessment will be updated and will consider additional mitigation measures, where required and where practicable. These will be presented within the ES.

9. Geology and Hydrogeology

9.1 Scope

9.1.1 **Chapter 10 Geology and Hydrogeology** presents a preliminary assessment of how the Project may affect geology and hydrogeology receptors during construction and operation. In relation to geology and hydrogeology the following key sensitive receptors have been identified:

- geology and minerals (including mineral resources and Regionally Important Geological Sites (RIGS));
- hydrogeology (including Principal and Secondary A Aquifers, springs, groundwater abstractions and Groundwater Dependent Terrestrial Ecosystems); and
- contaminated land (including human health (construction workers and future site users) and controlled waters (surface water and groundwater)).

9.2 Study Area

9.2.1 The Study Area is defined by the draft Order Limits, plus a 250 m buffer for geology and a 500 m buffer for hydrogeology.

9.3 Existing Baseline

9.3.1 Baseline conditions have been gathered from desk-based information using information from existing publicly accessible records (including the Environment Agency, British Geological Survey, the Mining Remediation Authority and local authorities). Environmental data to inform the baseline have also been purchased from third-party providers.

9.3.2 In relation to contaminated land and identification of potential sources of contamination, the majority of the Study Area appears to be agricultural land, however past and current potentially contaminative land uses have been identified in localised areas. The following provides a summary of the type of potential sources of contamination identified across the Study Area:

- mineral extraction features (opencasts, collieries, spoil heaps, shafts);
- railway land;
- waste exemptions (storage of sludge);
- potentially infilled land;
- waste activities (landfills and construction and demolition waste);
- a licensed pollutant release (unloading of petrol into tanks);
- previous industrial sites;
- licensed discharge of sewage;
- sewage works; and
- a power station (Willington Power Station).

9.4 Mitigation

- 9.4.1 The Project is being designed and routed to avoid sensitive geological and hydrogeological receptors (such as mining features, landfills and groundwater source protection zones) as far as practicable.
- 9.4.2 A range of standard good practice mitigation measures for the Project would be adopted throughout the design, construction and operational (including maintenance) phases. **Appendix 4A Draft Outline Code of Construction Practice** presents the likely good practice mitigation measures relevant to geology and hydrogeology.

9.5 Preliminary Assessment

- 9.5.1 The preliminary assessment in relation to geology concludes that with good design embedded and good practice mitigation measures in place during the construction phase, the effect of the Project on mineral resources (i.e. permanently preventing the extraction of mineral resources), and RIGS are likely to be **not significant**.
- 9.5.2 The preliminary assessment in relation to hydrogeology concludes that the Project has potential to present a **significant** effect on groundwater flows and levels, as well as groundwater quality during construction.
- 9.5.3 The preliminary assessment in relation to contaminated land has conservatively assessed that the Project has potential to present a **significant** effect in that its construction may disturb land which has already been contaminated.
- 9.5.4 The excavation of foundations for the pylons, and the trenches within which the cable ducts would be placed could affect groundwater. During the operation of the Project these effects would be **not significant** other than in those locations where larger pylon foundations are required, where **significant** effects have the potential to occur.

9.6 Potential Additional Mitigation Measures

- 9.6.1 At this stage of the assessment, additional mitigation may include additional intrusive ground investigation and subsequent assessment, over and above that which is included as embedded mitigation. In addition, measures such as the production of a Groundwater Management and Monitoring Plan and Dewatering Management Plan may be required.

9.7 Monitoring

- 9.7.1 Groundwater level and quality monitoring would be undertaken ahead of the construction phase to establish baseline conditions and inform design. Where required, groundwater monitoring would continue throughout the construction phase.

9.8 Residual Effects

- 9.8.1 Should additional mitigation measures be required and put in place, residual effects are likely to decrease to **not significant** in relation to groundwater flows and levels, and groundwater quality. With additional mitigation the potential effects on human health and controlled waters as a result of the potential disturbance of existing contamination is also likely to be reduced to **not significant**.

10. Agriculture and Soils

10.1 Scope

10.1.1 **Chapter 11 Agriculture and Soils** presents a preliminary assessment of how the Project may affect agriculture and soils receptors during construction and operation. Receptors which would be potentially affected by the Project have been identified as follows:

- agricultural land (including Best and Most Versatile (BMV) land, i.e., land which is considered to be most flexible for different types of food production);
- soil function (the ability of soils to support ecosystem services such as biodiversity, soil carbon, and water filtering and storage); and
- agricultural landholdings (impacts to farm operations such as access to fields).

10.2 Study Area

10.2.1 The Study Area for agriculture and soils comprises the area directly impacted by the Project, which for the purposes of informing the assessment is the draft Order Limits. It should be noted that the extent of agricultural land and associated soils impacted would not be the entire draft Order Limits but would only be within areas required for the construction of the overhead line; also where temporary and permanent development including roads, pylons, construction compounds, occurs; and where the temporary or permanent disturbance of soils is required.

10.3 Existing Baseline

Soils

10.3.1 Across the Project, the soil is predominantly identified as loamy and clayey soils which are affected by groundwater or are at risk of flooding.

Agricultural Land

10.3.2 Provisional Agricultural Land Classification (ALC) mapping categorises the quality of soils in terms of its ability to support agriculture with Grade 1 being the best category and Grade 4 the poorest. The mapping indicates that the majority of the land within the Study Area is Grade 3 and Grade 4. Grade 4 land is mostly located to the north of Dale Abbey, while Grade 3 land is primarily to the south of Dale Abbey. There is a small portion of ALC Grade 2 land mainly present to the south and east of Derby. At this preliminary stage it has been assumed that all Grade 2 and Grade 3 land is BMV.

Land Use

10.3.3 Satellite imagery indicates that the agricultural land within the draft Order Limits is predominantly arable land and grassland. Two areas of land under Higher Level Stewardship agreement (a government funding scheme for specific land

management practices) are within areas where pylons and haul roads are proposed. A small area of land under a Woodland Grant Scheme would be required for a haul road to allow for the construction and stringing of a pylon.

10.4 Mitigation

- 10.4.1 During design of the Project, National Grid has focused on reducing the area of agricultural land and soil disturbance required where practicable, particularly for construction.
- 10.4.2 A range of standard good practice mitigation measures for the Project would be adopted throughout the duration of the construction phase. **Appendix 4A Draft Outline Code of Construction Practice** includes the likely good practice mitigation measures relevant to agriculture and soils.
- 10.4.3 No mitigation measures are proposed for the operational phase.

10.5 Preliminary Assessment

- 10.5.1 The Project could affect agriculture and soils by causing temporary and permanent loss of agricultural land, including BMV land needed for construction and operation. This may result in **significant** effects during the operation of the Project due to permanent loss of agricultural land. However, effects during construction are anticipated to be **not significant**.
- 10.5.2 During construction, soils which are required to be stripped, handled and stored, could be damaged if not handled appropriately. Poor management could result in compacted soils, impacting their ecosystem services. Once mitigation measures are implemented it is anticipated that effects would be suitably minimised and would be **not significant**.
- 10.5.3 The works required to construct and operate the Project may affect farms and their operations. However, measures would be implemented during these phases to minimise disruptions and reduce effects. Based on this, effects are considered to be **not significant**.

10.6 Potential Additional Mitigation Measures

- 10.6.1 No additional mitigation measures have been developed for agriculture and soils for either construction or operation. Additional mitigation measures may be developed as the Project design evolves and ALC surveys are undertaken. These will be outlined at the ES stage.

10.7 Monitoring

- 10.7.1 Monitoring of soil movement, storage and reinstatement would be required during construction to ensure the suitable handling of soils. Once reinstated, some soils would require further monitoring during an aftercare period. Suitable measures would be outlined in the Outline Soil Management Plan to be submitted as part of the DCO.

10.8 Residual Effects

- 10.8.1 As no additional mitigation is currently proposed, the residual effects remain unchanged (**not significant**) for all potential effects with the exception of operational impacts from permanent loss of agricultural land (including BMV land) which remains **significant** due to the area of BMV land required for permanent infrastructure.
- 10.8.2 However, as the Project design evolves, National Grid will seek to reduce the area of BMV land required. ALC surveys will also support the understanding of the distribution of ALC gradings across the draft Order Limits to support the refinement of the design and reduce adverse effects where practicable. This will be included within the ES.

11. Traffic and Transport

11.1 Scope

11.1.1 **Chapter 12 Traffic and Transport** presents the preliminary assessment of traffic and transport effects associated with the construction and operation of the Project on the following:

- road network – effects on users of the Local Road Network during construction;
- PRowS, long distance and regional paths and National Cycle Network routes – effects on users during construction and operation; and
- navigable waterways network – effects on users during construction.

11.2 Study Area

11.2.1 The Study Area includes the routes that traffic would travel along during the construction of the Project, with PRowS, long distance and regional paths, National Cycle Network routes and navigable waterways that interact with the Project also included. The Study Area to be presented within the ES will also include sections of the Strategic Road Network, the scope of which will be agreed with National Highways.

11.3 Existing Baseline

11.3.1 The Strategic Road Network within the vicinity of the Project includes the M1, A50, A52 and A38. The Strategic Road Network feeds into the Local Road Network from which the Project would be accessed. In addition, a number of PRowS, National Cycle Network routes, regional paths and navigable waterways are located within the vicinity of the Project.

11.3.2 A summary of the transport network is provided within the chapter and the supporting appendices (**Appendix 12B Preliminary Public Rights of Way Management Plan** and **Appendix 12C Baseline Transport Context Information**). By understanding the baseline, it is possible to determine how sensitive specific roads are to traffic and transport effects.

11.4 Mitigation

11.4.1 The preliminary Public Right of Way Management Plan (**Appendix 12B Preliminary Public Rights of Way Management Plan**) sets out the good practice mitigation and management measures that the Project may employ to minimise impacts on PRowS, long distance and regional paths and National Cycle Network routes. This plan will be developed into an 'Outline' management plan as part of the ES. A Preliminary Construction Traffic Management Plan has been produced setting out measures to manage traffic during construction of the Project. An Outline Construction Traffic Management Plan will also be produced for the ES. Both management plans will be discussed with the key stakeholders during their development. In addition, **Appendix 4A Draft Outline Code of Construction Practice** includes other likely good practice mitigation measures relevant to traffic and transport.

11.5 Preliminary Assessment

11.5.1 The preliminary assessment provides the following key conclusions:

- The screening exercise undertaken shows that five of the 40 receptors within the Study Area would require detailed assessment of traffic and transport effects based on the increase in total vehicles as a result of the construction of the Project. A further 29 receptors would require detailed assessment when considering only Heavy Duty Vehicle increases. A detailed assessment of effects that meet the screening threshold for assessment will be provided in the ES. This will set out the associated magnitude and significance of effect and identify additional mitigation if needed.
- The screening exercise indicated that six of the 40 receptors within the Study Area would not experience a level of increase in vehicle flows which would warrant detailed assessment.
- Effects to navigable waterways are expected to be **not significant**.
- There may be a limited number of permanent effects on PRowS, most of which would involve diversions or realignments of the route. The changes to the journey times for users are expected to be short and result in **not significant** effects.
- Potentially **significant** effects are identified to the users of the road network, however these will be further assessed as the design of the Project progresses, within the ES.

11.6 Potential Additional Mitigation Measures

11.6.1 The requirement for additional mitigation measures will remain under review during the refinement of the Project design and the completion of further assessment and development of the ES. If needed, additional mitigation could include adapting construction hours on certain routes at certain times or temporary traffic regulation orders.

11.7 Monitoring

11.7.1 The Preliminary Construction Traffic Management Plan and Preliminary Public Rights of Way Management Plan set out the frameworks for monitoring the traffic and transport impacts of the Project, as well as the implementation and monitoring of mitigation measures. These plans will be further developed into an Outline Construction Traffic Management Plan and Outline Public Rights of Way Management Plan, respectively, that will be part of the ES.

11.7.2 The finalised Construction Traffic Management Plan and Preliminary Public Rights of Way Management Plan would be prepared after the DCO has been granted and before construction begins. They would provide detailed information on monitoring, including roles and responsibilities, the management structure and actions to be taken if non-compliance occurs or if, as a result of review, further mitigation/control measures are required.

11.8 Residual Effects

- 11.8.1 The ES will identify the residual effects following the detailed assessment of the level of significance of each of the traffic and transport effects. The assessment of residual effects will consider the design embedded and good practice mitigation and any additional mitigation that has been identified. It is anticipated that these mitigation measures would address the impacts so that residual effects would be **not significant**. This will however be confirmed in the ES.

12. Air Quality

12.1 Scope

12.1.1 **Chapter 13 Air Quality** presents a preliminary assessment of how the Project might affect air quality receptors. The scope of the assessment covers the following effects on receptors during construction of the Project:

- dust during construction on properties and ecological habitats, of which the main potential impacts are dust soiling and deterioration of human health;
- generator exhaust emissions potentially affecting people; and
- vehicular exhaust emissions containing air pollutants released by construction traffic.

12.1.2 The operation of the Project is not anticipated to lead to a significant effect on local air quality.

12.2 Study Area

12.2.1 The Study Area for the preliminary assessment varies for different air quality receptors. For the construction dust assessment (including plant and machinery), these are:

- people within the draft Order Limits, plus those up to 250 m from the draft Order Limits, those within 50 m of the proposed routes used by construction traffic on the public highway, and those up to 250 m from a site entrance; and
- ecological features within the draft Order Limits, plus those up to 50 m from the draft Order Limits, those within 50 m of the proposed routes used by construction traffic on the public highway, and those up to 250 m from a site entrance.

12.2.2 Impacts on people associated with generator use have been considered up to 100 m from their source.

12.2.3 For the assessment of road traffic emissions, the Study Areas are:

- any road where the change in road traffic exceeds nationally recognised screening criteria³, which are used to determine effects to local air quality (health of people) within 200 m of these roads; and
- any ecological habitats within 200 m of any road links where the projected change in traffic flow exceeds nationally recognised screening criteria⁴, above which would result in a detrimental effect on ecology and/or the habitat.

³ As given in the Environmental Protection UK/Institute of Air Quality Management Planning Guidance.

⁴ As given in the Institute of Air Quality Management Nature Conservation Sites Guidance.

12.3 Existing Baseline

- 12.3.1 The existing air quality baseline across the Project has been informed by a review of available data including for nitrogen oxides (NOX), nitrogen dioxide (NO2) and particulate matter (PM10 and PM2.5). Government modelled data together with monitoring data collected by local authorities within 2 km of the draft Order Limits and 200 m of proposed construction routes, have informed the assessment of existing and future pollutant levels, including ammonia (NH3) and the rate of nitrogen deposition which can have detrimental effects on ecological habitats. In addition, Project-specific air quality monitoring surveys have been undertaken and will continue as the Project progresses. Overall, air quality is good reflecting the rural nature of the Study Area.
- 12.3.2 The review of air quality data also revealed that there are no known pollution hotspots, known as 'Air Quality Management Areas', within the draft Order Limits; the nearest hotspots are located in Chesterfield and Derby up to 2.5 km to 3 km from the draft Order Limits.
- 12.3.3 Within the Study Area there are hospitals, nursing homes, schools and places where people live ranging from small, scattered settlements up to towns and cities including Chesterfield, Alfreton, Ripley, Belper and Derby. Ecological habitats within the various Study Areas include statutory designations such as Sites of Special Scientific Interest and Local Nature Reserves, while Local Wildlife Sites and ancient woodlands make up the non-statutory sites.

12.4 Mitigation

- 12.4.1 The Project and draft Order Limits have been designed to avoid sensitive air quality receptors as far as practicable.
- 12.4.2 The Code of Construction Practice would outline the proportionate measures to be implemented to reduce effects on amenity due to dust soiling, and human health in terms of particulates, and includes emission standards for vehicles and plant (including generators). These good practice mitigation measures have been determined through the preliminary assessment. The Draft Outline Code of Construction Practice is included as **Appendix 4A Draft Outline Code of Construction Practice**.

12.5 Preliminary Assessment

- 12.5.1 The preliminary assessment of effects reported below considers embedded mitigation measures, as well as the good practice measures previously described.
- 12.5.2 Based on the preliminary assessment, following implementation of the dust mitigation measures outlined in the Draft Outline Code of Construction Practice, effects associated with dust and particulates generated during construction are likely to be **not significant**.
- 12.5.3 Following implementation of the mitigation measures outlined in the Draft Outline Code of Construction Practice and the intermittent nature of their operation, effects due to emissions from generator use during construction are likely to be **not significant**.

- 12.5.4 Projected changes in construction vehicle numbers exceed nationally recognised screening criteria on 39 roads. Therefore, **significant** effects due to changes in air quality cannot be ruled out at this stage and will require further assessment within the ES.
- 12.5.5 Based on the preliminary assessment, predicted effects for air quality during operation of the Project are likely to be **not significant**.

12.6 Potential Additional Mitigation Measures

- 12.6.1 No additional mitigation has been identified at this preliminary stage. Further assessment will be undertaken for the ES and should the potential for significant effects be confirmed then additional mitigation may be required.

12.7 Monitoring

- 12.7.1 Baseline air quality surveys of roadside NO₂ concentrations are currently being undertaken at key roadside locations to determine current levels. Should detailed modelling be required as part of the ES, these data will be used to verify the model outputs.
- 12.7.2 During the construction of the Project, monitoring activities including site inspections and checking compliance with the relevant construction dust and air quality emission mitigation measures would be undertaken by the Contractor(s).
- 12.7.3 At this stage, no air quality monitoring other than visual inspections for dust deposition would be required during the construction and operational phases of the Project.

12.8 Residual Effects

- 12.8.1 Through further assessment, design and mitigation, it is expected that impacts on air quality would be **not significant**.

13. Noise and Vibration

13.1 Scope

- 13.1.1 **Chapter 14 Noise and Vibration** presents a preliminary assessment of how noise and vibration resulting from the Project might affect sensitive receptors during construction and operation. Sensitive receptors will include people and their properties. The preliminary assessment includes consideration of:
- noise and vibration from construction activities associated with the overhead line and new Chesterfield Substation;
 - noise from construction traffic;
 - noise from the overhead lines and from the substation at Chesterfield during operation; and
 - noise from significant maintenance activities during the operational phase of the Project.
- 13.1.2 An assessment of the likely noise effects associated with the operation of the new Chesterfield Substation has not been included due to limited available information at this early stage. An assessment will instead be undertaken as part of the ES.

13.2 Study Area

- 13.2.1 For construction noise, a Study Area of 300 m from construction activities has been used. For construction vibration a Study Area of 100 m from construction activities has been used. The Study Area for construction traffic noise is based on a distance of 50 m from the roads that would be used to access the construction working areas. For the assessment of operational noise from the overhead line, a Study Area of 100 m from the area in which the overhead line would be located has been adopted. For the assessment of operational noise from the Chesterfield Substation, a Study Area of 1 km has been used.

13.3 Existing Baseline

- 13.3.1 The overhead line passes through a mix of rural and built-up areas. Noise sensitive receptors (NSRs) and vibration sensitive receptors (VSRs) close to the proposed route alignment include isolated dwellings, and residential properties in villages and towns. Existing sound levels are likely to be influenced by existing road and rail traffic, as well as by natural sounds (such as birds) and anthropogenic sources (such as agricultural activity).
- 13.3.2 Noise monitoring has been carried out at two locations close to the proposed substation at Chesterfield. Additional noise monitoring has also been carried out during the daytime at a further nine locations along the proposed route alignment. Further noise monitoring will be carried out and reported in the ES.

13.4 Mitigation

- 13.4.1 The Project is being designed and routed with the aim of avoiding environmentally sensitive features, including NSRs and VSRs, as far as reasonably practicable. Best practice measures would be adopted during construction to minimise noise and vibration at nearby NSRs and VSRs, where necessary and practicable. As far as practicable, the routes taken by construction traffic would be located away from NSRs.
- 13.4.2 Pylon fittings would be specified to reduce the potential for audible noises to occur. This would be achieved by ensuring that fittings are specified to accord with measures which reduce the potential for minimising the likelihood of audible noise and tones from conductors.
- 13.4.3 New infrastructure with moving parts, including cooling equipment and transformers, would include vibration isolation measures within the design as embedded mitigation, such as the use of suitable anti-vibration mounts.
- 13.4.4 Further embedded and good practice mitigation measures will be considered as the Project design evolves.

13.5 Preliminary Assessment

- 13.5.1 During the construction of the Project as well as during infrequent refurbishment works during operation, **significant** noise effects are predicted at NSRs within approximately 200 m of works during the daytime period and within approximately 630 m for works carried out during the weekend period. For construction of the substation, the potential for **significant** noise effects is predicted at NSRs within approximately 130 m of construction works during the daytime period. Potentially **significant** vibration effects are predicted within approximately 90 m of works.
- 13.5.2 Worst-case assumptions were adopted for these preliminary assessments which are likely to result in a cautious assessment of likely significant effects. The assessments will be refined for the ES.
- 13.5.3 Construction traffic noise effects are predicted to be **not significant**, as are construction vibration effects on flood defence structures.
- 13.5.4 Noise from the operation of the overhead line could be **significant** to vulnerable subgroups (such as hospitals, pre-schools, care homes and hospices) which are within 73 m of the overhead line.

13.6 Potential Additional Mitigation Measures

- 13.6.1 At this stage, no additional mitigation measures have been developed for noise and vibration for either construction or operation. The ES will present an assessment considering the likely noise reduction provided by the proposed mitigation measures, as required. Should the potential for significant construction noise and vibration effects be confirmed then additional mitigation measures may be applied.
- 13.6.2 In terms of construction noise, such additional mitigation measures could include acoustic screening, enclosure of fixed plant items, the use of different, quieter construction methods or restrictions on the timing of certain activities.

- 13.6.3 In terms of operational noise, additional mitigation measures could include the use of low noise versions of equipment, acoustic screens or enclosures within buildings.

13.7 Monitoring

- 13.7.1 A Construction Noise and Vibration Management Plan would be prepared prior to the start of construction and would include measures to mitigate and manage noise and vibration during the construction phase.
- 13.7.2 During commissioning of the Project, noise monitoring would be carried out at a selection of locations. The monitoring would be used to identify whether noise levels are higher than predicted, and should this be the case, to identify mitigation to reduce noise levels as far as reasonably practicable.
- 13.7.3 Once the overhead line and substation are operational, noise would be monitored during regular maintenance inspections and in response to any complaints.
- 13.7.4 Measures to mitigate and manage noise and vibration during the operational phase will be developed as the design progresses.

13.8 Residual Effects

- 13.8.1 At this stage, no additional mitigation measures have been developed, therefore, the residual effects remain unchanged for all potential effects reported in the preliminary assessment. As the Project design progresses, the assessment will be updated and will consider additional mitigation measures where required and where practicable. These will be presented within the ES.

14. Socio-economics, Recreation and Tourism

14.1 Scope

14.1.1 **Chapter 15 Socio-economics, Recreation and Tourism** presents the preliminary assessment of how the Project may affect socio-economics, recreation and tourism receptors identified within the Study Area during construction and operation. The scope of the assessment covers effects on the following receptors:

- the local and regional economy in relation to job creation;
- private property and housing;
- development land and businesses;
- agricultural land holdings;
- users of PRowS and recreational routes, such as walkers, cyclists and horse riders;
- users of community land and assets;
- tourist attractions; and
- tourist accommodation providers.

14.2 Study Area

14.2.1 The Study Area for the socio-economics assessment has been defined using professional judgement and experience of similar linear projects and is defined by the following local authority boundaries:

- Chesterfield Borough Council;
- North East Derbyshire District Council;
- Bolsover District Council;
- Ashfield District Council;
- Amber Valley Borough Council;
- Broxtowe Borough Council;
- Erewash Borough Council;
- North West Leicestershire District Council;
- Derby City Council;
- South Derbyshire District Council; and
- East Staffordshire Borough Council.

- 14.2.2 The principal labour market catchment area is considered to be the East Midlands, West Midlands and Yorkshire and the Humber and this has been used as the regional Study Area.
- 14.2.3 A Study Area of 500 m from the draft Order Limits has been used for the following receptors:
- private property and housing;
 - businesses and development land;
 - community land, assets and recreation;
 - agricultural land holdings; and
 - public access for walking, cycling and horse riding (PRoWs).
- 14.2.4 A Study Area of 5 km from the draft Order Limits has been used for tourist attractions and tourist accommodation.
- 14.2.5 Where the assessment of socio-economics, recreation and tourism uses data from other topic chapters, the Study Area for that chapter is referred to in the assessment.

14.3 Existing Baseline

- 14.3.1 Socio-economics statistics show the proportion of working-age individuals (16–64) in the Study Area is broadly in line with the national average (62.9 per cent), although there is some local variation. Economic activity rates among 16–64 year olds are generally higher than regional and national averages, except for North East Derbyshire and Derby City. Job density, which is the number of jobs per resident (aged 16-64), is lower than the national average, indicating fewer jobs per working-age resident. Four out of seven local authority districts are within the 50 per cent most deprived in England. The following is a summary of each of the receptors:
- Approximately 17,500 properties are within the Study Area, with four properties and one strategic housing allocation inside the draft Order Limits.
 - Around 473 businesses are within the Study Area, with five inside the draft Order Limits.
 - Where the Project crosses agricultural land, this is predominantly Grades 3 and 4 land according to the Provisional Agricultural Land Classification data.
 - Numerous PRoWs and designated routes cross the Study Area, including national and regional trails.
 - There are 153 community and recreational assets within 500 m of the draft Order Limits.
 - There are 44 tourist attractions within 5 km of the draft Order Limits, varying from local to regional/national importance.
 - Tourist accommodation includes 96 locations within 5 km but none within the draft Order Limits.

14.4 Mitigation

- 14.4.1 The proposed route alignment has been designed, where practicable, to avoid sensitive features including towns and villages and historic features. Additionally, the equipment that would be used has been designed to reduce potential noise and vibration effects. Construction traffic routes will be selected to avoid impacts on sensitive receptors, including walkers, cyclists and horse riders, nearby businesses and other users where possible.
- 14.4.2 An Outline Public Right of Way Management Plan will be produced and will include information on how temporary closures during construction would be managed and would ensure that potential disruption to PRoWs is minimised. It would also include details of any PRoW management requirements during operation of the Project.
- 14.4.3 A Construction Traffic Management Plan would be produced setting out measures to manage traffic during construction of the Project which would appropriately consider socio-economic, recreation and tourism receptors.
- 14.4.4 Access to business, recreation and tourism assets would be maintained, where practicable, along their current alignments during construction, with alternative access routes being provided if inhibited during construction.

14.5 Preliminary Assessment

- 14.5.1 The following effects have been identified at preliminary assessment:
- Amenity, severance and traffic delay effects on the following receptors are considered to be **significant** during construction and operation:
 - private property and housing;
 - development land and businesses;
 - community land, assets and recreational facilities; and
 - tourist accommodation (both amenity and effect on capacity (construction only)).
 - During construction, effects to public access for walkers, cyclists and horse riders are considered to be **significant**, however during operation, these would be **not significant**;
 - During construction, effects on tourist attractions are considered to be **significant**, however during operation, these would be **not significant**;
 - During construction, employment creation is considered to have a beneficial effect, however the effect would be **not significant**.
 - During construction, effects to agricultural land holdings are considered to be **significant**, however during operation, these would be **not significant**.
- 14.5.2 It should be noted that additional modelling and further assessments will be undertaken as part of the ES for each of the topic chapters with which the socio-economics, recreation and tourism assessment has interdependencies (**Chapter 6 Landscape and Visual, Chapter 11 Agriculture and Soils, Chapter 12 Traffic and Transport, Chapter 13 Air Quality and Chapter 14 Noise and Vibration**). Additionally, mitigation measures for each of the topic chapters will be refined. The

socio-economics, recreation and tourism assessment will continue to monitor the outcomes of these assessments and how these may change the significance of effects reported in this chapter.

14.6 Potential Additional Mitigation Measures

14.6.1 At this stage, no additional mitigation is proposed for the socio-economics, recreation and tourism assessment. Should the potential for significant effects be confirmed then the requirement for additional mitigation will be reviewed as the design of the Project progresses.

14.7 Monitoring

14.7.1 No monitoring is currently proposed for socio-economics, recreation and tourism, however, this will be revisited as part of the ES.

14.8 Residual Effects

14.8.1 At this stage, no additional mitigation measures have been developed, therefore, the residual effects remain unchanged for all potential effects reported in the preliminary assessment. As the Project design progresses, the assessment will be updated and will consider additional mitigation measures, where required and where practicable. These will be presented within the ES.

15. Health and Wellbeing

15.1 Scope

15.1.1 **Chapter 16 Health and Wellbeing** presents the preliminary assessment of how the Project may affect the health and wellbeing of the general population as well as vulnerable populations⁵ within the Study Area during construction and operation. The scope of the assessment covers the following effects on the general population and vulnerable populations:

- effects on quality of life – physical and mental wellbeing effects;
- physical and mental health – health-related effects upon users of the PRow network;
- physical and mental health – provision of and access to facilities;
- mental health – potential employment generation (during construction only); and
- mental health – perceived risk from electric and magnetic fields (EMFs) (during operation only).

15.2 Study Area

15.2.1 The Study Area for the health and wellbeing assessment has been defined using professional judgement and experience of similar linear projects and is defined by the following local authority boundaries:

- North East Derbyshire District Council;
- Bolsover District Council;
- Amber Valley Borough Council;
- Erewash Borough Council; and
- South Derbyshire District Council.

15.2.2 Chesterfield Borough Council and Derby City Council are both outside the draft Order Limits, however, they have also been considered as part of the Study Area due to their proximity to the draft Order Limits.

15.2.3 Where the assessment of effects upon health uses data from other topic chapters, the Study Area for that chapter will be referred to in the assessment. Due to the nature of mental health effects due to perceived risk of EMF, it is not practicable to apply a Study Area.

⁵ A vulnerable group may have a higher sensitivity to these changes in health status, by virtue of factors such as age (for example, older people or children), ethnicity, economic factors, disability, sex, or gender.

15.3 Existing Baseline

- 15.3.1 Health and wellbeing statistics show a wide variety of socio-economic and health factors affecting the different authorities across the Study Area. The Study Area tends to have an ageing population, and slightly lower life expectancy than the England average, which suggests that healthcare for these groups is a focus in the area. Varied levels of deprivation are also present across the area, with some local authorities having higher deprivation than the England average, and some lower.

15.4 Mitigation

- 15.4.1 The Project will be designed in accordance with UK Government policies and National Grid design standards relating to EMFs. Ongoing consultation will be held throughout the planning stages and the construction phase of the Project, providing the local community with more opportunities for discussion of the Project and EMFs. There is also information available on the NGET website www.emfs.info which is linked to all project websites for members of the public to access.
- 15.4.2 The proposed route alignment has been designed where practicable to avoid sensitive receptors, including towns and villages and historic features. Additionally, where practicable, the equipment that is planned to be used has been designed to reduce potential noise and vibration effects; and construction traffic routes will be selected to avoid impacts on sensitive receptors, including walkers, cyclists and horse riders, nearby businesses and other users. Access to existing facilities would also be maintained where practicable and further information will be provided in an Outline Construction Traffic Management Plan (that will be submitted alongside the DCO application).
- 15.4.3 A Preliminary PRow Management Plan has been produced, and will be developed into an Outline PRow Management Plan which will include information on how temporary closures would be managed and would ensure that potential disruption to PRow is minimised as far as practicable.

15.5 Preliminary Assessment

- 15.5.1 Physical and mental wellbeing effects as a result of changes to the environment are considered to be **significant** for vulnerable populations during construction and operation. Additionally, changes to the PRow network may lead to **significant** effects for vulnerable groups during construction and operation. All other effects are considered to be **not significant** at this stage. Finally, changes to access to services during construction could lead to **significant** effects for vulnerable groups. It should be noted that additional modelling for noise and air quality and further assessments will be undertaken as part of the ES. Additionally, mitigation measures for each of the topic chapters will be refined. The health and wellbeing assessment will continue to monitor the outcomes of these assessments and how these may change the significance of effects reported in this chapter.

15.6 Potential Additional Mitigation Measures

- 15.6.1 Additional mitigation comprises measures over and above any embedded and standard mitigation measures, for which the EIA has identified a requirement to further reduce significant environmental effects.
- 15.6.2 At this stage, no additional mitigation is proposed for the health and wellbeing assessment. Should the potential for significant effects be confirmed once the design of the Project has progressed, then the requirement for additional mitigation will be considered.

15.7 Monitoring

- 15.7.1 No monitoring is proposed as part of the health and wellbeing assessment, however, this will be revisited as part of the ES.

15.8 Residual Effects

- 15.8.1 At this stage, no additional mitigation measures have been proposed, therefore the residual effects reported in the preliminary assessment remain unchanged for all potential effects. As the Project design progresses, the assessment will be updated and will consider additional mitigation measures, where required and where practicable. These will be presented within the ES.

16. Cumulative Effects

16.1 Scope

16.1.1 **Chapter 17 Cumulative Effects** presents a preliminary assessment of how effects resulting from the Project may interact with each other, and also how the effects of the Project could accumulate with the effects of other developments proposed within the vicinity.

16.1.2 There are two types of effects:

- **Cumulative effects** (also known as inter-project effects): effects resulting from the Project combining and interacting with effects generated by the other developments to impact a common receptor, e.g., local communities experiencing greater traffic due to the Project and other nearby developments being constructed at the same time.
- **Combined effects** (also known as intra-project effects): the interaction and combination of different effects resulting from the Project which affect the same single receptor, e.g., residential occupants in a house may be impacted by visual impacts, noise and changes to air quality arising from the Project.

16.1.3 At this stage, the preliminary assessments presented within the topic chapters are not yet progressed to a stage where the level of significance for individual effects is defined. Therefore, the PEIR presents a preliminary assessment of cumulative effects only.

16.1.4 An assessment of cumulative and combined effects will be presented within the ES.

16.2 Methodology

16.2.1 Cumulative effects have the potential to occur when an existing, approved or planned project (known as a 'committed development') is situated within a certain radius from the Project (known as the Zone of Influence). The approach to assessment is as follows:

- **Stage 1 Establishing the long list:** In the first instance, a Zone of Influence is defined based on the Study Areas for each of the environmental topics. A long list of committed developments is then identified within the Zone of Influence by reviewing planning applications, development plans and other available sources.
- **Stage 2 Establishing the short list:** The long list is then refined to a short list based on overlaps in the timing of the development, the scale and nature of the development, the sensitivity of the receiving environment and requests from relevant stakeholders.
- **Stage 3 Information gathering:** Further information is gathered to refine the short list further and inform the final cumulative effect assessment (Stage 4). Information gathered includes design and location information of the development, construction and operational timescales, and the environmental assessments completed for the committed development.

- **Stage 4 Assessment:** The cumulative effects assessment will describe and evaluate how the likely significant residual effects arising from the Project could combine with likely significant residual effects generated by committed development presented in the short list.

16.3 Preliminary Assessment

- 16.3.1 The preliminary assessment presented within the PEIR includes both Stages 1 and 2, which are presented within **Appendix 17A Long List and Short List of Committed Developments**. Stages 3 and 4 will be undertaken and presented within the ES.
- 16.3.2 At this stage, a total of 108 developments have been shortlisted. These developments will be reviewed at the ES stage, and will be progressed to Stages 3 and 4 of the cumulative assessment within the ES.
- 16.3.3 The cumulative effects assessment will be reviewed, updated and progressed as part of the ongoing EIA and reported in the ES.

17. Looking Forward

17.1 What Happens Next?

- 17.1.1 Following the close of the consultation, all feedback will be collated and analysed to identify key themes and understand comments, concerns and any requests for changes to the design. National Grid will review its proposals and, where appropriate, refine these in light of the feedback.
- 17.1.2 Based on consultation responses, design refinements and additional information that becomes available from site visits and surveys, the environmental assessment will be reviewed and updated for the ES.
- 17.1.3 National Grid expects to submit its DCO application for the Project in 2027, which will be accompanied by the ES, which will report the findings of the EIA process.

17.2 Where Can I Find Further Information?

- 17.2.1 This document is the Non-Technical Summary of the PEIR for the Project. Volumes 1, 2 and 3 of the PEIR provide more detailed and technical information which is available on the Project website:
 - nationalgrid.com/chesterfieldtowillington
- 17.2.2 Further information can be obtained:
 - By email: chesterfield-willington@nationalgrid.com; or
 - Telephone: 0800 073 1047 (lines are open Monday to Friday 9am–5:30pm, with an answerphone facility taking messages outside these hours).
- 17.2.3 Public information events will also take place during Stage 2 consultation as shown in **Table 17.1**.

Table 17.1: Public information events schedule

Area	Date	Time	Location
North Wingfield and Grassmoor North East Derbyshire	Thursday 19 March 2026	2pm-7pm	North Wingfield Community Resource Centre, Whiteleas Avenue, North Wingfield, Chesterfield S42 5PW
Ripley Amber Valley	Friday 20 March 2026	2pm-7pm	Greenwich Community Sports Hub, Nottingham Road, Ripley DE5 3AY
Willington South Derbyshire	Saturday 21 March 2026	10am-4pm	Willington Village Hall, Twyford Road, Willington DE65 6DE

Area	Date	Time	Location
Ockbrook and Borrowash Erewash	Wednesday 25 March 2026	2pm-7pm	Ashbrook Community Centre, Harrington Avenue, Borrowash DE72 3JE
Weston-on-Trent South Derbyshire	Thursday 26 March 2026	1pm-6pm	Weston-on-Trent Village Hall 47 Main Street, Weston-on- Trent DE72 2BL
Calow North East Derbyshire	Friday 27 March 2026	12:30pm- 5:30pm	Calow Community Centre, Allpits Road, Calow, Chesterfield S44 5AT
Stanley and West Hallam Erewash	Thursday 16 April 2026	12pm-5pm	Stanley Village Hall, Park Avenue, Stanley, Ilkeston DE7 6FF
Shirland and Higham Amber Valley	Friday 17 April 2026	2pm-7pm	Shirland Village Hall, Main Road, Shirland, Alfreton DE55 6BB
Kilburn Amber Valley	Saturday 18 April 2026	10am-4pm	Kilburn Junior School, The Flat, Kilburn, Belper DE56 0LA

17.2.4 In addition to the in-person events, there will be eight public online webinars that will take place during the Stage 2 consultation period. Information on how to sign up for these can be found on National Grid's website for the Project (see above). The dates for the online webinars are presented in **Table 17.2**.

Table 17.2: Webinar schedule

Webinar Topic	Date	Time
General overview of the proposals	Tuesday 10 March 2026	6pm-7pm
Route Section 1: Chesterfield to Tibshelf	Thursday 12 March 2026	6pm-7pm
Route Section 2: Tibshelf to Ripley	Monday 16 March 2026	6pm-7pm
Route Section 3: Ripley to Morley	Tuesday 17 March 2026	6pm-7pm
Route Section 4: Morley to Ockbrook	Monday 13 April 2026	6pm-7pm
Route Section 5: Ockbrook to Aston-on-Trent	Tuesday 14 April 2026	6pm-7pm
Route Section 6: Aston-on-Trent to Willington	Tuesday 21 April 2026	6pm-7pm
General overview of the proposals	Thursday 23 April 2026	6pm-7pm

17.2.5 Printed copies of the consultation materials, including the PEIR, will be made available for viewing at public information events.

- 17.2.6 In addition to being available at public information events, reference copies of a number of consultation materials will be available to view at local information points (see **Table 17.3** below) along the proposed route alignment to view throughout the statutory consultation period.
- 17.2.7 USB sticks containing the PEIR, will be available on request or to collect at consultation events and at local information points.

Table 17.3: Information point locations

Location	Opening Times*
Chesterfield	
Chesterfield Library New Beetwell Street, Chesterfield S40 1QN	Monday - Wednesday, Friday: 9am-5pm Thursday: 9am-6pm Saturday: 9am-3pm Sunday: closed
Chesterfield Town Hall Rose Hill, Chesterfield S40 1LP	Monday - Friday: 9am-5pm Saturday and Sunday: closed
North East Derbyshire	
Clay Cross Library Kenning Park, Holmgate Road, Clay Cross S45 9PH	Monday: 9:30am-1pm, 2pm-6pm Tuesday and Thursday: 9:30am-1pm, 2pm-5pm Friday: 9:30am-1pm Saturday: 9:30am-12:30pm Wednesday and Sunday: closed
Holmewood Library Heath Road, Holmewood S42 5RB	Monday: 9:30am-1pm Thursday: 9:30am-1pm, 2pm-5pm Friday: 2pm-5pm Saturday: 9:30am-12:30pm Tuesday, Wednesday and Sunday: closed
Bolsover	
South Normanton Library The Hub, Shiners Way, South Normanton DE55 2AA	Monday: 9:30am-1pm Tuesday: 9:30am-1pm, 2pm-6pm Thursday and Friday: 9:30am-1pm, 2pm-5pm Saturday: 9:30am-12:30am Wednesday and Sunday: closed
Bolsover Library Church Street, Bolsover S44 6HB	Monday, Tuesday, Thursday, Friday: 9:30am- 5pm Wednesday: 9:30am-6pm Saturday: 9:30am-2pm Sunday: closed
Old Bolsover Town Hall Cotton Street, Bolsover S44 6HA	Monday - Friday: 9am-1pm Saturday - Sunday: closed

Location	Opening Times*
Amber Valley	
Ripley Library Grosvenor Road, Ripley DE5 3JE	Monday: 9:30am-6pm Tuesday - Friday: 9:30am-5pm Saturday: 9:30am-2pm Sunday: closed
Alfreton Library Severn Square, Alfreton DE55 7BQ	Monday, Tuesday, Thursday and Friday: 9:30am-5pm Wednesday: 9:30am-6pm Saturday: 9:30am-2pm Sunday: closed
Belper Library Derwent Street, Belper DE56 1UQ	Monday, Wednesday and Friday: 9:30am-5pm Tuesday: 9:30am-6pm Saturday: 9:30am-2pm Sunday: closed
Heanor Library Ilkeston Road, Heanor DE75 7DX	Monday - Wednesday and Friday: 9:30am-5pm Thursday: 9:30am-6pm Saturday: 9:30am-2pm Sunday: closed
Ripley Town Hall Market Place, Ripley DE5 3BT	Monday - Friday: 10am-3pm Saturday and Sunday: closed
Erewash	
Ilkeston Library Market Place, Ilkeston DE7 5RN	Monday, Wednesday - Friday: 9:30am-5pm Tuesday: 9:30am-6pm Saturday: 9:30am-2pm Sunday: closed
Borrowash Library Victoria Avenue, Borrowash DE72 3HE	Monday, Friday: 9:30am-1pm, 2pm-5pm Tuesday: 9:30am-1pm Wednesday: 9:30am-1pm, 2pm-6pm Saturday: 9:30am-12:30pm Thursday and Sunday: closed
Long Eaton Library Tamworth Road, Long Eaton NG10 1JG	Monday - Thursday: 9:30am-5pm Friday: 9:30am-6pm Saturday: 9:30am-2pm Sunday: closed
Ilkeston Town Hall Wharnccliffe Road, Ilkeston DE7 5RP	Monday, Tuesday, Thursday and Friday: 10am-12pm Wednesday, Saturday and Sunday: closed
Long Eaton Town Hall Derby Road, Long Eaton NG10 1HU	Monday - Wednesday and Friday: 10am-12pm Thursday, Saturday and Sunday: closed

Location	Opening Times*
City of Derby	
Alvaston Library 1252-1254 London Road, Alvaston, Derby DE24 8QP	Monday: 1pm-5pm Tuesday, Friday: 9:30am-5pm Thursday: 9:30am-7pm Saturday: 9:30am-1pm Wednesday and Sunday: closed
Riverside Library Council House, Corporation Street, Derby DE1 2FS	Monday - Friday: 9am-5pm Saturday: 9am-1pm Sunday: closed
Chellaston Library Barley Croft, Chellaston, Derby DE73 6TU	Tuesday, Thursday: 10am-4:30pm Monday, Wednesday, Friday - Sunday: closed
South Derbyshire	
Melbourne Library Melbourne Assembly Rooms, High Street, Melbourne DE73 8GF	Monday and Friday: 2pm-5pm Wednesday: 9:30am-1pm, 2pm-5pm Saturday: 9:30am-1pm Tuesday, Thursday and Sunday: closed
Swadlincote Library Civic Way, Swadlincote DE11 0AD	Monday - Wednesday and Friday: 9:30am-5pm Thursday: 9:30am-6pm Saturday: 9:30am-2pm Sunday: closed
Etwall Library Eggington Road, Etwall DE65 6NB	Monday and Thursday: 2pm-5pm Wednesday: 9:30am-1pm, 2pm-5pm Saturday: 9:30am-1pm Tuesday, Friday and Sunday: closed

**Please check with the relevant location for the most up-to-date opening times.*

17.3 How Can I Have My Say?

17.3.1 National Grid wants to hear your views on the proposals for the Project. You can get in touch in the following ways:

- Complete a feedback form on our website at nationalgrid.com/chesterfieldtowillington;
- Email your comments to chesterfield-willington@nationalgrid.com; or
- Complete a paper feedback form available at public information events, local information points, or online. The feedback form can be returned free of charge using the Freepost address **NATIONAL GRID PROJECTS (JBP)** no stamp required.

17.3.2 Comments received via any other method than those listed above, such as through social media, may not be formally recorded as part of the consultation.

- 17.3.3 Comments given orally, such as via telephone on 0800 073 1047 or at public information events, will only be considered in exceptional circumstances on a case-by-case basis where someone may not otherwise be able to respond to the consultation.
- 17.3.4 All responses must be submitted by 11:59pm on 28 April 2026. Feedback submissions sent via post will be accepted for up to five working days after this date.
- 17.3.5 All feedback will be handled in accordance with all applicable laws concerning the protection of personal data, including the UK General Data Protection Regulation (GDPR).
- 17.3.6 National Grid may be required to make copies of representations or comments available to the Planning Inspectorate and/or the Secretary of State during the DCO process. However, National Grid will request that personal details are not placed on the public record. Personal details will be held securely in accordance with the relevant data protection legislation and will be used solely by National Grid and its advisors in connection with the consultation process and the development of the Project and the DCO application and will not be disclosed to any third parties.
- 17.3.7 More information on how National Grid will use the information collected about respondents will be made available in the consultation feedback form and on the Project's website during the consultation period.

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