

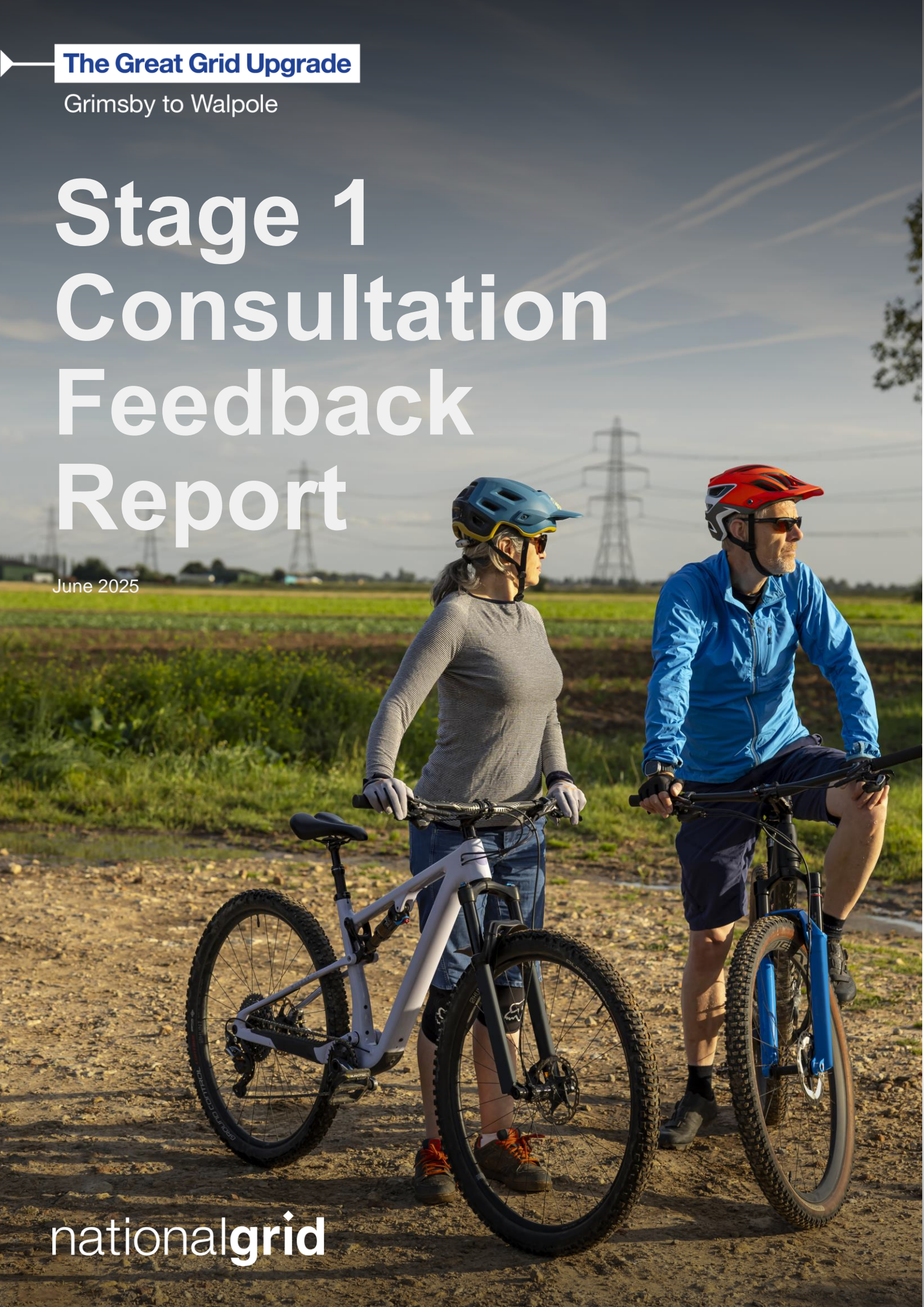
The Great Grid Upgrade

Grimsby to Walpole

Stage 1 Consultation Feedback Report

June 2025

nationalgrid



Contents

Executive summary	1
The Project	1
Stage 1 consultation	1
Analysis of feedback	2
How has feedback influenced the Project?	3
What happens next?	4
1. Introduction	5
1.1 Purpose of the Report	5
1.2 Structure of the Report	5
1.3 Background	6
2. Approach to Consultation	9
2.1 Our Approach	9
2.2 Consultation Strategy	10
2.3 Consultation Methods	11
3. Analysis of Feedback	20
3.1 Introduction	20
3.2 Feedback channels/response mechanisms	20
3.3 Overview of Stage 1 consultation feedback	20
3.4 Approach to Analysis	21
Closed question responses	21
Open question responses	22
Responses from technical stakeholders	23
Approach to route Sections	23
3.5 Analysis of feedback	24
About you	24
Strategic options – Question 1a and other relevant feedback	25
The emerging preferred corridor – Question 2a	31
The emerging preferred corridor – Question 2b	33
The graduated swathe – Question 3a and other relevant feedback	35
Grimsby West Substation – Question 3b and other feedback relevant to this Section of the route	55
Section 1: Grimsby West to Barnoldby le Beck – Question 3c and other feedback relevant to this Section of the route	67
Section 2: Barnoldby le Beck to North Thoresby – Question 3d and other feedback relevant to this Section of the route	79
Section 2: Barnoldby le Beck to North Thoresby – Question 3e and other feedback relevant to this Section of the route	81

Section 3: North Thoresby to Alvingham and Keddington – Question 3f and other feedback relevant to this Section of the route	93
Section 4: Alvingham and Keddington to Tothill – Question 3g and other feedback relevant to this section of the route	109
Lincolnshire Connection substation A – Question 3h and other feedback relevant to this Section of the route	123
Lincolnshire Connection substation B – Question 3i and other feedback relevant to this Section of the route	135
Section 5: Tothill to Cumberworth – Question 3j and other feedback relevant to this Section of the route	147
Section 6 Cumberworth to Burgh le Marsh – Question 3k and other feedback relevant to this Section of the route	163
Section 7 Burgh le Marsh to Midville – Question 3l and other feedback relevant to this Section of the route	175
Section 8 Midville to River Witham – Question 3m and other feedback relevant to this Section of the route	189
Section 9 River Witham to River Welland – Question 3n and other feedback relevant to this Section of the route	199
Weston Marsh substation – Question 3o and other feedback relevant to this Section of the route	213
Section 10 River Welland to B1165 – Question 3p and other feedback relevant to this Section of the route	222
New Walpole substation – Question 3q and other feedback relevant to this Section of the route	235
Section 11: B1165 to Walpole – Question 3r and other feedback relevant to this Section of the route	252
Other requirements – Question 4a and other relevant feedback	269
Refining our proposals – Question 5a and other relevant feedback	275
Refining our proposals – Question 5b and other relevant feedback	282
Refining our proposals – Question 5c and other relevant feedback	284
Our consultation – Question 6a	287
Our consultation – Question 6b	288
Our consultation – Question 6c	290
Our consultation – Question 6d	292
Our consultation – Question 6e	292
Our consultation - Question 6f and other relevant feedback	293
Additional questions – net zero – Question 7a	300
Additional questions – net zero – Question 7c	303
Additional questions – net zero – Question 7d	304
Additional questions – net zero – Question 7e	305
Equality and diversity – Question 8.1	307
Equality and diversity – Question 8.2	307
Equality and diversity – Question 8.3	308
Equality and diversity – Question 8.4	309
Further comments – Question 9 and other relevant feedback	310
4. How Feedback has Influenced the Project	322
4.6 Consultation	322
4.7 Receptors and Assessments	323

4.8	Design	323
	Residential Curtilage	323
	Overhead Line Routeing	324
5.	Next Steps	326
	Glossary	328

Table 2.1	Consultation materials	11
Table 2.2	Schedule of face-to-face events	13
Table 2.3	Schedule of online events	14
Table 2.4	Newspaper adverts schedule	17
Table 2.5	Digital media campaign	18
Table 2.6	Briefings to stakeholders	18
Table 3.1	Breakdown of responses received	21
Table 3.2	Broad alignment between the Stage 1 consultation (11 Sections) and the Stage 2 consultation (seven Sections)	23

Figure 2.1	PCZ distribution area	16
Figure 3.1	How would you describe your interest in Grimsby to Walpole?	24
Figure 3.2	We considered and assessed several options to select a preferred corridor. Do you agree with the emerging preferred corridor that has been identified for each Section of the proposed route?	33
Figure 3.3	Please let us know how you heard about this consultation by ticking one or more of the following boxes.	288
Figure 3.4	Please rate the information included as part of this consultation in terms of how clearly it was presented and how easy it was to understand.	288
Figure 3.5	Please rate how well this consultation was promoted and advertised to the public	290
Figure 3.6	Did you attend one of our face-to-face or online consultation events?	292
Figure 3.7	How informative did you find our consultation events and/or our consultation materials?	293
Figure 3.8	Given the goal to deliver net zero carbon emissions in the UK by 2050 and the need to facilitate the connection of new renewable generation in the region, to what extent do you agree with the identified need for Grimsby to Walpole (as described on pages 20-27 in the Project Background Document, and also in the Strategic Options Report and the Addendum to the Strategic Options Report)?	301
Figure 3.9	How concerned are you about the following? Please tick as relevant.	304
Figure 3.10	To what extent do you agree or disagree with each of the following statements?	305
Figure 3.11	What is your gender?	307
Figure 3.12	Do you consider yourself a person with a disability?	308
Figure 3.13	How would you describe your ethnic background?	309
Figure 3.14	What is your age?	310
Figure 5.1	Development Consent Order process	327

Appendix A: Local Planning Authority Response to Consultation Strategy	
Appendix B: Consultation Strategy	
Appendix C: Posters	
Appendix D: Maps of the Proposals	
Appendix E: Technical Stakeholders	
Appendix F: Feedback Form	

Grimsby to Walpole

Document control

Document Properties	
Organisation	Arup AECOM
Approved by	National Grid
Title	Stage 1 Consultation Feedback Report
Document Register ID	GWNC-ARUP(AEC)-CNS-REP-0001
Data Classification	Public

Version History			
Date	Version	Status	Description / Changes
June 2025	1.0	Final	First Issue

Executive summary

The Stage 1 consultation report outlines the consultation undertaken by National Grid, summarises the feedback received, describes how feedback has influenced design development, and sets out the next steps.

The Project

Grimsby to Walpole (referred to as the Project) is a project proposed by National Grid Electricity Transmission plc (referred to as National Grid within this report) to reinforce the high-voltage power network in several regions across the East of England. It comprises approximately 140 kilometres (km) of new overhead line and up to six new 400 kilovolt (kV) substations. The Project will contribute to achieving the UK's commitment to connect 50 GW of offshore wind by 2030 and 70 GW of solar power by 2035. This will help meet government targets to reduce carbon emissions, increase our country's energy security, and carry cleaner and more affordable energy to where it is needed.

Due to its size, the Project is classified as a 'Nationally Significant Infrastructure Project' (NSIP), and National Grid is required to obtain 'development consent' under the Planning Act 2008. The Planning Act 2008 requires statutory consultation (Stage 2 consultation) for NSIPs, which provides all those with an interest in the Project including local authorities, statutory consultees, parties with land interests and the local community the opportunity to influence the design of the developing Project.

Stage 1 consultation

In Spring 2024, a Stage 1 consultation was held for a period of eight weeks, between 18 January 2024 and 13 March 2024. This was a non-statutory consultation, which means that National Grid isn't obliged by law to carry it out. We undertook this exercise to engage people, businesses and other organisations in our proposals as early as possible and let them have their say.

The approach to consultation was set out in a Consultation Strategy that was discussed with the following local planning authorities: North East Lincolnshire Council, Lincolnshire County Council, Cambridgeshire County Council, Norfolk County Council, South East Lincolnshire Councils Partnership (East Lindsey District Council, South Holland District Council, Boston Borough Council), Fenland District Council, Borough Council of King's Lynn and West Norfolk, West Lindsey District Council, and North Kesteven District Council. Where practicable their comments were incorporated into the Consultation Strategy.

The Stage 1 consultation aimed to:

- i. Introduce National Grid and the Project proposals;
- ii. Explain why we need to build new electricity transmission infrastructure in the regions;
- iii. Outline the work we have carried out to identify our emerging preferred overhead line route corridor and substation siting areas, as well as the graduated swathe which indicated the emerging preference for siting of infrastructure at the time of Stage 1 consultation;

- iv. Ensure the public and stakeholders had the opportunity to provide feedback on our proposals, including where they felt infrastructure should be located within the corridor and siting zones; and
- v. Outline next steps for the Project following the Stage 1 consultation.

Information and materials made available at Stage 1 consultation were produced for both technical and non-technical users. These included the Project Background Document, Corridor and Preliminary Routeing and Siting Study (CPRSS) and Appendices, Strategic Options Report and Addendum, New Walpole Substation Location Options Report, Consultation Strategy, consultation newsletter, maps and plans, the feedback form, consultation event banners

A range of consultation activities were used to make information available and accessible, comprising a dedicated project website with all consultation materials, 11 face-to-face consultation events at venues along the proposed route, 8 online consultation events, and 12 information deposit locations where consultation materials were available to view. A freephone information line was available to request the feedback form and freepost envelope, to request a project team callback to discuss a specific topic and/or to raise queries. There were also stakeholder briefings for MPs, local elected representatives and parish councils.

The consultation and related activities were publicised through direct mailing of a newsletter to all properties with postcodes within 1 km of the edge of the emerging preferred corridor, and advertising in local and regional newspapers, social media, information to parish councils and press releases.

Analysis of feedback

A total of 7,694 submissions of consultation feedback were received during and outside of the consultation period. This total is comprised of paper feedback forms, online feedback forms, emails and letters.

For closed questions, the feedback was analysed and quantified. For open questions, letters and emails a systematic review of feedback was completed to identify themes raised and, where appropriate, design change requests.

A full review of consultation feedback is set out in Chapter 3 of this report, which includes National Grid's response to each matter raised. At a strategic level, themes identified through feedback included the following points:

- i. Objection to the Project in its current form.
- ii. Suggestions that alternatives be considered such as reinforcement of existing Grid infrastructure, an offshore subsea connection or underground cables, alternative routeing for the overhead line, alternative brownfield grid connection points and more modern technologies.
- iii. Concerns that cost had been the main driver in selecting the preferred solution, along with some queries on the route selection methodology and information shared.

Regarding the emerging preferred corridor, overhead line and substation siting zone graduated swathes, themes included: Impacts on landscape character, particularly for the Lincolnshire Wolds National Landscape (AONB), with the infrastructure considered to be out of character with a rural landscape and screening being insufficient.

- i. Impacts on views.

- ii. Impacts on wildlife and habitats, including risks for bird collision and disruption of flight paths particularly in the context of the migratory routes in proximity to the Project.
- iii. Impacts on tourism and the visitor economy.
- iv. Impacts on heritage assets and character.
- v. Concerns about the loss of agricultural land and associated food security, employment and economic effects.
- vi. Impacts of construction on local roads and their ability to accommodate additional traffic and large vehicles.
- vii. Impacts on public footpaths.
- viii. Impacts on flooding and drainage.
- ix. Impacts of Project related surveys.
- x. Impacts on mental and physical health and wellbeing.
- xi. Impacts on property prices, ability to sell property, and compensation offered.
- xii. Impact on quality of life.
- xiii. Impacts on flight paths in the area.
- xiv. Concerns about the perceived operational impacts of the Project including effects of Electric and Magnetic Fields (EMFs), noise, light pollution and their effects on physical and mental health and wellbeing.
- xv. The cumulative impacts of the Project, with other infrastructure including overhead lines in the area.

Queries were also raised about the benefits of the scheme for local people and how the community fund would operate.

Comments were received on the consultation process and the adequacy and accessibility of the information available at Stage 1 consultation.

How has feedback influenced the Project?

Following a review of feedback from the Stage 1 consultation, in some locations, the design of the Project has developed so as to deviate from the darkest shading of the graduated swathe. Instances where this occurred have been summarised below. A detailed explanation of these changes is provided in Chapter 3, Section 3.5 and Chapter 5 of this report and in Chapter 5 of the Design Development Report (DDR).

Section 2 – New Grimsby West Substation to New Lincolnshire Connection Substation A

- The overhead line alignment is proposed to be routed further west within the corridor presented at Stage 1 consultation than the most likely routeing indicated by the darkest shading of the graduated swathe adjacent to Covenham Saint Bartholomew. This is in response to feedback regarding The Thomas Centre at Covenham Saint Bartholomew. The overhead line alignment is proposed to be routed further west within the corridor presented at Stage 1 consultation than the most likely routeing indicated by the darkest shading of the graduated swathe, just east of Claythorpe near

Mother Wood, in response to feedback regarding potential impacts to the operations of Strubby Airfield.

Section 4 – New Lincolnshire Connection Substation B to Refined Weston Marsh Substation Siting Zone

- The overhead line has been routed more centrally through the graduated swathe than was indicated by the darkest shading in Burgh le Marsh, in response to feedback received indicating that routeing within the darkest shading would necessitate the removal of solar panels and wind turbines at The Hollies Solar Park and The Hollies Wind Farm. The overhead line has been routed closer to the northern and western boundary of the graduated swathe than was indicated by the darkest shading near Wigtoft, in response to feedback regarding potential impacts to residents of Wigtoft and heritage assets, including listed buildings, in the area.

Section 6 – Refined Weston Marsh Substation Siting Zone to New Walpole B Substation

- The overhead line alignment has been routed further south within the corridor presented at Stage 1 consultation than the darkest shading of the graduated swathe near Weston Hills in response to feedback received during Stage 1 consultation requesting the overhead line alignment avoids the narrow gap between properties on Delgate Bank.

Furthermore, development of the design to route outside the darkest shading of the graduated swathe, have also been made as a result of new information obtained by National Grid (including environmental surveys and input from stakeholders), engineering design evolution and the ongoing Environmental Impact Assessment (EIA) process. Development of the proposals presented during the Stage 1 consultation as referenced within this report are reflected in the preferred alignment which is described fully in Chapter 7 of the Design Development Report (DDR) published as part of the Stage 2 consultation.

What happens next?

National Grid is holding a Stage 2 consultation to present and invite feedback on the preferred alignment. This is running between 11 June 2025 and 6 August 2025, to provide the opportunity for the public and other stakeholders to see how the Project has evolved since the Stage 1 consultation, and to review and comment on how the proposals were developed.

The feedback from the Stage 1 and 2 consultations (as applicable) will be used to inform the final design that will be put forward in the application for development consent. National Grid expects to submit an application for consent for the Project in 2027. A consultation report will be produced following the 2025 Stage 2 consultation and submitted with the future DCO application.

1. Introduction

1.1 Purpose of the Report

- 1.1.1 The purpose of this report is to summarise the feedback received during the Stage 1 consultation on the Grimsby to Walpole Project (the Project), and to demonstrate how National Grid has had regard to this feedback.
- 1.1.2 This report details the approach to the Stage 1 consultation and provides a summary of the feedback received in relation to the Project. It also sets out the methods used to analyse submitted feedback, as well as National Grid's responses.
- 1.1.3 This is in accordance with the Department for Levelling Up, Housing and Communities (DLUHC) (2024) publication 'Planning Act 2008: Pre-application stage for Nationally Significant Infrastructure Projects', which states that *"it is good practice that those who have contributed to the consultation are informed of the results"*.
- 1.1.4 This report also identifies where National Grid has made changes to the proposals that are relevant to the feedback received during the Stage 1 consultation and how the responses received have influenced design development. This report will be used to inform the preparation of a Consultation Report which will be submitted as part of an application for a Development Consent Order (DCO) in accordance with Section 37(3)(c) of the Planning Act 2008.

1.2 Structure of the Report

- 1.2.1 The report is structured as follows:
 - i. **Chapter 1: Introduction** - outlines the purpose and structure of the report. It also provides background information and summarises the proposals;
 - ii. **Chapter 2: Approach to Consultation** - presents a summary of the consultation approach, process and methods employed;
 - iii. **Chapter 3: Analysis of Feedback** - outlines the approach to the analysis of feedback, provides summaries of the feedback received and how National Grid has responded. Design suggestions received through feedback are also included in this chapter;
 - iv. **Chapter 4: How feedback has influenced the Project** –presents a summary of the key changes that are relevant to the consultation feedback; and
 - v. **Chapter 5: Next Steps** –summarises the next steps for the Project in the DCO process.

1.3 Background

The Need for the Project

- 1.3.1 The electricity industry in Great Britain is undergoing unprecedented change. The closure of fossil fuel-powered generation and ageing nuclear power stations means substantial investment in sustainable generation and interconnection capacity is required to maintain energy security and supply standards. Growth in onshore renewable technologies, offshore wind generation, and interconnectors with Europe has resulted in many planned connections, particularly in Scotland, England, and along the East Coast. The UK Government's legally binding "Net Zero" commitment to achieve a 100% reduction in greenhouse gas emissions by 2050 under the Climate Change Act 2008 requires a decisive transition away from fossil fuels. This has driven and will continue to drive investment in low-carbon energy sources.
- 1.3.2 Historically, the transmission system relied on coal-powered generation, but the shift to low-carbon energy has resulted in the closure of these power stations, with more closures expected. New generation capacity is geographically distant from these historical hubs, requiring substantial updates to the transmission system to serve urban areas such as the M62 corridor, the Midlands, and the Southeast, which have the highest concentrations of electricity demand. As the UK decarbonises, national energy demand will increase, and fossil fuel generation will be replaced by low-carbon alternatives in new locations.
- 1.3.3 National Grid must be able to connect new generators and at the same time ensure the transmission system meets performance and security standards set out in the National Electricity Transmission System (NETS) Security and Quality of Supply Standard (SQSS). This means that where the boundary capacity of the NETS is exceeded against the SQSS, National Grid must resolve the capacity shortfall. This is known as "boundary reinforcement" and relates to boundaries designated B8 and B9 – see further below.
- 1.3.4 Generators apply to the National Energy System Operator (NESO) to connect to the NETS. Once agreed, these connections are contractually secured, and National Grid is obliged to provide them. The NETS must be designed to handle existing and new connections in peak demand conditions and to have sufficient spare capacity to prevent widespread supply interruptions from defined fault conditions. Performance standards require the system to maintain frequency, avoid overloads, stay within voltage limits, and remain electrically stable during faults.
- 1.3.5 The NETS in the area of the Project was primarily constructed in the 1960s to connect inland coal-fired power stations. Later, gas-fired stations were connected in areas such as the Humber. However, the Lincolnshire coastal region currently has limited infrastructure, restricting its ability to support new renewable energy connections. In respect of the Project, two clusters of new connections are particularly relevant.
- 1.3.6 The Creyke Beck generation group includes connections to existing substations and contracted new generation comprising offshore wind, interconnectors, energy storage, and combined cycle gas turbine (CCGT) power stations, with a total contracted capacity of approximately 18.7 GW by 2035. The East Coast generation group, spanning South Humber to North Wash, has a total contracted capacity of approximately 12.7 GW by 2035, including offshore wind, energy storage, solar, and CCGT. Both generation groups face significant transmission capacity shortfalls,

requiring approximately 7 GW of reinforcements each to accommodate new connections and comply with the SQSS.

- 1.3.7 The Project is also needed to provide reinforcement across boundaries B8 and B9. Boundaries split the system into two parts, crossing critical circuit paths that carry power between areas and where power flow limitations may be encountered. Boundaries help identify regions where reinforcement is most needed by enabling analysis of power transfers between separated areas. The current document Future Energy Scenarios 2023, for which the National Energy System Operator is responsible, reveals substantial capability deficits across these boundaries, with B8 requiring 7,899 MW of additional capacity by 2035 and B9 4,708 MW by 2030 in accommodating the two generation groups. Addressing these deficits will require two 400kV AC double circuits or six HVDC connections for B8, and one 400kV AC double circuit or three HVDC connections for B9. Maximising current capacity under fault conditions will not resolve the deficits, making reinforcements essential. The Project will provide one of the necessary 400kV double circuit reinforcements.

The Project

- 1.3.8 The Project is a proposal by National Grid Electricity Transmission plc ('National Grid') to build the following principal components:
- i. Approximately 140 km of new 400 kV overhead lines.
 - ii. A new 400 kV substation to be built in the vicinity of the existing Grimsby West 400 kV Substation in North East Lincolnshire (referred to as the new Grimsby West Substation). The existing substation would be decommissioned, in all, or part.
 - iii. Two new 400 kV Lincolnshire Connection substations located south-west of Mablethorpe in East Lindsey (referred to as Lincolnshire Connection Substation A and Lincolnshire Connection Substation B).
 - iv. Up to two new 400 kV substations in the vicinity of the Spalding Tee-Point in South Holland District (referred to as Weston Marsh Substation Siting Zone).
 - v. A new 400 kV substation in proximity to the existing Walpole Substation west of the village of Walpole St Andrew and north of the town of Wisbech, in King's Lynn and West Norfolk District (referred to as Walpole B Substation).
 - vi. Replacement of short sections of existing 400 kV overhead lines and local changes to the lower voltage distribution networks to facilitate the construction of the new overhead lines and substations.
- 1.3.9 The Project would include other required 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 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).
- 1.3.10 The Project is classified as a Nationally Significant Infrastructure Project (NSIP) under the Planning Act 2008. NSIPs are projects of certain types, over a certain size, which are considered by the Government to be of national importance, hence permission to build them needs to be given at a national level, by the relevant Secretary of State (in this case the Secretary of State for Energy Security and Net Zero). Instead of applying

to the local authority for Planning Permission, the developer must apply to the Planning Inspectorate for a different permission called a Development Consent Order (DCO).

- 1.3.11 National Grid will submit an application for development consent to the Planning Inspectorate. If accepted, the examining authority would be appointed (consisting of one or more examining inspectors) who, after a period of public examination, would make their recommendation to the SoS for Energy Security and Net Zero, who in turn would decide on whether development consent should be granted for the Project. The timescale between acceptance of the submission and a decision is approximately 18 months.
- 1.3.12 Further information on the background of the Grimsby to Walpole Project prior to the Stage 1 consultation can be found in the Project Background Document available at: www.nationalgrid.com/document/353611/download. The Stage 2 consultation document summarises the Project as presented at the Stage 2 consultation.

2. Approach to Consultation

2.1 Our Approach

- 2.1.1 Listening to the views of local communities and stakeholders provides valuable feedback and insight as proposals are developed and provides opportunities to influence the design development process. National Grid will continue to carefully consider feedback received as the Project develops.
- 2.1.2 Stakeholder and public involvement are important components of the UK planning system. Legislation and Government guidance aim to ensure that the public, local communities, statutory and other consultees and interested parties have an opportunity to have their views considered throughout the planning process. Within the Development Consent Order (DCO) process, the emphasis is on engagement and consultation prior to the submission of the DCO application, through the non-statutory (Stage 1) consultation and statutory (Stage 2) consultation processes. National Grid want to ensure that all stakeholders are engaged in the development of the Project and have the opportunity to comment at key decision-making points.
- 2.1.3 National Grid undertook the Stage 1 consultation for an 8-week period between 18 January and 13 March 2024. This was undertaken at an early stage of Project development and is followed by a Stage 2 consultation, which is required under the Planning Act 2008.
- 2.1.4 The Stage 1 consultation aimed to:
- i. Introduce National Grid and the Project proposals;
 - ii. Explain why we need to build new electricity transmission infrastructure in the regions;
 - iii. Outline the work carried out to identify our emerging preferred overhead line route corridor and substation siting areas, as well as the graduated swathe which indicated the emerging preference for siting of infrastructure at the time of Stage 1 consultation;
 - iv. Ensure stakeholders had the opportunity to provide feedback on our proposals, including where within the corridor and siting zones infrastructure could be located; and
 - v. Outline next steps for the Project following the Stage 1 consultation.
- 2.1.5 National Grid is committed to engaging those communities affected by its proposals in effective and meaningful consultation as reflected in the Stakeholder, Community and Amenity Policy (www.nationalgrid.com/document/81026/download) which incorporates National Grid's Schedule 9 Electricity Act 1989 Statement relating to the preservation of amenity. It makes the following commitments to consultation when undertaking electricity works:
- i. *"We will promote genuine and meaningful stakeholder and community engagement. We will meet and, where appropriate, exceed the statutory requirements for consultation or engagement. We will adopt the following principles to help us meet this commitment;*

- ii. *We will seek to identify and understand the views and opinions of all the stakeholders and communities who may be affected by our works;*
- iii. *We will provide opportunities for engagement from the early stages of the process, where options and alternatives are being considered and there is the greatest scope to influence the design of the works;*
- iv. *We will endeavour to enable constructive debate to take place, creating open and two-way communication processes;*
- v. *We will ensure that benefits, constraints and adverse impacts of proposed works are communicated openly for meaningful stakeholder and community comment and discussion. We will be clear about any aspects of the works that cannot be altered;*
- vi. *We will utilise appropriate methods and effort in engaging stakeholders and communities, proportionate to the scale and impact of the works; and*
- vii. *We will provide feedback on how views expressed have been considered and the outcomes of any engagement process or activity.”*

2.2 Consultation Strategy

- 2.2.1 Prior to the Stage 1 consultation, National Grid developed a Consultation Strategy document which set out how we planned to carry out the consultation. This document can be found in Appendix B of this report.
- 2.2.2 In October 2024, we consulted the following local planning authorities on the proposed Consultation Strategy:
 - i. North East Lincolnshire Council;
 - ii. Lincolnshire County Council;
 - iii. Cambridgeshire County Council;
 - iv. Norfolk County Council;
 - v. South East Lincolnshire Councils Partnership (East Lindsey District Council, South Holland District Council, Boston Borough Council);
 - vi. Fenland District Council;
 - vii. Borough Council of King’s Lynn and West Norfolk;
 - viii. West Lindsey District Council; and
 - ix. North Kesteven District Council.
- 2.2.3 Briefings were organised with local planning authorities to discuss the strategy, which outlined our initial approach to consultation. A draft version of the strategy was shared with local planning authorities, which gave them an early opportunity to review and provide comments for consideration. Following this period, any comments provided were reviewed and incorporated into the final version, where practicable. Details on the comments made by local planning authorities and National Grid’s response to these can be found in Appendix A.

2.3 Consultation Methods

2.3.1 National Grid used a range of methods to make information about the Project accessible and gather feedback. Our consultation activities included:

- i. A dedicated Project website with a virtual consultation room, interactive maps of the proposals, frequently asked questions (FAQs), online feedback form, email and postal address information and dedicated telephone information line;
- ii. Direct mailing – newsletter issued to all properties with postcodes within 1 km of the edge of the emerging preferred corridor (Primary Consultation Zone - PCZ);
- iii. Materials produced to support the consultation were (and remain) available online on the Project website – including the Project Background Document, Corridor and Preliminary Routeing and Siting Study (CPRSS) and Appendices, Strategic Options Report (SOR) and Addendum, consultation newsletter, maps and plans, the feedback form and consultation event banners;
- iv. Consultation events – eleven face-to-face events, eight online events, and telephone call-backs;
- v. Information deposit locations – consultation materials were made available across 12 information points in appropriate locations in proximity to the proposals;
- vi. Promotional activity – advertising in local and regional newspapers, social media, information to parish councils and press releases; and
- vii. Engagement activities – stakeholder briefings for MPs, local elected representatives and parish councils.

2.3.2 Each of these consultation activities is explained in more detail in the following sections of this report, as well as the Consultation Strategy.

Consultation materials

2.3.3 A range of technical and non-technical consultation materials were published as part of the Stage 1 consultation, which are set out in Table 2.1.

Table 2.1 Consultation materials

Material	Location
<i>Project Background Document:</i> set out general information about National Grid and the need for network reinforcement, moving toward net zero, identifying the route corridor and option selection process and how to find out more and have your say.	www.nationalgrid.com/document/353611/download
<i>Consultation newsletter:</i> summarised our proposals and provided information on the Stage 1 consultation.	www.nationalgrid.com/document/352586/download

Material	Location
<i>Feedback form</i> : a method by which feedback on the proposals could be submitted (online and hardcopy).	www.nationalgrid.com/document/353676/download and Appendix F
<i>Consultation event banners</i> : these banners displayed information about the Project and were used at the face-to-face consultation events.	www.nationalgrid.com/document/352596/download
<i>Consultation Strategy</i> : set out the approach to Stage 1 consultation.	www.nationalgrid.com/document/352876/download and Appendix B
<i>Strategic Options Report (SOR)</i> : explained the strategic options considered to deliver the necessary network reinforcement.	www.nationalgrid.com/document/352606/download
<i>Addendum to Strategic Options Report</i> : considered the implications of the requirement for a new Weston Marsh substation for the strategic option recommended in SOR.	www.nationalgrid.com/document/352611/download
<i>New Walpole Substation Location Options Report</i> : detailed the work undertaken in relation to the preferred location of the proposed new Walpole substation presented at Stage 1 consultation.	www.nationalgrid.com/document/352616/download
<i>CPRSS</i> : set out the work undertaken to develop the proposals that were presented at the Stage 1 consultation.	www.nationalgrid.com/document/352621/download
<i>Posters</i>	Appendix C
<i>Maps of the proposals</i>	Appendix D
<i>Interactive map</i>	https://experience.arcgis.com/experience/1fab14e7350844bcafd40ca44709d98e

Project website

- 2.3.4 National Grid updated the Project website at the launch of the Stage 1 consultation, on the 18 January 2024, with all consultation materials. These materials continue to be accessible on the Project website, available at: www.nationalgrid.com/g-w
- 2.3.5 The website provided information on the dates and times of face-to-face and online events and provided a platform for people to submit their comments via an online version of the feedback form.
- 2.3.6 The website also provided details of the proposals via interactive maps, diagrams, themed information pages via a virtual consultation room and provided links to project communication channels and timelines. The website was accessible at all times during the consultation period.

- 2.3.7 Following the close of the Stage 1 consultation period, the website remains live and maintains access to all consultation materials provided. During the consultation period, the Project website received 33,917 views from 22,512 users.

Consultation events - Face-to-face events

- 2.3.8 Face-to-face events provided the opportunity to find out more about the proposals, speak directly with members of the Project team (including technical experts), ask questions and provide feedback on the proposals. All planned face-to-face events went ahead as scheduled.
- 2.3.9 Eleven face-to-face events were held at suitable venues along the proposed route. Further information regarding the face-to-face events, including dates, times and locations are set out in Table 2.2.
- 2.3.10 In total, 2,976 people attended the face-to-face events during the consultation period.

Table 2.2 Schedule of face-to-face events

Date and time	Venue	Attendees
2-7pm 31 January 2024	Tydd St Giles Community Centre, Broad Drove East, Wisbech PE13 5LN	152
2-7pm 2 February 2024	Moulton Seas End Village Hall, 21 Seas End Road, Moulton Seas End, Spalding PE12 6LE	250
2-7pm 7 February 2024	Burgh le Marsh Village Hall, Jacksons Lane, Burgh le Marsh, Skegness PE24 5LA	353
11am–5pm 10 February 2024	Alford Corn Exchange, 9 Market Place, Alford LN13 9EB	748
2-7pm 13 February 2024	North Thoresby Village Hall, The Square, North Thoresby, Grimsby DN36 5QL	312
2-7pm 16 February 2024	Eastville, Midville and New Leake Village Hall Station Road, Boston PE22 8LS	173
2-7pm 20 February 2024	Walpole Community Centre, Summer Close, Wisbech PE14 7JW	156
2-7pm 22 February 2024	The Pavilion, London Road, Louth LN11 9QP	282
11am-5pm 24 February 2024	Oaklands Hall Hotel, Barton Street, Laceby, Grimsby, Lincolnshire DN37 7LF	124
2-7pm 27 February 2024	Hubberts Bridge Community Centre, Langrick Road, Boston PE20 3SG	243
2-7pm 29 February 2024	Alvingham Village Hall, 352 Yarburgh Road, Alvingham, Louth LN11 0QG	183

Consultation events – Online events

- 2.3.11 Online events were organised to present information about the Project to those wishing to attend via this platform. During online events, there was an opportunity for questions to be addressed to the Project team, and where a question could not be directly answered during the presentation, arrangements were made to provide response at a later date. Further information on the schedule of online events is set out in Table 2.3.
- 2.3.12 A total of eight online events were held during the consultation period, which discussed our proposals from both route wide and Section specific perspectives. This meant people could attend specific events according to their interest.
- 2.3.13 Online events were organised to take place over a variety of times of day and week, covering morning, afternoon, and evening events, including some occurring on weekends. Recordings were also made available on the Project website.

Table 2.3 Schedule of online events

Online events	Date	Attendees
Introduction to Grimsby to Walpole project proposals – general overview	2pm 23 January 2024	29
Our proposals in Sections 1 (Grimsby West to Barnoldby le Beck) and 2 (Barnoldby le Beck to North Thoresby)	10am 25 January 2024	7
Our proposals in Sections 3 (North Thoresby to Alvingham and Keddington) and 4 (Alvingham and Keddington to Tothill)	7pm 29 January 2024	56
Our proposals in Sections 5 (Tothill to Cumberworth) and 6 (Cumberworth to Burgh le Marsh)	2pm February 2024	9
Our proposals at the Lincolnshire Connection substations	10am 15 February 2024	21
Our proposals in Sections 7 (Burgh le Marsh to Midville) and 8 (Midville to River Witham)	10am 2 March 2024	6
Our proposals in Sections 9 (River Witham to River Welland), 10 (River Welland to B1165) and 11 (B1165 to Walpole)	7pm 5 March 2024	27
Introduction to Grimsby to Walpole project proposals – general overview	2pm 7 March 2024	20

Information deposit locations

- 2.3.14 Consultation materials were available across twelve suitable, publicly accessible locations in proximity to the proposals.
- 2.3.15 Documents available at the public information points included:
- Project Background Document;

- ii. Corridor Preliminary Routeing and Siting Study (CPRSS);
- iii. Strategic Options Report (SOR) and Addendum to Strategic Options Report;
- iv. Consultation newsletter;
- v. Maps and plans of the Project; and
- vi. Feedback form.

2.3.16 The information deposit points are set out, north to south, below:

- i. Grimsby Central Library, Town Hall Square, Grimsby DN31 1HG;
- ii. Waltham Library, High Street, Waltham, Grimsby DN37 0LL;
- iii. Louth Library, Northgate, Louth LN11 0LY;
- iv. Alford Library and Focal Point, 6 Market Place, Alford LN13 9AF;
- v. Burgh le Marsh Library and Community Hub, Tinkers Green, Jacksons Lane, Burgh le Marsh, Skegness PE24 5LA;
- vi. Skegness Library, 23 Roman Bank, Skegness PE25 2SA;
- vii. Boston Library, County Hall (Bank Street entrance), Boston PE21 6DY;
- viii. Spalding Library, Victoria Street, Spalding PE11 1EA;
- ix. Holbeach Community Library, Co-Op Store, 5 Fleet Street, Holbeach, Spalding PE12 7AX;
- x. Long Sutton Library, Trafalgar Square, Long Sutton, Spalding PE12 9HB;
- xi. Wisbech Library, Ely Place, Wisbech PE13 1EU; and
- xii. King's Lynn Library, London Road, King's Lynn PE30 5EZ.

2.3.17 Paper copies of the consultation newsletter and feedback form were available to collect from information points and reference copies of the Strategic Options Report (SOR), the Addendum to the SOR, Corridor Preliminary Routeing and Siting Study, and Project Background Document were also available in these locations.

Direct mailing to the Primary Consultation Zone

2.3.18 The primary consultation zone (PCZ) included properties with postcodes within 1 km of the edge of the emerging preferred corridor, as detailed in Figure 2.1. Where appropriate, the PCZ was extended to include whole streets and postcodes rather than the 1 km boundary dissecting hamlets or neighbourhoods. Stakeholders within the boundary were consulted directly at the start of our consultation via a newsletter that was issued to all residential and business addresses (approximately 21,000 addresses). The newsletter can be found at:

www.nationalgrid.com/document/352586/download

2.3.19 The newsletter included:

- i. An introduction to the Project;
- ii. Overview of the Project proposals being consulted on;

- Figure 2.1 PCZ distribution area



Wider promotional activity – press and social media

- 2.3.20 The secondary consultation zone (SCZ) extended to 5 km from the edge of the emerging preferred corridor, thereby including communities located further from our proposals. All members of the public had the opportunity to register to receive all Project information.
- 2.3.21 We raised awareness of the Project and the upcoming Stage 1 consultation with communities located in the SCZ via the following methods:
- Placing advertisements in local and regional newspapers with information about the consultation period and events, and directions for how to get involved. See Table 2.4 for the schedule of adverts (Adverts were generally quarter page prints, and a copy of these can be found in Appendix C);
 - Undertaking geographically targeted social media advertising during the consultation period;
 - Providing consultation materials at information points around the Project area for stakeholders to examine (the list of information points can be found in section 2.3 of this report);
 - Publishing full details of face-to-face and online consultation events on the Project website; and
 - Providing contact details for queries or to request paper copies of the consultation materials.

Table 2.4 Newspaper adverts schedule

Publication	Paper copy / online	Date(s)
Eastern Daily Press	Paper and online	18 January 2024
Grimsby Telegraph	Paper and online	18-25 January 2024
Lincolnshire World	Paper and online	18-24 January 2024
The Lincolnite	Online	18 January-3 February 2024
Lynn News	Paper and online	18 January 2024
Louth Leader	Online	24 January 2024
Lincolnshire Live	Online	18 January-3 February 2024
Wisbech Standard	Paper and online	18 January 2024
Cambridge Live	Online	18-25 January 2024

- 2.3.22 Digital promotion of the consultation was conducted through digital marketing campaigns hosted by online news providers. Online adverts were placed in the Grimsby Telegraph, Lincolnshire Live and Cambridge Live. The traffic generated from these campaigns is set out in Table 2.5.

Table 2.5 Digital media campaign

Platform	Campaign dates	Total Impressions
Grimsby Telegraph	18-25 January 2024	249,998
Cambridge Live	18-25 January 2024	249,998
Lincolnshire Live	18-31 January 2024	250,010
Wisbech Standard	18 January 2024	50,000

2.3.23 A targeted social media campaign was undertaken during the consultation period which generated 1,918,152 impressions

Additional engagement activities

2.3.24 National Grid undertook several engagement activities leading up to and throughout the consultation period.

2.3.25 Information on the Stage 1 consultation was sent to political stakeholders including Members of Parliament as well as county, district and parish councils within the SCZ. Briefings were offered to those political stakeholders and an overview of the briefings that took place is available in Table 2.6.

2.3.26 Briefings provided an introduction to the Project, including wider context on the existing network, the needs case and why the Project is required, an overview of the proposals and information on upcoming consultation events and how to get involved

Table 2.6 Briefings to stakeholders

Dates	MPs and Council briefings (County/District/ Parish)
9 January 2024	Lincolnshire County Council
17 January 2024	Victoria Atkins MP
22 January 2024	Map area 1 – Grimsby West to Alvingham and Keddington with local parish councils
23 January 2024	Map area 2 - Alvingham and Keddington to Burgh le Marsh with local parish councils
24 January 2024	Map area 3 - Burgh le Marsh to the River Welland with local parish councils
25 January 2024	Map area 4 – River Welland to Walpole with local parish councils
26 January 2024	Sir John Hayes MP
31 January 2024	Lia Nici MP, Matt Warman MP and Martin Vickers MP

Dates	MPs and Council briefings (County/District/ Parish)
19 February 2024	South & East Lincolnshire Councils Partnership (Boston Borough Council, East Lindsey District Council and South Holland District Council)

Response Methods

- 2.3.27 National Grid provided several channels to submit feedback, which are summarised below:
- **Online feedback form** (via the Project website) - An electronic version of the feedback form was available on the Project website, at: www.nationalgrid.com/g-w. This could either be completed and submitted online or downloaded from the website and posted to the Freepost address.
 - **Hard copy feedback form** (Appendix F) - Hard copies of the feedback form were available at consultation events, information deposit locations and upon request. They were also available as a PDF on the Project website, to be printed at home if preferred. They could be returned via the Freepost address.
 - **Email** – An email address (contact@g-w.nationalgrid.com) was available for submitting feedback.
 - **Post** - Hard copy responses (including letters and hardcopy feedback forms) could be submitted in writing to the freepost address at 'Freepost G TO W'.
- 2.3.28 A freephone information line was available to request a paper copy of the feedback form, and a freepost envelope, enabling consultees to send their feedback to the Project team free of charge. This was also available for people to call if they had any queries or wanted to arrange a call back from a member of the Project team to discuss a specific topic. Lines were open Monday to Friday 9.00am – 5.30pm, and an answerphone facility was available to take messages outside of these hours.
- 2.3.29 Consultees were encouraged to provide their feedback in writing, however feedback could be given over the phone where the other channels for responding were not suitable, for example to meet equality, diversity and accessibility needs.
- 2.3.30 Members of the public who wanted to provide their feedback at the in-person events were provided with a paper copy of the feedback form which they were able to hand in at the event or return via freepost.

3. Analysis of Feedback

3.1 Introduction

- 3.1.1 This chapter details the feedback received in response to the Stage 1 consultation. It includes a breakdown of how feedback was submitted, outlines the work undertaken to analyse this information, and provides a summary of the feedback received as well as National Grid's responses.
- 3.1.2 Chapter 3 is structured as follows:
- i. **3.2 Feedback channels/response mechanisms** - provides an overview of the channels feedback was received through;
 - ii. **3.3 Overview of Stage 1 consultation feedback** - provides an overview of feedback received based on submission types;
 - iii. **3.4 Approach to analysis** - outlines the approach taken in analysing the responses; and
 - iv. **3.5 Analysis of feedback** - summarises the feedback received, alongside National Grid's response to this feedback.

3.2 Feedback channels/response mechanisms

- 3.2.1 As outlined in section 2.3 of this report, to ensure that the Stage 1 consultation was inclusive and open to all, National Grid set up a number of methods by which feedback to the consultation could be provided.
- 3.2.2 Comments received on social media or discussions about the Project at public exhibitions or briefings were not captured as formal consultation feedback. Where appropriate, attendees to consultation events were encouraged to submit feedback via the channels which were included in various consultation materials (including the feedback form and banners), on the Project website and in promotional materials.
- 3.2.3 Emails and letters which clearly constituted a response to the consultation (i.e. provided comments on the proposals) were classified as consultation feedback. Emails and letters which only asked for copies of documents or where certain information could be found were not classified as consultation feedback.

3.3 Overview of Stage 1 consultation feedback

- 3.3.1 A total of 7,694 submissions of consultation feedback were received during and outside of the consultation period. We have had regard to partially completed online feedback forms (where the form was filled in online but not submitted) and we have also included a portion of blank feedback forms, where the form was opened online but no feedback was provided. The total is comprised of paper feedback forms, online feedback forms, emails and letters. Further information on feedback methods and the numbers of responses for each are set out below in Table 3.1.

- 3.3.2 Although some feedback was received after the close of consultation, all responses have been considered and reported in section 3.5 of this report, with the exception of 39 campaign slips. These expressed opposition to the Project and provided the names of the respondents but did not provide any additional detail.

Table 3.1 Breakdown of responses received

Response Method	Number of Responses
Online feedback form	1,213
Online feedback form (partial responses)	521
Online feedback form (blank responses)	937
Emails consisting of attached feedback forms	30
Emails (including campaign group responses)	2,437
Letter	248
Paper feedback form (via post)	233
Campaign slips	1,057
Campaign postcards	1,018
TOTAL	7,694

3.4 Approach to Analysis

- 3.4.1 National Grid has considered and taken account of all feedback. This is explained further in section 3.5 of this report.
- 3.4.2 National Grid's response to feedback at this stage is preliminary, and we have had regard to Government guidance regarding pre-application consultation¹. A Consultation Report covering all consultation undertaken on the Project will be submitted with the Development Consent Order (DCO) application in due course.

Closed question responses

- 3.4.3 Responses to the closed (quantitative) questions of the feedback form have been analysed, explained and displayed graphically in section 3.5 of this report. Regarding the percentages shown on the graphs, the numbers have been rounded up or down to provide the percentage to the nearest decimal place, and as such some of the totals are not equal to 100%.

¹ Planning Act 2008: Pre-application: <https://www.gov.uk/guidance/planning-act-2008-pre-application-stage-for-nationally-significant-infrastructure-projects>

Open question responses

3.4.4 All open (qualitative) responses received as part of the Stage 1 consultation have undergone a process of coding and analysis. The steps behind this process are explained below.

3.4.5 Sources of open responses included:

- i. Responses to open questions in the feedback form (hardcopy and online);
- ii. Email responses (which clearly constituted a consultation response); and
- iii. Letter responses (which clearly constituted a consultation response).

Checking feedback

3.4.6 Assigning a unique reference number to each response to create an audit trail throughout the analysis process. Quality assurance checks were undertaken to ensure that each response was reviewed.

Identifying the themes

3.4.7 To analyse open responses, an initial coding framework was produced, which was informed by the content of the feedback form. The coding framework enabled the breakdown and assigning of responses into corresponding themes, as appropriate. If multiple themes were covered in feedback, each was coded appropriately to ensure all matters raised within the feedback were captured and reviewed by the appropriate specialists. The narrative presented in section 3.5 of this report is based on the themes identified. Where appropriate, themes have been grouped in the narrative.

Identifying the topics within a theme

3.4.8 As coding and analysis progressed, the coding framework was further informed and developed (using the analysis of consultation feedback) to identify 'themes' that were more detailed in nature, which were referred to as topics.

3.4.9 'Ecology' is an example of a theme, and 'impacts on wildlife associated with construction' is an example of a topic that relates to this theme. The process of identifying themes and topics informed the narrative of consultation feedback presented in section 3.5 of this report.

Identifying the location or Section of the route

3.4.10 For the purpose of the Stage 1 consultation the emerging preferred corridor was presented in 11 Sections to assist consultees in commenting on different areas of the Project. These Sections were defined by key geographic features or settlements and included the proposed substation siting zones, as set out within the Stage 1 consultation materials (including the Project Background Document, Corridor and Preliminary Routeing and Siting Study and Feedback Form). Where specific locations were referenced in feedback, these were used to identify the corresponding route Section to inform the narrative of consultation feedback presented in section 3.5 of this report.

Identifying design change requests

- 3.4.11 Where specific, locatable changes or amendments to the Project design were suggested through feedback, these were identified and considered through a separate process called Design Change Control (DCC). For more information on the DCC process, please refer to Chapter 3 of the Design Development Report (DDR). Design changes requested through feedback are set out under the 'Planning and Design' theme across all Sections of the Project and are reported in section 3.5 of this report, alongside National Grid's response to them. Further information on the design development process is also available in Chapter 7 of the DDR.

Responses from technical stakeholders

- 3.4.12 The Stage 1 Consultation was not a statutory consultation, however feedback was received from statutory bodies, referred to as technical stakeholders, as listed in Appendix E. Feedback from technical stakeholders is also reported in section 3.5 of this report.

Approach to route Sections

- 3.4.13 At Stage 1 consultation, the emerging preferred corridor was presented in 11 Sections to assist consultees in commenting on different areas of the Project. These Sections were defined by key geographic features or settlements and include the proposed substation siting zones. For the Stage 2 consultation, the preferred route has been split into seven Sections to provide a clear distinction between substation locations and overhead line locations and to facilitate simpler and more consistent reporting across publications. Table 3.2 shows the broad alignment between the Sections at Stage 1 and Stage 2 consultation

Table 3.2 Broad alignment between the Stage 1 consultation (11 Sections) and the Stage 2 consultation (seven Sections)

Route Sections – Stage 2 consultation	Route Sections – Stage 1 consultation
Section 1 - New Grimsby West Substation	Section 1 – Grimsby West to Barnoldby le Beck (part)
Section 2 - New Grimsby West Substation to new Lincolnshire Connection Substation A	Section 1 – Grimsby West to Barnoldby le Beck (part) Section 2 – Barnoldby le Beck to North Thoresby Section 3 – North Thoresby to Alvingham and Keddington Section 4 – Alvingham and Keddington to Tothill Section 5 – Tothill to Cumberworth (part)
Section 3 - New Lincolnshire Connection Substations A and B	Section 5 – Tothill to Cumberworth (part)
Section 4 - New Lincolnshire Connection Substation B to Refined Weston Marsh Substation Siting Zone	Section 5 – Tothill to Cumberworth (part) Section 6 – Cumberworth to Burgh le Marsh Section 7 – Burgh le Marsh to Midville Section 8 – Midville to River Witham Section 9 – River Witham to River Welland (part)

Route Sections – Stage 2 consultation	Route Sections – Stage 1 consultation
Section 5 - Refined Weston Marsh Substation Siting Zone	Section 9 – River Witham to River Welland (part) Section 10 – River Welland to B1165 (part)
Section 6 - Refined Weston Marsh Substation Siting Zone to New Walpole B Substation	Section 10 – River Welland to B1165 (part) Section 11 – B1165 to Walpole (part)
Section 7 - New Walpole B Substation	Section 11 – B1165 to Walpole (part)

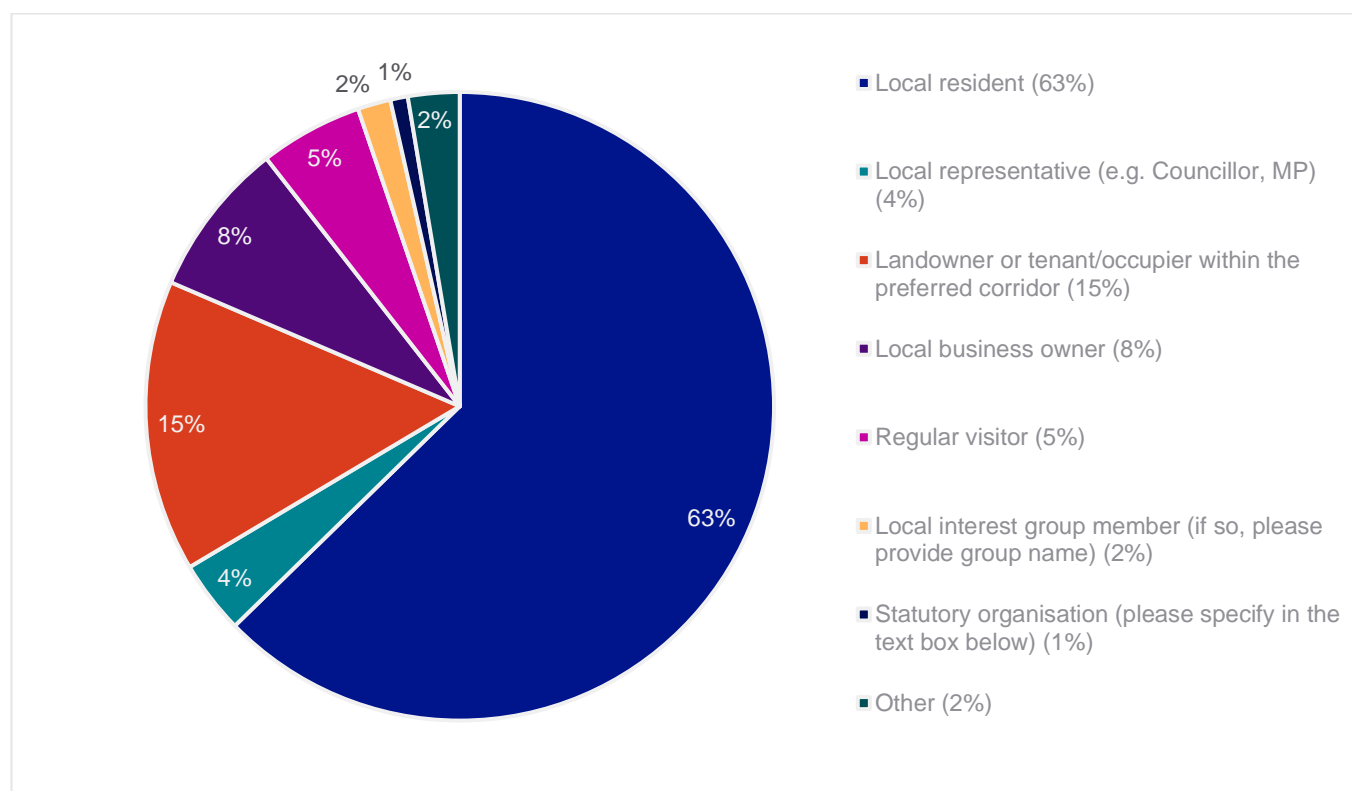
3.5 Analysis of feedback

About you

‘How would you describe your interest in Grimsby to Walpole?’

3.5.1 A total of 1,887 responses were received. As illustrated below, 63% of responses selected ‘Local resident’. The next most popular category was ‘Landowner or tenant/occupier within the emerging preferred corridor’ with 15% of responses selecting this option. 8% of responses selected ‘Local business owner’. A small percentage of responses were received from ‘local representatives’, ‘other’, local interest groups and statutory organisations.

Figure 3.1 How would you describe your interest in Grimsby to Walpole?



Strategic options – Question 1a and other relevant feedback

3.5.1 Question 1a of the feedback form asked:

‘Do you have any comments to make on our work to identify our preferred strategic option?’

3.5.2 The following sections provide a summary of the comments made in relation to the work to identify the preferred strategic option and National Grid’s response to those. This section of the report is arranged under the following headings: opposition to the Project; support for the Project; alternative options; and costs.

Opposition to the Project

3.5.3 A considerable proportion of the community members’ responses, alongside technical stakeholders’ feedback (Addlethorpe Parish Council, Alford Town Council, Anderby Parish Council, Ashby cum Fenby Parish Council, Bilsby and Farlethorpe Parish Council, Elkington Parish Council, Fotherby Parish Council, Grainthorpe Parish Council, Great and Little Carlton Parish Council, Halton Hologate with Halton Fenside Parish Council, Legbourne Parish Council, Lincolnshire County Council, Lincolnshire Police and Crime Commissioner, Lincolnshire Wolds Countryside Service, Louth Town Council, Marshchapel Parish Council, North East Lincolnshire Council, North Cotes Parish Council, North Somercotes Parish Council, Orby Parish Council, Rigsby with Ailby Parish Council, Skegness Town Council, Skidbrooke with Saltfleet Haven Parish Council, Stickford Parish Council, Tetney Parish Council, Theddlethorpe Parish Council, Utterby Parish Council, Wainfleet St Mary Parish Council, Welton le Marsh Parish Council, West Walton Parish Council, Weston Parish Council, Willoughby and District Parish Council and Withern with Stain Parish Council) noted opposition/objection or strong opposition/objection to the proposed Project in its current form.

3.5.4 The following feedback was also noted:

- i. North Cotes Parish Council agrees with East Lindsey District Council, Lincolnshire County Council and many other Parish Councils and opposes the Project.
- ii. North Somercotes Parish Council agree with Lincolnshire County Council’s submission.
- iii. Halton Hologate with Halton Fenside Parish Council, Grainthorpe Parish Council, Legbourne Parish Council and Addlethorpe Parish Council agree with Lincolnshire County Council’s submission.
- iv. Addlethorpe Parish Council also agrees with the submissions by East Lindsey District Council, and Lincolnshire Police and Crime Commissioner.
- v. Grainthorpe Parish Council and Marshchapel Parish Council noted there is no support for the Project from MPs, County Councillors, District Councillors, Parish Councillors and the general public.
- vi. Addlethorpe Parish Council and North East Lincolnshire Council mentioned that their opposition will be shared with the Secretary of State for Energy Security and Net Zero.

3.5.5 **National Grid’s response:** The need case for the Project is detailed in the Strategic Options Report (SOR). Government is seeking to increase operating offshore wind

capacity to 50 GW by 2030. Consistent with that target, there has been, and continues to be, growth in the volume of renewable and zero carbon generation that is seeking to connect to the electricity transmission system in the Lincolnshire and East of England region. As recognised in most of the technical stakeholders' feedback, this growth in renewable energy generation, coupled with greater interconnection between our transmission network and networks in other countries, in line with the Government's net zero agenda, is driving a need to increase the capability of our transmission system, as power flows are set to exceed the capability of the existing network in the next decade. The Project proposals will help strengthen the electricity transmission network between the North and the Midlands. It will add capability to accommodate increasing power flows from offshore wind and interconnection in both Scotland and the north-east of England.

- 3.5.6 The electricity network system in Britain is split into boundaries. Each boundary has a limit to the amount of electricity that can flow across it. As more electricity is needed and is being generated in Britain, we can assess where the power flows between these boundaries will need to increase. Assessments have shown that that this applies to power flows across boundaries B8 and B9. Grimsby to Walpole will help achieve this by providing reinforcement across boundaries B8 and B9.
- 3.5.7 B8 needs around 7.9 GW of additional capacity by 2035, and B9 needs around 4.7 GW by 2030. Without reinforcement to provide this additional network capability, constraint action, which involves paying generators to reduce the energy they produce in one part of the country while paying others elsewhere to generate to avoid a thermal overload on the transmission network (known as 'constraint payments'), is likely to be needed during periods of high wind generation and high interconnection imports. The cost of that constraint action is ultimately passed on to consumers through higher electricity bills.
- 3.5.8 National Grid recognises that concerns about the Project have been raised by the community and stakeholders but does not agree that there is "no" support for the Project from MPs, Councillors and the general public, as stated by Grainthorpe Parish Council and Marshchapel Parish Council. Where specific concerns have been raised, National Grid has addressed them in this report. In particular, for a consideration of alternatives and technology choice please see National Grid's response under Alternative options.

Support for the Project

- 3.5.9 Several community members' responses noted support for the Project.
- 3.5.10 **National Grid's response:** National Grid welcomes these comments.

Alternative options

- 3.5.11 A considerable proportion of the community members' responses, alongside technical stakeholders' feedback (Alford Town Council, Alvingham Parish Council, Anderby Parish Council, Bilsby and Farlesthorpe Parish Council, Burgh le Marsh Town Council, Covenham Parish Council, East Keal Parish Council, Fotherby Parish Council, Friskney Parish Council, Grainthorpe Parish Council, Grimoldby and Manby Parish Council, Halton Hologate with Halton Fenside Parish Council, Legbourne Parish Council, Lincolnshire County Council, Lincolnshire Police and Crime Commissioner, Lincolnshire Wolds Countryside Service, Louth Town Council, Marshchapel Parish Council, Moulton Parish Council, Norfolk County Council, North East Lincolnshire

Council, North Somercotes Parish Council, Orby Parish Council, Skidbrooke with Saltfleet Haven Parish Council, Stickford Parish Council, Sutton St Edmund Parish Council, Tetney Parish Council, Tydd St Giles Parish Council, Welton le Marsh Parish Council, West Walton Parish Council and Withern with Stain Parish Council) recognised the need for the Project, but objected to it in its current form and requested:

- i. That alternatives including reinforcement of the existing Grid infrastructure, alternative routing for the overhead line, an offshore subsea connection or underground cables, alternative brownfield grid connection points and more modern technologies are reconsidered. Some feedback referenced that other European countries have opted for offshore options, suggesting that should be the case in the UK too, and provided examples of similar projects that have taken this approach; and
- ii. That a more comprehensive and cohesive evidence base should be provided to show why alternative options are not feasible, which is believed to not have been provided at the Stage 1 consultation.

- 3.5.12 A considerable proportion of the community members' responses suggested that the new infrastructure should be located on brownfield land.
- 3.5.13 A large proportion of the community members' responses, alongside technical stakeholders' feedback (Elkington Parish Council, Fotherby Parish Council, Legbourne Parish Council, Lincolnshire County Council, North Cotes Parish Council, North Somercotes Parish Council, Skegness Town Council, Tydd St Giles Parish Council, Weston Parish Council and Willoughby and District Parish Council) suggested an integrated offshore/undersea solution.
- 3.5.14 Lincolnshire County Council's feedback questioned why the subsea option has been discounted. The Council's feedback requested that the details of how this conclusion was reached are provided, mentioning the subsea option would be pursued.
- 3.5.15 Fenland District Council's feedback noted a preference for undergrounding.
- 3.5.16 Norfolk County Council's feedback noted concerns with any subsea option making landfall in Norfolk.
- 3.5.17 Natural England's feedback noted difficulty with commenting on the preferred routes, or overhead vs underground options, without survey results. It is expected that the Project will follow the 'avoid, mitigate, compensate' hierarchy set out in the National Planning Policy Framework. The feedback mentioned that undergrounding cables should be considered based on survey results, including risk of bird collision. With regard to the Lincolnshire Wolds National Landscape (AONB), Natural England would like to understand whether overhead lines would be avoided completely in the 2 km constraint buffer and the scope for undergrounding cables within the setting of the National Landscape (AONB). Natural England's feedback expressed support for the presumption of undergrounding cables if a direct route through the National Landscape (AONB) is unavoidable.
- 3.5.18 The Environment Agency's feedback welcomed the decision not to progress with underground cables, as any undergrounding would require significant works which not only removes associated habitats (such as woodlands or hedgerows) and is a loss of biodiversity, but also puts groundwater and watercourses at risk of pollution.
- 3.5.19 **National Grid's response:** The feedback received at the Stage 1 consultation has been taken in account, alongside further assessments and design work, in developing

the proposals presented at the Stage 2 consultation. The alternatives referred to in the feedback outlined above are addressed below, with further detail available in the Strategic Options Report (SOR), Corridor Preliminary Routeing and Siting Study (CPRSS), Design Development Report (DDR) and **PEI Report Volume 2 Part A Chapter 3 Main Alternatives Considered**.

- 3.5.20 **Re-routeing** - The proposed alignment for the new overhead line is presented within the DDR, with a description of the alternatives considered contained in **PEI Report Volume 2 Part A Chapter 3 Main Alternatives Considered**. Both include the consideration of alternative routes for the overhead line.
- 3.5.21 **Reinforcement of existing infrastructure** - As detailed in the SOR, the increase in power flow capacity which is required across the B8 and B9 transmission boundaries in the coming years is significant (>12 GW and >6 GW, respectively) and therefore cannot be achieved through upgrades to existing infrastructure alone. Part of the Project needs case is also to provide connection capacity for the East Coast generation group. This is a key driver for the routing and siting of the proposed infrastructure in East Lincolnshire, in close proximity to the coast, to enable optimised connection of offshore generation and interconnection projects from this group into the main onshore interconnected transmission system. This is an area which does not currently have any electricity transmission infrastructure at the voltages which are required for the capacity of the connections and reinforcements proposed at part of this Project. As such, there are no nearby existing assets which could be reinforced or upgraded to meet the needs case.
- 3.5.22 **Offshore option** - Three strategic options were considered for the Project, including two onshore options and one offshore option. Having considered value to bill-paying consumers, environmental and socio-economics factors and cost, the offshore option was not progressed. While offshore options may be justifiable for other projects, environmental and socio-economics factors were not considered to differentiate between the onshore and offshore options for the Project. However, the offshore option was identified as significantly more expensive to both build and maintain over a 40-year period. As a result, an onshore option was progressed. Further information is presented in the SOR.
- 3.5.23 **Underground cables** - Strategic options considered included onshore options as well as offshore options. Technical, environmental and socio-economics factors were not considered to differentiate between onshore and offshore options. However, the offshore options were substantially more expensive than any of the onshore options and onshore options were therefore preferred. The assessment of onshore options was based on overhead lines as the preferred technology choice. This is consistent with National Policy Statement (NPS) EN-5, which states in paragraph 2.9.20 that overhead lines should be the strong starting presumption for electricity networks developments in general. National Grid will, however, consider localised undergrounding where justified. Locations where this was considered are discussed further in section 3.5 of this report and section 3.8 of **PEI Report Volume 2 Part A Chapter 3 Main Alternatives Considered**.
- 3.5.24 With reference to Natural England's comments, surveys are ongoing with full results to be presented in the Environmental Statement (ES). A preliminary assessment of Ecology and Biodiversity impacts is presented in the **PEI Report** available as a part of the Stage 2 consultation. The mitigation hierarchy has been adopted in the approach to design and assessment. The purpose of the 2 km buffer was to ensure that there were no direct impacts to the Lincolnshire Wolds National Landscape (AONB) either

during construction or operation in line with the national policy statements. There are locations where the Project is located within 2 km of the boundary. We have considered additional mitigations in these locations. The design incorporates low height pylons in one section, where it was considered to reduce the effects on views from the designated landscape. Further work has been undertaken to understand the setting of the National Landscape (AONB) which is presented in **PEI Report Volume 3 Part C Appendix 2A Lincolnshire Wolds National Landscape (AONB) Setting Study**. The proposed design does not currently include any localised undergrounding. This is because it is not considered that there would be significant adverse landscape and/or visual impacts requiring such mitigation.

- 3.5.25 National Grid notes that the Environment Agency welcomes the decision not to progress with underground cable.
- 3.5.26 **Other Technologies** - Further information including a full evaluation of lifetime costs for AC underground technology; high voltage direct current overhead line and underground cables; and gas insulated line was presented in the SOR under the Appraisal of strategic options chapters. National Grid considers that an overhead line continues to provide the best balance between capital cost, capacity, environmental impact and lifetime operating costs for the transmission of high levels of power. Technologies continue to improve, and National Grid continually assess new technologies and look to implement and utilise these when they offer the best overall solution. Detail is presented in an updated SOR for Stage 2 consultation. As detailed in the DDR, National Grid has also considered the use of close paralleling, although there are relatively few locations within the proposed route alignment where there are opportunities for close parallel with an existing overhead line, and alternative pylon types.
- 3.5.27 **Use of brownfield land** - Given the length and linear nature of the Project, it would not be feasible to locate all new infrastructure on brownfield land. However, as identified at section 4.5 of the CPRSS, National Grid acknowledges that using available brownfield land will generally be of benefit/advantage compared with utilising greenfield land and considered the availability of brownfield land in the site selection process. In line with that approach, National Grid has investigated potentially suitable land in the region, designated as brownfield sites, for placement of compounds required for the construction phase and for the siting of substations. While siting zones LCS11 and LCS12 would have utilised existing and /or available brownfield land in the form of former RAF Manby and Strubby Airfield and Glider Field, these siting zones were not preferred for the reasons detailed at section 13.3 of the CPRSS. No suitable brownfield sites were identified for proposed permanent or temporary infrastructure.

Costs

- 3.5.28 A considerable proportion of the community members' responses, alongside technical stakeholders' feedback (Alvingham Parish Council, Great and Little Carlton Parish Council, Grimoldby and Manby Parish Council, Huttoft Parish Council, Lincolnshire County Council, Lincolnshire Police and Crime Commissioner, Skidbrooke with Saltfleet Haven Parish Council and Withern and Stain Parish Council) identified that cost should not be the primary consideration in selecting the preferred solution, particularly for dismissing alternative options. Furthermore, some feedback referenced shareholders/profit being prioritised over local people, and that money saving would not be a good enough justification for the Project.

- 3.5.29 A considerable proportion of the community members' responses alongside technical stakeholders' feedback (Anderby Parish Council, Fotherby Parish Council, Halton Holegate with Halton Fenside Parish Council, Lincolnshire County Council, Orby Parish Council, Tydd St Giles Parish Council and Withern with Stain Parish Council) questioned the methodology for the costs benefits analysis of the different options and how the conclusions were reached for the current proposals. Some of the feedback referenced the lack of inclusion of compensation required for the loss of tourism, properties and agricultural land, environmental, economic and social costs or the rising cost of imported steel. Lack of costings for subsea routes and underground HVDC was highlighted. Consistency of costs when compared to other projects, including grid upgrade projects was also questioned.
- 3.5.30 Several community members' responses, alongside technical stakeholders' feedback (Halton Holegate with Halton Fenside Parish Council, Lincolnshire County Council and Tydd St Giles Parish Council) requested the business case and financial assessment based on the Treasury Green Book principles for all options or made reference to these principles.
- 3.5.31 **National Grid's response:** When strategic options are taken forward to appraisal, options are evaluated in respect of environmental constraints, socio-economics effects, technology alternatives, capital and lifetime costs. Undertaking this appraisal ensures stakeholders can see how we have made our judgments and balanced the relevant factors in accordance with our legal duties. The appraisal process considers the following areas:
- i. Environmental topics, which consider whether there are environmental constraints or issues of sufficient importance to influence decision making at a strategic level, having particular regard for internationally or nationally important receptors.
 - ii. Socio-economics topics, which consider whether there are socio-economics constraints or issues of sufficient importance to influence decision making at a strategic level, having particular regard for internationally or nationally important receptors.
 - iii. Consideration of technical benefits includes, whether the option is providing the required capacity to meet the need case; whether the option has particular system benefits over alternatives; whether the option introduces any system complexity that would cause system operability issues.
 - iv. Capital and lifetime costs considers a range of factors:
 - capital cost of the substation and wider works;
 - capital cost of the circuit costs for each technology appraised; and
 - circuit lifetime costs, including circuit capital cost, cost of losses over 40 years and cost of operation over 40 years.
- 3.5.32 Our high-level calculations of costs for the Project were presented within the Strategic Options Report (SOR) which remains available on the Project website. These costs are subject to change and as the Project progresses are updated in accordance with the most up to date assumptions.
- 3.5.33 Costings for subsea and underground options were included in the SOR. The cost estimating process followed for the SOR, and all National Grid projects, is consistent. At the initial appraisal stage, National Grid prepares indicative estimates of the capital

costs. These estimates are based on the high-level scope of works defined for each Strategic Option in respect of each technology option considered to be feasible. As these estimates are prepared before detailed design work has been carried out, National Grid makes equivalent assumptions for each option. Final project costs for any solution taken forward following detailed design and risk mitigation will be in excess of any high-level appraisal cost. For example, costings did not consider compensation related to loss of tourism, properties and agricultural land, environmental, economic and social costs or the rising cost of imported steel. However, all options were assessed on the same basis and would be subject to such increases. We are presenting an update to the SOR at our Stage 2 consultation (North Humber to High Marnham and Grimsby to Walpole Updated Strategic Options Report).

- 3.5.34 Our overall decision on the proposed alignment for the new overhead line and substation siting is presented in detail within the Design Development Report (DDR). Whilst cost is a factor in the design process, we also take into account engineering considerations, environmental and socio-economics factors when seeking to develop the most appropriate design, in accordance with our statutory duties and obligations. These duties include the need to be economic and efficient, which includes keeping costs down in the interests of the bill-paying consumers.
- 3.5.35 National Grid is confident that the process followed to identify and then assess potential strategic options is robust and the most appropriate. This has been tried and tested through numerous previous projects, formal examination processes and ultimately decisions by the Secretary of State to grant development consent. The Treasury Green Book provides guidance on the interpretation by public servants of public spending, assets and resources for projects, policies and spend from the public purse. That is not relevant for National Grid projects. There is no requirement in the Planning Act 2008 for developers to have to submit a Treasury Green Book assessment as part of a Development Consent Order (DCO) application. National Grid is an Office of Gas and Electricity Markets (Ofgem) regulated business, with obligations to consider customer, environmental and other considerations as outlined in the Electricity Act and in its licence commitments. Consideration of the costs of a project and the funding it should receive via the regulatory settlement is the subject of a separate regulatory process, and it is not appropriate for the Planning Inspectorate, Examining Authority or the Secretary of State in their remit under the Planning Act to seek to duplicate other regimes.
- 3.5.36 A preliminary assessment of the impacts arising from the proposed alignment on socio-economics, recreation and tourism is presented in **PEI Report Volume 2 Part B Sections 1 to 7 Chapter 11 Socio-economics, Recreation and Tourism** and **PEI Report Volume 2 Part C Route-wide Chapter 7 Socio-economics, Recreation and Tourism**.

The emerging preferred corridor – Question 2a

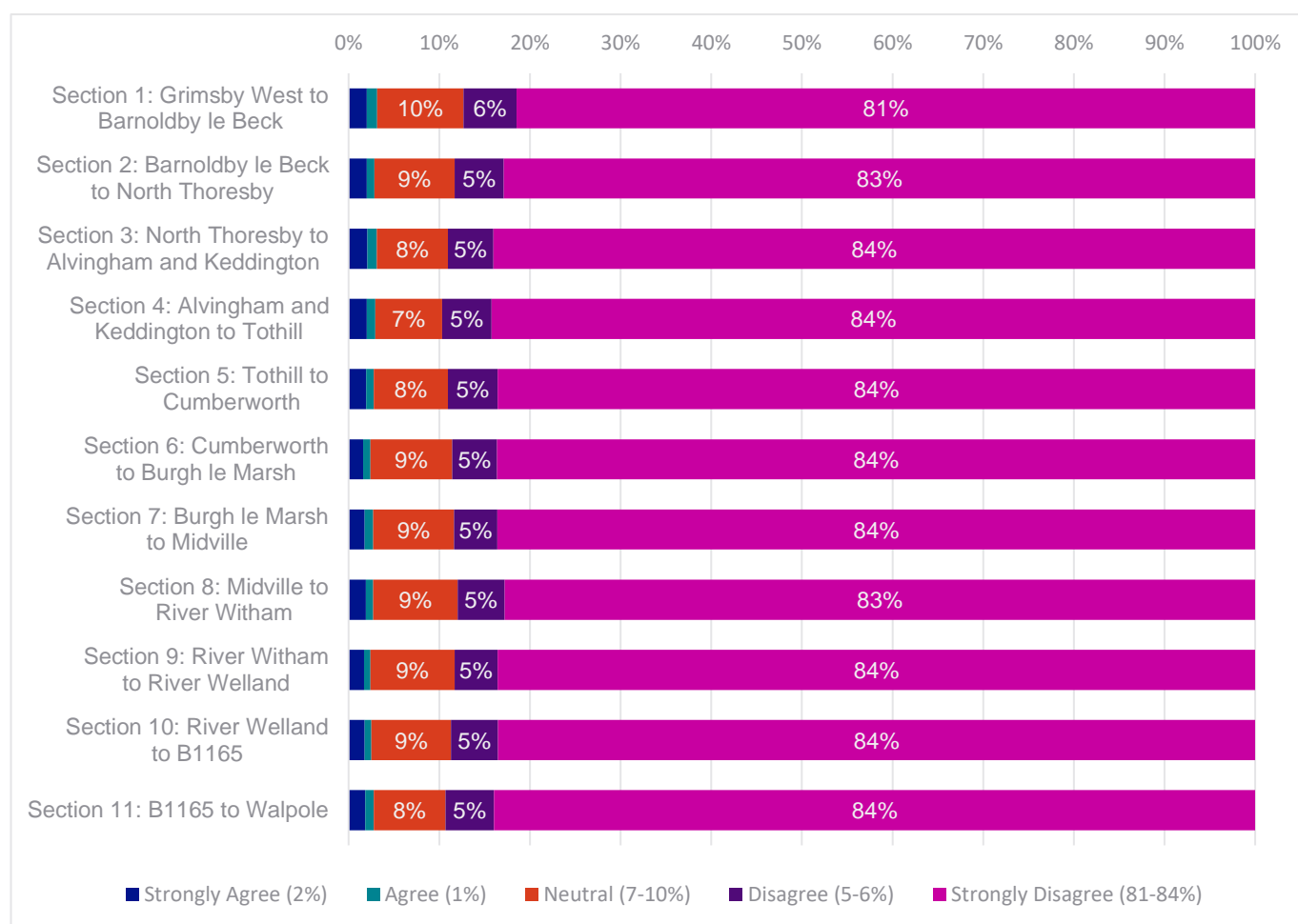
- 3.5.37 Question 2a asked respondents about the extent to which they agreed with the emerging preferred corridor that has been identified for each Section of the proposed route.
- 3.5.38 The findings are summarised below and illustrated in Figure 3.2.
- 3.5.39 A similar number of responses were received for each Section of the Project presented in the Stage 1 consultation, as listed below.
 - i. Section 1: Grimsby West to Barnoldby le Beck, 1,586 responses.

- ii. Section 2: Barnoldby le Beck to North Thoresby, 1,582 responses.
- iii. Section 3: North Thoresby to Alvingham and Keddington, 1,598 responses.
- iv. Section 4: Alvingham and Keddington to Tothill, 1,591 responses.
- v. Section 5: Tothill to Cumberworth, 1,587 responses.
- vi. Section 6: Cumberworth to Burgh le Marsh, 1,575 responses.
- vii. Section 7: Burgh le Marsh to Midville, 1,583 responses.
- viii. Section 8: Midville to River Witham, 1,581 responses.
- ix. Section 9: River Witham to River Welland, 1,582 responses.
- x. Section 10: River Welland to B1165, 1,584 responses.
- xi. Section 11: B1165 to Walpole, 1,583 responses.

3.5.40 Across all Sections the feedback was generally consistent with:

- i. A very small proportion (3%) of respondents '*Strongly agreed*' or '*Agreed*' with the emerging preferred corridor identified for any Section;
- ii. The majority of respondents, between 87% and 89%, '*Strongly disagreed*' or '*Disagreed*' to some extent with the emerging preferred corridor identified for any Section; and
- iii. Between 7% and 9% of respondents were '*Neutral*'.

Figure 3.2 We considered and assessed several options to select a preferred corridor. Do you agree with the emerging preferred corridor that has been identified for each Section of the proposed route?



The emerging preferred corridor – Question 2b

- 3.5.41 Question 2b of the feedback form gave respondents the opportunity to expand on their answer regarding their reasoning to their selection in Question 2a. Reasons received have been summarised below, alongside National Grid’s response.
- 3.5.42 Reasons for ‘*Strongly agree*’ and ‘*Agree*’ were similar in nature across all Sections of the route and are summarised as follows:
- General support for the emerging preferred corridor;
 - The emerging preferred corridor is the best route;
 - The emerging preferred corridor drives the transition to renewable energy and away from fossil fuels, as well as safeguarding power supply in Lincolnshire; and
 - The choice of the emerging preferred corridor shows National Grid’s effort to research and identify the best route.
- 3.5.43 **National Grid’s response:** National Grid welcomes the respondents’ views.
- 3.5.44 Reasons provided for ‘*Strongly disagree*’, ‘*Disagree*’, ‘*Neither agree nor disagree*’ and ‘*Unsure*’ were similar in nature across all Sections of the route and are summarised as

follows. National Grid's responses to these points are provided under Question 3a of this report.

- Impacts on tourism due to the Project.

National Grid's response: National Grid's response can be seen under Tourism.

- Impacts on heritage assets, as well as the historic character of villages due to the Project.

National Grid's response: National Grid's response can be seen under Historic Environment.

- Concerns with health and wellbeing.

National Grid's response: National Grid's response can be seen under Health and Wellbeing.

- Concerns with impacts on property prices.

National Grid's response: National Grid's response can be seen under Land and property.

- Impacts on the landscape and visual impacts due to the Project.

National Grid's response: National Grid's response can be seen under Landscape and Visual.

- The preferred route should be underground or offshore and alternative options should be explored further.

National Grid's response: National Grid's response can be seen under Alternative options.

- Impacts on aircraft movements including on Strubby North, Boston Airfield and Fenland Airfield, as well as air ambulance.

National Grid's response: National Grid's response can be seen under Flight Paths.

- Concerns with loss of agricultural land.

National Grid's response: National Grid's response can be seen under Land and property.

- Concerns with impacts on the environment, ecology and biodiversity, including wildlife and habitats.

National Grid's response: National Grid's response can be seen under Ecology and Biodiversity.

The graduated swathe – Question 3a and other relevant feedback

3.5.45 Question 3a of the feedback form asked:

‘Are there any features or considerations that you think we should take into account when developing our plans?’

3.5.46 The following sections provide a summary of the comments made in relation to features or considerations that should be taken into account and National Grid’s response to those. This section of the report is arranged under the following headings: land and property; health and wellbeing; noise and vibration; safety; historic environment; ecology and biodiversity; landscape and visual; flight paths and communications interference; tourism; cumulative impacts; and communities and quality of life.

Land and property

3.5.47 **Survey requirements and access** - A considerable proportion of the community members’ responses, alongside technical stakeholders’ feedback (Great and Little Carlton Parish Council, Louth Town Council and Rigsby with Ailby Parish Council) raised concerns about the impacts on landowners and property owners due to the Project. Some of the responses also noted that surveys can be disruptive, and some have taken place without agreement or that requests to access properties and land felt very demanding. Furthermore, some of the responses expressed that the Project is threatening what landowners and property owners have worked to build over a lifetime.

3.5.48 **National Grid’s response:** National Grid is and will continue to work with all landowners and farmers who may be affected by our proposals including gaining access to land for survey requirements. Voluntary agreement is always sought to gain access to land for surveys and investigation works and where we have contact details for the owner/occupier, we will always seek to contact them prior to taking access. We will continue to work with the farming community to limit disruption where practicable. This includes providing prior notice of survey work.

3.5.49 **Property prices and compensation** - A considerable proportion of the community members’ responses, alongside technical stakeholders’ feedback (Alvingham Parish Council, Anderby Parish Council, Bilsby and Farlethorpe Parish Council, Burgh le Marsh Town Council, Norfolk County Council, Orby Parish Council, Rigsby with Ailby Parish Council, Welton le Marsh Parish Council and Willoughby and District Parish Council) raised concerns about impacts on property prices due to the Project, rendering properties unsellable and the impacts this would have on mental health. Concerns were also raised that the compensation offered will not be adequate and consideration needs to be given to appropriate compensation.

3.5.50 **National Grid’s response:** National Grid acknowledges that its proposals and the associated visual impacts of new overhead infrastructure may cause concern to communities, home and property owners. While UK law does not prescribe any minimum distance between overhead lines and properties, as part of the routing and siting exercise, National Grid has sought and will continue to reduce as far as practicable impacts on sensitive receptors, such as residential areas.

3.5.51 Please take appropriate advice if you think your property has been affected, including by diminishment of its value. Compensation claims will be considered on an individual basis in accordance with current legislation. Where compensation is due, it will be assessed in accordance with the Compensation Code.

- 3.5.52 National Grid will pursue voluntary agreements with impacted property owners to acquire the rights required to construct and operate the Project. The National Grid Land Rights Strategy and Payment Schedule for Assets explains the approach to acquisition of rights and compensation associated with that. Details are available at:
www.nationalgrid.com/document/353131/download.
- 3.5.53 **Compulsory purchase** - Several community members' responses raised concerns about their land being compulsory purchased, which could affect their livelihood or businesses.
- 3.5.54 A few community members' responses raised that any land which is acquired for environmental mitigation should be by agreement and not compulsory acquisition.
- 3.5.55 **National Grid's response:** National Grid will aim to acquire all land rights voluntarily through negotiation in the first instance. Compulsory powers will be sought as part of the Development Consent Order (DCO) application for the Project, where necessary and as a last resort. The National Grid Land Rights Strategy and Payment Schedule for Assets explains the approach to acquisition of rights and compensation associated with that. Details are available at:
www.nationalgrid.com/document/353131/download.
- 3.5.56 The requirements for environmental mitigation will be informed by the baseline surveys and are being developed as the Project design progresses. As further assessment is undertaken, additional or alternative areas may be identified, and National Grid would welcome feedback on locations for biodiversity mitigation and enhancement.
- 3.5.57 We are and will continue to work with all landowners who may be affected by the proposals to understand the impacts and potential mitigations as the Project is developed.
- 3.5.58 **Land referencing** - A large proportion of the community members' responses expressed concerns with the land referencing exercise undertaken in respect of identifying potentially affected properties and land, noting that some properties, businesses, homes or land had not been identified or had been identified incorrectly.
- 3.5.59 **National Grid's response:** National Grid must identify and consult with everyone who has an interest in land which is either the subject of, or may be affected by, the development of new electricity transmission assets. "People with an interest in land" are defined as owners, tenants, occupiers and mortgagees and also anyone who exercises rights over land, for example, private rights of way, sporting rights or rights to receive payments in respect of land. For all new electricity projects, National Grid seek to identify everyone who has an interest in the land which may be affected by the new electricity transmission assets. National Grid will use public sources of information, such as information held by HM Land Registry, to create an initial Book of Reference which details all people with an interest in land, who are affected or may be affected, by the Project. This is followed up with discussions with the landowner to understand any other occupiers/tenancies. Where areas of unregistered land and unknown third-party interests have been identified we have placed notices on the subject areas requesting any party with an interest in the land to come forward.
- 3.5.60 Details of how National Grid identify "People with an interest in land" can be found in sections one and two of the National Grid Guidance on Land Rights for New Electricity Transmission Assets which can be found here:
www.nationalgrid.com/document/345311/download

- 3.5.61 A third-party company, Dalcour Maclaren, has been instructed by National Grid to undertake this land referencing workstream and they have been undertaking the required due diligence to identify the correct individuals. If you believe you have an interest in land and have not been contacted, please speak with Dalcour Maclaren on 03331 885374 or email g-w@dalcourmaclaren.com.
- 3.5.62 **Agricultural land and farming operations** - A considerable proportion of the community members' responses, alongside technical stakeholders' feedback (Anderby Parish Council, Bilsby and Farlesthorne Parish Council, Burgh le Marsh Town Council, Fotherby Parish Council, Great and Little Carlton Parish Council, Halton Hologate with Halton Fenside Parish Council, Lincolnshire County Council, Legbourne Parish Council, Marshchapel Parish Council, North Cotes Parish Council, North Somercotes Parish Council, Orby Parish Council, Rigsby with Ailby Parish Council, Skidbrooke with Saltfleet Haven Parish Council, Sutton St Edmund Parish Council, Tetney Parish Council, West Walton Parish Council, Weston Parish Council, Willoughby and District Parish Council and Withern with Stain Parish Council) raised concerns about the impact on and/or loss of agricultural land and farming operations, with associated food security, employment and economic impacts due to the Project.
- 3.5.63 Natural England's feedback noted that they are a statutory consultee on developments likely to permanently impact over 20 ha of Best and Most Versatile (BMV) Agricultural Land and that any BMV land affected by the development should be returned to the Agricultural Land Classification (ALC) in which it was found. The feedback mentioned that the soil structure and functional processes should also be managed to ensure there are no impacts. Natural England's feedback identified that guidance available in the Defra Construction Code of Practice for the Sustainable Use of Soils on Construction Sites should be used, as well as an appropriately experienced soil specialist to advise on, and supervise soil handling. Natural England would be happy to have discussions on this topic, including on the development of a Soil Management Plan.
- 3.5.64 **National Grid's response:** National Grid recognises that there is the potential for impacts on agricultural land and operations. We look to limit the impact on agricultural land through careful and considered routing and siting of infrastructure and through consultation with affected landowners. We are and will continue to work with all landowners who may be affected by the proposals to understand the impacts on their operations and to work with them as the Project is developed. We will seek to continue to work with the farming community to limit disruption where practicable.
- 3.5.65 The draft Order Limits shown include areas of land required for temporary construction activities including temporary construction compounds, and access etc. as well as permanent infrastructure including substations, pylons and overhead line. Direct permanent loss of agricultural land is associated primarily with permanent infrastructure (substations and pylon foundation plinths). Direct permanent loss of agricultural land per pylon is restricted to the area of the foundation plinths. Where pylons are located within pasture land, the area beneath the pylon can still be grazed. It is acknowledged that where pylons are located within arable rotations or land used for hay and silage cropping, the area beneath the pylon is excluded from agricultural use during the operational phase, as agricultural machinery cannot be used in these areas. We will work with landowners to accommodate as far as possible any requirements that will limit the impact on cropping patterns.
- 3.5.66 Once the Stage 2 consultation is complete and a design is in place for the Development Consent Order (DCO) application, the Environmental Statement (ES) will present a

more detailed assessment of the areas of temporary and permanent loss of agricultural land as a result of the Project.

- 3.5.67 **PEI Report Volume 2 Part C Route-wide Chapter 6 Agriculture and Soils** provides a preliminary assessment on the impact of the Project on agricultural land, soil resources, and agricultural landholdings using publicly available and purchased data related to land grades (according to the ALC system), soil profiles, and land use. The preliminary assessment has used publicly available Provisional ALC data; however, a detailed ALC survey will be conducted prior to the submission of the ES to provide a full assessment of the extent of land grades and soil types affected.
- 3.5.68 The agricultural land required across the draft Order Limits is provisionally mapped as a combination of ALC Grades 1, 2, 3, and 4 land. Land mapped as Grades 1, 2, and 3 is, for the purposes of the assessment presented in the **PEI Report**, assumed to comprise BMV land, and as such the Project is considered likely to comprise areas of BMV land.
- 3.5.69 National Grid are committed to the implementation of effective soil handling, storage, and reinstatement measures, which will be detailed in an Outline Soil Management Plan ('Outline SMP', submitted as part of the DCO application), and would be critical in ensuring the minimisation of the effects and ensuring successful reinstatement of soils and agricultural land grade, where practicable. The Outline SMP will draw upon technical guidance such as the DEFRA Construction Code of Practice for the Sustainable Use of Soils on Construction Sites and will detail the key roles and responsibilities including the provision of technical site supervision where required.
- 3.5.70 National Grid has engaged with Natural England on the broad content of the Outline SMP and will continue to engage as the Outline SMP is developed.

Health and Wellbeing

- 3.5.71 A considerable proportion of the community members' responses, alongside technical stakeholders' feedback (Alvingham Parish Council, Anderby Parish Council, Bilsby and Farlesthorpe Parish Council, Grainthorpe Parish Council, Great and Little Carlton Parish Council, Grimoldby and Manby Parish Council, Halton Holegate with Halton Fenside Parish Council, Legbourne Parish Council, Marshchapel Parish Council, North Cotes Parish Council, North Somercotes Parish Council, Orby Parish Council, Skidbrooke with Saltfleet Haven Parish Council, Sutton St Edmund Parish Council, Weston Parish Council, West Walton Parish Council and Willoughby and District Parish Council) raised concerns about health and wellbeing due to the Project and some noted that the impacts of electric and magnetic fields (EMF) exposure and living near high voltage networks should be considered in the development of the Project. Furthermore, it was noted that these topics are of concern and could heighten anxiety.
- 3.5.72 Norfolk County Council's feedback noted that comprehensive information about EMFs and compliance with International Commission on Non-Ionizing Radiation (ICNIRP) guidelines and requirements of National Policy Statement for Electricity Networks Infrastructure (EN-5) (NPS EN-5) should be provided as part of the Environmental Statement (ES). Furthermore, the Council's feedback expressed that they would like to see a full health impact assessment (HIA) using an appropriate methodology to cover the impacts during both the construction phase and operational phases of the Project, and to set out appropriate mitigation measures if required. It is expected that this would identify costs and benefits to vulnerable communities and those in the surrounding areas, and would consider both direct impacts on health and wider determinants of health. The Council's feedback also noted that concerns about EMFs

could give rise to anxiety and therefore a mental health assessment (MHA) should be undertaken. The Council's feedback stated that they would prefer to see the health elements drawn together into one Health and Wellbeing chapter, within the ES, supplemented by the results from the EMFs report, HIA and MHA, with appropriate mitigation measures detailed where necessary. Furthermore, the County Council as Education Authority considers that any proposed route should not pass directly over a school building or associated playing fields or be located in close proximity of any schools.

- 3.5.73 The UK Health Security Agency's feedback (also submitted on behalf of the Office for Health Improvements and Disparities) noted that all developments will have some effect on the determinants of health, which in turn will influence the health and wellbeing of the general population, vulnerable groups and individual people. The feedback noted that there is a need for a proportionate assessment focused on an application's significant effects, which should be in accordance with Public Health England 'Advice on the content of Environmental Statements accompanying an application under the NSIP Regime'. The UK Health Security Agency welcomes discussions to provide clarification on any points raised.
- 3.5.74 **National Grid's response:** The UK has a carefully thought-out set of policies for protecting us all against EMFs, the main component of which is exposure guidelines. Those exposure guidelines are set by independent scientific bodies and are based on decades-long studies into the effects of EMFs and ill health. After those decades of research, the weight of evidence is against there being any health risks of EMFs below the guideline limits. These policies are incorporated into the decision-making process for Development Consent in NPS EN-5. It is National Grid's policy to ensure that all of its equipment complies fully with those exposure limits. Our approach is to ensure that all our equipment complies with the policies, which are set by Government on the advice of their independent advisors. The proposed infrastructure will be designed to ensure full compliance with these policies and guidelines. This ensures that health concerns relating to EMFs are properly and adequately addressed.
- 3.5.75 We are undertaking an Environmental Impact Assessment (EIA), to ensure that matters relating to the environment are considered when developing the proposals for the Project. An EIA is a legal requirement for this development and is strictly regulated, and a wide range of environmental subjects will be taken into consideration as part of this process. The human health and wellbeing assessment as part of the EIA for the Project will assess the health effects, including the mental health impacts on the community as a result of concerns about EMF, for residents and employees within close proximity to the area. Any effects will be considered in terms of size of the impact (magnitude) and the vulnerability of these users (sensitivity) to impacts in the construction and operational phase. The results of our initial assessments are presented in the **PEI Report** as part of our Stage 2 consultation and will be further refined and presented in an Environmental Statement (ES) which will form part of the eventual Development Consent Order (DCO) application.
- 3.5.76 National Grid recognises people may have concerns about the health effects of living close to an overhead line, and that the uncertainty whilst the proposals are developed may cause some stress and anxiety. We will continue to engage with people potentially affected during the development of the Project, through regular communication including letters, phone calls and meetings. This will enable concerns to be raised and discussed at an early opportunity and provide a regular point of contact to respond to queries and concerns.

- 3.5.77 Recognising that concerns about EMF may adversely impact some people's mental health by heightened anxiety, National Grid provide open and transparent information about EMFs on the website www.emfs.info, including what EMFs are, exposures from electricity infrastructure, research into health effects and the policies and guidelines in place to protect against EMF for members of the public to access. An EMF helpline is also available to answer any questions or concerns about the subject. EMF specialists were also present at all consultation events, to address any concerns. These actions are aimed at providing information on EMFs and the measures in place to protect to help reduce anxiety around the subject.
- 3.5.78 We urge anyone with concerns to get in touch through the Grimsby to Walpole Freephone number, post address or email throughout the development of the Project:
- i. Freepost G TO W (no stamp or further address details are required)
 - ii. Email contact@g-w.nationalgrid.com
 - iii. Telephone 0800 0129 153 (Lines are open Monday to Friday 9.00am – 5.30pm)
- 3.5.79 In addition to health and wellbeing considerations, an Equality Impact Assessment (EqIA) will be undertaken in order to identify any differential or disproportionate impacts on vulnerable people as a result of the Project, in line with the Equality Act 2010. If any impacts are identified, the EqIA will recommend mitigations and actions to be put in place to reduce any impact.

Noise and vibration

- 3.5.80 A considerable proportion of the community members' responses, alongside technical stakeholders' feedback (Alvingham Parish Council, Anderby Parish Council, Legbourne Parish Council, North Cotes Parish Council, Orby Parish Council, Sutton St Edmund Parish Council and Willoughby and District Parish Council) raised concerns about the noise the Project will generate, especially the noise generated by the pylons and overhead lines, including humming and buzzing, and that this should be considered while developing the Project.
- 3.5.81 **National Grid's response:** National Grid will be undertaking a noise and vibration assessment that will form part of the Environmental Impact Assessment (EIA) for the Project. Noise levels and the effect on residential properties as well as other sensitive receptors, such as hospitals and schools are carefully considered during Project development, assessed according to the appropriate UK standards, and mitigated where necessary. The early findings are presented in the **PEI Report**, as part of the Stage 2 consultation before being refined and submitted in an Environmental Statement (ES) which will form part of the eventual Development Consent Order (DCO) application.
- 3.5.82 An initial assessment of noise and vibration effects from the Project is presented in **PEI Report Volume 2 Part B Sections 1 to 7 Chapter 10 Noise and Vibration**. The assessment considers the potential effects from construction noise and vibration, construction traffic noise, and operational noise.
- 3.5.83 The preliminary assessment of construction noise and vibration, and construction traffic noise indicates that significant adverse effects are not expected at any noise sensitive locations across the route. The contractor will be required to employ best practicable means as described in the Preliminary Code of Construction Practice (CoCP) to reduce the effects of construction noise and vibration. This is particularly the case where the route passes close to residential and other sensitive areas.

- 3.5.84 A low noise conductor system is proposed for the overhead lines. As such, operational noise is scoped out of the assessment on the basis that operational noise levels would be low, even directly underneath the line, such that significant adverse effects are not expected. A brief explanation is provided in **PEI Report Volume 2 Part B Sections 2, 4 and 6 Chapter 10 Noise and Vibration** and further information will be provided in the ES.
- 3.5.85 As part of the Development Consent Order (DCO) application, a CoCP and a Construction Traffic Management Plan will be submitted which will outline the good practice and standard control measures to reduce and mitigate potential impacts and/or disruptions that may arise during the construction phase. The DCO will include a requirement to comply with these plans.

Safety

- 3.5.86 A large proportion of the community members' responses, alongside technical stakeholder' feedback (Halton Holegate with Halton Fenside Parish Council and Rigsby with Ailby Parish Council) raised the proximity of pylons and associated infrastructure to residential areas as a safety hazard and shared fears that the infrastructure could pose a risk in the event of structural failure or extreme weather conditions. There were also concerns raised about the potential for pylons to attract lightning strikes, which could endanger nearby properties and residents. Concerns were raised about the potential threat of terrorism, with the siting locations of substations being a potential national security risk or potential explosive hazard and that pylons are visible, vulnerable targets.

National Grid's response: Overall responsibility for security of the energy sector lies with the Department for Energy Security and Net Zero who work closely with Government security agencies including the Centre for the Protection of National Infrastructure to reduce the vulnerability of the most 'critical' infrastructure assets in the sector to terrorism and other national security threats. National Grid is a provider of critical infrastructure across the UK. In this role, National Grid maintains regular dialogue with a range of organisations with responsibility for both local and national crime prevention and security. As such, all sites and infrastructure will be designed and operated to the relevant security standards. Unforeseen events of sufficient severity to cause damage to infrastructure are very rare in the UK but do occur. Overhead lines could be subject to adverse weather conditions such as high wind speeds and lightning strikes, and also, due to disruption from an external factor such as sabotage. In addition, above ground structures such as pylons are designed to National Grid technical standards to be resilient to flooding, wind, storms, extreme temperature and earth movement. Designing the infrastructure to the National Grid standards includes substantial factors of safety which can be increased if studies find that environmental loading will be significant, such that structural failure during operation would be extremely unlikely and new overhead lines would be able to withstand these extreme conditions for several decades over their lifespans. The condition of the steelwork and all fittings are regularly monitored and any material which is found to be degraded will be replaced or repaired to ensure the assets remain in good condition and performance is maintained.

- 3.5.87 The Project's overhead line infrastructure will be designed to avoid the risk of damage through sabotage and arson (including terrorism) deterrence. The materials are resistant to damage and are not at risk of catching fire. During construction, the working area would have security fencing around the site and only authorised personnel would be admitted to the site. Wilful sabotage of overhead lines is also very rare due to the

risk of electrocution that could result from this. The risk of fire at substations can be mitigated by either the use of synthetic esters within the transformers, which are less-flammable than traditional mineral oil, or by installing a Fire Deluge System. In addition, the design of the substation includes fire damage zones which reduce the risk of a transformer fire spreading in the event that fire does occur. Other parts of new substations, including any buildings and structural steelwork, must also be designed to extensive fire resistance and protection standards. Concerns about the substation being an explosive hazard are noted, however based on the rigorous maintenance regime and embedded system protection mechanisms which limit the potential risk and impact of fires, National Grid considers the risk to be very low.

- 3.5.88 To reduce sabotage from the ground as far as practicable, National Grid install anti-climb measures such as barb-wiring on overhead lines. However, the possibility of interference remains as pylons are typically situated in isolated locations where constant surveillance is impractical. In the unlikely event an overhead line was to be damaged, a network wide monitoring system would detect the fault almost immediately and the circuit would be tripped, and the live current stopped. At the point of repairing any damage, overhead lines are comparatively easier and more cost-effective to repair and maintain than alternative transmission technology. The substation locations will be assessed through set security criteria and categorised, and these types of events will be mitigated through the design adopting the relevant National Grid Technical Specifications and any applicable industry standards. Appropriate measures could include palisade or mesh fencing with an electric pulse fence system installed to the internal face of the fence and extending 1m above the top of the fence. Other measures could include double gated entrance design to achieve an 'airlock' arrangement for added security.

Historic Environment

- 3.5.89 A large proportion of the community members' responses, alongside technical stakeholder's feedback (North Somercotes Parish Council) identified the importance of considering archaeological finds and heritage assets in the planning process, suggesting collaborating with local historians, heritage organisations, and indigenous communities as a means of providing valuable insights for preserving heritage assets while advancing infrastructure goals. Some of the feedback queried what assessments had been completed in respect of archaeological finds and heritage.
- 3.5.90 **National Grid's response:** The Project and draft Order Limits have been designed to avoid sensitive receptors as far as practicable. This is in accordance with the Holford Rules applicable to routeing of new overhead lines and the Horlock Rules which apply to design and siting of substations. These approaches are explained in further detail within the Corridor Preliminary Routeing and Siting Study (CPRSS), Design Development Report (DDR) and **PEI Report Volume 2 Part A Chapter 3 Main Alternatives Considered**. Principles include, but are not limited to, seeking to avoid areas of highest amenity, cultural or scientific value, taking advantage of natural screening provided by existing landform and features (e.g. woodland) and keeping visual, noise and other environmental effects to a minimum. For historic environment, such measures include the avoidance of physical impacts to designated heritage assets and where practicable non-designated heritage assets, and where possible reducing potential impacts to the setting of designated heritage assets and non-designated heritage assets.
- 3.5.91 Heritage assets are being considered throughout the Project planning and design process and have been assessed within the **PEI Report** available at Stage 2

consultation. It should be noted that this is an ongoing assessment and is subject to changes due to the ongoing development of the Project. A programme of archaeological survey and evaluation is being developed for the Project in consultation with Historic England and local planning authorities. A full detailed assessment, as well as survey results will be included within the Environmental Statement (ES) submitted with the Development Consent Order (DCO) application.

- 3.5.92 National Grid are engaging with local communities through Stage 1 and Stage 2 consultations. We will continue to engage with Historic England and relevant local planning authorities, on aspects relating to the historic environment and heritage assets, including appropriate mitigation measures and techniques and will take their views into consideration as the Project evolves.

Ecology and Biodiversity

- 3.5.93 **Bird collision** - A considerable proportion of the community members' responses, alongside technical stakeholders' feedback (Anderby Parish Council, Bilsby and Farlethorpe Parish Council, Grimoldby and Manby Parish Council, Halton Hologate with Halton Fenside Parish Council, North Cotes Parish Council, North Somercotes Parish Council, Orby Parish Council and Rigsby with Ailby Parish Council) expressed concerns about the risks for bird collision and disruption of their flight paths/ navigation due to the Project, including electromagnetic radiation (EMR), noting that this should be given careful consideration.
- 3.5.94 Natural England's feedback noted that bird collision risks should inform the proposed route.
- 3.5.95 **National Grid's response:** The Project has been designed to avoid direct impacts upon European Designated Sites (Special Areas of Conservation, Special Protection Areas and Ramsar sites) and Sites of Special Scientific Interest. Through routeing and siting National Grid has sought and will continue to reduce as far as practicable potential impacts on biodiversity including habitats and protected species. The process of routeing takes account of existing biodiversity, the natural environment and, where practicable, seeks to avoid wildlife, and where not feasible, reduce potential impacts on areas of ecological sensitivity including protected species and their associated habitats through mitigation. A suite of habitat and species surveys will inform the ecological baseline, this data is still being collected and will be provided at Environmental Statement (ES) stage per Chartered Institute of Ecology and Environmental Management guidance. The surveys include bats, badgers, great crested newts, otter, fish, aquatic macroinvertebrates, aquatic macrophytes, water vole, reptiles, and breeding and non-breeding birds. The Environmental Impact Assessment (EIA) for the Project will assess the effects on important ecological features using this baseline information. This will include collision risk with the overhead lines and potential impacts from EMR once all bird data has been collected, and where/if required design changes and/or appropriate mitigation measures will be proposed.
- 3.5.96 The initial assessment including the surveys undertaken are reported in **PEI Report Volume 2 Part B Sections 1 to 7 Chapter 4 Ecology and Biodiversity**. The initial assessment identifies that at this stage significant effects cannot be excluded, and further survey work (ongoing) will be used to confirm the status of these species, inform the design of appropriate mitigation and a full assessment of effects that will be reported in the ES.

- 3.5.97 **East Atlantic Flyway** - Several community members' responses, alongside technical stakeholders' feedback (Alvingham Parish Council, Lincolnshire County Council, North Cotes Parish Council and North Somercotes Parish Council) referenced the "East Atlantic Flyway", a migratory bird route over western parts of Europe including Lincolnshire which has been confirmed in the proposed list of UNESCO world heritage sites, by the Government. The feedback suggested that the area sees huge transient bird populations pass through every year as the seasons change. It was noted that these bird migrations land on the Lincolnshire coast as one of their first stopping points for overwintering and if the UNESCO heritage status is granted the pylons would be required to be removed.
- 3.5.98 **National Grid's response:** National Grid note that the 'East Atlantic Flyway: England East Coast Wetlands' site, is at the time of writing this report on the UNESCO "tentative list" and has therefore not been added to the global list (ratified). Nevertheless, the consideration of other statutory designations for birds will align with the need to consider the tentative UNESCO status in this area.
- 3.5.99 The Environmental Impact Assessment (EIA) for the Project will assess the effects on important ecological features using this baseline information referenced above (paragraph 3.5.95). This will include determining the likelihood on any negative impacts on the East Atlantic Flyway once all bird data has been collected, and where/if required design changes and/or appropriate mitigation measures will be proposed. A detailed assessment of potential ornithological impacts will be presented within the report to inform the Habitats Regulations Assessment and the ES once all necessary baseline surveys have been completed. The EIA will also include an assessment of socio-economics, recreation and tourism impacts.
- 3.5.100 **Environmental impacts** - A considerable proportion of the community members' responses, alongside technical stakeholders' feedback (Alvingham Parish Council, Bilsby and Farlethorpe Parish Council, Burgh le Marsh Town Council, Grimoldby and Manby Parish Council, North East Lincolnshire Council, Rigsby with Ailby Parish Council, Skegness Town Council, Skidbrooke with Saltfleet Haven Parish Council, Tetney Parish Council and West Walton Parish Council) expressed concerns about the general environmental effects of an overhead line and associated pylons. Furthermore, a considerable proportion of the community members' responses, alongside technical stakeholders' feedback (Anderby Parish Council, Grimoldby and Manby Parish Council, Halton Hologate with Halton Fenside Parish Council, North Cotes Parish Council, North Somercotes Parish Council, Orby Parish Council, Skidbrooke with Saltfleet Haven Parish Council and Sutton St Edmund Parish Council) expressed concerns about wildlife and habitats, especially bats and barn owls across the whole route of the Project. North Somercotes Parish Council queries alignment with the DEFRA Environmental Improvement Plan (EIP).
- 3.5.101 **National Grid's response:** We are undertaking an EIA, to ensure that matters relating to the environment are considered when developing the proposals for the Project. An EIA is a legal requirement for this development and is strictly regulated, and a wide range of environmental subjects will be taken into consideration as part of this process. The results of our initial assessments are presented in the **PEI Report** as part of our Stage 2 consultation and will be further refined and presented in an ES which will form part of the eventual Development Consent Order (DCO) application.
- 3.5.102 In respect of impacts to wildlife and habitats the Project has been designed to avoid direct impacts upon European Designated Sites (Special Areas of Conservation, Special Protection Areas and Ramsar sites) and Sites of Special Scientific Interest.

Through routeing and siting National Grid has sought and will continue to reduce as far as practicable potential impacts on biodiversity including habitats and protected species. The process of routeing takes account of existing biodiversity, the natural environment and, where practicable, seeks to avoid wildlife, and where not feasible, reduce potential impacts on areas of ecological sensitivity including protected species and their associated habitats through mitigation. A suite of habitat and species surveys will inform the ecological baseline, this data is still being collected and will be provided at ES stage per Chartered Institute of Ecology and Environmental Management guidance. The surveys include bats, badgers, great crested newts, otter, fish, aquatic macroinvertebrates, aquatic macrophytes, water vole, reptiles, and breeding and non-breeding birds. The EIA for the Project will assess the effects on important ecological features using this baseline information. Some species are not protected or notable and therefore will not be assessed. However, the overall impact on ecology is taken into account as part of the EIA process for the Project.

- 3.5.103 The initial assessment including the surveys undertaken are reported in the **PEI Report Volume 2 Part B Sections 1 to 7 Chapter 4 Ecology and Biodiversity**. The initial assessment identifies that at this stage significant effects cannot be excluded, and further survey work (ongoing) will be used to confirm the status of these species, inform the design of appropriate mitigation and a full assessment of effects that will be reported in the ES. National Grid will comply with the Schedule 9 duty (and all other environmental duties), but there is no legal obligation to fulfil the EIP.
- 3.5.104 **Impacts on bees and ability to pollinate** - A considerable proportion of the community members' responses, alongside technical stakeholder's feedback (North Somercotes Parish Council) raised concerns with the impacts that the Project will have on bees and their ability to pollinate due to electric and magnetic fields (EMFs).
- 3.5.105 **National Grid's response:** Bees can be affected if the hive is under (or very close to) a power line and the hive becomes charged. This can be eliminated by screening or earthing the hive. Other than that effect, there is little evidence of EMFs or overhead lines adversely affecting bees or pollination. In the United States of America, the strip of land along power lines, have been shown to be particularly attractive to bees².
- 3.5.106 Additionally National Grid has worked with the British Beekeeping Association to establish the location of hives around our sites, including high voltage substations, which have thrived. This will be carefully considered during development of the Project.

Landscape and Visual

- 3.5.107 **Lincolnshire Wolds National Landscape (AONB)** - A considerable proportion of the community members' responses, alongside technical stakeholders' feedback (Alvingham Parish Council, Anderby Parish Council, Bilsby and Farlethorpe Parish Council, Elkington Parish Council, Fotherby Parish Council, Grainthorpe Parish Council, Great and Little Carlton Parish Council, Grimoldby and Manby Parish Council, Halton Hologate with Halton Fenside Parish Council, Huttoft Parish Council, Legbourne Parish Council, Lincolnshire County Council, Lincolnshire Wolds Countryside Service, Louth Town Council, Marshchapel Parish Council, North Somercotes Parish Council, Orby Parish Council, Rigsby with Ailby Parish Council, Skidbrooke with Saltfleet Haven Parish Council, Tetney Parish Council, Welton le

² Russell, K., Russell, G., Kaplan, K., Mian, S., Kornbluth, S. (2018) Increasing the conservation value of powerline corridors for wild bees through vegetation management: an experimental approach. Biodiversity and Conservation Use of Transmission Line Easements for the Benefit of Native Bees. EPRI, Palo Alto, CA: 2011. 1023106

Marsh Parish Council, Willoughby and District Parish Council and Withern with Stain Parish Council) raised concerns and objections regarding visual impacts on the setting of the National Landscape (AONB), as well as the Fens, with some noting that whilst the route is not proposed within the National Landscape (AONB) it will have a direct impact on the views of the Wolds both to and from, due to its proximity. It was also noted that at this stage it is unclear how the Project would be consistent with the duties to *“further the purpose of conserving and enhancing the natural beauty of the areas of outstanding natural beauty”*.

- 3.5.108 Lincolnshire Wolds Countryside Service’s feedback noted that the current preferred route corridor proposal in terms of avoiding a direct line through the National Landscape (AONB), as per the Holford Rules, was welcomed but expressed concerns that this has been proposed as a completely overhead line route with its associated above ground pylons and connectors. Additionally, the feedback identified that the overhead line route runs in close proximity and parallel to virtually the entire eastern flank of the Lincolnshire Wolds and would significantly impact upon many of the notable vantage points afforded by the higher ground of the Wolds. The feedback also mentioned that the views to the east, across the Lincolnshire Coastal Grazing Marshes are extensive and panoramic, the juxtaposition between the low-lying outer marsh and the Wolds is an important and subtle component of the protected landscapes immediate and wider setting.
- 3.5.109 Natural England’s feedback provided advice limited to upholding the statutory purposes of the relevant Protected Landscapes and their settings from the development. The feedback mentioned that effects are likely due to the proximity of the Project to the National Landscape (AONB) and that the purpose of this nationally designated landscape is to conserve and enhance the area’s natural beauty. Natural England’s feedback noted that the Corridor and Preliminary Routeing and Siting Study (CPRSS) confirmed that if direct impacts to National Landscape (AONB) cannot be avoided and an alternative underground cable corridor to the west of the overhead line Study Area within the National Landscape (AONB) should be considered as a viable alternative. Natural England’s feedback advised that a Landscape and Visual Impact Assessment (LVIA) is needed to explore the potential effects of overhead lines within the immediate setting of the National Landscape (AONB). Several members of the community members’ responses also noted this need. With regard to the LVIA, Natural England’s feedback identified this should include an assessment of potential construction and operational effects, including Sealing End Compounds on the defined special qualities of the National Landscape (AONB). Furthermore, the feedback noted that a robust justification as to why the Western Corridor route cannot avoid National Landscape (AONB) or its setting will be necessary to meet the requirements of national policy.
- 3.5.110 **National Grid response:** The feedback received at the Stage 1 consultation has been taken in account, alongside further assessments and design work, in developing the proposals presented at Stage 2 consultation. The alternatives referred to in the feedback outlined above are addressed below, with further detail available in the Strategic Options Report (SOR), Corridor Preliminary Routeing and Siting Study (CPRSS), Design Development Report (DDR) and **PEI Report Volume 2 Part A Chapter 3 Main Alternatives Considered**.
- 3.5.111 Strategic options considered included onshore options as well as offshore options. Technical, environmental and socio-economics factors were not considered to differentiate between onshore and offshore options. However, the offshore options were substantially more expensive than any of the onshore options and onshore

options were therefore preferred. The assessment of onshore options was based on overhead lines as the preferred technology choice. This is consistent with National Policy Statement (NPS) EN-5, which states in paragraph 2.9.20 that overhead lines should be the strong starting presumption for electricity networks developments in general. National Grid will, however, consider localised undergrounding where justified. Locations where this was considered are discussed further in section 3.5 of this report and section 3.8 of **PEI Report Volume 2 Part A Chapter 3 Main Alternatives Considered** in relation to alternatives that have been considered.

- 3.5.112 National Grid has undertaken a review of parts of the emerging preferred corridor adjacent to the Lincolnshire Wolds National Landscape (AONB) following the original appraisal reported in the CPRSS. The review has considered additional information obtained by National Grid following the publication of the CPRSS to confirm the appropriateness of selecting the preferred (western) corridor compared to the alternative (eastern) corridor. The review has focussed on those Sections commencing just south of North Thoresby and Tetney and ending just north of Burgh le Marsh. The comparative analysis highlights that distinguishing factors in the selection of the preferred option remain finely balanced and largely relate to the increased potential for impacts on the National Landscape (AONB) associated with the western corridor and the increased potential for potential impacts on the coastal ecological designations and flood risk issues associated with the eastern corridor. The review concludes that consideration of the new information does not significantly alter the previous conclusions reported in the CPRSS and the preference for the western corridor. The findings of the review are not considered significant enough to require a change of route corridor.
- 3.5.113 **PEI Report Volume 2 Part C Route-wide Chapter 2 Landscape** reports early findings of the assessment of impacts on National Landscape (AONB) during construction and operation of the Project. This considers the purposes of the designation and its special qualities and includes views from and to the National Landscape (AONB). The **PEI Report** also includes information on the setting of the National Landscape (AONB) which can be found in **PEI Report Volume 3 Part C Appendix 2A Lincolnshire Wolds National Landscape (AONB) Setting Study**. A full assessment of the impacts on National Landscape (AONB) will be provided as part of the LVIA, which will be reported in the Environmental Statement (ES) that would be submitted with the Development Consent Order (DCO) application for the Project. This will include a write-up of an assessment of the effects on the landscape character of the area and visual effects from communities. Where likely significant effects are anticipated, the LVIA will consider and identify areas where it may be necessary and appropriate to put forward potential mitigation as part of an iterative design and assessment process.
- 3.5.114 A new overhead line will be visible from parts the National Landscape (AONB) due to the elevated landform and long-distance views, across the Lincolnshire Coastal Grazing Marsh towards the coast, and some significant effects on views are likely. However, from many locations, the new lattice overhead line would be visible against a backdrop of landform which helps to reduce its perceptibility or views would be filtered by existing vegetation. A section of low height pylons has been adopted into the design as embedded mitigation between Barnoldby le Beck and Ashby cum Fenby (GL18-GL36) to further reduce the effects of the new overhead line in views from the National Landscape (AONB).
- 3.5.115 The full assessment of impacts will be presented in the ES, including an assessment of any conflict with the natural beauty, special qualities and key characteristics of the

National Landscape (AONB). Further analysis will also be provided alongside those assessments as part of the wider DCO application, to address the duty applicable under Section 85(A1). To the extent that the ES identifies residual adverse impacts on the landscape, this will include an analysis of those impacts against the benefits of the Project, as referred to at paragraph 5.10.35 of EN-1.

Landscape and visual impacts

- 3.5.116 A considerable proportion of the community members' responses, alongside technical stakeholders' feedback (Bilsby and Farlesthorne Parish Council, Elkington Parish Council, Grimoldby and Manby Parish Council, Halton Holegate with Halton Fenside Parish Council, Marshchapel Parish Council, North East Lincolnshire Council, Skegness Town Council, Skidbrooke with Saltfleet Haven Parish Council, Stickford Parish Council, Sutton St Edmund Parish Council, Tetney Parish Council and Willoughby and District Parish Council) noted that the landscape in the area where the Project is proposed boasts an unindustrialised landscape and the infrastructure will be out of character, damaging visually and disruptive to tranquillity.
- 3.5.117 A considerable proportion of the community members' responses, alongside technical stakeholders' feedback (Alvingham Parish Council, Anderby Parish Council, Burgh le Marsh Town Council, Marshchapel Parish Council, North Somercotes Parish Council and Orby Parish Council) noted concerns about the proposed infrastructure being visible for miles and damaging the landscape due to the height of the pylons.
- 3.5.118 Lincolnshire County Council's feedback noted that no mitigation would manage the impact of overhead lines and associated infrastructure on the natural and historic landscape of the east of the County. Furthermore, the Council's feedback stated that there are numerous planning decisions going back many years that clearly indicate that tall vertical structures in flat open landscape can never be justified due to the scale of impact on the landscape over a very wide area. The Council's feedback also noted that three substations are proposed in Lincolnshire and questioned if any mitigation and screening for the substations can be effective in such an unspoilt landscape as currently exists in the areas of search.
- 3.5.119 Halton Holegate with Halton Fenside Parish Council's feedback shared the views expressed by Lincolnshire County Council regarding mitigation. Furthermore, the Parish Council noted that the Project will potentially have a significant impact on large swathes of the landscape in the area when viewed from both distance, and locally in relation to the Fens.
- 3.5.120 A large proportion of the community members' responses raised concerns about light pollution in a 'dark sky area'.
- 3.5.121 **National Grid's response:** National Grid develops its projects in line with national policy and our statutory duties to develop an efficient, economic and co-ordinated network, and have regard to preserving amenity and mitigating impacts. We recognise that overhead lines and associated infrastructure can give rise to adverse landscape and visual effects, and we carefully consider these along with other environmental and socio-economics considerations, technical requirements and cost when developing our Projects.
- 3.5.122 National Grid has carefully considered the potential impacts of the Project at an early stage, and the findings and justifications for the selection of the emerging preferred corridor and siting zones, can be found in the Corridor and Preliminary Routeing and Siting Study (CPRSS), which is available on our Project website. Through the routeing

and siting exercise we have sought to reduce the impact on landscape character and visual amenity. We will continue to consider both landscape character and amenity value as we develop our proposals and seek to reduce effects.

- 3.5.123 It is acknowledged that likely significant effects are predicted for landscape character and communities along the length of the Project from the introduction of pylons and substations in landscapes and views where overhead line infrastructure is not currently present. Preliminary assessment for all landscape character areas and communities along the route can be found in **PEI Report Volume 2 Part B Sections 1 to 7 Chapter 2 Landscape** and **Chapter 3 Visual**.
- 3.5.124 It is also acknowledged that mitigation planting would not fully address the effects of the Project on landscape and visual receptors. However, planting is being included in selected locations across the Project to filter views and larger areas of woodland planting are proposed around substation locations. Proposed areas for mitigation are presented in the Consultation plans.
- 3.5.125 It is not correct that that tall vertical structures in flat open landscapes can never be justified. Paragraph 2.9.20 of EN-5 confirms that "*overhead lines should be the strong starting presumption for electricity networks developments*", while paragraph 5.10.35 of EN-1 states that "*The scale of energy projects means that they will often be visible across a very wide area. The Secretary of State should judge whether any adverse impact on the landscape would be so damaging that it is not offset by the benefits (including need) of the Project.*" As such, the presence of structures and any adverse landscape impacts associated with them alone does not constitute a reason for refusal. Rather, EN-1 requires that a balancing exercise is carried out between those impacts and the benefits of the relevant project.
- 3.5.126 As noted above, preliminary assessments in respect of the Project can be found in **PEI Report Volume 2 Part B Sections 1 to 7 Chapter 2 Landscape** and **Chapter 3 Visual**, with further assessment to be presented in the Environmental Statement (ES). To the extent that the ES identifies residual adverse impacts on the landscape, an analysis of those impacts against the benefits of the Project will be provided as part of the Development Consent Order (DCO) application. The wider benefits of the Project will be presented in full as part of the DCO application but the key elements of the needs case for the Project are described in section 4 of the updated Strategic Options Report (SOR) and section 1.2 of **PEI Report Volume 2 Part A Chapter 1 Introduction** as the accommodating of increased power flows and the connection of generation projects. Without the reinforcement provided in part by the Project, the transmission system between the North and South of England would have insufficient capacity to accommodate contracted and predicted generation connections in the area. This includes the connection of new renewable energy generators, to facilitate the achievement of the Government's Net Zero target of connecting up to 50 gigawatts (GW) of offshore wind by 2030 and the transition away from fossil fuels required to achieve the Government's legally binding "Net Zero" commitment of a 100 per cent reduction in greenhouse gas emissions by 2050. The enabling of these commitments and the meeting of future energy transmission demand is a clear public benefit of the Project.
- 3.5.127 There is not anticipated to be any significant effects on visual receptors due to lighting from the Project. There is no operational lighting associated with the proposed overhead line. The assumption at this stage is that lighting for substations would be designed to be environmentally sensitive and, would be event activated and therefore

would not be continuous. Further information regarding lighting design will be provided as part of the ES.

- 3.5.128 National Grid will be producing a Landscape and Visual Impact Assessment (LVIA) that will, in addition to other topic specific assessments, form part of the Environmental Impact Assessment (EIA) for the Project. This will include an assessment on both landscape and visual amenity. The assessment will consider the impact of the Project on the landscape character of the area, as well as views from communities along the proposed route. Where significant effects are anticipated, the LVIA will consider and identify areas for potential mitigation as part of an iterative design and assessment process. This could include proposing trees and hedgerows to reduce the visual impacts. The results of our initial assessments are presented in the **PEI Report** as part of our Stage 2 consultation and will be further refined and presented in an ES which will form part of the eventual Development Consent Order (DCO) application.

Flight Paths and Communications Interference

- 3.5.129 A considerable proportion of the community members' responses, alongside technical stakeholders' feedback (Lincolnshire Police and Crime Commissioner and Rigsby with Ailby Parish Council) noted potential impacts on flight paths, including for air ambulances, as well as private planes and airports across the route.
- 3.5.130 Lincolnshire Police and Crime Commissioner's feedback noted that the Project will impact on the mission critical communications network, airwave by electromagnetic interference, with no mitigation being able to guarantee continued function of the communications with an above ground solution. The feedback stated that this could limit the response provided by emergency services.
- 3.5.131 Several community members' responses, alongside technical stakeholder's feedback (North Cotes Parish Council and West Walton Parish Council) raised concerns about interference from the Project with mobile phone signals, WiFi and satellite guidance systems for farm vehicles or hauliers.
- 3.5.132 **National Grid's response:** National Grid is aware of several airfields in the region that are within varying proximities to the proposed Project. Where possible, we have been engaging with airfield operators to better understand their activities, aircraft types and annual movements to inform our design development. National Grid has considered potential impacts to aviation receptors as outlined in Chapter 6 of the Design Development Report (DDR) with support from specialist aviation consultants. With regard to users of airfields, aviation will be considered in the Environmental Statement (ES). **PEI Report Volume 2 Part B Sections 1 to 7 Chapter 11 Socio-economics, Recreation and Tourism** sets out the relevant baseline and explain how aviation will be assessed with a specialist standalone report in support of the Environmental Statement (ES).
- 3.5.133 With regard to air ambulances, we do not expect any impact on any helicopter emergency services as a result of the Project. However, we will keep this under review after the Stage 2 consultation and conduct a more detailed review for the Project area where appropriate.
- 3.5.134 Radio frequency emissions can interfere with electrical equipment, telecommunication, WiFi and broadcast equipment. These emissions are limited from overhead lines by design set out in National Grid's Technical Specifications, which include the requirements of British standards minimising the generation of interference. All the equipment used will meet the requirements in these standards, which are in place to

prevent interference issues. These are the same good engineering practices that are applied to the existing transmission system assets, including existing 400 kV overhead lines, which cause no interference issues for electrical equipment, telecommunication, WiFi and broadcast equipment, under normal operating conditions. Therefore, we do not expect any interference issues on communications equipment as a result of the Project.

Tourism

- 3.5.135 A considerable proportion of the community members' responses, alongside technical stakeholders' feedback (Anderby Parish Council, Bilsby and Farlethorpe Parish Council, Burgh le Marsh Town Council, Great and Little Carlton Parish Council, Grimoldby and Manby Parish Council, Halton Holegate with Halton Fenside Parish Council, North Somercotes Parish Council, Orby Parish Council, Rigsby with Ailby Parish Council, Skegness Town Council, Tetney Parish Council and Welton le Marsh Parish Council) raised concerns about potential negative impacts on tourism in the area, with the Project discouraging visitors that seek tranquillity and natural beauty and therefore reducing visitor numbers. Furthermore, some of the responses noted that this will ultimately have an impact on employment and the economy in the area with potential higher magnitude impacts due to levels of social deprivation and also that National Grid is removing pylons in other areas where tourism is important to the economy.
- 3.5.136 **National Grid' response:** Through the routeing and siting exercise, National Grid has sought and will continue to reduce as far as practicable potential direct impacts to local businesses and tourism. To reduce potential impacts, we are identifying local businesses and enterprises, including those that are likely to generate and/or support the tourism industry (including businesses that provide tourism bedspaces), in addition to local and strategic tourism attractions within the Project Study Area. These are set out at a route wide level within **PEI Report Volume 2 Part C Route-wide Chapter 7 Socio-economics, Recreation and Tourism**; with localised detail contained within the Section specific reports (**PEI Report Volume 2 Part B Sections 1 to 7 Chapter 11 Socio-economics, Recreation and Tourism**).
- 3.5.137 This identification and assessment exercise will continue during the design process. Where impacts on tourism (tourism attractions and visitors) are identified, these will be presented within a socio-economics, recreation and tourism assessment, which is undertaken as part of the Environmental Impact Assessment (EIA). Should any significant impacts be identified, that cannot be avoided, mitigation measures will be included to minimise these impacts where possible. In addition to this, a range of measures will be considered throughout the construction phase of the Project to minimise disruption to local businesses (including those within the tourism sector), local and strategic visitor attractions, and their users. These measures could include traffic management, signage and routeing measures, and will be identified within the Environmental Statement (ES), the Code of Construction Practice and the Construction Traffic Management Plan that will be submitted with the Development Consent Order (DCO) application.
- 3.5.138 National Grid assumes that where feedback mentioned that National Grid is removing pylons in other areas is a reference to its Visual Impact Provision ("VIP") projects, which are separate from the Project. The VIP projects utilise funding provision made available by Ofgem for the period 2021 to 2026. This initiative was specifically established to reduce the landscape and visual impacts of existing electricity

transmission lines within designated National Parks and National Landscapes in England and Wales.

- 3.5.139 The VIP site selection process involved National Grid commissioning landscape experts to assess all 571 km of its overhead lines in National Parks and National Landscapes. This assessment was then reviewed by an independent Stakeholder Advisory Group who recommended priority locations based on the following five Guiding Principles:
- i. greatest landscape enhancement benefits;
 - ii. greatest opportunities to conserve and enhance natural beauty, wildlife and cultural heritage whilst avoiding unacceptable impacts on the natural and historic environment which cannot be mitigated;
 - iii. greatest opportunities to encourage public understanding and enjoyment of the protected landscapes, including positive socio-economics impacts;
 - iv. technically feasible in the context of the wider transmission system; and
 - v. economic and efficient.
- 3.5.140 This process culminated in 5 sites being taken forward by National Grid as the chosen VIP projects. While landscape and visual improvements may indirectly benefit tourism, tourism impact is not a selection criterion in the VIP project selection process. The criteria and process described above relate solely to VIP projects and are unrelated to the Project. For more information about the VIP projects, please visit the National Grid website via the following link: [Visual Impact Provision | National Grid](#).

Cumulative impacts

- 3.5.141 A considerable proportion of the community members' responses, alongside technical stakeholders' feedback (Legbourne Parish Council and Lincolnshire County Council) raised concerns about the cumulative impacts of the Project, with infrastructure, including overhead lines located across much of this area and other projects.
- 3.5.142 The Environment Agency's feedback identified that there are some major projects happening within the proposed corridor and surrounding area including a new reservoir in South East Lincolnshire and works to implement the Lower Witham embankment, which should also be taken into consideration. The Environment Agency's feedback also noted that this would be a great opportunity to work together to provide maximum environmental enhancements and deliver great outcomes.
- 3.5.143 Lincolnshire County Council's feedback noted that the purpose of the proposed substations is to provide connection points, for other energy projects, which in many cases will require their own substations, and therefore the cumulative impacts should be taken into account. The Council's feedback noted that at the Stage 1 consultation the committed connection points were only listed, and more information is required on the additional onshore infrastructure needed.
- 3.5.144 Natural England's feedback noted the possibility for cumulative effects with other projects and referenced the Planning Inspectorate's Guidance Note 17: Cumulative effects assessment relevant to nationally significant infrastructure projects.
- 3.5.145 Norfolk County Council's feedback noted the requirement for consideration with other National Grid projects including EGL 3 and 4 and the Norwich to Tilbury projects.

- 3.5.146 **National Grid's response:** National Grid is, as part of the Environmental Impact Assessment (EIA) process for the Project, undertaking a cumulative effects assessment in accordance with the Planning Inspectorate's advice page on Cumulative Effects Assessment. This will include consideration of the projects specified by Norfolk County Council's feedback. This, in summary, is a four-step process and involves the production of a long-list (Stage 1) generated from existing and/or approved development(s) taking into consideration defined Zones of Influence for each environmental topic to be assessed through the EIA process. This long-list will be refined into a short-list based upon a range of factors including the potential for interactions between the projects to occur, the level of environmental information/assessment already undertaken by that development that is within the public domain, and the certainty (i.e. planning status) of that development occurring (Stages 2 to 3). Upon completion of the short-list a cumulative impact assessment (Stage 4) will be undertaken for the Project and those short-listed developments. Identified effects and any subsequent mitigation measures (if necessary) will be presented within the Environmental Statement (ES) which will form part of the eventual Development Consent Order (DCO) application.
- 3.5.147 In addition, we will report on any indirect amenity effects for affected communities as part of the socio-economics, recreation and tourism assessment, which might occur through in-combination effects across the Project (such as noise and vibration, visual, and transport and movement effects). The results of our initial assessments are presented in **PEI Report Volume 2 Part C Route-wide Chapter 10 Cumulative Effects** and **PEI Report Volume 2 Part C Route-wide Chapter 7 Socio-economics, Recreation and Tourism** during our Stage 2 consultation before being further refined and presented in an ES which will form part of the eventual DCO application.
- 3.5.148 Throughout the design development process National Grid will be undertaking regular and continuous monitoring of live planning applications. We will also engage with stakeholders including local planning authorities to understand the other relevant proposed developments in the Project area (which have adequate information in the public domain) that should be included in the long/short-list for assessment, such as solar farms, housing developments and major roads. We will work closely with other developers where there may be a cumulative impact to ensure that we understand their proposals so that these can be considered in our own assessment. As part of the BNG strategy for the Project we will work closely with other National Grid projects and engage with local stakeholders to identify opportunities to contribute to nature recovery at a larger scale, alongside other development projects in the local area, to achieve the Project's BNG commitments while maximising wider environmental benefits.
- 3.5.149 The Project will directly interact with a number of other National Grid projects, including Eastern Green Link (EGL) 3 and EGL 4, which are two new primarily offshore electricity links with associated onshore infrastructure between Scotland and England. The new Walpole B substation is a common connection point for these projects. Therefore, the new Walpole B substation forms part of the design for each of them and consent for it will be sought in both the EGL 3 and EGL 4 DCO and the Grimsby to Walpole DCO.
- 3.5.150 Other National Grid projects that interact with Grimsby to Walpole include EGL 5, a new primarily offshore electricity link (with associated onshore infrastructure) between Scotland and England, and Weston Marsh to East Leicestershire, which is a new onshore network reinforcement. National Grid will seek to ensure collaboration across developments to minimise the potential for significant cumulative environmental effects where practicable.

3.5.151 There is no direct interaction between the Project and the Norwich to Tilbury project.

Communities and quality of life

3.5.152 A considerable proportion of the community members' responses, alongside technical stakeholders' feedback (Alvingham Parish Council, Bilsby and Farlesthorne Parish Council, Fotherby Parish Council, Grimoldby and Manby Parish Council, Lincolnshire County Council, North Cotes Parish Council and Rigsby with Ailby Parish Council) shared concerns about impacts of the Project on communities and the quality of life.

3.5.153 North Somercotes Parish Council's feedback referred to National Grid's Visual Impact Provision Guiding Principles, which states that there is a case for the removal of pylons in areas of social deprivation. The Parish Council's feedback noted that much of the proposed area for the pylon route is in areas of high deprivation raising concerns that there could be impacts on employment if the visitor economy is negatively affected, with a higher magnitude effect due to the present levels of social deprivation.

3.5.154 **National Grid's response:** As part of the design process, National Grid seek to avoid impacts on residents where possible, through careful routeing. As part of this process, we take into account the most appropriate engineering solution alongside environmental, cost and socio-economics factors. Our priorities, from a socioeconomic perspective, is to where possible avoid siting of the Project in proximity to towns, villages and businesses, where there are likely to be people who live and work in the area. We are undertaking an Environmental Impact Assessment (EIA), to ensure that matters relating to the environment and socio-economics are considered in developing the proposals for the Project. An EIA is a legal requirement for this development and is strictly regulated, and a wide range of environmental subjects will be taken into consideration as part of this process. Should any significant impacts be identified, that cannot be avoided, National Grid will seek to minimise these impacts where possible, through the implementation of mitigation strategies. This assessment will consider any socio-economics effects associated with routes proximity to properties and residents. This will be considered in terms of size of the impact (magnitude) and the vulnerability of residents (sensitivity) to impacts in the construction and operational phase. The results of the initial assessments are set out in the **PEI Report** as part of our Stage 2 consultation, before being refined and submitted in an Environmental Statement (ES) which will form part of the eventual Development Consent Order (DCO) application.

3.5.155 North Somercotes Parish Council's feedback refers to National Grid's Visual Impact Provision ("VIP") projects, which are separate from the Project. The VIP projects utilise funding provision made available by Ofgem for the period 2021 to 2026. This initiative was specifically established to reduce the landscape and visual impacts of existing electricity transmission lines within designated National Parks and National Landscapes in England and Wales.

3.5.156 The VIP site selection process involved National Grid commissioning landscape experts to assess all 571 km of its overhead lines in National Parks and National Landscapes. This assessment was then reviewed by an independent Stakeholder Advisory Group who recommended priority locations based on the following five Guiding Principles:

- i. greatest landscape enhancement benefits;
- ii. greatest opportunities to conserve and enhance natural beauty, wildlife and cultural heritage whilst avoiding unacceptable impacts on the natural and historic environment which cannot be mitigated;

- iii. greatest opportunities to encourage public understanding and enjoyment of the protected landscapes, including positive socio-economics impacts;
- iv. technically feasible in the context of the wider transmission system; and
- v. economic and efficient.

3.5.157 This process culminated in 5 sites being taken forward by National Grid as the chosen VIP projects. While the third Guiding Principle does reference "positive socio-economics impacts," this is specifically in the context of encouraging public understanding and enjoyment of designated protected landscapes. The VIP Guiding Principles do not include any criterion related to areas of social deprivation. Furthermore, the criteria and process described above relate solely to VIP projects and are unrelated to the Project. For more information about the VIP projects, please visit the National Grid website via the following link: [Visual Impact Provision | National Grid](#).

Grimsby West Substation – Question 3b and other feedback relevant to this Section of the route

3.5.158 Question 3b of the feedback form, which asked:

‘Do you have a preference for the location of the Grimsby West substation within the siting area?’

3.5.159 The feedback about the new Grimsby West substation covered themes including construction; consultation; historic environment; planning and design; ecology, biodiversity and environment; agricultural land; health and wellbeing; landscape and visual; flood risk and drainage; and groundwater.

3.5.160 The following sections provide a summary of the comments made in relation to these themes for the new Grimsby West substation and National Grid’s response to those. When narrating feedback, we refer to the Sections of the route as they were described at the time of the Stage 1 consultation. National Grid’s responses refer to the revised Sections of the route as presented as part of the Stage 2 consultation. For further detail on the changes in sectioning please see Approach to route Sections.

Construction

3.5.161 A few community members’ responses identified concerns regarding increased traffic during construction on the local road network, which is considered insufficient to accommodate the additional traffic associated with the Project. Some of the responses raised concerns that the road network around Grimsby already has safety issues and increased traffic during construction will potentially cause more accidents.

3.5.162 Some community members’ responses identified concerns about the potential cumulative impacts arising during construction, particularly regarding planned developments, as well as risks of localised changes to air quality, noise and vibration on settlements adjacent to the siting area, suggesting the need for suitable mitigation measures to avoid adverse impacts.

3.5.163 Natural England’s feedback noted that the site of the new Grimsby West Substation is within the vicinity of the Humber Estuary SPA, SAC and Ramsar, notified on a national level as the Humber Estuary SSSI, and the potential for temporary noise and visual disturbance to the designated site should be addressed within the Habitats Regulations Assessment (HRA). The HRA should detail noise levels during the construction phase of the development, and the results of the wintering and passage surveys should be

used to inform the likely numbers of birds to be present on site. It was also advised that timing of the construction work should be designed to avoid impacts on wintering and passage SPA birds. Also impacts to water quality which may arise due to dust and other pollution incidents during construction should also be considered. Suitable mitigation for these impacts could be outlined within a Construction Environmental Management Plan. For construction traffic movements within 200m of the designated site the potential air quality impacts due to road traffic during the construction phase need to be considered.

- 3.5.164 **National Grid's response:** We recognise that construction of the Project would result in some temporary impacts to local areas. The Corridor Preliminary Routeing and Siting Study (CPRSS), published at the Stage 1 consultation, explains that our approach to the appraisal of design options considered a range of topics with various technical considerations including construction.
- 3.5.165 The **PEI Report** appraises the suitability of local roads to accommodate the forecast volume of construction traffic movements. This includes consideration of road geometry, congestion, accidents and sensitive receptors that include local amenities, schools and non-motorised user activity. Sensitive routes will be avoided where practicable, and construction haul roads used where appropriate along with maximising the use of suitable major and strategic roads. **PEI Report Volume 2 Part B Section 1 Chapter 9 Traffic and Movement** and **PEI Report Volume 3 Part B Sections 1 to 7 Appendix 9B Preliminary Construction information** and **Appendix 9C Future Baseline and Impact Analysis** identify Primary Access Routes to construction access points (bellmouths), compounds and substations, along with an estimate of average daily flows based on the existing information available at the time of writing. Our initial appraisal included in **PEI Report Volume 2 Part B Section 1 Figure 9.5 Preliminary Impact Analysis** shows impacts on the roads that result in potential significant effects. These routes are identified as part of the Primary Access Route network to access the substation and will require discussion with the local highway authority and possibly further assessment to determine the effect, if any, on users of the highway. Construction traffic routeing will be discussed with the appropriate highway authorities during the full Transport Assessment, which will be reported in the Environmental Statement (ES).
- 3.5.166 Construction noise and vibration and operational noise have been considered, and early findings are reported in **PEI Report Volume 2 Part B Section 1 Chapter 10 Noise and Vibration**. Construction dust and traffic impacts on air quality have been considered and early findings are reported in **PEI Report Volume 2 Part B Section 1 Chapter 12 Air Quality**.
- 3.5.167 A Code of Construction Practice (CoCP) and a Construction Traffic Management Plan will be prepared and submitted with the Development Consent Order (DCO) application. These documents will include commitments to reduce construction impacts together with a framework for detailed management plans to be prepared at the detailed design stage to reduce and mitigate potential impacts and / or disruptions that may arise during the construction phase. A Preliminary CoCP is available as part of the Stage 2 consultation.
- 3.5.168 The potential for likely significant effects upon the designated sites within the Zone of Influence of the Project will be assessed within the ES. The report to inform HRA will consider both the construction and operational phases of the Project, will use the results of the baseline ecology surveys, and will consider potential pathways of effect including loss of functionally linked habitat, noise and visual disturbance of qualifying

bird species, changes in water quality and changes in air quality between the Project and the designated sites during construction and operation. We will be engaging as necessary with Natural England during preparation of the HRA.

Consultation

- 3.5.169 A few community members' responses identified that insufficient information was provided to respond to this question, with specific reference to the need for more information on substations and their purpose. Furthermore, some community members' responses noted that the graduated swathe in the siting area implied that a decision had already been made. Some community members' responses suggested that further dialogue and continuous engagement should be undertaken with those developing the Grimsby West Sustainable Urban Extension.
- 3.5.170 **National Grid Response:** For National Grid's responses on consultation materials and feedback please refer to Our consultation - Question 6f and other relevant feedback, under Consultation materials and Consultation feedback.
- 3.5.171 The new Grimsby West siting areas have been developed through definition of a Study Area (Step 1), mapping and weighting of features (Step 2 and Step 3), and an iterative identification, review and refinement process (Steps 4, 5 and 6), followed by Options Appraisal (Step 7). Following the selection of the emerging preferred siting zones and siting areas, a preliminary exercise was undertaken, in accordance with the Horlock Rules, to identify where it might be more appropriate to locate the required infrastructure. The outcome of the preliminary exercise was a 'graduated swathe'. The graduated swathe presented at Stage 1 consultation was both preliminary and indicative, and it was developed for the purposes of consultation and engagement. For the new Walpole substation, it was identified that the area most likely for infrastructure to be located was within and/or adjacent to the National Grid landholding to reduce impacts upon the surrounding environment and in seeking to avoid larger areas at high and medium risk of surface water flooding to the north and south, which was reflected within the 'graduated swathe'. Information on substations, including their purpose on the energy network, how they work, the different types in operation and the substations proposed as part of this Project are discussed in Chapter 2 of the Corridor and Preliminary Routeing and Siting Study (CPRSS) that was published as part of the Stage 1 consultation.
- 3.5.172 National Grid is aware of proposals to bring forward the Grimsby West Sustainable Urban Extension project and we have been engaging with the developer to understand potential interactions and how to mitigate potential impacts, as far as practicable.

Historic Environment

- 3.5.173 A few community members' responses identified the importance of considering and avoiding impacts on local heritage assets and features in this Section of the route including the Church of St Nicolas grade I listed building, and two moated sites at Healing Hall scheduled monument, as well as potential archaeological findings.
- 3.5.174 **National Grid's response:** The Project and draft Order Limits have been designed to avoid sensitive receptors as far as practicable. This is in accordance with the Holford Rules applicable to routing of new overhead lines and the Horlock Rules which apply to design and siting of substations. These approaches are explained in further detail within the Corridor and Preliminary Routeing and Siting Study (CPRSS), Design Development Report (DDR) and **PEI Report Volume 2 Part A Chapter 3 Main**

Alternatives Considered. Principles include, but are not limited to, seeking to avoid areas of highest amenity, cultural or scientific value, taking advantage of natural screening provided by existing landform and features (e.g. woodland) and keeping visual, noise and other environmental effects to a minimum. For historic environment, such measures include the avoidance of physical impacts to designated heritage assets and where practicable non-designated heritage assets, and where possible reducing potential impacts to the setting of designated heritage assets and non-designated heritage assets.

- 3.5.175 National Grid has carried out a preliminary assessment of potential likely effects on the historic environment arising from the proposed new Grimsby West substation, which is reported in **PEI Report Volume 2 Part B Section 1 Chapter 5 Historic Environment**. In summary:
- i. Temporary minor changes to the setting of the two moated sites at Healing Hall scheduled monument during construction of the Project may give rise to a moderate adverse effect which would be significant. The long-term presence of the new Grimsby West substation within the landscape will be partially screened by both existing mature vegetation and proposed substation screening vegetation, which would result in minor adverse effect which would not be significant.
 - ii. The Great Coates Conservation Area, within which a number of grade II listed assets and the grade I listed Church of St Nicolas are located, may experience little alteration or change to its overall character and heritage value. Temporary impacts during construction have been assessed as having a minor adverse effect which would not be significant. The permanent presence of the proposed new Grimsby West substation in the wider landscape and setting of the Great Coates Conservation Area would have a minor adverse effect, which would not be significant.
- 3.5.176 We will undertake further archaeological evaluation to understand the full extent and significance of non-designated buried archaeological remains that will inform suitable archaeological mitigation measures to be presented in the Environmental Statement (ES), which will be submitted with Development Consent Order (DCO) application.
- 3.5.177 National Grid will continue to engage with Historic England and relevant local planning authorities, on aspects relating to the historic environment and heritage assets, including appropriate mitigation measures and techniques and will take their views into account as the Project evolves.

Planning and Design

- 3.5.178 A large proportion of the community members' responses made design suggestions in relation to the new Grimsby West substation, which are summarised as follows:
- i. Suggestion that the substation should be sited where it has suitable connectivity to an offshore/ undergrounded route or in areas that have appropriate road systems.

National Grid's response: The Corridor and Preliminary Routeing and Siting Study (CPRSS) documents the potential corridor and substation siting areas considered, the routeing and siting considerations, and outlines our emerging preferred siting locations. Further detail regarding the options identification and selection process can be found in Chapter 4 of the CPRSS (starting with page 77), which also includes information on

identifying and defining siting zones and siting areas (page 88). Furthermore, it discusses the key drivers for the location of a new Grimsby West substation:

- Seek to minimise the length of connections between the new substation and the existing 400 kV overhead line between Grimsby and Keadby and South Humber Bank, for reasons of operational efficiency and to minimise environmental impacts (by reducing the geographical extent of effects) and costs.
- Seek to minimise the length and technical complexity of connections between the new substation and the existing NPG 132 kV substation, for reasons of operational efficiency and to minimise environmental impacts (by reducing the geographical extent of effects) and costs.
- Seek to utilise land owned by National Grid, to minimise the extent of development which would be required on third-party land, and therefore socio-economics impacts and costs.

The proposed siting areas were identified based on these drivers. Suitable connectivity to an offshore/ undergrounded route or appropriate road systems were not considered through the work undertaken because the preferred option for the transmission line was overhead line, so the substations were developed to accommodate this. For further information regarding offshore and underground alternatives, please refer to Strategic options – Question 1a and other relevant feedback , under Alternative options.

- ii. Suggestion that the existing substation should be expanded, rather than creating a new one.

National Grid's response: The Strategic Options Report (SOR) identifies additional transmission capacity requirements across the North of England to Midlands boundary and the Midlands to South of England boundary to facilitate an increase in required power flows across these areas. The need to provide significant additional boundary capability, coupled with the requirement to provide connection infrastructure for multiple generation customers as well as additional connections to the distribution (132 kV and below) network, has resulted in options being assessed to meet all these requirements with the most efficient network improvements. The SOR Addendum concluded that establishment of a new electricity transmission route between a new Grimsby West substation, new Lincolnshire Connection substation(s), new Weston Marsh substation and new Walpole substation (similar to ECO 6 within the SOR) represented the most appropriate solution.

The new Grimsby West substation as part of this proposed option must therefore have sufficient capacity to accommodate the existing 400 kV overhead line to Keadby and South Humber Bank, the proposed new 400 kV overhead line to LCS A, multiple contracted generation customers, and multiple supergrid transformers to connect into the distribution network via the adjacent Northern Powergrid 132 kV substation. The existing Grimsby West substation is a small substation with very limited capacity due to the original design only accommodating for a single overhead line connection and two supergrid transformers. Extending the existing substation would be technically complex and would still require a substantial increase in the required land take of the substation. Overall, it was not considered that expanding the existing substation was a technically feasible option, and the proposal is for a new substation to be constructed in close proximity.

- iii. Suggestion to relocate the new Grimsby West substation to Spurn Point.

National Grid's response: Siting the new Grimsby West substation at this location would not achieve the needs case for the Project because it would not allow for connection into the existing network north of the B8 boundary and therefore not deliver the network reinforcement, identified as required by National Energy System Operator (NESO). This location would also pose significant environmental challenges, as it is located within and adjacent to national designations of environmental significance, including Ramsar sites, Special Areas of Conservation, Special Protected Areas and Marine Conservation Zones.

- iv. Suggestion to site the new Grimsby West substation along the A18 to reduce impacts to villages and towns in these Sections.

National Grid's response: Siting the new Grimsby West substation further north or west introduces the need for additional infrastructure and introduces technical complexity regarding two existing wind turbines located west of Pyewipe Farm and presence of existing underground infrastructure, including the Viking CCS pipeline and the Hornsea 1 and 2 offshore wind export cables. Additionally, this location is likely to site infrastructure closer the boundary of the National Landscape (AONB). Significant impact would also be expected to a nearby airfield (Lindens Farm Airstrip), due to a requirement to permanently divert the existing 4KG overhead line alignment so that it would cross the approach and take off flightpaths of the airstrip almost perpendicularly and potentially within 500 m of the runway. This would be significantly more restrictive to flight operations than the current 4KG alignment which runs broadly in parallel with the runway. Siting more closely to the existing Grimsby substation has several benefits, including reduced extent of overhead line diversions, use of land already owned by National Grid and taking advantage of existing screening opportunities.

- v. Suggestion to move Grimsby West substation further north outside of the proposed siting location, towards the bank of the River Humber, where there is existing industrial infrastructure.

National Grid's response: Siting the new Grimsby West substation at this location would create the need for additional overhead lines and infrastructure to support a new connection point (opposed to the benefits of siting in proximity of existing Grimsby substation). Additionally, siting at this location would require crossing two railways and main roads which adds technical complexity, creates more impacts to residential receptors and impacts to ecology designations along the river.

- vi. Suggestion to site the new Grimsby West substation as close as possible to the existing substation to minimise the impacts from more open views across the surrounding farmland. Options proposed further west would create greater visual separation and potentially 'extend' the perceived size of the substation.

National Grid's response: National Grid can confirm that this suggestion reflects the proposed design. Siting at this location reduces the extent of overhead line diversions, makes use of land already owned by National Grid and takes advantage of existing screening opportunities.

- 3.5.179 A few community members' responses expressed support for the locations of the substation, acknowledging that they are a necessary part of energy networks.

National Grid's response: National Grid welcomes the respondents' views.

- 3.5.180 A few community members' responses identified concerns about the potential impacts of the substation on existing or planned housing developments, including Grimsby West Sustainable Urban Extension identified by Policy 14 of the formally adopted North East Lincolnshire Local Plan dated 2018 and a solar farm in the Grimsby area (Aura Power Grimsby Solar Farm).
- 3.5.181 **National Grid's response:** National Grid undertake regular monitoring of emerging, existing, and recently approved development proposals to keep informed of other development activity in the local area/region. This enables collaboration and coordination with other projects and helps to minimise impacts on local communities.
- 3.5.182 National Grid are aware of the strategic scale Grimsby West Sustainable Urban Extension which borders Pyewipe Farm that is currently being progressed into a planning application by MF Strawson Ltd and Harworth Estates. National Grid continue to engage with the developers of this housing development, and the developer's latest plans (published in February 2025 as part of their Scoping Opinion Request) show the proposed route of the Grimsby to Walpole transmission line. The developers of the Grimsby West Sustainable Urban Extension have also included the Grimsby to Walpole scheme in the cumulative effects section of their Scoping Report and, likewise, the Grimsby to Walpole cumulative effects assessment takes account of their scheme. Each scheme is therefore aware of the other, and both are being progressed in a way that aims to minimise impacts on each other.
- 3.5.183 In terms of renewable energy projects, National Grid is aware of several nearby existing or emerging solar farms including Aura Power's Grimsby Solar Farm. We have been engaging with various solar developers in the locality of the Project for some time and this has included Aura Power. Meetings have taken place to understand the interactions between the two projects and the potential impacts arising from their proximity to each other. Ongoing work is being undertaken to assess the interaction between these two schemes and mitigate any adverse impacts as much as possible.
- 3.5.184 National Grid are aware of various projects that are currently identified as expected to connect to the proposed substation infrastructure included as part of the Project. National Grid is currently working closely with a number of these projects to provide a co-ordinated approach to project development, where possible as the design of the Project evolves. All identified emerging and committed developments are considered as part of the inter-project cumulative effects in **PEI Report Volume 2 Part C Route-wide Chapter 10 Cumulative Effects** prepared for the Stage 2 consultation and subsequently in the Environmental Statement (ES) accompanying the Development Consent Order (DCO) application.

Ecology, Biodiversity and Environment

- 3.5.185 Several community members' responses raised concerns that the proposed Grimsby West substation siting area would have adverse impacts upon wildlife and the natural environment, including wooded areas.
- 3.5.186 Natural England's feedback noted that the site of the new Grimsby West substation is within the vicinity of the Humber Estuary SPA, SAC and Ramsar, notified on a national

level as the Humber Estuary SSSI and the potential for impacts to designated features within the boundary of the European sites should be assessed within a Habitats Regulations Assessment (HRA). The HRA should include assessment of potential impacts on wintering and passage birds, migrating river and sea lamprey, water and air quality, as well as the potential for temporary noise and visual disturbance. The potential impacts may include direct loss of supporting watercourses, damage to vegetation, noise and vibration from machinery, or pollution impacts such as siltation.

- 3.5.187 **National Grid's Response:** The Project has been designed to avoid direct impacts upon European Designated Sites (Special Areas of Conservation, Special Protection Areas and Ramsar sites) and Sites of Special Scientific Interest. The Project is not located within any statutory designated sites.
- 3.5.188 A report to inform HRA will be submitted with the Environmental Statement (ES) and will assess the potential for likely significant effects upon European designated sites, such as Humber Estuary SPA, SAC and Ramsar, alone or in combination with other plans or projects and significant effects cannot be excluded at this stage in the assessment. The report to inform HRA will consider both the construction and operational phases of the Project and will use data collected during baseline ecology surveys to inform the assessment. The HRA report will consider potential pathways of effect between the Project and the designated sites including loss of functionally linked habitat, noise and visual disturbance within functionally linked habitat, changes in air quality and changes in water quality.
- 3.5.189 Through routeing and siting National Grid has sought and will continue to reduce as far as practicable potential impacts on biodiversity including habitats and protected species. The process of siting will take account of existing biodiversity, the natural environment and, where practicable, seeks to avoid wildlife, and where not feasible, reduce potential impacts on areas of ecological sensitivity including protected and notable species and their associated habitats through mitigation. A suite of habitat and species surveys will inform the ecological baseline, this data is still being collected and will be provided at ES stage per CIEEM guidance. The surveys include bats, badgers, great crested newts, otter, fish, aquatic macroinvertebrates, aquatic macrophytes, water vole, reptiles, and breeding and non-breeding birds. The Environmental Impact Assessment (EIA) for the Project will assess the effects on important ecological features using this baseline information. Some species are not protected or notable and therefore will not be assessed. However, the overall impact on ecology is taken into account as part of the EIA process for the Project.
- 3.5.190 The early findings of this process including the surveys undertaken are reported in **PEI Report Volume 2 Part B Section 1 Chapter 4 Ecology and Biodiversity**. The initial assessment identifies that at this stage significant effects cannot be excluded, and further survey work (ongoing) will be used to confirm the status of these species, inform the design of appropriate mitigation and a full assessment of effects that will be reported in the ES.

Agricultural Land

- 3.5.191 A few community members' responses noted concerns regarding loss of agricultural land due to the new Grimsby West substation.
- 3.5.192 **National Grid's response:** National Grid recognises that there is the potential for impacts on agricultural land. We look to limit the impact on agricultural land through careful and considered routeing and siting of infrastructure and through consultation with affected landowners. We are and will continue to work with all landowners who

may be affected by the proposals to understand the impacts as the Project is developed.

- 3.5.193 The draft Order Limits shown include areas of land required for temporary construction activities including temporary construction compounds, and access etc, as well as permanent infrastructure including substations.
- 3.5.194 Attempts have been made to avoid Best and Most Versatile (BMV) agricultural land as part of the design evolution. Where BMV agricultural land is to be developed, if possible, this will be directed at land of the lowest possible grade.
- 3.5.195 **PEI Report Volume 2 Part B Section 1 Chapter 8 Agriculture and Soils** provides a preliminary assessment of the impact of the Project on agricultural land, soil resources and agricultural landholdings using publicly available and purchased data related to land grades (according to the Agricultural Land Classification (ALC) system), soil profiles and land use. The preliminary assessment has used publicly available Provisional ALC data, however, a detailed ALC survey will be conducted and reported in the Environmental Statement (ES), to be submitted with the Development Consent Order (DCO) application, to provide a full assessment of the extent of land grades and soil types affected.
- 3.5.196 The agricultural land required within the draft Order Limits at the new Grimsby West substation is provisionally mapped as ALC Grade 3, and as such is considered likely to comprise, at least in part, BMV agricultural land. **PEI Report Volume 2 Part B Section 1 Chapter 8 Agriculture and Soils** reports a likely significant effect due to the temporary and permanent loss of agricultural land and soil function. National Grid are committed to the implementation of effective soil handling, storage and reinstatement measures, which will be detailed in an Outline Soil Management Plan ('Outline SMP', submitted as part of the DCO application) and would be critical in ensuring minimisation of effects and ensuring successful reinstatement of soils and agricultural land grade, where practicable.

Health and Wellbeing

- 3.5.197 Several community members' responses raised concerns regarding impacts on health, wellbeing and safety which are summarised as follows:
- i. Concerns about the health and wellbeing of local residents due to the scale/size of the new substation; and
 - ii. Concerns about health and wellbeing due to electric and magnetic fields (EMFs).
- 3.5.198 **National Grid's Response:** National Grid recognises people may have concerns about the potential impacts of living close to an overhead line and associated infrastructure and that the uncertainty whilst the proposals are developed may cause anxiety. Through the routeing and siting exercise National Grid has sought and will continue to reduce as far as practicable impacts on sensitive receptors, including residential areas. A considerable amount of assessment work has been undertaken to allow preliminary judgements to be made about the design and routeing of the Project. This has been set out in various publications, including the Corridor and Preliminary Routeing and Siting Study (CPRSS) and Strategic Options Report (SOR), published as part of the Stage 1 consultation.
- 3.5.199 Further assessment work has been undertaken since the Stage 1 consultation as reported in **PEI Report Volume 2 Part C Route-wide Chapter 8 Health and Wellbeing**. A health and wellbeing baseline has been established for each Section to

understand how the Project may specifically impact the health and wellbeing of different communities. This includes the community of Grimsby.

- 3.5.200 Policies and procedures are in place to make sure all equipment will comply with public electric and magnetic fields (EMF) exposure limits. As such, physical health effects associated with the generation of EMFs is scoped out of the health and wellbeing assessment on the basis that EMF levels would be low such that significant adverse effects are not expected. An EMF report, separate to the Environmental Impact Assessment (EIA) process, will be prepared as part of the Project.
- 3.5.201 No mental health impacts as a result of EMFs are expected as a result of the Project as described within **PEI Report Volume 2 Part C Route-wide Chapter 8 Health and Wellbeing**. Furthermore, no significant impact on health and wellbeing as a result of changes in access to promoted recreational routes and open space; or changes to employment were identified.
- 3.5.202 The health and wellbeing assessment assesses the impact of changes to landscape and visual on health and wellbeing in conjunction with air quality, noise, and traffic and transport. This combination effect is assessed as 'Neighbourhood Quality'. For a neighbourhood quality effect to be identified, at least two significant residual effects must combine at the same location. There is evidence to suggest links between neighbourhood quality and health and wellbeing, as health and wellbeing can be adversely impacted by changes to air quality, noise, visual amenity, increased traffic. This will be assessed within the Environmental Statement (ES) and if required, mitigation put in place to address these impacts.
- 3.5.203 The health and wellbeing assessment recognises that concerns about the health impacts of EMF may adversely impact some people's mental health by heightening anxiety. However, it is anticipated that this group is likely to be very small, and that this impact will be effectively mitigated by National Grid's engagement with the community.
- 3.5.204 The health and wellbeing assessment will continue to be updated to ensure health and wellbeing concerns and impacts of local communities are taken into account.
- 3.5.205 For further information on EMFs please refer to The graduated swathe – Question 3a and other relevant feedback under Health and Wellbeing.

Landscape and Visual

- 3.5.206 A large proportion of the community members' responses raised concerns about the potential landscape and visual impacts of the proposed Grimsby West substation, which are summarised as follows:
- i. Concern about the new substation changing the character of the existing rural landscape, particularly the estate of Aylesby Park and the surrounding housing estates;
 - ii. Concerns about light pollution generated by the substation; and
 - iii. Impacts on key views and valued landscapes including the Lincolnshire Wolds National Landscape (AONB), and historic villages.
- 3.5.207 Furthermore, some community members' responses noted that a comprehensive and robust strategic landscaping assessment and mitigation scheme is needed to ensure that it takes into account not only existing views but also how the substation will eventually relate to planned developments in the area, including the Grimsby West Sustainable Urban Extension.

- 3.5.208 **National Grid's response:** National Grid develops its projects in line with national policy and our statutory duties to develop an efficient, economic and co-ordinated network, and have regard to preserving amenity and mitigating impacts. We recognise that substations can give rise to adverse landscape and visual effects, and we carefully consider these along with other environmental and socio-economics considerations, technical requirements and cost when developing our Projects.
- 3.5.209 National Grid has carefully considered the potential impacts of the Project at an early stage, and the findings and justifications for the selection of the emerging preferred siting zones, can be found in the Corridor and Preliminary Routeing and Siting Study (CPRSS), which is available on our Project website. Through the routeing and siting exercise we have sought to reduce the impact on landscape character and visual amenity. We will continue to consider both landscape character and amenity value as we develop our proposals and seek to reduce effects.
- 3.5.210 The potential likely effects of National Grid's proposals at the new Grimsby West substation on landscape character and visual receptors are considered in **PEI Report Volume 2 Part B Section 1 Chapter 2 Landscape** and **Chapter 3 Visual**.
- 3.5.211 Existing vegetation around the new Grimsby West substation would be supplemented by additional planting which would help reduce the potential impacts of the substation on the surrounding landscape and visual receptors, although some localised significant effects are predicted which is inevitable for a development of this size and scale.
- 3.5.212 **PEI Report Volume 2 Part B Section 1 Chapter 3 Visual** identifies the community of Aylesby Parish to be considered highly susceptible to visual change resulting from the Project, with views across the eastern side of the parish being affected by construction of the new Grimsby West substation. Overall, this could result in a likely significant effect.
- 3.5.213 There is not anticipated to be any significant effects on visual receptors due to lighting at the new Grimsby West substation. The assumption at this stage is that lighting would be designed to be environmentally sensitive and would be event activated and therefore would not be continuous. Further information regarding substation lighting design will be provided within the Project description within the Environmental Statement (ES).
- 3.5.214 **PEI Report Volume 2 Part C Route-wide Chapter 2 Landscape** reports early findings of the assessment of impacts on designated landscapes including the Lincolnshire Wolds National Landscape (AONB). This considers the purposes of the designation and its special qualities which also includes views. A full assessment of the impacts on National Landscape (AONB) will be provided as part of the landscape and visual impact assessment, which will be reported in the ES that would be submitted with the Development Consent Order (DCO) application of the Project.
- 3.5.215 National Grid will be producing a Landscape and Visual Impact Assessment (LVIA) that will, in addition to other topic specific assessments, form the latter part of the Environmental Impact Assessment (EIA) for the Project. This will include a write-up of an assessment of the effects on the landscape character of the area and visual effects from communities. Where likely significant effects are anticipated, the LVIA will consider and identify areas where it may be necessary and appropriate to put forward potential mitigation as part of an iterative design and assessment process. A landscape mitigation plan will be produced for the new Grimsby West substation at ES stage in response to the LVIA, which will take account of committed and cumulative developments identified at that time.

Flood Risk and Drainage

- 3.5.216 The Environment Agency's feedback noted that the preferred location looks to follow a sequential approach placing the development in flood zone 1, minimising flood risk implication. Additionally, this area is outside of the floodplain and will not impede flow or remove capacity for floodwaters.
- 3.5.217 **National Grid' response:** The Project and draft Order Limits have been designed to avoid sensitive receptors as far as practicable. The Project seeks to avoid flood risk and potentially significant effects via the sequential approach to routing and siting, minimising significant effects where possible.
- 3.5.218 **PEI Report Volume 2 Part B Section 1 Chapter 6 Water Environment and Flood Risk** assesses the impact on the Water Environment and Flood Risk using desk-based assessment of existing data. A site walkover will be undertaken to supplement the data described below and inform the assessment reported in the Environmental Statement (ES). Additionally, the understanding obtained from the baseline data will also be supplemented by further consultation with relevant water and flood risk stakeholders.
- 3.5.219 All pylons are located in Flood Zone 1 along with their associated scaffolding areas and temporary access routes. Given that most of the wider Study Area is productive agricultural land outside of established settlement boundaries, it is unlikely that the run-off regime will change significantly within and surrounding the Study Area. However, the surrounding areas of the new Grimsby West substation, on the western edge of Grimsby, could be subject to further suburban development in the future (e.g. for housing). However, developers will be obliged by the requirements of the National Planning Policy Framework to ensure that surface runoff is managed within developments so as not to increase flood risk to others.

Groundwater

- 3.5.220 The Environment Agency's feedback identified the main water quality constraints within the search area was the Drinking Water Groundwater Safeguard Zone. The response noted that the proposed siting locations, GW1, GW2 and parts of GW3, for the new Grimsby West substation fall into this zone. It was noted that further siting and design development should consider this water quality constraint.
- 3.5.221 **National Grid's response:** The Project has been designed to take into account and avoid sensitive hydrogeological receptors where possible, within the balance of other relevant design factors, to minimise/prevent any significant effects on these receptors. This includes siting the new Grimsby West substation outside this zone.
- 3.5.222 The potential effects of the new Grimsby West substation and nearby pylon construction activities are assessed in **PEI Report Volume 2 Part B Section 1 Chapter 7 Geology and Hydrogeology**. Within the **PEI Report**, no significant effects on groundwater receptors were identified as a result of the construction, operation or maintenance of the Project, with the implementation of appropriate control measures, including ground investigation and foundation works risk assessments in areas of high hydrogeological sensitivity. This will ensure that suitable groundwater protection measures are observed for all works, including those in the Drinking Water Groundwater Safeguard Zone, and that no pathways into the groundwater aquifers are created as a result of the Project.

Section 1: Grimsby West to Barnoldby le Beck – Question 3c and other feedback relevant to this Section of the route

3.5.223 Question 3c of the feedback form asked:

‘Do you have any comments about this Section of the route?’

3.5.224 The feedback about Section 1: Grimsby West to Barnoldby le Beck covered themes including construction; historic environment; planning and design; ecology, biodiversity and environment; socio-economics; health and wellbeing; landscape and visual; noise and vibration; and groundwater.

3.5.225 The following sections provide a summary of the comments made in relation to these themes and National Grid’s response to those. When narrating feedback, we refer to the Sections of the route as they were described at the time of the Stage 1 consultation. National Grid’s responses refer to the revised Sections of the route as presented as part of the Stage 2 consultation. For further detail on the changes in sectioning please see Approach to route Sections.

Construction

3.5.226 A few community members’ responses identified concerns about existing through traffic and disruption associated with the development of other infrastructure projects in the area; and the capacity of the existing local road network to accommodate the increased traffic during construction. Specific concerns were raised about Bradley Road, with remarks that a management plan is needed.

3.5.227 Some community members’ responses indicated that temporary construction areas should not be sited in this Section.

3.5.228 Natural England’s feedback raised that potential impacts to water quality which may arise due to dust and other pollution incidents during construction should also be considered and mitigation for these impacts could be outlined within a Construction Environmental Management Plan. For the Sections of the overhead line route which will involve a significant increase in traffic movements within 200m of the designated site Natural England identified that the potential air quality impacts, including ammonia emissions, due to road traffic during the construction phase will need to be considered. The assessment should confirm which roads will be used to access the development site, and the number of predicted vehicle movements.

3.5.229 **National Grid’s response:** We recognise that construction of the Project would result in some temporary impacts to local areas. The Corridor Preliminary Routeing and Siting Study (CPRSS), published at the Stage 1 consultation, explains that our approach to the appraisal of design options considered a range of topics with various technical considerations including construction.

3.5.230 The **PEI Report** appraises the suitability of local roads to accommodate the forecast volume of construction traffic movements. This includes consideration of road geometry, congestion, accidents and sensitive receptors that include local amenities, schools and non-motorised user activity. Sensitive routes will be avoided where practicable, and construction haul roads used where appropriate along with maximising the use of suitable major and strategic roads. **PEI Report Volume 2 Part B Section 2 Chapter 9 Traffic and Movement**, and **PEI Report Volume 3 Part B Sections 1 to 7 Appendix 9B Preliminary Construction Information and Appendix 9C Future Baseline and Impact Analysis** identify Primary Access Routes to

construction access points (bellmouths), compounds and substations, along with an estimate of average daily flows based on the existing information available at the time of writing. Our initial appraisal included in **PEI Report Volume 2 Part B Section 2 Figure 9.5 Preliminary Impact Analysis** shows impact on the roads that result in potential significant effects. These routes are identified as part of the Primary Access Route network to Section 2 and will require discussion with the local highway authority and possibly further assessment to determine the effect, if any, on users of the highway. Construction traffic routeing will be discussed with the appropriate highway authorities during the full Transport Assessment, which will be reported in the Environmental Statement (ES).

- 3.5.231 **PEI Report Volume 2 Part B Section 2 Figure 9.2 Primary Access Routes (PAR) and Workers Access Routes** identifies Bradley Road as a Workers Access Route for construction workers' cars/LGVs accessing construction bellmouths. It is not identified for HGVs as the current analysis shows other appropriate routes are available to serve the Project during construction. Please note that this is subject to ongoing design development and liaison with the local highway authority. **PEI Report Volume 2 Part B Section 2 Figure 9.5 Preliminary Impact Analysis** identifies no potential for significant effect to Bradley Road and so no further assessment is planned.
- 3.5.232 **PEI Report Volume 2 Part B Section 2 Chapter 12 Air Quality** considers construction dust and construction traffic emission. The assessment in the **PEI Report** also considers changes in local air quality including the potential for changes in nutrient nitrogen deposition due to emissions oxides of nitrogen and ammonia resulting from construction vehicle movements. The preliminary assessment concludes no significant effects are likely from construction dust, and significant effects upon ecological sites due to changes in air quality resulting from the Project are considered unlikely as the vehicle movements are below to the EPUK/IAQM thresholds.
- 3.5.233 Siting of the construction compounds for the Project has been informed by the location of Project elements, the specific construction needs that each compound is required to serve, and proximity to the Strategic Road Network. In this Section of the route construction compounds are proposed south east of the A46 between Laceby and Laceby Acres and off the A16 between Grainsby and Waithe. Further information on proposed construction compounds is available in section 8.4 of the Design Development Report (DDR).
- 3.5.234 A Code of Construction Practice (CoCP) and Construction Traffic Management Plan will be prepared and submitted with the Development Consent Order (DCO) application. These documents will include commitments to reduce construction impacts together with a framework for detailed management plans to be prepared at detailed design stage to reduce and mitigate potential impacts and/or disruptions that may arise during the construction phase. A Preliminary CoCP is available as part of the Stage 2 consultation. In respect of the air quality points raised by Natural England this includes measures to control dust.

Historic Environment

- 3.5.235 A few community members' responses identified the importance of considering and avoiding impacts of the Project on local heritage assets and features within this Section of the route including listed buildings and scheduled monuments (feedback does not specify which).
- 3.5.236 **National Grid's response:** The Project and draft Order Limits have been designed to avoid sensitive receptors as far as practicable. This is in accordance with the Holford

Rules applicable to routeing of new overhead lines and the Horlock Rules which apply to design and siting of substations. These approaches are explained in further detail within the Corridor and Preliminary Routeing and Siting Study (CPRSS), Design Development Report (DDR) and **PEI Report Volume 2 Part A Chapter 3 Main Alternatives Considered**. Principles include, seeking to avoid areas of highest amenity, cultural or scientific value, taking advantage of natural screening provided by existing landform and features (e.g. woodland) and keeping visual, noise and other environmental effects to a minimum. For historic environment, such measures include the avoidance of physical impacts to designated heritage assets and where practicable non-designated heritage assets, and where possible reducing potential impacts to the setting of designated heritage assets and non-designated heritage assets.

- 3.5.237 National Grid has carried out a preliminary assessment of potential likely effects on the historic environment arising from the proposals in this Section of the route, which is reported in **PEI Report Volume 2 Part B Section 2 Chapter 5 Historic Environment**. This sets out the methodology that has been applied and initial findings. As the feedback does not relate to any specific assets no further information is set out here.
- 3.5.238 We will continue to engage with Historic England and relevant Local Planning Authorities on aspects relating to the historic environment and heritage assets, including appropriate mitigation measures and techniques and will take their views into consideration as the Project evolves.

Planning and Design

- 3.5.239 A large proportion of the community members' responses made design suggestions in relation to this Section of the route, which are summarised as follows:
- i. Suggestion that overhead lines should be underground to avoid visual impacts to the new residential development at Bradley Road.

National Grid's Response: National Policy Statement (NPS) EN-5 makes it clear that the Government expects overhead lines to be appropriate in most instances, although it recognises that there may be, at particularly sensitive locations such as National Landscapes, potential adverse landscape and visual impacts of an overhead line which may make it unacceptable in planning terms, taking account of the specific local environment and context. The residential housing development to the west of Bradley Road is located over 100m to the east of the draft Order Limits. As part of the routing and siting study and ongoing design development we have sought to route the proposed Project infrastructure away from residential property on grounds of general amenity where practicable. However, the residential housing development to the west of Bradley Road is not considered to be a particularly sensitive location from a landscape and visual perspective and therefore overhead lines are considered to be appropriate. Undergrounding of overhead lines also needs to be considered in the context of a higher cost to bill-paying consumers, potential environmental implications of installation (due to the wider construction corridor required) and potential maintenance implications, as well as a requirement for sealing end compounds at the start and end point of the underground sections.

- ii. Suggestion that overhead lines should be routed to the west of the swathe near Barnoldby le Beck, to avoid potential impacts including health impacts, noise, degradation of scenic landscapes and reduction of property prices, on the new Aspen Park housing development along Bradley Road.

National Grid's Response: National Grid investigated this suggestion and identified that routing west of Barnoldby le Beck is a more constrained and technically challenging alternative due to the presence of the existing Hornsea 1 underground cable, interface with an existing overhead line and overall, less siting flexibility within a narrower corridor. Limited flexibility may lead to further vegetation clearance that may significantly reduce screening opportunities. Additionally, routing to the west would site infrastructure closer to the National Landscape (AONB) and listed buildings in Barnoldby le Beck and would likely increase potential impacts to the setting of these receptors.

3.5.240 Multiple suggestions were made in relation to the Grimsby West Sustainable Urban Extension:

- i. Suggestion to underground the new 400kV overhead line route at Grimsby West to accommodate Grimsby West Sustainable Urban Extension.
- ii. Suggestion to re-route the existing 132kV overhead line route at Grimsby West, to reduce impact on Grimsby West Sustainable Urban Extension.
- iii. Suggestion to develop temporary overhead lines at Grimsby West to accommodate Grimsby West Sustainable Urban Extension.

National Grid's Response: National Grid are aware of the Grimsby West Sustainable Urban Extension that is currently being progressed into a planning application. The proposed alignment has been developed to minimise interactions with the proposed housing development. National Grid will continue to engage with the developers of the housing development to ensure that both are being progressed in a way that aims to minimise impacts on each other. National Policy Statement (NPS) EN-5 makes it clear that the Government expects overhead lines to be appropriate in most instances, although it recognises that there may be, at particularly sensitive locations such as National Landscapes, potential adverse landscape and visual impacts of an overhead line which may make it unacceptable in planning terms, taking account of the specific local environment and context. However, the Grimsby West Sustainable Urban Extension is not considered to be a particularly sensitive location from a landscape and visual perspective and therefore overhead lines are considered to be appropriate. Undergrounding of overhead lines also needs to be considered in the context of a higher cost to bill-paying consumers, potential environmental implications of installation (due to the wider construction corridor required) and potential maintenance implications, as well as a requirement for sealing end compounds at the start and end point of the underground sections.

The existing 132kV overhead line is located 570m away from the proposed 400kV overhead line at its closest point to the Project in this area. The proposals at Grimsby West are located a significant distance from the existing 132 kV overhead line and therefore undergrounding is not included in the scope of works at this location.

The routing of the temporary overhead line alignment on the existing 4KG overhead line which is required during the construction of the new Grimsby West substation is not expected to impact Grimsby West Sustainable Urban Extension.

- iv. Suggestion to route as far east as possible at Waltham Road, Barnoldby le Beck, due to amenity and ecological concerns such as construction impacts, landscape and visual impacts on nearby Barnoldby le Beck, wooded areas of priority habitat

to the south of Waltham Road, and on heritage buildings including grade I Listed St Helen's Church and grade II Listed Huntsman Obelisk and Pelham House.

National Grid's Response: The proposed alignment already routes as far east as possible as it crosses Waltham Road, striking the best balance between proximity to residential properties along Waltham Road and Barnoldby le Beck (to the west) and the western edge of Waltham (to the east), avoidance of a Hornsea underground cable (located on the eastern edge of the emerging preferred corridor presented at Stage 1 consultation) and mitigating potential impacts to the setting of the National Landscape (AONB).

- v. North East Lincolnshire Council requested that the overhead lines be underground within the North East Lincolnshire boundary due to visual and environmental effects.

National Grid's Response: National Policy Statement (NPS) EN-5 makes it clear that the Government expects overhead lines to be appropriate in most instances, although it recognises that there may be, at particularly sensitive locations such as National Landscapes, potential adverse landscape and visual impacts of an overhead line which may make it unacceptable in planning terms, taking account of the specific local environment and context. As part of the routing and siting study and ongoing design development we have sought to route the proposed Project infrastructure away from residential property and environmental features. Undergrounding of overhead lines also needs to be considered in the context of a higher cost to bill-paying consumers, potential environmental implications of installation (due to the wider construction corridor required) and potential maintenance implications, as well as a requirement for sealing end compounds at the start and end point of the underground sections. Within the North East Lincolnshire boundary there are not considered to be any particularly sensitive locations from a landscape and visual perspective where overhead lines would be considered inappropriate. Therefore, there are no proposals to underground within the North East Lincolnshire boundary.

- vi. Suggestion to route to the west of the water station at Barnoldby le Beck as this would minimise impact on inhabitants at the Anglian Water owned property to the north of Waltham Road.

National Grid's Response: National Grid can confirm that this suggestion reflects the proposed design.

- vii. Suggestion to avoid temporary construction on land adjacent to residential property along A46 Grimsby Road.

National Grid's Response: National Grid has considered several potential locations for siting of temporary infrastructure in the area. Following detailed appraisal, temporary infrastructure is proposed to be sited in a land parcel 300m south-east of the referenced residential property, south of the adjacent land parcel to the east and as such not proposed to be sited on the land directly adjacent to the property. This is preferred because it maintains a good level of accessibility off the A46 which minimises the distance from the overhead line (keeping proposed works closer together, as opposed to spreading infrastructure) and the extent of additional temporary works access routes required. Additionally, this location is preferred because it offers the greatest distance from residential receptors, avoids historic parkland and has the lowest requirement for habitat replacement.

- viii. Suggestion that the overhead lines should follow the eastern or western alternative corridors in this area, near Barnoldby le Beck, due to concerns about the proposed overhead lines impacting on residential property, the village of Barnoldby le Beck, and the setting of the Lincolnshire Wolds National Landscape (AONB).

National Grid's Response: As detailed in the Corridor and Preliminary Routeing and Siting Study (CPRSS), the western corridor option routed to the west of Barnoldby le Beck between Grimsby West and North Thoresby was not preferred as it was identified as being significantly constrained by the presence of the Viking CCS NSIP (Sections W2/W2U to W6), the National Landscape (AONB) (Sections W2/W2U to W5/W5U) and narrow areas in proximity to residential properties (Sections W3, W4 and W6). Similarly, as detailed in the CPRSS, the eastern corridor routed to the east of Barnoldby le Beck between A46 and North Cotes (Sections E1 to E5) was not preferred due to the density and proximity of the settlement, routeing through multiple narrow areas and potential cumulative landscape and visual impacts from the interaction with two existing 132 kV overhead lines.

Significant visual effects have been predicted for the proposed alignment at Barnoldby le Beck where there would be close proximity views of the Project. Views from the National Landscape (AONB) towards Grimsby and the coast in this Section are already affected by existing 132 kV and 400 kV overhead lines, but it is acknowledged that the Project would be visible. A section of low height pylons have been proposed between Barnoldby le Beck and Waithe to reduce effects on views out from the National Landscape (AONB).

- 3.5.241 A few community members' responses raised concerns relating to planned developments, including Grimsby West Sustainable Urban Extension and renewable energy projects in the area and interactions with the Project. A specific concern was raised regarding the impact of the proposed route on future residential development (West of Pyewipe Farm).
- 3.5.242 **National Grid's response:** National Grid undertake regular monitoring of emerging, existing, and recently approved development proposals to keep informed of other development activity in the local area/region. This enables collaboration and coordination with other projects and helps to minimise impacts on local communities. National Grid are therefore aware of the strategic scale 'Grimsby West' housing allocation which borders Pyewipe Farm and is currently being progressed into a planning proposal by MF Strawson Ltd and Harworth Estates. National Grid have been engaging with the developers of this housing development for some time, and the developer's latest plans (published in February 2025 as part of their Scoping Opinion Request) show the proposed route of the Grimsby to Walpole transmission line. The developers of Grimsby West have also included the Grimsby to Walpole scheme in the cumulative effects section of their Scoping Report and, likewise, the Grimsby to Walpole cumulative effects assessment takes account of their scheme.
- 3.5.243 In terms of renewable energy projects, National Grid is aware of several solar farms (and other developments), both existing and in various stages of planning, across the proposed route for the Project (Aura Grimsby Solar Farm, Bradley Road Solar Farm, Laceby Solar Farm, Low Farm Solar Farm in this Section of the route). Where possible, we have been engaging with developers to understand the interactions between projects and where appropriate, work to mitigate potential impacts as far as practicable.

Ecology, Biodiversity and Environment

- 3.5.244 Concerns were raised in several community members' responses about the:
- Potential negative impact of the Project on key habitats, rural ecosystems, wildlife and ecology, including protected species. Specific references were made to various species including birds, bats, bees, otters and crested newts.
 - Impacts of the Project on bird migration routes given the local area, including designated nature reserves, is used by overwintering birds. In particular there was concern about the impact on flocks of geese, swans, eagles and cranes.
 - Local natural amenities being lost or spoilt, citing wooded areas such as Bradley and the Wolds beyond Waltham.
 - Potential for adverse impacts on the local environment, including the area of Grimsby West.
- 3.5.245 Natural England's feedback noted that Section 1 of the proposed route is within the vicinity of the Humber Estuary SPA, SAC and Ramsar, which are also notified on a national level as the Humber Estuary SSSI. The feedback identified that the potential for impacts to designated features within the boundary of the European sites as well as functionally linked land should be assessed within a Habitats Regulations Assessment (HRA). The HRA should also consider the:
- Potential for temporary noise and visual disturbance to the designated site, as well as adjacent fields;
 - Potential for there to be additional visual disturbance once the overhead line is in situ, including from adjacent fields;
 - Potential visual disturbance to birds due to changes in site lighting, or perception of the pylons acting as potential predator perch points;
 - Impacts to migrating river and sea lamprey within the designated site, as well as adjacent fields. The potential impacts may include direct loss of supporting watercourses, damage to vegetation, noise and vibration from machinery, or pollution impacts such as siltation.
- 3.5.246 Natural England's feedback suggested flight paths observed during the wintering and passage surveys could be used to determine the most suitable location for placement to minimise impacts from this pathway, as the presence of the overhead line may also lead to a greater collision risk for birds.
- 3.5.247 **National Grid's response:** The Project has been designed to avoid direct impacts upon European Designated Sites (SAC, SPA and Ramsar sites) and Sites of Special Scientific Interest. The Project is not located within any statutory designated sites. The nearest international site is the Humber Estuary SAC, SPA and Ramsar located 4.2 km north-east of the Section 2 draft Order Limits at its closest point. Saltfleetby-Theddlethorpe Dunes (including Gibraltar Point) SAC is located 8.4 km east and The Greater Wash SPA is located 8.8 km east of the Section 2 draft Order Limits. In addition, the Gibraltar Point SPA and Ramsar and Wash SPA and Ramsar (where bird species with large foraging ranges are noted as, or one of, the qualifying features), are located 22.5 km south-east and 24.1 km south-east of the draft Order Limits.
- 3.5.248 A report to inform the HRA will be submitted with the Environmental Statement (ES) and will assess the potential for likely significant effects upon European designated sites alone or in combination with other plans or projects. The report to inform HRA will

consider both the construction and operational phases of the Project and will use data collected during the baseline ecology surveys to inform the assessment. The HRA report will consider potential pathways of effect between the Project and the designated site including loss of functionally linked habitat, noise and visual disturbance within functionally linked habitats, and changes in lighting, air quality and water quality.

- 3.5.249 Through routeing and siting National Grid has sought and will continue to reduce as far as practicable potential impacts on biodiversity including habitats and protected species. The process of routeing takes account of existing biodiversity, the natural environment and, where practicable, seeks to avoid wildlife, and where not feasible, reduce potential impacts on areas of ecological sensitivity including protected and notable species and their associated habitats, through mitigation. A suite of habitat and species surveys will inform the ecological baseline, this data is still being collected and will be provided at ES stage per Chartered Institute of Ecology and Environmental Management guidance. The surveys include bats, badgers, great crested newts, otter, fish, aquatic macroinvertebrates, aquatic macrophytes, water vole, reptiles, and breeding and non-breeding birds. The Environmental Impact Assessment (EIA) for the Project will assess the effects on important ecological features using this baseline information. This will include collision risk with the overhead line once all bird data has been collected, and where/if required design changes and/or appropriate mitigation measures will be proposed. Some species are not protected or notable such as bees (kept by beekeepers) and therefore will not be assessed. However, the overall impact on ecology is taken into account as part of the EIA process for the Project.
- 3.5.250 The initial assessment including the surveys undertaken are reported in **PEI Report Volume 2 Part B Section 2 Chapter 4 Ecology and Biodiversity**. The initial assessment identifies that at this stage significant effects cannot be excluded, and further survey work (ongoing) will be used to confirm the status of these species, inform the design of appropriate mitigation and a full assessment of effects that will be reported in the ES.

Socio-economics

- 3.5.251 A large proportion of the community members' responses raised concerns in relation to socio-economics impacts of the Project, which are summarised as follows:
- i. Impact on tourism in the area; and
 - ii. Impacts on rural businesses in the area.
- 3.5.252 **National Grid response:** Through the routeing and siting exercise National Grid has sought to reduce impacts to businesses and the local economy, as evidenced in the Strategic Options Report (SOR) and the Corridor and Preliminary Routeing and Siting Study (CPRSS) published at the Stage 1 consultation. To further reduce potential impacts, we have identified businesses and enterprises and their primary function, including those in connection with tourism. These have been and will continue to be considered during the iterative design process.
- 3.5.253 From a socioeconomic perspective, the likely effects of National Grid's proposals on local businesses including those operating in connection with tourism (e.g. holiday parks and caravan sites) are assessed in **PEI Report Volume 2 Part B Section 2 Chapter 11 Socio-economics, Recreation and Tourism**. In summary, no significant adverse effects are anticipated for socio-economics, recreation and tourism receptors, noting this excludes above ground renewable energy generation infrastructure, within

Section 2 as a result of the construction, operation and maintenance phase of the Project. An assessment of the direct effects of the Project on above ground renewable energy generation infrastructure (solar and onshore wind farms) as socio-economics receptors will be presented in the Environmental Statement (ES).

- 3.5.254 With regard to settlements and population, affected communities (local communities, including populations of towns and villages) **PEI Report Volume 2 Part C Route-wide Chapter 7 Socio-economics, Recreation and Tourism** identifies that at this stage it is anticipated that likely non-significant effects associated with construction activities would generally be minor adverse and temporary, with effects felt most by communities in closest proximity to the Project. We will report on any indirect amenity effects for affected communities as part of the socio-economics, recreation and tourism assessment, which might occur through in-combination effects across the Project (such as noise and vibration, visual, and transport and movement effects). **PEI Report Volume 2 Part C Route-wide Chapter 10 Cumulative Effects** presents a preliminary assessment of cumulative effects upon common receptors across environmental topics identified within **PEI Report Volume 2 Part B** (intra-project) and identifies a shortlist of other Committed Developments with which there may be potential for cumulative effects and the relevant environmental topics for such effects (inter-project). The full cumulative effects assessment will be reported within the ES.
- 3.5.255 With regard to tourism including strategic visitor attractions and the impact of construction workforce on tourist accommodation bedspace, **PEI Report Volume 2 Part C Route-wide Chapter 7 Socio-economics, Recreation and Tourism** identifies that non-local workers would require accommodation in the local area, which is likely to be serviced from hotels and similar establishments such as B&Bs, and non-serviced accommodation including holiday lets, caravan parks and tourist campsites, and other collective accommodation. Overall, both temporary positive benefits to tourist accommodation businesses and temporary adverse effects through a reduction in tourist accommodation bed spaces are anticipated in relation to the labour market during construction. Given the preliminary number of construction workers anticipated to be employed on the Project, and the level of likely spare capacity for bedspace, the preliminary assessment of effects sets out that these are not likely to be significant. For strategic visitor attractions the preliminary assessment of these receptors is that the effects are not expected to be significant.
- 3.5.256 It should be noted that this is an ongoing assessment and is subject to changes due to the ongoing development of the Project. A full detailed assessment will be included within the ES submitted with the Development Consent Order (DCO) application.

Health and Wellbeing

- 3.5.257 A few community members' responses raised concerns about pylons and overhead lines causing adverse physical and mental health effects on residents living in proximity to this route Section, such as the communities of Barnoldby le Beck, Grimsby West and Laceby.
- 3.5.258 A particular health concern that was noted was tinnitus, and the potential for sufferers to experience worse physical and mental health as a result of the additional noise from the pylons. The potential for adverse health impacts of children and future residents of the community were also noted.
- 3.5.259 **National Grid's response:** National Grid recognises people may have concerns about the potential impacts of living close to an overhead line and associated infrastructure and that the uncertainty whilst the proposals are developed may cause anxiety.

Through the routeing and siting exercise National Grid has sought and will continue to reduce as far as practicable impacts on sensitive receptors, such as residential areas, education facilities and areas for recreation. A considerable amount of assessment work has been undertaken to allow preliminary judgements to be made about the design and routeing of the Project. This has been set out in various publications including the Corridor and Preliminary Routeing and Siting Study (CPRSS) and Strategic Options Report (SOR) as part of the Stage 1 consultation.

3.5.260 Further assessment work has been undertaken since the Stage 1 consultation as reported in **PEI Report Volume 2 Part C Route-wide Chapter 8 Health and Wellbeing**. A health and wellbeing baseline has been established for each Section to understand how the Project may specifically impact the health and wellbeing of different communities. This includes the following communities:

- Grimsby
- Laceby
- Barnoldby le Beck
- Waltham
- Brigsley
- Ashby cum Fenby
- North Thoresby
- Covenham St Mary
- Yarburgh
- Alvingham
- Little Carlton
- Withern
- Tothill

3.5.261 Policies and procedures are in place to make sure all equipment will comply with public electric and magnetic fields (EMF) exposure limits. As such, physical health effects associated with the generation of EMFs is scoped out of the health and wellbeing assessment on the basis that EMF levels would be low such that significant adverse effects are not expected. An EMF report, separate to the Environmental Impact Assessment (EIA) process, will be prepared as part of the Project.

3.5.262 No mental health impacts as a result of EMFs are expected as a result of the Project as described within **PEI Report Volume 2 Part C Route-wide Chapter 8 Health and Wellbeing**. Furthermore, no significant impact on health and wellbeing as a result of changes in access to promoted recreational routes and open space; or changes to employment were identified.

3.5.263 The health and wellbeing assessment recognises that concerns about the health impacts of EMF may adversely impact some people's mental health by heightening anxiety. However, it is anticipated that this group is likely to be very small, and that this impact will be effectively mitigated by National Grid's engagement with the community.

3.5.264 For further information on EMFs please refer to The graduated swathe – Question 3a and other relevant feedback under Health and Wellbeing.

3.5.265 The health and wellbeing assessment assesses the impact of changes to landscape and visual on health and wellbeing in conjunction with air quality, noise, and traffic and transport. This combination effect is assessed as 'Neighbourhood Quality'. For a neighbourhood quality effect to be identified, at least two significant residual effects must combine at the same location. There is evidence to suggest links between neighbourhood quality and health and wellbeing, as health and wellbeing can be adversely impacted by changes to air quality, noise, visual amenity, increased traffic. This will be assessed within the Environmental Statement (ES) and if required, mitigation put in place to address these impacts.

3.5.266 With regard to noise and vibration please see **Noise and Vibration** in this section of the report. A brief explanation is provided in **PEI Report Volume 2 Part B Section 2 Chapter 10 Noise and Vibration** and further information will be provided in the ES.

Health effects associated with operational noise impacts are, therefore, considered to be minimal.

- 3.5.267 The health and wellbeing assessment will continue to be updated to ensure health and wellbeing concerns and impacts of local communities are taken into account.

Landscape and Visual

- 3.5.268 A considerable proportion of the community members' responses raised concerns in relation to landscape and visual impact, which are summarised as follows:

- i. Impacts on the views to/from the Lincolnshire Wolds National Landscape (AONB);
- ii. The potential for adverse impact on key viewpoints and recreational spaces;
- iii. Impacts on views from the Heritage Railway and the Dock Tower in Grimsby;
- iv. Impacts on the views of the Wolds, especially when leaving Grimsby via the A46;
- v. Concerns that the Project would be visible from a considerable distance, disrupting scenic views across the area; and
- vi. Impacts on views from residential properties.

- 3.5.269 A few community members' responses acknowledged that routing the corridor towards the west helped to mitigate some visual impacts, as the pylons would be less intrusive against the backdrop of the Lincolnshire Wolds. However, others felt that this did not go far enough, stating that impacts are still likely regardless of distance.

- 3.5.270 **National Grid's response:** National Grid develops its Projects in line with national policy and our statutory duties to develop an efficient, economic and co-ordinated network, and have regard to preserving amenity and mitigating impacts. We recognise that overhead lines can give rise to adverse landscape and visual effects, and we carefully consider these along with other environmental and socio-economics considerations, technical requirements and cost when developing our Projects.

- 3.5.271 National Grid has carefully considered the potential impacts of the Project at an early stage, and the findings and justifications for the selection of the emerging preferred corridor in which the new overhead line is proposed to be routed, can be found in the Corridor and Preliminary Routeing and Siting Study (CPRSS), which is available on our Project website. Through the routeing and siting exercise we have sought to reduce the impact on landscape character and visual amenity. We will continue to consider both landscape character and amenity value as we develop our proposals and seek to reduce effects.

- 3.5.272 The potential likely effects of National Grid's proposals in this area on landscape character and visual receptors are set out in **PEI Report Volume 2 Part B Section 2 Chapter 2 Landscape** and **Chapter 3 Visual**. A preliminary visual assessment has been undertaken for each community, or parish, within the Study Area. A number of viewpoints have been selected to represent the views from local communities. These are presented in **PEI Report Volume 3 Part B Sections 1 to 7 Appendix 3A Proposed Viewpoints** and will form the basis for the Landscape and Visual Impact Assessment (LVIA). Viewpoints include views to and from the Lincolnshire Wolds National Landscape (AONB), towards Grimsby Dock Tower, on the A46 and in the landscape surrounding the Lincolnshire Wolds Heritage Railway.

- 3.5.273 **PEI Report Volume 2 Part C Route-wide Chapter 2 Landscape** reports early findings of the assessment of impacts on the National Landscape (AONB). This considers the purposes of the designation and its special qualities which also includes views. Low height pylons have been proposed between Barnoldby le Beck and Waithe to reduce the visual effects for receptors within the National Landscape (AONB). A full assessment of the impacts on National Landscape (AONB) will be provided as part of the landscape and visual impact assessment, which will be reported in the Environmental Statement (ES) that would be submitted with the Development Consent Order (DCO) application of the Project.
- 3.5.274 Views towards the Dock Tower in Grimsby were considered during the design process, particularly those views from the National Landscape (AONB). In response to concerns about these views, low height pylons have been adopted into the design between GL16 and GL32, to reduce the prominence of the Project in views including those views where the Dock Tower is more prominent. Effects on views from the Lincolnshire Wolds Heritage Railway have not been considered at **PEI Report** stage which is reporting on the wider community areas, but will be considered during the LVIA.
- 3.5.275 Significant visual effects have been predicted for two communities with views to the National Landscape (AONB). This includes Laceby and Barnoldby le Beck where there would be close proximity views of the Project as it routes through these community areas. Views from the National Landscape (AONB) towards Grimsby and the coast in this Section are already affected by existing 132 kV and 400 kV overhead lines, but it is acknowledged that the Project would be visible. To the south of Barnoldby le Beck, a section of low height pylons is proposed to reduce effects on views out from the National Landscape (AONB).
- 3.5.276 National Grid will be producing a LVIA that will, in addition to other topic specific assessments, form the latter part of the Environmental Impact Assessment (EIA) for the Project. This will include a write-up of an assessment of the effects on the landscape character of the area and visual effects from communities. Where likely significant effects are anticipated, the LVIA will consider and identify areas where it may be necessary and appropriate to put forward potential mitigation as part of an iterative design and assessment process.

Noise and Vibration

- 3.5.277 A few community members' responses raised concerns about the potential for noise impacts during construction and operation, with the proposed pylons being in very close proximity to residential properties across this Section of the route, with Barnoldby le Beck being referenced specifically.
- 3.5.278 **National Grid's response:** National Grid will be undertaking a noise and vibration assessment that will form part of the Environmental Impact Assessment (EIA) for the Project. Noise levels and the effect on residential properties as well as other sensitive receptors, such as hospitals and schools are carefully considered during Project development, assessed according to the appropriate UK standards, and mitigated where necessary. The early findings are presented in a **PEI Report**, as part of the Stage 2 consultation before being refined and submitted in an Environmental Statement (ES) which will form part of the eventual Development Consent Order (DCO) application.
- 3.5.279 An initial assessment of noise and vibration effects from the Project is presented in **PEI Report Volume 2 Part B Section 2 Chapter 10 Noise and Vibration**. The

assessment considers the potential effects from construction noise and vibration, construction traffic noise, and operational noise.

- 3.5.280 The assessment of construction noise and vibration, and construction traffic noise indicates that significant adverse effects are not expected at any noise sensitive locations in Section 2 with mitigation (best practicable measures) in place. The contractor will be required to employ best practicable means to reduce the effects of construction noise and vibration. This is particularly the case where the route passes close to residential and other sensitive areas, such as Barnoldby le Beck.
- 3.5.281 A low noise conductor system is proposed for the overhead line. As such, operational noise is scoped out of the assessment on the basis that operational noise levels would be low, even directly underneath the line, such that significant adverse effects are not expected. A brief explanation is provided in **PEI Report Volume 2 Part B Section 2 Chapter 10 Noise and Vibration** and further information will be provided in the ES.

Groundwater

- 3.5.282 The Environment Agency's feedback noted that an SPZ1, associated with 4 licensed abstractions is located in the south of this Section. SPZ2s are also present along parts of the Section and the entire Section is within an SPZ3.
- 3.5.283 **National Grid's response:** The Project has been designed to take into account and avoid sensitive hydrogeological receptors wherever possible, within the balance of other relevant design factors, to minimise/prevent any significant effects on these receptors. This includes groundwater source protection zones, groundwater abstractions and aquifers of high sensitivity.
- 3.5.284 There are several areas within this Section where complete avoidance of SPZ 1 and 2 has not been possible through the design process, but the number of pylons within any SPZ 1 area has been reduced as far as possible, within the limits of any engineering constraints for the overhead line. Where construction and permanent infrastructure associated with this Section are required within SPZ 1 and SPZ 2 areas, an initial assessment of potentially significant effects reported in **PEI Report Volume 2 Part B Section 2 Chapter 7 Geology and Hydrogeology**. This identifies that no significant effects are predicted for Geology and Hydrogeology receptors within Section 2, as a result of the construction, operation and maintenance phases of the Project. The assessment references the control measures that would be applied during construction, as set out in **PEI Report Volume 3 Part A Appendix 5A Preliminary Code of Construction Practice**. With these measures the Project would have a negligible, non-significant effect on the chalk aquifer, SPZ and abstractions.
- 3.5.285 Further detail on groundwater abstractions and the SPZ areas will be obtained from Anglian Water and the EA and utilised within the subsequent Environmental Statement (ES), to enable a detailed assessment for high sensitivity areas and determination of any likely significant and non-significant effects.

Section 2: Barnoldby le Beck to North Thoresby – Question 3d and other feedback relevant to this Section of the route

- 3.5.286 Question 3d of the feedback form asked:
- 'Do you have a preference for the new line to be located north or south of Brigsley? Please tell us the reason for your answer.'*

- 3.5.287 A summary of the comments provided in relation to a preference for the new overhead line route is included in this section of the report, alongside National Grid's responses.
- 3.5.288 A considerable proportion of the community member's responses suggested that neither north or south are preferred and requested that the new line avoids Brigsley entirely, suggesting that underground or offshore alternatives would avoid or mitigate all impacts, particularly on the Lincolnshire Wolds National Landscape (AONB), villages and residential areas.

National Grid's response: For National Grid's response in relation to consideration of offshore/ underground options please refer to Strategic options – Question 1a and other relevant feedback, under Alternative options. As presented in the Corridor and Preliminary Routeing and Siting Study (CPRSS), a number of alternative corridor options were appraised at the routeing and siting stage including corridor options located further to the west and east of Brigsley than the emerging preferred corridor selected. However, these alternative options were not preferred as the corridor further west (Sections W2 to W5) is located closer to the National Landscape (AONB) and the corridor further to the east (Sections E2 to E5) is restricted by narrower areas and multiple constraints to routeing including existing overhead lines, ancient woodland, pipelines, a solar farm and proposed housing. In comparison, the emerging preferred corridor located closer to Brigsley was considered to be less challenging as the Sections are generally larger with fewer narrower areas, and although constraints are present, they can generally be avoided whilst maintaining a largely direct route and using fewer angle pylons.

- 3.5.289 Several community members' responses stated a preference to route the proposed alignment to the north of Brigsley to reduce impacts to the National Landscape (AONB) and lessen disturbance to the landscape, including watercourses. A suggestion was also made the routeing should be east of Brigsley rather than near Ashby cum Fenby.

National Grid's response: The preferred overhead line corridor from Stage 1 consultation presented routeing optionality both north and south of Brigsley. Through design development, a route north of Brigsley is the emerging preference because it is overall a shorter and straighter alignment that avoids technical complexities associated with crossing the Viking CCS pipeline, that routes through the southern corridor option. Routing to the north of Brigsley will also avoid a crossing of Waithe Beck which would otherwise need to be crossed if a route to the south of Brigsley was taken in this area of the Project. The northern route is also located further from the National Landscape (AONB). The proposed alignment routes to the north and east of Brigsley compared with the alternative route which would route to the south and west of Brigsley closer to Ashby-cum-Fenby.

- 3.5.290 A few community members' responses stated a preference to route the proposed alignment to the south of Brigsley to avoid dividing communities in this location.

National Grid's response: Following an appraisal of the corridor presented at Brigsley, it was identified that routing south of Brigsley offers an overall less flexible alignment from a technical perspective and is less compliant with the Holford Rules for overhead lines because it would increase the length of alignment and number of angle pylons required. The southern corridor option is narrower (approximately 100m) and the presence of existing underground infrastructure (Viking CCS pipeline) and areas of Flood Zones 2 and 3 increases technical complexity. Routeing south would also

increase the potential impacts to visual receptors in the area including listed buildings within Brigsley, the grade II* listed Church of St Peter and grade II listed buildings within Ashby cum Fenby, as well as siting infrastructure closer to the National Landscape (AONB), that may increase impacts to the setting. Following the DCC process, this suggestion was not preferred. The proposed alignment to the north of Brigsley is routed through available space between properties along Waltham Road. Routing south of Brigsley would also require routing through available space between properties along Main Road and Ashby Lane. Once operational the proposed overhead line would not result in any physical dividing of communities.

- 3.5.291 A large proportion of the community members' responses stated no preference for the location of the new line and answered 'no' or 'none' to this question.

National Grid's response: National Grid notes the respondents' views.

Section 2: Barnoldby le Beck to North Thoresby – Question 3e and other feedback relevant to this Section of the route

- 3.5.292 Question 3e of the feedback form asked:

'Please use this box to provide any other comments on this Section of the route.'

- 3.5.293 Comments on Section 2: Barnoldby le Beck to North Thoresby covered a wide range of topics including: construction; historic environment; planning and design; ecology, biodiversity and environment; socio-economics; health and wellbeing; landscape and visual; and noise and vibration.
- 3.5.294 The following sections provide a summary of the comments made in relation to these themes and National Grid's response to those. When narrating feedback, we refer to the Sections of the route as they were described at the time of the Stage 1 consultation. National Grid's responses refer to the revised Sections of the route as presented as part of the Stage 2 consultation. For further detail on the changes in sectioning please see Approach to route Sections.

Construction

- 3.5.295 A few community members' responses raised concerns with the construction process which are summarised as follows:
- i. Adverse impacts on local wildlife and fauna, including protected orchids;
 - ii. Adverse impacts on local properties and their prices; and
 - iii. Disruption to travel around local villages in these areas due to construction. Furthermore, information on construction traffic impacts and access was requested.
- 3.5.296 Some community members' responses noted that houses in this area that are close to the Viking Link were affected by disruption during construction, but nothing since, which suggests that impacts can be limited by undergrounding the proposals.
- 3.5.297 **National Grid's response:** We recognise that construction of the Project would result in some temporary impacts to local areas The Corridor and Preliminary Routeing and

Siting Study (CPRSS), published at the Stage 1 Consultation, explains that our approach to the appraisal of design options considers a range of topics with various technical considerations including construction.

- 3.5.298 The **PEI Report** appraises the suitability of local roads to accommodate the forecast volume of construction traffic movements. This includes consideration of road geometry, congestion, accidents and sensitive receptors that include local amenities, schools and non-motorised user activity. Sensitive routes will be avoided where practicable, and construction haul roads used where appropriate along with maximising the use of suitable major and strategic roads. **PEI Report Volume 2 Part B Section 2 Chapter 9 Traffic and Movement** and **PEI Report Volume 3 Part B Sections 1 to 7 Appendix 9B Preliminary Construction information** and **Appendix 9C Future Baseline and Impact Analysis** identify Primary Access Routes to construction access points (bellmouths), compounds and substations, along with an estimate of average daily flow based on the existing information available at the time of writing. Our initial appraisal included in **PEI Report Volume 2 Part B Section 2 Figure 9.5 Preliminary Impact Analysis** shows impacts on the roads that result in potential significant effects. These routes are identified as part of the Primary Access Route network to Section 2 and will require discussion with the local highway authority and possibly further assessment to determine the effect, if any, on users of the highway. Construction traffic routing will be discussed with the appropriate highway authorities during the full Transport Assessment, which will be reported in the Environmental Statement (ES).
- 3.5.299 Ecology surveys are being completed to identify important ecological features and these will be avoided wherever possible and mitigation will be provided where needed. Information on the habitats and species surveys is presented in **PEI Report Volume 2 Part B Section 2 Chapter 4 Ecology and Biodiversity**. A Preliminary Code of Construction Practice (CoCP) is provided in **PEI Report Volume 3 Part A Appendix 5A Preliminary Code of Construction Practice** and details the measures proposed to control and manage potential impacts on ecology and biodiversity during construction. The CoCP includes measures to control potential impacts from dust, waste, water, noise, vibration and soil during construction. Mitigation requirements for the protection of habitats and species will be confirmed once baseline surveys have been completed, however these are likely to include the restoration of habitats post construction and/or the creation of new habitats. Species such as orchids will be considered based on their statutory and policy protection status as part of the Environmental Impact Assessment (EIA) process to the extent relevant.
- 3.5.300 A CoCP and Construction Traffic Management Plan will be prepared and submitted with the Development Consent Order (DCO) application. These documents will include commitments to reduce construction impacts together with a framework for detailed management plans to be prepared at the detailed design stage to reduce and mitigate potential impacts and/or disruptions that may arise during the construction phase. A Preliminary CoCP is available as part of the Stage 2 consultation.
- 3.5.301 For National Grid's response regarding impacts on properties and prices please refer to The graduated swathe – Question 3a and other relevant feedback , under Property prices and compensation.

Historic Environment

- 3.5.302 A few community members' responses identified the importance of considering and avoiding impacts on local heritage assets and features in this Section of the route

including the grade I Listed Church of St Helen in Barnoldby le Beck, the grade II Listed Huntsman Obelisk and Pelham House to the east of the village, the grade I Listed Waithe Church, the grade II Listed Grainsby Church and Waltham Windmill.

3.5.303 **National Grid's response:** The Project and draft Order Limits have been designed to avoid sensitive receptors as far as practicable. This is in accordance with the Holford Rules applicable to routing of new overhead lines and the Horlock Rules which apply to design and siting of substations. These approaches are explained in further detail within the Corridor and Preliminary Routeing and Siting Study (CPRSS), Design Development Report (DDR) and **PEI Report Volume 2 Part A Chapter 3 Main Alternatives Considered**. Principles include, but are not limited to, seeking to avoid areas of highest amenity, cultural or scientific value, taking advantage of natural screening provided by existing landform and features (e.g. woodland) and keeping visual, noise and other environmental effects to a minimum. For historic environment, such measures include the avoidance of physical impacts to designated heritage assets and where practicable non-designated heritage assets, and where possible reducing potential impacts to the setting of designated heritage assets and non-designated heritage assets.

3.5.304 National Grid has carried out a preliminary assessment of likely effects on the historic environment arising from the proposals in this Section of the route, which is presented in **PEI Report Volume 2 Part B Section 2 Chapter 5 Historic Environment**. In summary:

- i. The grade I listed Church of Saint Helen in Barnoldby le Beck is located approximately 830 m south west of proposed new pylons and overhead line. The parish church has medieval origins and is located within a churchyard surrounded by mature trees. Construction activities have the potential to temporarily impact the setting of the church resulting in a minor adverse effect that would not be significant. The presence of the new pylons and overhead line within the wider setting of the church would have little effect on the heritage value of the asset or how it is understood and appreciated. This was assessed as a minor adverse effect which would not be significant.
- ii. The grade II listed Huntsman's Obelisk and Railed Enclosure approximately 30 m north east of the Church of Saint Helen was erected in 1861 as a memorial to William Smith, Huntsman to the Earl of Yarborough. Standing approximately four metres in height it is located within a square enclosure with cast iron railings overlooking the surrounding rural countryside. Construction of the Project has the potential to temporarily impact upon the setting of the obelisk which would result in a negligible adverse effect which is not significant. The presence of the new pylons and overhead line in the landscape was not considered likely to change to the setting of the obelisk, resulting in a neutral effect which would not be significant.
- iii. The grade II listed Pelham House is a mid-18th century house with earlier origins to rear wing was reputedly a hunting lodge of the Pelhams, Earls of Yarborough. The house is located in the centre of the village of Barnoldby le Beck which forms the setting of the asset and is well screened by existing mature trees and adjacent buildings. The Project is not located within the setting of Pelham House and would have no temporary or permanent impact on the setting or value of the asset during construction and throughout its operation. This would result in a neutral effect which would not be significant.

- iv. The grade I listed Church of St Martin, Waithe, is located approximately 190 m north-east of the proposed pylons and overhead line. The church is set back from Church Lane and is bounded by dense mature trees and vegetation, creating a secluded enclosed setting. The wider setting of the church includes the surrounding agrarian landscape and its historic relationship with Waithe Parish. Construction of the Project would have a temporary moderate adverse effect which would be significant. The permanent presence of the new pylons and overhead line in the field south of the church, along with interruption of views from historic routeways would also result in a moderate adverse effect, which would be significant.
- v. The grade II* listed Church of St Nicholas in Grainsby, located approximately 480 m south west of the Project. Its setting is formed by its immediate surroundings and historic relationship with the grade II listed Old Rectory and includes the mature trees providing a secluded setting to the east, south and west. Construction works would temporarily alter how the asset is experienced having a temporary minor adverse effect which is not significant. The long-term presence of the Project in the landscape would not affect this setting, resulting in a neutral effect which would not be significant.
- vi. The grade II* listed Waltham Windmill (NHLE 1161256), a six-storey tower mill built in 1880, is located approximately 840 m north of the draft Order Limits. Views of the windmill from the south when approaching along Waltham Road and Cheapside, as well as Waithe Lane to the south of the village, are limited due to the topography, which rises in the fields to the south of the windmill, and from intervening trees which line the roads. The Section of overhead line to the south of the windmill will also utilise low height pylons to reduce the visibility of the Project within the surrounding landscape. Construction of the Project is, therefore, likely to result in temporary and permanent minor adverse effects, which would not be significant.

3.5.305 National Grid will continue to engage with Historic England and relevant local planning authorities, on aspects relating to the historic environment and heritage assets, including appropriate mitigation measures and techniques and will take their views into account as the Project evolves.

Planning and Design

- 3.5.306 A large proportion of the community members' responses made design suggestions in relation to this Section of the route, which are summarised as follows.
- i. The location of the proposed new overhead line should not be influenced by the existing or planned solar farms, as the nature of solar farm developments is temporary.

National Grid's response: National Grid is aware of several solar farm developments, both in the planning process and existing, across the proposed route for the Project. Where possible, we have been engaging with developers to understand the interactions between projects and where appropriate, work to mitigate potential impacts as far as practicable. External developments are a design factor taken into account but are only one of many considerations influencing routeing development decision making.

- ii. Suggestion that requested that the old airfield at Holton-le-Clay is used for temporary works, for instance as a construction compound.

National Grid's response: The suggested location of the former airfield at Holton-le-Clay was appraised as a potential siting location for temporary works. The outcomes of appraisal work determined that this location is too far from the proposed alignment to be of material benefit to the construction phase.

- iii. Suggestion that overhead lines should be relocated further north east, near Grainsby, to avoid land associated with the Grainsby Estate.

National Grid's response: National Grid has considered an alignment in line with this feedback and identified that an eastern alignment offers overall less siting flexibility due to the presence of Hornsea 1 and 2 cables, creating a pinch point that constrains the routeing. An alignment at this location would also site infrastructure closer to properties along Cheapside and Station Lane as well as designated heritage assets, including the Round Barrow Cemetery and Waithe Water Mill. The proposed alignment provides greater siting flexibility and allows for use of existing screening opportunities to reduce potential visual impacts to visual receptors.

- iv. Suggestion that overhead lines should be routed to avoid the outer part of North Thoresby and should go through the open land between North Thoresby and Fullstow.

National Grid's response: National Grid confirms that this suggestion reflects the proposed alignment for the Project.

- 3.5.307 A few community members' responses noted concerns about a proposed solar farm, Battery Energy Storage System and substation which is currently at planning application stage (the name or specific location of which was not identified) and suggested that National Grid should coordinate with EGL for a potential link offshore and with Hornsea 1 and 2 regarding the existing cables located west of Bradley Road and Waltham. Additionally, some community members' responses requested more detail in relation to the decision to discount the central and eastern corridor for the Section covered in Chapter 6 of the Corridor and Preliminary Routeing and Siting Study (CPRSS) 'Stage 2 between the A46 and North Thoresby/North Cotes'.
- 3.5.308 **National Grid's response:** National Grid undertake regular monitoring of emerging development proposals to keep informed of other developments in the local area/region to enable collaboration and coordination with other projects. This process is designed to minimise impacts on local communities. National Grid is aware of several solar farms (and other developments), both existing and subject to the planning process, across the proposed route for the Project. Where possible, we have been engaging with developers to understand and assess the interactions between projects and where appropriate, have made design changes or introduced mitigation measures to help reduce potential cumulative impacts as far as practicable.
- 3.5.309 For National Grid's response in relation to consideration of offshore/ underground options please refer to Strategic options – Question 1a and other relevant feedback , under Alternative options.

- 3.5.310 With respect to existing underground cables such as those for Hornsea 1 and Hornsea 2 and the proposed EGL 3 and 4 underground cables, it is not possible to install the proposed pylons along the same route as existing underground cables due to the foundations required for each pylon, and because the underground cables need to be easily accessed for maintenance and repair in the event of a fault. Minimum electrical distances also need to be maintained for the two systems to work safely and effectively.
- 3.5.311 Justification for discounting the central and eastern corridors between the A46 and North Thoresby/North Cotes is presented in Chapter 6 of the Corridor and Preliminary Routeing and Siting Study (CPRSS) and informed the emerging preference in terms of individual corridor Sections in this location; the emerging preference was then also reviewed as part of the end-to-end solution as presented in Chapter 14 of the CPRSS. The information presented in the CPRSS is considered to sufficiently cover the justification for the selection of the emerging preferred corridor presented at Stage 1 consultation. As detailed in **PEI Report Volume 3 Part A Appendix 3A Western Corridor Review**, a review of parts of the emerging preferred corridor adjacent to the Lincolnshire Wolds National Landscape (AONB) has since been undertaken to confirm the validity of the emerging preferred corridor in this area, taking into consideration newly available information identified since the publication of the CPRSS. The review concludes that there is no change to the preference for the western corridor presented in the CPRSS.

Ecology, Biodiversity and Environment

- 3.5.312 A considerable proportion of the community members' responses, alongside technical stakeholder's feedback (Tetney Parish Council) raised concerns about impacts on ecology, which are summarised as follows:
- i. General concerns regarding adverse impacts on wildlife and habitats in the area;
 - ii. General concerns regarding impacts on the environment, particularly in the areas of Ashby cum Fenby and Brigsley;
 - iii. Impacts on wooded areas south of Waltham Road, east of Barnoldby le Beck and north of Waltham Road and east of Bradley Road, which are areas of priority habitat;
 - iv. Impacts on bees and their ability to pollinate, as well as bee hives, which would suffer detrimental consequences from pylons;
 - v. Impacts on protected and notable species including water voles, bats, newts, turtle doves, barn owls, migratory birds, which would suffer detrimental consequences from construction and pylons;
 - vi. Proximity of proposals to large ponds popular with wildlife at North Thoresby, as well as designated nature reserves in the area;
 - vii. Impacts on Tetney Blow Wells SSSI (Site of Special Scientific Interest);
 - viii. Impacts on Grainsby Estate woodland areas; and
 - ix. Impacts on wintering herds of Mute Swans, Whoopers and the occasional Bewick Swan; Brent and Pink Footed Geese as well as several species of wader like Golden Plover and Lapwing also graze the fields.
- 3.5.313 Furthermore, some community members' responses noted that environmental assessments to identify and mitigate potential impacts on habitats, biodiversity and

ecosystems should be undertaken, and more information is needed regarding mitigation plans.

- 3.5.314 **National Grid's response:** The Project has been designed to avoid direct impacts upon European Designated Sites (Special Areas of Conservation, Special Protection Areas and Ramsar sites) and Sites of Special Scientific Interest. No site (nor part of any site) statutorily designated for its biodiversity importance is present within the Section 2 draft Order Limits. The Humber Estuary SPA, SAC and Ramsar site, Greater Wash SPA, Gibraltar Point SAC and Saltfleetby-Theddlethorpe Dunes SAC, all fall within 10 km of the draft Order Limits. In addition, Gibraltar Point SPA and Ramsar site and Wash SPA and Ramsar site (where bird species with large foraging ranges are noted as, or one of, the qualifying features), fall within 30 km of the Section 2 draft Order Limits. The Impact Risk Zones for Tetney Blow Wells SSSI partially overlap with the Section 2 draft Order Limits. The potential for likely significant effects upon these sites will be assessed within the Environmental Statement (ES) and a Report to inform HRA. The closest designated site is Bradley and Dixon Woods LNR which is located less than 100 m from the draft Order Limits. Survey work will establish the nature and importance of any receptors associated with this LNR that may be affected by the works and appropriate mitigation will be implemented.
- 3.5.315 There are ten Local Wildlife Sites (LWS) that are located within or within 0.1 km of the draft Order Limits (Mother and Greenfield Woods LWS, Bradley and Dixon's Woods LWS, Grange Plantation, Aby LWS, Long Eau West LWS, Great Eau LWS, Laceby Beck North LWS, Withern Ings LWS, Withern Wood LWS, River Freshney Headwaters LWS and Waithe Beck East LWS) which includes watercourses which are crossed by the alignment and woodlands that lie adjacent to the Section 2 draft Order Limits. Due to the proximity of the draft Order Limits to these LWS there is a risk of adverse effects on habitats as well as potentially any fauna (e.g. bats, otter and water vole) associated with these LWS. Further survey work will establish the nature and importance of any receptors associated with these LWS and will inform mitigation requirements.
- 3.5.316 Infrastructure has been located outside of Habitats of Principal Importance (HPI) where possible, however some areas of HPI will be directly affected by the proposed works including the Coastal and Floodplain Grazing Marsh in the Withern area and broadleaved woodland south-east of Laceby. Where HPI cannot be avoided, suitable mitigation will be provided and this will be developed and presented within the ES.
- 3.5.317 Through routeing and siting National Grid has sought and will continue to reduce as far as practicable potential impacts on biodiversity including habitats and protected species. The process of routeing takes account of existing biodiversity, the natural environment and, where practicable, seeks to avoid wildlife, and where not feasible, reduce potential impacts on areas of ecological sensitivity including protected and notable species and their associated habitats, through mitigation. A suite of habitat and species surveys will inform the ecological baseline, this data is still being collected and will be provided at ES stage per Chartered Institute of Ecology and Environmental Management guidance. The surveys include bats, badgers, great crested newts, otter, fish, aquatic macroinvertebrates, aquatic macrophytes, water vole, reptiles, and breeding and non-breeding birds. The Environmental Impact Assessment (EIA) for the Project will assess the effects on important ecological features using this baseline information. This will include collision risk with the overhead line once all bird data has been collected, and where/if required design changes and/or appropriate mitigation measures will be proposed. Some species are not protected or notable such as bees (kept by beekeepers) and therefore will not be assessed. However, the overall impact on ecology is taken into account as part of the EIA process for the Project.

- 3.5.318 The initial assessment including the surveys undertaken are reported in **PEI Report Volume 2 Part B Section 2 Chapter 4 Ecology and Biodiversity**. The initial assessment identifies that at this stage significant effects cannot be excluded, and further survey work (ongoing) will be used to confirm the status of these species, inform the design of appropriate mitigation and a full assessment of effects that will be reported in the ES.
- 3.5.319 With regard to electric and magnetic fields impacts on bees please refer to The graduated swathe – Question 3a and other relevant feedback , under Impacts on bees and ability to pollinate.

Socio-economics

- 3.5.320 A large proportion of the community members' responses identified adverse effects on the attractiveness of the open countryside and villages in this area, which support local businesses with attracting employees and custom. Furthermore, some community members' responses noted that visitor numbers and tourism in the area will be adversely impacted by the proposals, mentioning the Sungrove Club, a caravan site in Brigsley.
- 3.5.321 Several community members' responses raised concerns with:
- i. Conflicts with private plane flight paths in the area; and
 - ii. Implications on aircrafts which are performing low level exercises in the area.
- 3.5.322 **National Grid's response:** Through the routeing and siting exercise National Grid has sought to reduce impacts on businesses and the local economy, as evidenced in the Strategic Options Report (SOR) and the Corridor and Preliminary Routeing and Siting Study (CPRSS) published at the Stage 1 consultation. To reduce potential impacts, we have identified businesses and enterprises and their primary function, and those that are likely to generate tourism. These have been and will continue to be considered during the iterative design process.
- 3.5.323 From a socioeconomic perspective, the likely effects of National Grid's proposals on open space, local businesses including those operating in connection with tourism (e.g. holiday parks and caravan sites) are considered in **PEI Report Volume 2 Part B Section 2 Chapter 11 Socio-economics, Recreation and Tourism**. In summary, no significant adverse effects are anticipated for socio-economics, recreation and tourism receptors, noting this excludes above ground renewable energy generation infrastructure, within Section 2 as a result of the construction, operation and maintenance phase of the Project. An assessment of the direct effects of the Project on above ground renewable energy generation infrastructure (solar and onshore wind farms) as socio-economics receptors will be presented in the Environmental Statement (ES).
- 3.5.324 With regard to settlements and population, affected communities (local communities, including populations of towns and villages) **PEI Report Volume 2 Part C Route-wide Chapter 7 Socio-economics, Recreation and Tourism** identifies that at this stage it is anticipated that likely non-significant effects associated with construction activities would generally be minor adverse and temporary, with effects felt most by communities in closest proximity to the Project. We will report on any indirect amenity effects for affected communities as part of the socio-economics, recreation and tourism assessment, which might occur through in-combination effects across the Project (such as noise and vibration, visual, and transport and movement effects). **PEI Report**

Volume 2 Part C Route-wide Chapter 10 Cumulative Effects presents a preliminary assessment of cumulative effects upon common receptors across environmental topics identified within **PEI Report Volume 2 Part B** (intra-project) and identifies a shortlist of other Committed Developments with which there may be potential for cumulative effects and the relevant environmental topics for such effects (inter-project). The full cumulative effects assessment will be reported within the ES.

- 3.5.325 With regard to tourism including strategic visitor attractions and the impact of construction workforce on tourist accommodation bedspace, **PEI Report Volume 2 Part C Route-wide Chapter 7 Socio-economics, Recreation and Tourism** identifies that non-local workers would require accommodation in the local area, which is likely to be serviced from hotels and similar establishments such as B&Bs, and non-serviced accommodation including holiday lets, caravan parks and tourist campsites, and other collective accommodation. Overall, both temporary positive benefits to tourist accommodation businesses and temporary adverse effects through a reduction in tourist accommodation bed spaces are anticipated in relation to the labour market during construction. Given the preliminary number of construction workers anticipated to be employed on the Project, and the level of likely spare capacity for bedspace, the preliminary assessment of effects sets out that these are not likely to be significant. For strategic visitor attractions the preliminary assessment of these receptors is that the effects are not expected to be significant.
- 3.5.326 It should be noted that this is an ongoing assessment and is subject to changes due to the ongoing development of the Project. A full detailed assessment will be included within the ES submitted with the Development Consent Order (DCO) application.
- 3.5.327 The Sungrove Club, a caravan site in Brigsley, was not specifically referenced as part of the Stage 1 consultation material. This site has now been taken into account and is considered in **PEI Report Volume 2 Part B Section 2 Chapter 11 Socio-economics, Recreation and Tourism**.
- 3.5.328 National Grid is aware of several airfields in the region that are within varying proximities to the proposed Project. Where possible, we have been engaging with airfield operators to better understand their activities, aircraft types and annual movements to inform our design development. National Grid has considered potential impacts to aviation receptors as outlined in Chapter 6 of the Design Development Report (DDR) with support from specialist aviation consultants.
- 3.5.329 With regard to users of airfields, aviation will be considered in the ES, whilst **PEI Report Volume 2 Part B Section 2 Chapter 11 Socio-economics, Recreation and Tourism** sets out the relevant baseline and explains how aviation will be assessed with a specialist standalone report in support of the ES.

Health and Wellbeing

- 3.5.330 Several community members' responses raised concerns regarding impacts on health, safety and security, which are summarised as follows:
- i. General concerns about health and wellbeing of communities in the area; and
 - ii. Health and wellbeing implications from pylons and electric and magnetic fields (EMF) for residents in the area, including residents of Brigsley, St Helens Crescent, Barnoldby le Beck, Ashby cum Fenby or North Thoresby.
- 3.5.331 **National Grid's response:** National Grid recognises people may have concerns about the potential impacts of living close to an overhead line and associated infrastructure,

such as those communities in Brigsley, Barnoldby le Beck, Ashby cum Fenby and North Thoresby, and that the uncertainty whilst the proposals are developed may cause anxiety. Through the routeing and siting exercise National Grid has sought and will continue to reduce as far as practicable impacts on sensitive receptors, such as residential areas, health and education facilities and areas for recreation. A considerable amount of assessment work has been undertaken to allow preliminary judgements to be made about the design and routeing of the Project. This has been set out in various publications, including the Corridor and Preliminary Routeing and Siting Study (CPRSS) and Strategic Options Report (SOR), published as part of the Stage 1 consultation.

3.5.332 Further detailed assessment work has been undertaken since the Stage 1 consultation as reported in **PEI Report Volume 2 Part C Route-wide Chapter 8 Health and Wellbeing**. A health and wellbeing baseline has been established for each Section to understand how the Project may specifically impact the health and wellbeing of different communities. This includes the following communities:

- | | | |
|---------------------|--------------------|------------------|
| • Laceby | • Ashby cum Fenby | • Alvingham |
| • Barnoldby le Beck | • North Thoresby | • Little Carlton |
| • Waltham | • Covenham St Mary | • Withern |
| • Brigsley | • Yarburgh | • Tothill |

3.5.333 Policies and procedures are in place to make sure all equipment will comply with public EMF exposure limits. As such, physical health effects associated with the generation of EMFs is scoped out of the health and wellbeing assessment on the basis that EMF levels would be low such that significant adverse effects are not expected. An EMF report, separate to the Environmental Impact Assessment (EIA) process, will be prepared as part of the Project.

3.5.334 No mental health impacts as a result of EMFs are expected as a result of the Project as described within **PEI Report Volume 2 Part C Route-wide Chapter 8 Health and Wellbeing**. Furthermore, no significant impact on health and wellbeing as a result of changes in access to promoted recreational routes and open space; or changes to employment were identified.

3.5.335 The health and wellbeing assessment recognises that concerns about the health impacts of EMF may adversely impact some people's mental health by heightening anxiety. However, it is anticipated that this group is likely to be very small, and that this impact will be effectively mitigated by National Grid's engagement with the community.

3.5.336 For further information on EMFs please refer to **The graduated swathe – Question 3a and other relevant feedback** under Health and Wellbeing.

3.5.337 The Health and Wellbeing assessment assesses the impact of changes to landscape and visual on health and wellbeing in conjunction with air quality, noise, and traffic and transport. This combination effect is assessed as 'Neighbourhood Quality'. For a neighbourhood quality effect to be identified, at least two significant residual effects must combine at the same location. There is evidence to suggest links between neighbourhood quality and health and wellbeing, as health and wellbeing can be adversely impacted by changes to air quality, noise, visual amenity, increased traffic. This will be assessed within the Environmental Statement (ES) and if required, mitigation put in place to address these impacts.

- 3.5.338 The health and wellbeing assessment will continue to be updated to ensure health and wellbeing concerns and impacts of local communities are taken into account.

Landscape and Visual

- 3.5.339 A large proportion of the community members' responses raised general concerns regarding impacts on the landscape in the area and more information was requested on these, as well as on mitigation proposed. Furthermore, some community members' responses noted that visual impacts, including to/from the Lincolnshire Wolds National Landscape (AONB) will affect the communities in the area, including Brigsley, Ashby cum Fenby, Grainsby Estate and Village, Waithe, Barnoldby le Beck and Waltham.
- 3.5.340 **National Grid's response:** National Grid develops its Projects in line with national policy and our statutory duties to develop an efficient, economic and co-ordinated network, and have regard to preserving amenity and mitigating effects. We recognise that overhead lines can give rise to adverse landscape and visual effects, and we carefully consider these along with other environmental and socio-economics considerations, technical requirements and cost when developing our Projects.
- 3.5.341 National Grid has carefully considered the potential impacts of the Project at an early stage, and the findings and justifications for the selection of the emerging preferred corridor in which the new overhead line is proposed to be routed, can be found in the Corridor and Preliminary Routeing and Siting Study (CPRSS), which is available on our Project website. Through the routeing and siting exercise we have sought to reduce the impact on landscape character and visual amenity. We will continue to consider both landscape character and amenity value as we develop our proposals and seek to reduce effects.
- 3.5.342 The likely effects of National Grid's proposals in this area on landscape character and visual receptors are set out in **PEI Report Volume 2 Part B Section 2 Chapter 2 Landscape** and **Chapter 3 Visual**. A preliminary visual assessment has been undertaken for each community, or parish, within the Study Area. A number of viewpoints have been selected to represent the views from local communities. These are presented in **PEI Report Volume 3 Part B Sections 1 to 7 Appendix 3A Proposed Viewpoints** and will form the basis for the Landscape and Visual Impact Assessment (LVIA).
- 3.5.343 Significant visual effects have been predicted for a number of communities with views to and from the National Landscape (AONB). This includes communities that would be directly affected by a new overhead line, but also communities which have longer distance views from the more elevated areas within the Wolds and for communities to the east of the Project with strong visual links towards the Wolds. This includes Brigsley, Grainsby, Waithe and Barnoldby le Beck where there would be close proximity views of the Project as it routes through these community areas. Significant effects are not predicted for Ashby cum Fenby and Waltham, both of which benefit from vegetation along field boundaries which will help to filter views of the Project, which in this Section is proposed to be constructed using low height pylons.
- 3.5.344 **PEI Report Volume 2 Part C Route-wide Chapter 2 Landscape** reports early findings of the assessment of impacts on National Landscape (AONB). This considers the purposes of the designation and its special qualities which also includes views. Within this Section, low height pylons have been proposed between Barnoldby le Beck and Waithe to reduce the visual effects for receptors within the National Landscape (AONB). A full assessment of the impacts on National Landscape (AONB) will be provided as part of the LVIA, which will be reported in the Environmental Statement

(ES) that would be submitted with the Development Consent Order (DCO) application of the Project.

- 3.5.345 National Grid will be producing a LVIA that will, in addition to other topic specific assessments, form the latter part of the Environmental Impact Assessment (EIA) for the Project. This will include a write-up of an assessment of the effects on the landscape character of the area and visual effects from communities. Where likely significant effects are anticipated, the LVIA will consider and identify areas where it may be necessary and appropriate to put forward potential mitigation as part of an iterative design and assessment process.

Noise and Vibration

- 3.5.346 A few community members' responses raised concerns regarding the noise impact that the overhead line infrastructure will have, as their houses appeared very close to the proposed route.
- 3.5.347 A few community members' responses raised additional concerns about the potential for noise impacts during construction and operation at Brigsley.
- 3.5.348 **National Grid's response:** National Grid will be undertaking a noise and vibration assessment that will form part of the Environmental Impact Assessment (EIA) for the Project. Noise levels resulting from the Project and the effect on residential properties as well as other sensitive receptors, such as hospitals and schools are carefully considered during Project development, assessed according to the appropriate UK standards, and mitigated where necessary. The early findings are presented in a **PEI Report**, as part of the Stage 2 consultation before being refined and submitted in an Environmental Statement (ES) which will form part of the eventual Development Consent Order (DCO) application.
- 3.5.349 The noise from overhead line and pylons have been discussed in **PEI Report Volume 2 Part B Section 2 Chapter 10 Noise and Vibration**. The proposed overhead line system is a 'triple Araucaria' conductor bundle, which is regarded as practically quiet during both typical dry and wet weather conditions and would not lead to significant adverse effects at nearby noise and vibration sensitive receptors, even if directly underneath the line.
- 3.5.350 In addition, pylon fittings, such as insulators, dampers, spacers, and clamps, will be designed and procured in accordance with a series of National Grid Technical Specifications and will be type registered (rigorously tested) to ensure the fittings conform to the specification. The design of the overall system will reduce the potential for audible noise and tones to occur from all types of fittings, including insulators. Where noise occurs, it is likely to be localised and of short duration. If noise is due to a fault, action will be taken to rectify it, as part of ongoing maintenance protocols, including through cleaning or replacing the relevant fitting.
- 3.5.351 The assessment of construction noise and vibration, and construction traffic noise indicates that significant adverse effects are not expected at any noise sensitive locations in Section 2. The contractor will be required to employ best practicable means to reduce the effects of construction noise and vibration. This is particularly the case where the route passes close to residential and other sensitive areas, such as Brigsley.

Section 3: North Thoresby to Alvingham and Keddington – Question 3f and other feedback relevant to this Section of the route

3.5.352 Question 3f of the feedback form asked:

‘Do you have any comments about this Section of the route?’

3.5.353 The feedback on Section 3: North Thoresby to Alvingham and Keddington covered themes including construction; consultation; historic environment; planning and design; ecology, biodiversity and environment; socio-economics; health and wellbeing; landscape and visual; noise and vibration; walkers, cyclists and horse riders; and groundwater.

3.5.354 The following sections provide a summary of the comments made in relation to these themes and National Grid’s response to those. When narrating feedback, we refer to the Sections of the route as they were described at the time of the Stage 1 consultation. National Grid’s responses refer to the revised Sections of the route as presented as part of the Stage 2 consultation. For further detail on the changes in sectioning please see Approach to route Sections.

Construction

3.5.355 Several community members’ responses raised concerns with the construction process, which are summarised as follows:

- i. Adverse impacts on local house prices;
- ii. Negative impacts on tourism around Louth;
- iii. Disruption to travel around local villages in these areas because the current road infrastructure is insufficient; and
- iv. Impacts on the farm shop and tea shop at Alvingham.

3.5.356 **National Grid’s response:** We recognise that construction of the Project would result in some temporary impacts to local areas. The Corridor and Preliminary Routeing and Siting Study (CPRSS), published at the Stage 1 consultation, explains that our approach to the appraisal of design options considered a range of topics with various technical considerations including construction.

3.5.357 The **PEI Report** appraises the suitability of local roads to accommodate the forecast volume of construction traffic movements. This includes consideration of road geometry, congestion, accidents and sensitive receptors that include local amenities, schools and non-motorised user activity. Sensitive routes will be avoided where practicable, and construction haul roads used where appropriate along with maximising the use of suitable major and strategic roads. **PEI Report Volume 2 Part B Section 2 Chapter 9 Traffic and Movement** and **PEI Report Volume 3 Part B Sections 1 to 7 Appendix 9B Preliminary Construction information** and **Appendix 9C Future Baseline and Impact Analysis** identify Primary Access Routes to construction access points (bellmouths), compounds and substations, along with an estimate of average daily flows based on the existing information available at the time of writing. Our initial appraisal included in **PEI Report Volume 2 Part B Section 2 Figure 9.5 Preliminary Impact Analysis** shows impacts on the roads that result in potential significant effects. These routes are identified as part of the Primary Access Route network to Section 2 and will require discussion with the local highway authority

and possibly further assessment to determine the effect, if any, on users of the highway. Construction traffic routeing will be discussed with the appropriate highway authorities during the full Transport Assessment, which will be reported in the Environmental Statement (ES).

- 3.5.358 The **PEI Report** provides a more detailed presentation of environmental constraints and receptors and preliminary assessment findings, including in relation to construction impacts, across a range of environmental topics. This includes local business, such as farms, local tourist attractions, tourist accommodation and energy generating infrastructure that operate as commercial entities, which fall within the Study Area, which are considered in **PEI Report Volume 2 Part B Section 2 Chapter 11 Socio-economics, Recreation and Tourism**. The farm shop and tea shop at Alvingham has not been identified within the Study Area for local businesses, being located 500m beyond the draft Order Limits and therefore is not predicted to experience any significant effects as a result of construction, operation or maintenance of the Project.
- 3.5.359 Impacts of the construction workforce on tourism accommodation bedspace and strategic visitor attractions are considered in **PEI Report Volume 2 Part C Route-wide Chapter 7 Socio-economics, Recreation and Tourism**, with no significant effects identified at this stage.
- 3.5.360 A Code of Construction Practice (CoCP) and a Construction Traffic Management Plan will be prepared and submitted with the Development Consent Order (DCO) application. These documents will include commitments to reduce construction impacts together with a framework for detailed management plans to be prepared at the detailed design stage to reduce and mitigate potential impacts and/or disruptions that may arise during the construction phase. A Preliminary CoCP is available as part of the Stage 2 consultation.
- 3.5.361 For National Grid's response regarding the ability to sell properties please refer to The graduated swathe – Question 3a and other relevant feedback , under Property prices and compensation.

Consultation

- 3.5.362 Several community members' responses identified what they considered to be missing information or matters that are not adequately consulted on, which are summarised as follows.
- i. Insufficient local information provided to enable comment to be made in response to this question;
 - ii. Lack of consultation material on impacts of the Project on the ability to sell properties in this area;
 - iii. No information on impacts to agricultural land in the area; and
 - iv. Inclusion of the Lincolnshire Wolds railway and its significant and exclusion of the Thomas Centre in Covenham St Bartholomew and various local villages such as Fulstow, Covenham St Bartholomew and Yarborough, in the consultation material.
- 3.5.363 **National Grid's Response:** For National Grid's responses on consultation materials and feedback please refer to Our consultation - Question 6f and other , under Consultation materials. For National Grid's response regarding the ability to sell

properties please refer to The graduated swathe – Question 3a and other relevant feedback , under Property prices and compensation.

- 3.5.364 The Lincolnshire Wolds Railway is referenced in the CPRSS as a key feature in the North Thoresby to Woodthorpe area due to its status as a heritage railway and visitor attraction and it is noted *“that it could be avoided through careful routing (at later stages) by an overhead line along the western or eastern extents of the Section or, where required, it could be oversailed”* (Paragraph 6.2.35). The alignment we are proposing at Stage 2 consultation avoids the Lincolnshire Wolds Railway. We are aware of potential plans for railway extension and therefore any interactions will need to be managed when information is available.
- 3.5.365 The CPRSS discusses consideration of agricultural land using the Best and Most Versatile (BMV) Agricultural Land Classification (ALC) and concludes that BMV agricultural land is not considered to be a differentiating factor in the identification and assessment of corridors, siting zones and siting areas due to its prominence within the wider Study Area for the Project. **PEI Report Volume 2 Part B Section 2 Chapter 8 Agriculture and Soils** provides a preliminary assessment of the impact of the Project on agricultural land, soil resources and agricultural landholdings using publicly available and purchased data related to land grades (according to the ALC system) soil profiles and land use. The preliminary assessment has used publicly available Provisional ALC data, however, a detailed ALC survey will be conducted and reported in the Environmental Statement (ES), to be submitted with the Development Consent Order (DCO) application, to provide a full assessment of the extent of land grades and soil types affected.
- 3.5.366 The Thomas Centre, at Covenham St Bartholomew, was not specifically referenced as part of the Stage 1 consultation material. The Thomas Centre was a consideration during design development of the proposed overhead lines and further detail can be found in Chapter 5 of the Design Development Report (DDR). The Thomas Centre is also considered in **PEI Report Volume 2 Part B Section 2 Chapter 11 Socio-economics, Recreation and Tourism**.
- 3.5.367 Fulstow, Covenham St Bartholomew and Yarborough were included in the consultation plans, which are still available on the Project website www.nationalgrid.com/document/352636/download

Historic Environment

- 3.5.368 Several community members’ responses, alongside technical stakeholders’ feedback (Grimoldby and Manby Parish Council and Louth Town Council) identified the importance of considering and avoiding impacts on local heritage assets and features in this Section of the route, including the Lincolnshire Wolds Heritage railway line, which is due to be expanded; St James Church in Louth; the historic village of Covenham St Mary with its two churches; unspecified listed buildings and scheduled ancient monuments; and general areas of historic interest. Some community members’ responses stated that alternative proposals should be considered due to impacts on heritage.
- 3.5.369 **National Grid’s response:** The Project and draft Order Limits have been designed to avoid sensitive receptors as far as practicable. This is in accordance with the Holford Rules applicable to routing of new overhead lines and the Horlock Rules which apply to design and siting of substations. These approaches are explained in further detail within the Corridor and Preliminary Routeing and Siting Study (CPRSS), Design Development Report (DDR) and **PEI Report Volume 2 Part A Chapter 3 Main**

Alternatives Considered. Principles include, but are not limited to, seeking to avoid areas of highest amenity, cultural or scientific value, taking advantage of natural screening provided by existing landform and features (e.g. woodland) and keeping visual, noise and other environmental effects to a minimum. For historic environment, such measures include the avoidance of physical impacts to designated heritage assets and where practicable non-designated heritage assets, and where possible reducing potential impacts to the setting of designated heritage assets and non-designated heritage assets.

3.5.370 National Grid has carried out a preliminary assessment of potential likely effects on the historic environment arising from the proposals in this Section of the route, which is reported on in **PEI Report Volume 2 Part B Section 2 Chapter 5 Historic Environment**. In summary:

- i. The grade I listed Parish Church of St James (NHLE 1063264) is located in the centre of Louth in the Conservation Area, approximately 3.4 kms from the draft Order Limits. The setting of the church does not extend to where the proposed infrastructure will be located for the Project and no change is anticipated that would result in altering the way the church is experienced or appreciated. This will be assessed further, in consultation with Historic England, and will be reported in the Environmental Statement (ES).
- ii. The historic village of Covenham St Mary includes the grade II* listed Church of St Bartholomew (NHLE 1063108) and the grade II* listed Church of St Mary (NHLE 1063109). These are located just over 500 m from the draft Order Limits. The setting of Church of St Bartholomew (NHLE 1063108) does not extend to where the proposed infrastructure will be located and no change is anticipated. The temporary impacts from the construction works and the longer-term permanency of the pylons and associated infrastructure in the landscape and possible setting of Church of St Mary (NHLE 1063109) do fall within its setting but the impacts are not considered to be significant. Similarly potential effects on non-designated farmsteads within or near the village are not considered to be significant.

3.5.371 The Lincolnshire Wolds Heritage Railway line is shown on historic OS maps but is not recorded as a historic asset on the Historic Environment Records (HERs) and therefore has not been assessed as part of the **PEI Report**. This will be assessed at ES stage as an identified historic asset within the 1 km Study Area.

3.5.372 National Grid will continue to engage with Historic England and relevant local planning authorities on aspects relating to the historic environment and heritage assets, including appropriate mitigation measures and techniques and will take their views into account as the Project evolves.

Planning and Design

3.5.373 A large proportion of the community members' responses made design suggestions in relation to this Section of the route, which are summarised as follows.

3.5.374 Suggestions about undergrounding in this Section are summarised as follows:

- i. Suggestion to place the overhead lines underground where in close proximity to the villages of Yarburgh and Alvingham.

- ii. Suggestion to route the overhead lines offshore to avoid impacts on the Lincolnshire Wolds National Landscape (AONB), wildlife and views of St James' Church in Alvingham.
- iii. Suggestion to route underground to not obscure views to the sea.
- iv. Suggestion to route this Section underground to protect the Lincolnshire Wolds.
- v. Suggestion to underground the overhead lines between Grimsby and Louth to avoid impact on the National Landscape (AONB) and villages in this area.

National Grid's response: National Policy Statement (NPS) EN-5 makes it clear that the Government expects overhead lines to be appropriate in most instances, although it recognises that there may be, at particularly sensitive locations such as National Landscapes, potential adverse landscape and visual impacts of an overhead line which may make it unacceptable in planning terms, taking account of the specific local environment and context. Undergrounding of overhead lines also needs to be considered in the context of a higher cost to bill-paying consumers, potential environmental implications of installation (due to the wider construction corridor required) and potential maintenance implications, as well as a requirement for sealing end compounds at the start and end point of the underground sections. The Project is located at a sufficient distance from the National Landscape that is not considered that this area is particularly sensitive from a landscape and visual perspective. Between Grimsby and Louth and between Yarburgh and Alvingham, there are not considered to be any particularly sensitive locations from a landscape and visual perspective where overhead lines would be considered inappropriate. Therefore, it is considered that overhead lines are appropriate in these locations.

The grade I listed Parish Church of St James (NHLE 1063264) is located approximately 3.4 kms from the draft Order Limits and as such no change is anticipated that would result in altering the way the church is experienced or appreciated. This will be assessed further, in consultation with Historic England, and will be reported in the Environmental Statement (ES).

In terms of offshore options please refer to Strategic options – Question 1a and other relevant feedback, under Alternative options.

- vi. As the proposed overhead line is to carry power from a North Sea wind farm, they will initially start with undersea cable bringing the power ashore. Therefore, the cable should be offshore undersea down the coastline to the Wash, at which point the cable, still under water enters the River Nene and continues up the Nene to just beyond Foul Anchor where it is less than a mile to the Walpole substation where it could be reached by underground cable across agricultural farmland this would avoid environmental impacts on countryside and agricultural land.

National Grid's response: Whilst providing connection infrastructure for offshore wind generation into the wider National Electricity Transmission System (NETS) forms a part of the Project needs case, there are multiple drivers for both the substation and overhead line elements of the Project. Aside from offshore wind generation, generation or demand capacity is also expected to be required at substations for Solar, Battery Storage, Interconnector, Carbon Capture and Gas Turbine projects, many of which will be based onshore. Individual connections between offshore wind generators and the onshore transmission system would not provide any connection capacity for the other connecting projects.

The other key driver for the Grimsby to Walpole Project, and the overhead line in particular, is the need to provide additional power flow capacity between the North of England and the Midlands boundary, and between the Midlands and the South of England boundary. To achieve this, the new transmission line that is part of the Grimsby to Walpole Project must connect into the existing transmission network in multiple locations and form an integrated power transmission route with the rest of the NETS. Individual radial connections from generators into existing or new substations without any new interconnecting lines would not achieve this part of the needs case, as no additional power transfer capacity is being provided between different regions of the transmission system.

In terms of offshore options please refer to Strategic options – Question 1a and other relevant feedback, under Alternative options.

- vii. Suggestion to route overhead lines midway between the new dwellings (three new dwellings immediately east of the railway line on Station Lane in North Thoresby) and the pair of existing semi-detached houses to the east which are already shown as a cut-out.

National Grid's response: The proposed alignment is close to midway between the identified properties, although not exactly halfway, in order to avoid impacts to woodlands further north and land parcels further south, as well as allowing a haul road to run further away from the single cut-out property than routing halfway between properties. It is not expected that the current proposal would be much different from a route exactly halfway between the properties in terms of visual impact. It is also noted that the property to the east of the proposed overhead lines (the single property in the cut-out) benefits from existing screening.

3.5.375 Several suggestions were made regarding using the eastern corridor, as summarised below:

- i. Suggestion to use the eastern corridor for Section 3 of the route, in order to reduce impacts on villages in the area, including Abbey House, Keddington, Alvingham or Yarburgh and the National Landscape (AONB).
- ii. Suggestion to route to the east of Fulstow, Covenham, South Cockerington, Grimoldby and Manby as it would provide further distance from the National Landscape (AONB).

National Grid's response: National Grid has undertaken a review of parts of the emerging preferred corridor adjacent to the Lincolnshire Wolds National Landscape (AONB) following the original appraisal reported in the Corridor and Preliminary Routeing and Siting Study (CPRSS). The review has considered additional information obtained by National Grid following the publication of the CPRSS to confirm the appropriateness of selecting the preferred (western) corridor compared to the alternative (eastern) corridor. The review has focussed on those Sections commencing just south of North Thoresby and Tetney and ending just north of Burgh le Marsh. The comparative analysis highlights that distinguishing factors in the selection of the preferred option remain finely balanced and largely relate to the increased potential for impacts on the National Landscape (AONB) associated with the western corridor and the increased potential for potential impacts on the coastal ecological designations and flood risk issues associated with the eastern corridor. The review concludes that consideration of the new information does not significantly alter the previous

conclusions reported in the CPRSS and the preference for the western corridor. The findings of the review are not considered significant enough to require a change of route corridor. Further detail can be found in **PEI Report Volume 3 Part A Appendix 3A Western Corridor Review**.

- iii. Suggestion to route the overhead lines to avoid the Heritage Railway Lines (Lincolnshire Wolds Railway) that runs from Holton le Clay to Louth.

National Grid's response: National Grid can confirm that this suggestion reflects the proposed design for the Project and the Lincolnshire Wolds Railway is being avoided. Although we are aware of the plans for the railway to be extended, nothing has been confirmed yet and therefore any interactions will need to be managed once more information is available.

- iv. With reference to the three cut-outs from the corridor to the immediate south of Louth Canal, route overhead lines between the two most easterly cut-outs or between the eastern cut-out and the eastern edge of the corridor, for reasons of wildlife, scenery, local public amenity, historical interest, and impact on dwellings.

National Grid's response: National Grid can confirm that this suggestion reflects the proposed design.

- v. Suggestion to route the overhead lines as far to the east as possible from the historic moated Brackenborough Hall and the scheduled ancient monument of the deserted medieval village of Brackenborough and the award-winning self-catering accommodation located in the Coach House to Brackenborough Hall.

National Grid's response: National Grid can confirm that this suggestion reflects the proposed design, as the routeing is as far east as reasonably possible in the corridor considering villages to the east. National Grid has undertaken a review of parts of the emerging preferred corridor adjacent to the Lincolnshire Wolds National Landscape (AONB) following the original appraisal reported in the Corridor and Preliminary Routeing and Siting Study (CPRSS). The review has considered additional information obtained by National Grid following the publication of the CPRSS to confirm the appropriateness of selecting the preferred (western) corridor compared to the alternative (eastern) corridor – routeing in the intervening area has also been discounted. The review has focussed on those Sections commencing just south of North Thoresby and Tetney and ending just north of Burgh le Marsh. The comparative analysis highlights that distinguishing factors in the selection of the preferred option remain finely balanced and largely relate to the increased potential for impacts on the National Landscape (AONB) associated with the western corridor and the increased potential for potential impacts on the coastal ecological designations and flood risk issues associated with the eastern corridor. The review concludes that consideration of the new information does not significantly alter the previous conclusions reported in the CPRSS and the preference for the western corridor. The findings of the review are not considered significant enough to require a change of route corridor. Further detail can be found in **PEI Report Volume 3 Part A Appendix 3A Western Corridor Review**.

3.5.376 The following suggestions have been considered together:

- i. Underground or reroute the overhead lines to accommodate special educational needs and disabilities (SEND) requirements at the Thomas Centre in Covenham St Bartholomew.
- ii. Alternative alignment which shifts the overhead lines further west between Covenham St Bartholomew and Keddington.
- iii. Route the overhead lines as far west as possible, away from Alvingham and Yarburgh, to ensure these are less visible on the horizon.
- iv. Move the overhead lines to the east, outside the current corridor, to route to the east of Covenham Reservoir.
- v. Route the overhead lines in a straight line from Covenham to a point to the west of the solar farm at Grove Farm, Yarburgh, then in a straight line from the solar farm to cross the Louth Canal between Louth Water Recycling Centre and Alvingham Fishing Lakes.
- vi. Route the overhead lines immediately to the east of the solar farm at Grove Farm, Yarburgh.
- vii. Route the overhead lines to the west of the swathe, further away from Covenham St Mary and Covenham St Bartholomew.

National Grid's response: National Grid has considered alternative overhead line routeing options between North Thoresby and Keddington. After consideration of the options, a central route was taken past Covenham Saint Bartholomew, moving the proposed overhead line alignment further west within the corridor presented at Stage 1 consultation than the most likely routeing indicated by the shading of the graduated swathe as it passes The Thomas Centre. This route, as shown in Image 5.1 in the Design Development Report (DDR), was chosen as the proposed option as it was considered to achieve the most appropriate balance between the following key considerations:

-reducing the potential amenity impacts to users of The Thomas Centre during construction relating to noise and vibration, air quality and visual, as well as visual impacts during operation;

-reducing interactions where the alignment crosses the Viking CCS Pipeline compared to other routeing options; and

-landscape and visual impacts to the Lincolnshire Wolds National Landscape (AONB) for which the proposed option has no greater effects on the AONB than the most likely routeing originally indicated by the darkest shading of the graduated swathe.

For more information on the routeing considerations between North Thoresby and Keddington, please refer to Chapter 5 of the Design Development Report (DDR).

- viii. Three new dwellings immediately east of the railway line on Station Lane in North Thoresby, have been highlighted, which may intersect with the swathe.

National Grid's response: National Grid can confirm that the properties referenced in this comment were removed from the corridor during design development, in line with the routeing and siting methodology set out in the Corridor and Preliminary Routeing and Siting Study (CPRSS).

Ecology, Biodiversity and Environment

- 3.5.377 Several community members' responses, alongside technical stakeholders' feedback (Grainthorpe Parish Council, Marshchapel Parish Council and North Cotes Parish Council) expressed concerns about impacts on ecology, which are summarised as follows.
- i. A study is needed to assess the impact of the proposals on migratory birds within this area, including wetland areas in Great Carton, relating to concerns with impacts on migrating birds;
 - ii. Adverse impacts on the local bat population, as this Section of the route harbours a robust bat population, which would suffer detrimental consequences from pylons;
 - iii. Impacts on bird populations and the natural habitats of nesting birds including barn owls, tawny owls, Routh Legged Buzzard, buzzards and sparrow hawks. In particular, a rare overwintering Rough Buzzard with a maximum population of 150 was noted, which utilises parts of Covenham St Mary as a nesting and hunting ground;
 - iv. Impacts on seal breeding including at Donna Nook seal sanctuary and other parts of the Lincolnshire Coast;
 - v. General concerns regarding adverse impacts on wildlife and habitats in the area, as well as nature reserves;
 - vi. Proximity to the Lincolnshire coast, the Wash, nature reserves, and the wetlands of the Fens, which provide important habitats. More specifically, this includes the RSPB Tetney Marshes, Rimac Nature Reserve, Saltfleetby and Theddlethorpe dunes, Sandilands Pit, Huttoft Bank Pit, Chapel Pit, RSPB Freiston Shore, RSPB Frampton Marsh and, Moulton Marsh Nature Reserve;
 - vii. Impacts on the fields around North Cotes, Tetney and North Thoresby, which hold wintering herds of Mute Swans, Whooper and Bewick Swan, Brent and Pink Footed Geese, several species of wader like Golden Plover and Lapwing. In addition, it is stated that the proposed pylon route goes very close to Covenham Reservoir which holds wintering duck species like Smew, Goldeneye as well as wintering Grebes, Divers and Gulls; and
 - viii. Impacts on Natural England new Lincolnshire Coronation Coast National Nature Reserve.
- 3.5.378 **National Grid Response:** The Project has been designed to avoid direct impacts upon European Designated Sites (Special Areas of Conservation, Special Protection Areas and Ramsar sites) and Sites of Special Scientific Interest. Ornithology data will be used to determine the likelihood on any negative impacts on relevant sites including Tetney Marshes, Rimac Nature Reserve, Saltfleetby and Theddlethorpe dunes, Sandilands Pit, Huttoft Bank Pit, Chapel Pit, RSPB Freiston Shore, RSPB Frampton Marsh and, Moulton Marsh Nature Reserve, extending to consider other sites designated for their biodiversity value.
- 3.5.379 The Project will not impact grey seal breeding including at Donna Nook National Nature Reserve and seal sanctuary, nor other parts of the Lincolnshire Coast. Lincolnshire Coronation Coast NNR is located over 5 km from the Project and no impacts are predicted.

- 3.5.380 Through routeing and siting National Grid has sought and will continue to reduce as far as practicable potential impacts on biodiversity including habitats and protected species. The process of routeing takes account of existing biodiversity, the natural environment and, where practicable, seeks to avoid wildlife, and where not feasible, reduce potential impacts on areas of ecological sensitivity including protected and notable species and their associated habitats, through mitigation. A suite of habitat and species surveys will inform the ecological baseline, this data is still being collected and will be provided at ES stage per Chartered Institute of Ecology and Environmental Management guidance. The surveys include bats, badgers, great crested newts, otter, fish, aquatic macroinvertebrates, aquatic macrophytes, water vole, reptiles, and breeding and non-breeding birds. The Environmental Impact Assessment (EIA) for the Project will assess the effects on important ecological features using this baseline information. This will include collision risk with the overhead line once all bird data has been collected, and where/if required design changes and/or appropriate mitigation measures will be proposed. Some species are not protected or notable and therefore will not be assessed. However, the overall impact on ecology is taken into account as part of the EIA process for the Project.
- 3.5.381 The initial assessment including the surveys undertaken are reported in **PEI Report Volume 2 Part B Section 2 Chapter 4 Ecology and Biodiversity**. The initial assessment identifies that at this stage significant effects cannot be excluded, and further survey work (ongoing) will be used to confirm the status of these species, inform the design of appropriate mitigation and a full assessment of effects that will be reported in the ES.

Socio-economics

- 3.5.382 A large proportion of the community members' responses noted the attractiveness of the open countryside and villages in this area which make it easier for local businesses to attract employees and custom, and that this will be adversely affected due to the impact of the proposals on views.
- 3.5.383 Several community members' responses made comments relating to economics and business which are summarised below.
- i. Negative impacts on wedding venues;
 - ii. Concerns regarding holiday homes in Great Carlton due to the potential to degrade the landscape and reduce visitors to the area;
 - iii. The proximity to Alvingham village will result in a depreciation of house prices in what is already a deprived area;
 - iv. Puddleducks Pre-school in Alvingham was referenced regarding the impact of pylons and high voltage lines on pre-school children and the enjoyment of the local pre-school and thereby the impact on the future success and operation of the pre-school;
 - v. The North Thorsby Railway line is a tourist attraction that was set up by volunteers and will be adversely impacted by these proposals;
 - vi. Concerns regarding caravan sites used for tourism in the area;
 - vii. Impacts on beekeeper and honey production business; and
 - viii. Impacts on small airfields such as the one at North Cotes.

- 3.5.384 **National Grid Response:** Through the routeing and siting exercise National Grid has sought to reduce impacts to businesses and the local economy, as evidenced in the Strategic Options Report (SOR) and the Corridor and Preliminary Routeing and Siting Study (CPRSS) published at the Stage 1 consultation. To reduce potential impacts, we have identified businesses and enterprises and their primary function, and those that are likely to generate tourism. These have been and will continue to be considered during the iterative design process.
- 3.5.385 From a socioeconomic perspective, the likely effects of National Grid's proposals on local businesses including those operating in connection with tourism (including local businesses, wedding venues, honey production businesses, tourism accommodation and community facilities) are considered in **PEI Report Volume 2 Part B Section 2 Chapter 11 Socio-economics, Recreation and Tourism**. In summary, no significant adverse effects are anticipated for socio-economics, recreation and tourism receptors, noting this excludes above ground renewable energy generation infrastructure, within Section 2 as a result of the construction, operation and maintenance phase of the Project. An assessment of the direct effects of the Project on above ground renewable energy generation infrastructure (solar and onshore wind farms) as socio-economics receptors will be presented in the Environmental Statement (ES).
- 3.5.386 With regard to settlements and population, affected communities (local communities, including populations of towns and villages) **PEI Report Volume 2 Part C Route-wide Chapter 7 Socio-economics, Recreation and Tourism** identifies that at this stage it is anticipated that likely non-significant effects associated with construction activities would generally be minor adverse and temporary, with effects felt most by communities in closest proximity to the Project. We will report on any indirect amenity effects for affected communities as part of the socio-economics, recreation and tourism assessment, which might occur through in-combination effects across the Project (such as noise and vibration, visual, and transport and movement effects). **PEI Report Volume 2 Part C Route-wide Chapter 10 Cumulative Effects** presents a preliminary assessment of cumulative effects upon common receptors across environmental topics identified within **PEI Report Volume 2 Part B** (intra-project) and identifies a shortlist of other Committed Developments with which there may be potential for cumulative effects and the relevant environmental topics for such effects (inter-project). The full cumulative effects assessment will be reported within the ES.
- 3.5.387 With regard to tourism including strategic visitor attractions and the impact of construction workforce on tourist accommodation bedspace, **PEI Report Volume 2 Part C Route-wide Chapter 7 Socio-economics, Recreation and Tourism** identifies that non-local workers would require accommodation in the local area, which is likely to be serviced from hotels and similar establishments such as B&Bs, and non-serviced accommodation including holiday lets, caravan parks and tourist campsites, and other collective accommodation. Overall, both temporary positive benefits to tourist accommodation businesses and temporary adverse effects through a reduction in tourist accommodation bed spaces are anticipated in relation to the labour market during construction. Given the preliminary number of construction workers anticipated to be employed on the Project, and the level of likely spare capacity for bedspace, the preliminary assessment of effects sets out that these are not likely to be significant. For strategic visitor attractions the preliminary assessment of these receptors is that the effects are not expected to be significant.
- 3.5.388 It should be noted that this is an ongoing assessment and is subject to changes due to the ongoing development of the Project. A full detailed assessment will be included within the ES submitted with the Development Consent Order (DCO) application.

- 3.5.389 The Puddleducks Pre-school in Alvingham has not been identified within the Study Area, as it is located 500m beyond the draft Order Limits and therefore is not predicted to experience any significant effects as a result of construction, operation or maintenance of the Project.
- 3.5.390 National Grid is aware of several airfields in the region that are within varying proximities to the proposed Project. Where possible, we have been engaging with airfield operators to better understand their activities, aircraft types and annual movements to inform our design development. National Grid has considered potential impacts to aviation receptors as outlined in Chapter 6 of the Design Development Report (DDR) with support from specialist aviation consultants. North Cotes is more than 5km away from the proposed overhead line and therefore we would not anticipate any impacts on aviation operations at this airfield.
- 3.5.391 With regard to users of airfields, aviation will be considered in the ES, whilst **PEI Report Volume 2 Part B Section 2 Chapter 11 Socio-economics, Recreation and Tourism** sets out the relevant baseline and explains how aviation will be assessed with a specialist standalone report in support of the ES.

Health and Wellbeing

- 3.5.392 Several community members' responses raised concerns regarding impacts on health and wellbeing as follows:
- Proximity of works to a village and in particular a children's play area, which is considered dangerous (the feedback does not specify the village or the play area);
 - General concerns about health and wellbeing of communities in the area;
 - Impacts on local residents with existing health conditions (including Parkinsons and Dementia), due to changing views from their properties;
 - Impact of high voltage lines on children at the Puddle Duck's Pre-school; and
 - Health impacts on elderly residents of Alvingham.
- 3.5.393 **National Grid Response:** National Grid recognises people may have concerns about the potential impacts of living close to an overhead line and associated infrastructure and that the uncertainty whilst the proposals are developed may cause anxiety. Through the routeing and siting exercise, National Grid has sought and will continue to reduce as far as practicable impacts on sensitive receptors, such as residential areas, education facilities and areas for recreation. A considerable amount of assessment work has been undertaken to allow preliminary judgements to be made about the design and routeing of the Project. This has been set out in various publications, including the Corridor and Preliminary Routeing and Siting Study (CPRSS) and Strategic Options Report (SOR), published as part of the Stage 1 consultation.
- 3.5.394 Further detailed assessment work has been undertaken since the Stage 1 consultation as reported in **PEI Report Volume 2 Part C Route-wide Chapter 8 Health and Wellbeing**. A health and wellbeing baseline has been established for each Section to understand how the Project may specifically impact the health and wellbeing of different communities. This includes the following communities:
- Laceby
 - Ashby cum Fenby
 - Alvingham

- Barnoldby le Beck
- North Thoresby
- Little Carlton
- Waltham
- Covenham St Mary
- Withern
- Brigsley
- Yarburgh
- Tothill

- 3.5.395 Policies and procedures are in place to make sure all equipment will comply with public electric and magnetic fields (EMFs) exposure limits. As such, physical health effects associated with the generation of EMFs is scoped out of the health and wellbeing assessment on the basis that EMF levels would be low such that significant adverse effects are not expected. An EMF report, separate to the Environmental Impact Assessment (EIA) process, will be prepared as part of the Project.
- 3.5.396 No mental health impacts as a result of EMFs are expected as a result of the Project as described within **PEI Report Volume 2 Part C Route-wide Chapter 8 Health and Wellbeing**. Furthermore, no significant impact on health and wellbeing as a result of changes in access to promoted recreational routes and open space; or changes to employment were identified.
- 3.5.397 The health and wellbeing assessment recognises that concerns about the health impacts of EMFs may adversely impact some people's mental health by heightening anxiety. However, it is anticipated that this group is likely to be very small, and that this impact will be effectively mitigated by National Grid's engagement with the community.
- 3.5.398 For further information on EMFs please refer to **The graduated swathe – Question 3a and other relevant feedback** under Health and Wellbeing.
- 3.5.399 The health and wellbeing assessment assesses the impact of changes to landscape and visual on health and wellbeing in conjunction with air quality, noise, and traffic and transport. This combination effect is assessed as 'Neighbourhood Quality'. For a neighbourhood quality effect to be identified, at least two significant residual effects must combine at the same location. There is evidence to suggest links between neighbourhood quality and health and wellbeing, as health and wellbeing can be adversely impacted by changes to air quality, noise, visual amenity, increased traffic. This will be assessed within the Environmental Statement (ES) and if required, mitigation put in place to address these impacts.
- 3.5.400 In addition to health and wellbeing considerations, an Equality Impact Assessment (EqIA) will be undertaken in order to identify any differential or disproportionate impacts on vulnerable people (including children and older people), as a result of the Project, in line with the Equality Act 2010. If any impacts are identified, the EqIA will recommend mitigations and actions to be put in place to reduce any impact.
- 3.5.401 The health and wellbeing assessment will continue to be updated to ensure health and wellbeing concerns and impacts of local communities are taken into account.
- 3.5.402 It should be noted that Puddleducks Pre-school in Alvingham has not been identified within the Study Area, which is 500m beyond the draft Order Limits and therefore is not predicted to experience any significant effects as a result of construction, operation or maintenance of the Project.

Landscape and Visual

- 3.5.403 A large proportion of the community members' responses noted that for some residents the route will closely pass residential homes in this area. Others noted the more general adverse impact on the 'rural setting' of the Lincolnshire countryside due

to proposed pylons. More specifically a few members of the community noted that the proposals would impact the vistas from Covenham Reservoir. Concerns were also identified regarding impacts on views for Aby, Yarburgh, Elkington Top, Kenwick Top and offshore to the sea, as well as for the roads and footpaths in the area.

- 3.5.404 A few community members' responses suggested that the proposals should be considered in terms of the cumulative impact in respect of the wind turbines, which currently have an adverse impact on the landscape. Some of the responses identified that visual and aesthetic considerations are paramount, particularly in areas of scenic beauty or cultural landscapes.
- 3.5.405 Several community members' responses alongside technical stakeholders' feedback (Grimoldby and Manby Parish Council and Louth Town Council) noted that pylons would destroy the view of Louth's Parish Church of St James.
- 3.5.406 **National Grid Response:** National Grid develops its Projects in line with national policy and our statutory duties to develop an efficient, economic and co-ordinated network, and have regard to preserving amenity and mitigating impacts. We recognise that overhead lines can give rise to adverse landscape and visual effects, and we carefully consider these along with other environmental and socio-economics considerations, technical requirements and cost when developing our Projects.
- 3.5.407 National Grid has carefully considered the potential impacts of the Project at an early stage, and the findings and justifications for the selection of the emerging preferred corridor in which the new overhead line is proposed to be routed, can be found in the Corridor and Preliminary Routeing and Siting Study (CPRSS), which is available on our Project website. Through the routeing and siting exercise we have sought to reduce the impact on landscape character and visual amenity. We will continue to consider both landscape character and amenity value as we develop our proposals and seek to reduce effects.
- 3.5.408 The likely effects of National Grid's proposals in this area on landscape character and visual receptors are set out in **PEI Report Volume 2 Part B Section 2 Chapter 2 Landscape** and **Chapter 3 Visual**. A preliminary visual assessment has been undertaken for each community, or parish, within the Study Area. A number of viewpoints have been selected to represent the views from local communities. These are presented in **PEI Report Volume 3 Part B Sections 1 to 7 Appendix 3A Proposed Viewpoints** and will form the basis for the Landscape and Visual Impact Assessment (LVIA).
- 3.5.409 Significant visual effects have been predicted for a number of communities with views to and from the Lincolnshire Wolds National Landscape (AONB). This includes communities that would be directly affected by a new overhead line, but also communities which have longer distance views from the more elevated areas within the Wolds and for communities to the east of the Project with strong visual links towards the Wolds.
- 3.5.410 **PEI Report Volume 2 Part C Route-wide Chapter 2 Landscape** reports early findings of the assessment of impacts on National Landscape (AONB). This considers the purposes of the designation and its special qualities which also includes views. A full assessment of the impacts on National Landscape (AONB) will be provided as part of the LVIA, which will be reported in the Environmental Statement (ES) that would be submitted with the Development Consent Order (DCO) application of the Project.
- 3.5.411 A new overhead line will be visible from parts the National Landscape (AONB) due to the elevated landform and long-distance views towards the coast and some significant

effects on views are likely. However, from many locations, the new lattice overhead line would be visible against a backdrop of landform which helps to reduce its perceptibility or views would be filtered by existing vegetation. This is particularly relevant for those more elevated areas such as Elkington.

- 3.5.412 National Grid will be producing a LVIA that will, in addition to other topic specific assessments, form the latter part of the Environmental Impact Assessment (EIA) for the Project. This will include a write-up of an assessment of the effects on the landscape character of the area and visual effects from communities. Where likely significant effects are anticipated, the LVIA will consider and identify areas where it may be necessary and appropriate to put forward potential mitigation as part of an iterative design and assessment process.

Noise and Vibration

- 3.5.413 Several community members' responses raised concerns regarding the impact of noise and vibration on the Thomas Centre for users with SEND requirements. More broadly, a few members of the community raised concerns with noise pollution from pylons especially at peak times with issues of 'constant buzzing' posing a nuisance for those living close by. In particular, this could cause disturbance for those working shifts and people with sensitive hearing.
- 3.5.414 **National Grid Response:** National Grid will be undertaking a noise and vibration assessment that will form part of the Environmental Impact Assessment (EIA) for the Project. Noise levels and the effect on residential properties as well as other sensitive receptors, such as hospitals and schools are carefully considered during Project development, assessed according to the appropriate UK standards, and mitigated where necessary. The early findings are presented in a **PEI Report**, as part of the Stage 2 consultation before being refined and submitted in an Environmental Statement (ES) which will form part of the eventual Development Consent Order (DCO) application.
- 3.5.415 Although the Thomas Centre is located outside of the Study Area for our assessment of construction noise and vibration impacts, we have included this receptor in our assessment following our consideration of feedback. As such the Thomas Centre has been considered as a noise and vibration sensitive receptor within **PEI Report Volume 2 Part B Section 2 Chapter 10 Noise and Vibration**. Given the distance between the Project and this receptor, significant adverse effects from construction noise and vibration are not expected. However, construction noise may on occasion still be audible at this location, albeit at a relatively low level, which may cause an adverse effect given the sensitivity of the users of this receptor. The sensitivity of this receptor will therefore be considered when working in this area, and best practicable means will be employed to reduce the effects of construction noise.
- 3.5.416 With regards to operational noise from overhead lines, a low noise conductor system is proposed and significant adverse effects from operational noise are not expected, even directly underneath the line. Operational noise from overhead lines is therefore scoped out of our assessment of noise and vibration impacts. However, further information regarding noise from overhead lines will be provided in an informative appendix in the ES, which will be submitted with the DCO application.

Walkers, Cyclists and Horse Riders

- 3.5.417 Some community members' responses raised concerns about the impact this Section would have on horse riding in the area due to the segregation of fields by the infrastructure proposals.
- 3.5.418 **National Grid Response:** Through routeing and siting, National Grid has sought and will continue to reduce, as far as practicable, impacts and disruption to Public Rights of Way (PRoW). The design process has identified the existing PRoW network and wider connectivity and has sought where practicable to reduce and, where possible, remove impacts to PRoW. In the event that any significant impacts on PRoW are identified that cannot be avoided and mitigation is required, mitigation measures may include, the temporary closure of PRoW during the construction phase, and where possible a diversion to allow for the continued use and movement through the wider PRoW network. We will work closely with the relevant local authorities to understand and gain information on PRoW and the local road network.
- 3.5.419 Effects on PRoW will be mitigated where possible, maintaining access where practicable, with closures as a last resort. We will continue to engage with the interested parties and stakeholders on the PRoW network to enable feedback and input to be considered as the Project develops.
- 3.5.420 The **PEI Report** reports our early assessment findings on traffic and transport, and this includes equestrian routes (i.e. bridleways). The **PEI Report** identifies the PRoWs affected by construction activity and the likely level of disruption anticipated. In most cases, PRoWs will be retained as open routes except for some activities during the end of the programme where routes will be temporarily closed for safety reasons. There are some routes that will be locally diverted (to join together) to minimise crossings of the haul road.
- 3.5.421 The impact of horse-riding activity within private land, such as equestrian establishments, has not been assessed however engagement with impacted businesses and landowners will be undertaken as part of land access discussions. Generally, the way to mitigate an impact of the overhead line on equestrian features, where leisure activities may be elevated due to a horse jumping (for example), is to increase the clearance of the overhead line (i.e. the height of the conductors from the ground). Due to the rural nature of the Study Area, encountering equestrian activity is highly likely. Where such uses are identified through landowner discussions and site surveys, mitigations in the form of increased clearances may need to be applied.

Groundwater

- 3.5.422 The Environment Agency's feedback identified where the emerging preferred route encroaches on groundwater source protection zones avoidance of the highly sensitive SPZ1 and SPZ2 would be preferable, but where they cannot be avoided careful consideration of groundwater protection must be included in the Environmental Statement. SPZ1 and associated zones 2 and 3 are present in the northern part of this Section.
- 3.5.423 **National Grid's response:** The Project has been designed to take into account and avoid sensitive hydrogeological receptors wherever possible, within the balance of other relevant design factors, to minimise/prevent any significant effects on these receptors. This includes groundwater source protection zones, groundwater abstractions and aquifers of high sensitivity.

- 3.5.424 There are several areas where complete avoidance of SPZ1 and 2 has not been possible through the design process, but the number of pylons within any SPZ 1 area has been reduced as far as possible, within the limits of any engineering constraints for the overhead line. The substations have also been sited outside of SPZ 1 areas. Where construction and permanent infrastructure associated with the Project are required within SPZ1 and SPZ2 areas, these have been assessed within the **PEI Report** for an initial assessment of potentially significant effects.
- 3.5.425 Further detail on groundwater abstractions and the SPZ areas will be obtained from Anglian Water and the EA and utilised within the subsequent Environmental Statement (ES), to enable a detailed assessment for each high sensitivity area and determination of any likely significant and non-significant effects.

Section 4: Alvingham and Keddington to Tothill – Question 3g and other feedback relevant to this section of the route

- 3.5.426 Question 3g of the feedback form asked:
- ‘Do you have any comments about this Section of the route?’***
- 3.5.427 The feedback about Section 4: Alvingham and Keddington to Tothill covered themes including: construction; historic environment; planning and design; ecology, biodiversity and environment; socio-economics; health and wellbeing and landscape and visual.
- 3.5.428 The following sections provide a summary of the comments made in relation to these themes and National Grid’s responses. When narrating feedback, we refer to the Sections of the route as they were described at the time of the Stage 1 consultation. National Grid’s responses refer to the revised Sections of the route as presented as part of the Stage 2 consultation. For further detail on the changes in sectioning please see Approach to route Sections.

Construction

- 3.5.429 Several community members’ responses raised concerns with construction, which are summarised as follows:
- i. Impact on the environment and ecology including wildlife;
 - ii. Traffic impact on the local road network during the construction phase and cumulative impact with other projects in the locality; and
 - iii. The inability of the local road network to accommodate heavy goods vehicles (HGVs).
- 3.5.430 **National Grid’s response:** We recognise that construction of the Project would result in some temporary impacts to local areas. The Corridor and Preliminary Routeing and Siting Study (CPRSS), published at the Stage 1 consultation, explains that our approach to the appraisal of design options considered a range of topics with various technical considerations including construction.
- 3.5.431 The **PEI Report** appraises of the suitability of local roads to accommodate the forecast volume of construction traffic movements. This includes consideration of road geometry, congestion, accidents and sensitive receptors that include local amenities, schools and non-motorised user activity. Sensitive routes will be avoided where practicable, and construction haul roads used where appropriate along with

maximising the use of suitable major and strategic roads. **PEI Report Volume 2 Part B Section 2 Chapter 9 Traffic and Movement**, and **PEI Report Volume 3 Part B Sections 1 to 7 Appendix 9B Preliminary Construction Information and Appendix 9C Future Baseline and Impact Analysis** identify Primary Access Routes to construction access points (bellmouths), compounds and substations, along with an estimate of average daily flows based on the existing information available at the time of writing. Our initial appraisal included in **PEI Report Volume 2 Part B Section 2 Figure 9.5 Preliminary Impact Analysis** shows impact on the roads that result in potential significant effects. These routes are identified as part of the Primary Access Route network to Section 2 and will require discussion with the local highway authority and possibly further assessment to determine the effect, if any, on users of the highway. Construction traffic routeing will be discussed with the appropriate highway authorities during the full Transport Assessment, which will be reported in the Environmental Statement (ES).

- 3.5.432 Ecology surveys are being completed to identify important ecological features, and these will be avoided wherever possible and mitigation will be provided where needed. Information on the habitats and species surveys is presented in **PEI Report Volume 2 Part B Section 2 Chapter 4 Ecology and Biodiversity**. A Preliminary Code of Construction Practice (CoCP) is provided in **PEI Report Volume 3 Part A Appendix 5A Preliminary Code of Construction Practice** and details the measures proposed to control and manage potential impacts on Ecology and Biodiversity during construction. The CoCP includes measures to control potential impacts from dust, waste, water, noise, vibration and soil during construction. Mitigation requirements for the protection of habitats and species will be confirmed once baseline surveys have been completed, however these are likely to include the restoration of habitats post construction and/or the creation of new habitats.
- 3.5.433 A CoCP and Construction Traffic Management Plan will be prepared and submitted with the Development Consent Order (DCO) application. These documents will include commitments to reduce construction impacts together with a framework for detailed management plans to be prepared at detailed design stage to reduce and mitigate potential impacts and/or disruptions that may arise during the construction phase. A Preliminary CoCP is available as part of the Stage 2 consultation.

Historic Environment

- 3.5.434 A large proportion of the community members' responses raised concerns in relation to the Project's impact on the historic environment and, to a lesser extent, archaeology. In summary, these were as follows:
- i. Impact on heritage assets including three Scheduled Monuments (individual receptors not specified), Listed Buildings (individual receptors not specified), and other historic sites, with the moated site at Upphall Farm specifically mentioned;
 - ii. Louth Town Council noted the Church of St James which has the tallest medieval church spire in England; and
 - iii. In terms of archaeology, reference was made to archaeological sites at Castle Carlton (motte and bailey) and a Saxon village in Little Carlton. Roman and pilgrim artifacts were noted, and suggestions were made that an archaeological survey would be needed.
- 3.5.435 **National Grid's response:** The Project and draft Order Limits have been designed to avoid sensitive receptors as far as practicable. This is in accordance with the Holford

Rules applicable to routing of new overhead lines and the Horlock Rules which apply to design and siting of substations. These approaches are explained in further detail within the Corridor and Preliminary Routeing and Siting Study (CPRSS), Design Development Report (DDR) and **PEI Report Volume 2 Part A Chapter 3 Main Alternatives Considered**. Principles include, but are not limited to, seeking to avoid areas of highest amenity, cultural or scientific value, taking advantage of natural screening provided by existing landform and features (e.g. woodland) and keeping visual, noise and other environmental effects to a minimum. For historic environment, such measures include the avoidance of physical impacts to designated heritage assets and where practicable non-designated heritage assets, and where possible reducing potential impacts to the setting of designated heritage assets and non-designated heritage assets.

3.5.436 National Grid has carried out a preliminary assessment of potential likely effects on the historic environment arising from the proposals in this Section of the route, which is reported in **PEI Report Volume 2 Part B Section 2 Chapter 5 Historic Environment**. In summary:

- i. A number of scheduled monuments are located within this Section of the route including the North Cockerington Hall moated site and Louth Park Abbey.
- ii. The grade I listed Parish Church of St James (NHLE 1063264) is located in the centre of Louth in the Conservation Area, approximately 3.4 kms from the draft Order Limits. The setting of the church does not extend to where the proposed infrastructure will be located for the Project and no change is anticipated that would result in altering the way the church is experienced or appreciated. This will be assessed further, in consultation with Historic England, and will be reported in the Environmental Statement (ES).
- iii. The North Cockerington Hall moated site is located approximately 1.1 km east of the draft Order Limits, comprising the earthwork remains of a rectangular enclosure, surrounded by a 10 m wide ditch. The setting of the monument encompasses the existing and former settlement of North Cockerington and the surrounding medieval agricultural landscape. Construction of the Project may temporarily alter the setting of this heritage asset, with long term changes to the setting arising from the presence of the Project within the landscape. The impacts to the setting of the monument are assessed resulting in a potential moderate adverse effect which would be significant.
- iv. Louth Park Abbey scheduled monument is located to the east of Louth and south-west of the Louth Canal/River Lud, approximately 560 m west of the draft Order Limits and 860 m west of the proposed Project infrastructure. Situated approximately in the centre of the scheduled monument, on slightly elevated ground, are the grade I listed Louth Abbey Ruins (NHLE 1063050). The setting of the monument and listed abbey remains includes their direct historic associations set within an enclosed, secluded area bounded by dense mature trees and hedges. Their wider setting includes their historical association with the non-designated Louth Park Abbey area, Monk's Dyke and probable late medieval field system enclosures wider parishes of Louth and Keddington. Construction of the Project may temporarily alter the setting of the scheduled monument, with long term changes to the setting arising from the presence of the Project within the landscape. However, intervisibility with the construction activities would be very limited due to the density of the screening surrounding

the Abbey site. These temporary impacts would hardly affect the setting or value of the assets, resulting in minor adverse effects which would not be significant.

- v. The Castle Hill motte and bailey castle scheduled monument at Castle Carlton dates from the 11th or 12th century and is located approximately 750 m west of the Project. The monument comprises the earthwork remains of a motte and double bailey castle enclosed by ditches, with external banks and buried archaeological remains associated with the fortification and domestic activity within the bailey. The setting of the monument includes the remains of the Castle Carlton Deserted Medieval Village and the nearby settlements of Little Carlton and Great Carlton. The Project is located within the wider setting of the monument, with existing vegetation including Carlton Wood and hedgerows provide partial screening of the Project in views eastwards from the monument. Construction of the Project may temporarily alter the setting of this heritage asset, with long term changes to the setting arising from the presence of the Project within the landscape. The impacts to the setting of the monument are assessed resulting in a potential moderate adverse effect which would be significant.
- vi. The Project has been routed to avoid physical impacts to the moated site at Upphall Farm and Middle Saxon settlement remains at Little Carlton. The potential for the discovery of previously unknown archaeological remains in this area is acknowledged, and a programme of archaeological survey and evaluation is being developed for the Project in consultation with Historic England and Local Planning Authorities. The results of the surveys will be reported in the ES.

3.5.437 National Grid will continue to engage with Historic England and relevant local planning authorities, on aspects relating to the historic environment and heritage assets, including appropriate mitigation measures and techniques and will take their views into account as the Project evolves.

Planning and Design

3.5.438 A large proportion of the community members' responses made design suggestions in relation to this Section of the route, which are summarised as follows:

- i. Suggestion to route overhead lines to avoid Louth Navigation, which is a canal that flows from Tetney to Louth, and then into the Louth River.

National Grid's response: Crossing of the canal cannot be avoided because a crossing would be required across the full width of the emerging preferred corridor that was presented at Stage 1 consultation. We will provide sufficient clearance above the canal. If the canal does become navigable then this clearance can be investigated and increased. Crossing protection can be put in place for the construction process if required.

3.5.439 The following suggestions have been considered together:

- i. Suggestion to route overhead lines so that these are equidistant between Louth and Manby to avoid impacts to Manby.
- ii. Suggestion to route overhead lines further away from Grimoldby / Cockerington / Alvingham and closer to A16

- iii. Suggestion to route overhead lines to avoid impacts to the Furze Farm Estate and associated caravan park by either routing as far east or far west as possible from the Furze Farm Estate land or paralleling the existing power lines in this area (Northern Power Grid 33kV overhead line).

National Grid's response: The proposed alignment between Louth and Manby is reflective of the emerging preference indicated in the graduated swathe presented during Stage 1 consultation. The proposed alignment seeks to find the best balance between several constraints, which include residential receptors in Louth and Legbourne (to the west) and Manby (to the east), reducing potential impacts to the setting of the National Landscape (AONB), presence of the Manby Anaerobic Digester project (currently in planning pending decision) at former RAF Manby and maintaining Holford Rules compliance by routeing as short and straight an alignment as possible. On balance, the proposed alignment seeks an appropriate balance between Louth and Manby, as far as practicable.

3.5.440 The following suggestions have been considered together:

- i. Suggestion to route the overhead lines to the west of Louth and continue straight down heading south (rather than heading towards Skegness).
- ii. Suggestion to route overhead lines along Louth Road because that is a major road, unlike small villages it has less landscape or character to lose.
- iii. Suggestion to route the overhead lines directly from Barnoldby le Beck to Midville a straight line between Sections 2 and 7.

National Grid's response: The Corridor and Preliminary Routeing and Siting Study (CPRSS) sets out the routeing and siting methodology and options identification and selection process, including defining the Study Area, baseline data gathering, scoping environmental topics, ascribing weights to environmental constraints, producing heat maps and defining potential corridors. Routeing the overhead line either in a straight line from Barnoldby le Beck to Midville, or west of Louth, would require the alignment to route over the Lincolnshire Wolds National Landscape, which is afforded the highest environmental weighting during project development. These routing options were therefore not considered at that stage of Project development.

- iv. Suggestion to underground overhead lines to avoid impacts to residential properties at Louth Road near South Cockerington.

National Grid's response: National Policy Statement (NPS) EN-5 makes it clear that the Government expects overhead lines to be appropriate in most instances, although it recognises that there may be, at particularly sensitive locations such as National Landscapes, potential adverse landscape and visual impacts of an overhead line which may make it unacceptable in planning terms, taking account of the specific local environment and context. As part of the routing and siting study and ongoing design development we have sought to route the proposed Project infrastructure away from residential property and environmental features. However, the residential properties at Louth Road are not considered to be a particularly sensitive location from a landscape and visual perspective and therefore overhead lines are considered to be appropriate. Undergrounding of overhead lines also needs to be considered in the context of a higher cost to bill-paying consumers, potential environmental implications of installation (due to the wider construction corridor required) and potential maintenance

implications, as well as a requirement for sealing end compounds at the start and end point of the underground sections.

- v. Suggestion to underground this Section of overhead lines across the B1200 at Grimoldby.

National Grid's response: National Policy Statement (NPS) EN-5 makes it clear that the Government expects overhead lines to be appropriate in most instances, although it recognises that there may be, at particularly sensitive locations such as National Landscapes, potential adverse landscape and visual impacts of an overhead line which may make it unacceptable in planning terms, taking account of the specific local environment and context. As part of the routing and siting study and ongoing design development we have sought to route the proposed Project infrastructure away from residential property and environmental features. Undergrounding of overhead lines also needs to be considered in the context of a higher cost to bill-paying consumers, potential environmental implications of installation (due to the wider construction corridor required) and potential maintenance implications, as well as a requirement for sealing end compounds at the start and end point of the underground sections. Across the B1200 at Grimoldby, there are not considered to be any particularly sensitive locations from a landscape and visual perspective where overhead lines would be considered inappropriate. Therefore, there are no proposals to underground across the B1200.

- vi. Suggestion to amend the overhead lines routing to avoid impacting aircraft movements at North Reston Farm Strip. It was noted that the proposed route puts the transmission lines directly on the flight path of arriving and departing traffic. In the instance of an engine failure after take-off, these obstacles present a significant risk to the aircraft and pilot by placing unnecessary obstacles in their path.

National Grid's response: National Grid has considered potential impacts to aviation receptors as outlined in Chapter 6 of the Design Development Report (DDR) with support from specialist aviation consultants. This assessment included North Reston Farm Strip.

The proposed overhead line route is approximately 2,200 m to the east of the runway threshold at North Reston Farm Strip. Based on this information and the assessments carried out at this stage, no impacts are expected on flight operations at North Reston Farm Strip, and it is considered that aircraft will be able to safely overfly the overhead line both on approach to Runway 24 and departure from Runway 06. However, this conclusion will be kept under review as the Project design progresses and as more thorough assessments are undertaken, as well as through ongoing engagement directly with the owners and users of North Reston Farm Strip.

- vii. Suggestion to route the overhead lines to the west to avoid the historic moated site at Upphall Farm, Little Carlton.

National Grid's response: National Grid has investigated this suggestion and concluded that moving the overhead line to the west as suggested could have implications for the designated scheduled monuments at Castle Carlton and Hall Farm. The moated site at Upphall Farm, Little Carlton is a non-designated asset and is located alongside a non-designated medieval ridge and furrow. As designated heritage assets, the scheduled monuments the Castle Hill motte and bailey castle at Castle

Carlton and the moated site west of Hall Farm are more sensitive and need to be prioritised.

- viii. Suggestion to route the overhead lines west of Hall Farm in the "large open space to the west of this location".

National Grid's response: National Grid has investigated this suggestion and concluded that to facilitate this, an increased overhead line length would be required, that routes closer to Louth Park Abbey (NHLE 10050020) scheduled monument and Louth Abbey Ruins (NHLE 1063050) grade I listed building, as well as to Louth, increasing the potential for impacts to the setting of the National Landscape (AONB). Following the Design Change Control (DCC) process, this suggestion was not preferred.

- ix. Suggestion to adopt the design of T-pylons for this project (near Louth) as it would match that of the current wind turbines to reduce visual impact.

National Grid's response: T-pylons have been considered for the Project from a general technical and visual perspective and Section specific reviews have been undertaken to understand visual benefits. Please refer to Chapter 6 and 7 of the Design Development Report (DDR) for more information on the preferred pylon technology and why T-pylons are not used for this project.

- x. Part of a residential property's garden, along the A157 near South Reston, falls within the graduated swathe and should be removed.

National Grid's response: National Grid has investigated the residential property referenced in the response and as part of design development (and in line with Corridor and Preliminary Routeing and Siting Study (CPRSS) methodology) have trimmed the cut-out to exclude the full extent of residential curtilage from land that may be required for the Project.

- xi. Suggestion to route the overhead lines as far as possible from the Old Rectory along the A157, to minimise visual impact and potential effects on the holiday business.

National Grid's response: The proposed alignment at this location is constrained by residential properties along the A157 both to the east and west and thus seeks to be equidistant between residential receptors as far as practicable. The Project team did not prefer this suggested alignment because routeing further in either direction would increase potential impacts to the relevant residential receptors.

3.5.441 The following suggestions have been considered together:

- i. Suggestion that overhead lines should avoid the small stretch of Louth Road between the two existing cut-outs from the corridor.
- ii. Suggestion that overhead lines should not be routed through the narrow gap between the large cut-out and the small cut-out on Louth Road, North Cockerington.

National Grid's response: National Grid can confirm these suggestions reflect the proposed design, which routes the overhead line centrally at this location and to the

west of the larger cut out, as seen in the Stage 1 consultation emerging preferred corridor.

3.5.442 The following suggestions have been considered together:

- i. Suggestion to underground the overhead lines throughout Section 4 to protect the Lincolnshire Wolds National Landscape (AONB).
- ii. Suggestion to underground the overhead lines in the area adjacent to the National Landscape (AONB).
- iii. Suggestion to underground or offshore the overhead lines to avoid impacts on the National Landscape (AONB) and St James' Church in Louth.
- iv. Suggestion to underground the overhead lines from the north of Louth to Alford in order to preserve the beauty of the Wolds and coastal panorama.
- v. Suggestion to underground the overhead line in the Section from the Wolds National Landscape (AONB) north of Louth to Alford.

National Grid's response: National Policy Statement (NPS) EN-5 makes it clear that the Government expects overhead lines to be appropriate in most instances, although it recognises that there may be, at particularly sensitive locations such as National Landscapes, potential adverse landscape and visual impacts of an overhead line which may make it unacceptable in planning terms, taking account of the specific local environment and context. Undergrounding of overhead lines also needs to be considered in the context of a higher cost to bill-paying consumers, potential environmental implications of installation (due to the wider construction corridor required) and potential maintenance implications, as well as a requirement for sealing end compounds at the start and end point of the underground sections. The Project is located at a sufficient distance from the National Landscape that is not considered that this area is particularly sensitive from a landscape and visual perspective. Therefore, it is considered that overhead lines are appropriate in this location.

The grade I listed Parish Church of St James (NHLE 1063264) is located approximately 3.4 kms from the draft Order Limits and as such no change is anticipated that would result in altering the way the church is experienced or appreciated. This will be assessed further, in consultation with Historic England, and will be reported in the Environmental Statement (ES).

In terms of offshore options please see **Alternative options**.

3.5.443 The following suggestions have been considered together:

- i. Suggestion that consideration should be given to the eastern corridor to the east of Manby and Grimoldby, due to proximity to Louth, the National Landscape (AONB) and the village of Legbourne.
- ii. Suggestion to route overhead lines further east and away from the National Landscape (AONB).
- iii. Suggestion to route the overhead lines to the east of Manby.

National Grid's response: National Grid has undertaken a review of parts of the emerging preferred corridor adjacent to the Lincolnshire Wolds National Landscape (AONB) following the original appraisal reported in the Corridor and Preliminary Routeing and Siting Study (CPRSS). The review has considered additional

information obtained by National Grid following the publication of the CPRSS to confirm the appropriateness of selecting the preferred (western) corridor compared to the alternative (eastern) corridor. The review has focussed on those Sections commencing just south of North Thoresby and Tetney and ending just north of Burgh le Marsh. The comparative analysis highlights that distinguishing factors in the selection of the preferred option remain finely balanced and largely relate to the increased potential for impacts on the National Landscape (AONB) associated with the western corridor and the increased potential for potential impacts on the coastal ecological designations and flood risk issues associated with the eastern corridor. The review concludes that consideration of the new information does not significantly alter the previous conclusions reported in the CPRSS and the preference for the western corridor. The findings of the review are not considered significant enough to require a change of route corridor. Further detail can be found in **PEI Report Volume 3 Part A Appendix 3A Western Corridor Review**. Proximity to the National Landscape (AONB) and the communities of Manby, Grimoldby and Legbourne have been considered but do not alter the conclusions of the review and therefore the preference for the western corridor, as set out in the CPRSS (published at Stage 1 consultation), remains unchanged.

- iv. Suggestion to route the overhead lines as far east as possible within the graduated swathe near Keddington Corner/River Farm Valley.

National Grid's response: Routeing further east within the corridor at this location was assessed but not preferred by the Project team because it is a more constrained and technically challenging alignment (including several pinch points) that increases potential impacts to residential properties along Louth Road and the settlements of North and South Cockerington. The proposed alignment at this location routes centrally through the emerging preferred corridor presented at Stage 1 consultation, between Louth and Keddington (to the west) and North and South Cockerington (to the east). This alignment best balances equidistance between these receptors (as far as practicable) whilst maintaining compliance with the Holford Rules.

Ecology, Biodiversity and Environment

3.5.444 A considerable proportion of the community members' responses expressed concerns in relation to impacts on ecology, with a particular focus on wildlife and habitats (including watercourses and aquatic ecology). The concerns raised are summarised as follows:

- i. Impact on birds, particularly in relation to disruption to migratory birds and the overhead line being a collision risk for birds. Numerous types of birds were referred to, including:
 - Birds of prey such as buzzards, sparrow hawks, eagles, peregrine falcons, and owls;
 - Waterfowl including Canadian geese, swans, cormorants, cranes and egrets;
 - Waders and shorebirds including redshank and lapwing;
 - Songbirds and other small birds such as snow bunting and kingfishers; and
 - Pheasants.

- ii. Impact on aquatic ecology and watercourses, with various species identified including amphibians including frogs, natterjack toads, newts and Great Crested Newts, as well as fish (trout);
- iii. Impacts on mammals including bats, badgers, otters and seals were listed;
- iv. Impact of the pylons on bees and beehives; and
- v. Impacts on various known nature reserves, wetland habitats, and other important habitats were listed including Saltfleetby and Theddlethorpe dunes.

3.5.445 **National Grid Response:** The Project has been designed to avoid direct impacts upon European Designated Sites (Special Areas of Conservation, Special Protection Areas and Ramsar sites) and Sites of Special Scientific Interest. The Project is not located within any statutory designated sites. The nearest international site is the Humber Estuary SAC, SPA and Ramsar located 4.2 km north-east of the Section 2 draft Order Limits at its closest point. Saltfleetby-Theddlethorpe Dunes (including Gibraltar Point) SAC is located 8.4 km east and The Greater Wash SPA is located 8.8 km east of the section 2 Draft Order Limits. In addition, the Gibraltar Point SPA and Ramsar and Wash SPA and Ramsar (where bird species with large foraging ranges are noted as, or one of, the qualifying features), are located 22.5 km south-east and 24.1 km south-east of the Section 2 draft Order Limits at its closest point respectively. The potential for likely significant effects upon these sites will be assessed within the Environmental Statement (ES) and the Report to inform Habitats Regulations Assessment.

3.5.446 Through routeing and siting National Grid has sought and will continue to reduce as far as practicable potential impacts on biodiversity including habitats and protected species. The process of routeing takes account of existing biodiversity, the natural environment and, where practicable, seeks to avoid wildlife, and where not feasible, reduce potential impacts on areas of ecological sensitivity including protected and notable species and their associated habitats, through mitigation. A suite of habitat and species surveys will inform the ecological baseline, this data is still being collected and will be provided at ES stage per Chartered Institute of Ecology and Environmental Management guidance. The surveys include bats, badgers, great crested newts, otter, fish, aquatic macroinvertebrates, aquatic macrophytes, water vole, reptiles, and breeding and non-breeding birds. The Environmental Impact Assessment (EIA) for the Project will assess the effects on important ecological features using this baseline information. This will include collision risk with the overhead line once all bird data has been collected, and where/if required design changes and/or appropriate mitigation measures will be proposed. Some species are not protected or notable such as pheasant and bees (kept by beekeepers), and in the case of natterjack toads there is no suitable habitat and therefore will not be assessed. However, the overall impact on ecology is taken into account as part of the EIA process for the Project.

3.5.447 The initial assessment including the surveys undertaken are reported in **PEI Report Volume 2 Part B Section 2 Chapter 4 Ecology and Biodiversity**. The initial assessment identifies that at this stage significant effects cannot be excluded at this stage, and further survey work (ongoing) will be used to confirm the status of these species, inform the design of appropriate mitigation and a full assessment of effects that will be reported in the ES.

3.5.448 With regard to electric and magnetic fields impacts on bees please refer to The graduated swathe – Question 3a and other relevant feedback , under Impacts on bees and ability to pollinate.

Socio-economics

- 3.5.449 A large proportion of the community members' responses noted the attractiveness of the open countryside and villages in this area which make it easier for local businesses to attract employees and custom, and that this will be adversely affected due to the Project. Furthermore, it was noted that the proposals will have a negative impact on visitor numbers and tourism in Lincolnshire, which consultees noted are already struggling.
- 3.5.450 Several community members' responses noted the following comments related to socio-economics:
- i. Impacts on small local businesses, particularly those in rural areas that might suffer from a reduced attractiveness of the area, for example holiday rental owners;
 - ii. Impacts on North Cockerington primary school and the need to consider proximity to schools in the area; and
 - iii. Impacts on Rushmoor Country Park.
- 3.5.451 Several community members' responses raised concerns about impacts on small airfields such as North Reston.
- 3.5.452 **National Grid Response:** Through the routeing and siting exercise National Grid has sought to reduce impacts to businesses and the local economy, as evidenced in the Strategic Options Report (SOR) and the Corridor and Preliminary Routeing and Siting Study (CPRSS) published at the Stage 1 consultation. To further reduce potential impacts, we have identified businesses and enterprises and their primary function, including those in connection with tourism. These have been and will continue to be considered during the iterative design process.
- 3.5.453 From a socioeconomic perspective, the potential likely effects of National Grid's proposals on local businesses including those operating in connection with tourism (e.g. holiday parks and caravan sites), strategic visitor attractions and community facilities including primary schools, are considered in **PEI Report Volume 2 Part B Section 2 Chapter 11 Socio-economics, Recreation and Tourism**. In summary no significant adverse effects are anticipated for socio-economics, recreation and tourism receptors, noting this excludes above ground renewable energy generation infrastructure, within Section 2, as a result of the construction, operation and maintenance phase of the Project. An assessment of the direct effects of the Project on above ground renewable energy generation infrastructure (solar and onshore wind farms) as socio-economics receptors will be presented in the Environmental Statement (ES).
- 3.5.454 With regard to settlements and population, affected communities (local communities, including populations of towns and villages) **PEI Report Volume 2 Part C Route-wide Chapter 7 Socio-economics, Recreation and Tourism** identifies that at this stage it is anticipated that likely non-significant effects associated with construction activities would generally be minor adverse and temporary, with effects felt most by communities in closest proximity to the Project. We will report on any indirect amenity effects for affected communities as part of the socio-economics, recreation and tourism assessment, which might occur through in-combination effects across the Project (such as noise and vibration, visual, and transport and movement effects). **PEI Report Volume 2 Part C Route-wide Chapter 10 Cumulative Effects** presents a preliminary assessment of cumulative effects upon common receptors across environmental

topics identified within **PEI Report Volume 2 Part B** (intra-project) and identifies a shortlist of other Committed Developments with which there may be potential for cumulative effects and the relevant environmental topics for such effects (inter-project). The full cumulative effects assessment will be reported within the ES.

- 3.5.455 With regard to tourism including strategic visitor attractions and the impact of construction workforce on tourist accommodation bedspace, **PEI Report Volume 2 Part C Route-wide Chapter 7 Socio-economics, Recreation and Tourism** identifies that non-local workers would require accommodation in the local area, which is likely to be serviced from hotels and similar establishments such as B&Bs, and non-serviced accommodation including holiday lets, caravan parks and tourist campsites, and other collective accommodation. Overall, both temporary positive benefits to tourist accommodation businesses and temporary adverse effects through a reduction in tourist accommodation bed spaces are anticipated in relation to the labour market during construction. Given the preliminary number of construction workers anticipated to be employed on the Project, and the level of likely spare capacity for bedspace, the effects are not likely to be significant. For strategic visitor attractions the effects are not expected to be significant.
- 3.5.456 It should be noted that this is an ongoing assessment and is subject to changes due to the ongoing development of the Project. A full detailed assessment will be included within the ES submitted with the Development Consent Order (DCO) application.
- 3.5.457 North Cockerington primary school and Rushmore Country Park are not considered within the socio-economics, recreation and tourism assessment because they are situated outside the relevant Study Area (within 500m of the development Order Limits) and therefore are not predicted to experience any significant effects as a result of construction, operation or maintenance of the Project.
- 3.5.458 National Grid is aware of several airfields in the region that are within varying proximities to the proposed Project. Where possible, we have been engaging with airfield operators to better understand their activities, aircraft types and annual movements to inform our design development. National Grid has considered potential impacts to aviation receptors as outlined in Chapter 6 of the Design Development Report (DDR) with support from specialist aviation consultants. The proposed overhead line route is approximately 2,200 m to the east of the runway threshold at North Reston Farm Strip. Based on this information and the assessments carried out at this stage, no impacts are expected on flight operations at North Reston Farm Strip.
- 3.5.459 With regard to users of airfields, aviation will be considered in the ES, whilst **PEI Report Volume 2 Part B Section 2 Chapter 11 Socio-economics, Recreation and Tourism** sets out the relevant baseline and explains how aviation will be assessed with a specialist standalone report in support of the ES.

Health and Wellbeing

- 3.5.460 A considerable proportion of the community members' responses raised general concerns in relation to health and wellbeing for residents in this area due to the Project.
- 3.5.461 **National Grid Response:** National Grid recognises people may have concerns about the potential impacts of living close to an overhead line and associated infrastructure and that the uncertainty whilst the proposals are developed may cause anxiety. Through the routeing and siting exercise National Grid has sought and will continue to reduce as far as practicable impacts on sensitive receptors, such as residential areas, education facilities and areas for recreation. A considerable amount of assessment

work has been undertaken to allow preliminary judgements to be made about the design and routeing of the Project. This has been set out in various publications including the Corridor and Preliminary Routeing and Siting Study (CPRSS) and Strategic Options Report (SOR) as part of the Stage 1 consultation.

3.5.462 Further assessment work has been undertaken since the Stage 1 consultation as reported in **PEI Report Volume 2 Part C Route-wide Chapter 8 Health and Wellbeing**. A health and wellbeing baseline has been established for each Section to understand how the Project may specifically impact the health and wellbeing of different communities. This includes the following communities:

- Laceby
- Barnoldby le Beck
- Waltham
- Brigsley
- Ashby cum Fenby
- North Thoresby
- Covenham St Mary
- Yarburgh
- Alvingham
- Little Carlton
- Withern
- Tothill

3.5.463 No mental health impacts as a result of electric and magnetic fields (EMFs) are expected as a result of the Project as described within **PEI Report Volume 2 Part C Route-wide Chapter 8 Health and Wellbeing**. Furthermore, no significant impact on health and wellbeing as a result of changes in access to promoted recreational routes and open space; or changes to employment were identified.

3.5.464 The health and wellbeing assessment recognises that concerns about the health impacts of EMFs may adversely impact some people's mental health by heightening anxiety. However, it is anticipated that this group is likely to be very small, and that this impact will be effectively mitigated by National Grid's engagement with the community.

3.5.465 For further information on EMFs please refer to **The graduated swathe – Question 3a and other relevant feedback** under Health and Wellbeing.

3.5.466 The health and wellbeing assessment assesses the impact of changes to landscape and visual on health and wellbeing in conjunction with air quality, noise, and traffic and transport. This combination effect is assessed as 'Neighbourhood Quality'. For a neighbourhood quality effect to be identified, at least two significant residual effects must combine at the same location. There is evidence to suggest links between neighbourhood quality and health and wellbeing, as health and wellbeing can be adversely impacted by changes to air quality, noise, visual amenity, increased traffic. This will be assessed within the Environmental Statement (ES) and if required, mitigation put in place to address these impacts.

3.5.467 The health and wellbeing assessment will continue to be updated to ensure health and wellbeing concerns and impacts of local communities are taken into account.

Landscape and Visual

3.5.468 A considerable proportion of the community members' responses raised concerns in relation to landscape and visual impacts, which are summarised as follows:

- i. The new infrastructure changing the character of the existing rural landscape;
- ii. The presence of pylons and overhead lines being seen as a significant detractor from the natural beauty of the area;

- iii. The impact on local villages including Alvingham, South Cockerington, North Cockerington, and Grimoldby which would overlook pylons and overhead lines, as well as views to/from the Lincolnshire Wolds National Landscape (AONB);
- iv. The view of Louth's St James' Church, which has the tallest medieval parish church spire in England, was highlighted as being at risk; and
- v. Impacts on the viewpoint from the A16 at Kenwick Top.

- 3.5.469 **National Grid Response:** National Grid develops its Projects in line with national policy and our statutory duties to develop an efficient, economic and co-ordinated network, and have regard to preserving amenity and mitigating impacts. We recognise that overhead lines can give rise to adverse landscape and visual effects, and we carefully consider these along with other environmental and socio-economics considerations, technical requirements and cost when developing our Projects.
- 3.5.470 National Grid has carefully considered the potential impacts of the Project at an early stage, and the findings and justifications for the selection of the emerging preferred corridor in which the new overhead line is proposed to be routed, can be found in the Corridor and Preliminary Routeing and Siting Study (CPRSS), which is available on our Project website. Through the routeing and siting exercise we have sought to reduce the impact on landscape character and visual amenity. We will continue to consider both landscape character and amenity value as we develop our proposals and seek to reduce effects.
- 3.5.471 The potential likely effects of National Grid's proposals in this area on landscape character and visual receptors are set out in **PEI Report Volume 2 Part B Section 2 Chapter 2 Landscape** and **Chapter 3 Visual**. A preliminary visual assessment has been undertaken for each community, or parish, within the Study Area. A number of viewpoints have been selected to represent the views from local communities. These are presented in **PEI Report Volume 3 Part B Sections 1 to 7 Appendix 3A Proposed Viewpoints** and will form the basis for the Landscape and Visual Impact Assessment (LVIA). Views towards St James's Church in Louth have been identified and will be assessed as part of the LVIA at the Environmental Statement (ES) stage. The edge of the Lincolnshire Wolds National Landscape (AONB) is well wooded in this Section which helps to limit the views east, but viewpoint locations has also been identified on the A16 above Kenwick Park.
- 3.5.472 Significant visual effects have been predicted for a number of communities with views to and from the National Landscape (AONB). This includes communities that would be directly affected by a new overhead line and for communities to the east of the Project with strong visual links towards the Wolds. This includes Alvingham, North Cockerington, Grimoldby, Little Carlton and Withern with Stain where there would be close proximity views of the Project as it routes through these community areas.
- 3.5.473 **PEI Report Volume 2 Part C Route-wide Chapter 2 Landscape** reports early findings of the assessment of impacts on National Landscape (AONB). This considers the purposes of the designation and its special qualities which also includes views. A full assessment of the impacts on National Landscape (AONB) will be provided as part of the LVIA, which will be reported in the ES that would be submitted with the Development Consent Order (DCO) application of the Project.
- 3.5.474 National Grid will be producing a LVIA that will, in addition to other topic specific assessments, form the latter part of the Environmental Impact Assessment (EIA) for the Project. This will include a write-up of an assessment of the effects on the landscape character of the area and visual effects from communities. Where likely

significant effects are anticipated, the LVIA will consider and identify areas where it may be necessary and appropriate to put forward potential mitigation as part of an iterative design and assessment process

Lincolnshire Connection substation A – Question 3h and other feedback relevant to this Section of the route

3.5.475 Question 3h of the feedback form asked:

‘Do you have a preference for the location of the Lincolnshire Connection substation A within the siting area?’

3.5.476 The feedback about Lincolnshire Connection substation A covered themes including construction; consultation; historic environment; planning and design; ecology, biodiversity and environment; socio-economics; agricultural land; health and wellbeing; landscape and visual; noise and vibration; flood risk and drainage and groundwater.

3.5.477 The following sections provide a summary of the comments made in relation to these themes and National Grid’s response to those. When narrating feedback, we refer to the Sections of the route as they were described at the time of the Stage 1 consultation. National Grid’s responses refer to the revised Sections of the route as presented as part of the Stage 2 consultation. For further detail on the changes in sectioning please see Approach to route Sections.

Construction

3.5.478 Several community members’ responses raised concerns in relation to traffic and transport associated with the construction of the substation because the roads in the area were deemed unsuitable (very narrow, single tracks with deep dykes either side).

3.5.479 Some community members’ responses requested information on the potential mitigation plans in relation to traffic movements during construction.

3.5.480 A few community members’ responses raised concerns in relation to increased traffic due to the Project causing impact to wildlife.

3.5.481 **National Grid’s response:** We recognise that construction of the Project would result in some temporary impacts to local areas. The Corridor and Preliminary Routeing and Siting Study (CPRSS), published at the Stage 1 consultation, explains that our approach to the appraisal of design options considered a range of topics with various technical considerations including construction.

3.5.482 The **PEI Report** appraises the suitability of local roads to accommodate the forecast volume of construction traffic movements. This includes consideration of road geometry, congestion, accidents and sensitive receptors that include local amenities, schools and non-motorised user activity. Sensitive routes will be avoided where possible, and construction haul roads used where appropriate along with maximising the use of suitable major and strategic roads. **PEI Report Volume 2 Part B Section 3 Chapter 9 Traffic and Movement, PEI Report Volume 3 Part B Sections 1 to 7 Appendix 9B Preliminary Construction Information and Appendix 9C Future Baseline and Impact Analysis** identify Primary Access Routes to construction access points (bellmouths), compounds and substations, along with an estimate of average daily flows based on the existing information available at the time of writing. Our initial appraisal included in **PEI Report Volume 2 Part B Section 3 Figure 9.5 Preliminary Impact Analysis** shows impacts on the roads that result in potential significant effects.

These routes are identified as part of the Primary Access Route network to the substation and will require discussion with the local highway authority and possibly further assessment to determine the effect, if any, on users of the highway. Construction traffic routing will be discussed with the appropriate highway authorities during the full Transport Assessment, which will be reported in the Environmental Statement (ES).

- 3.5.483 Where there is a requirement to use the local road network, a review has been conducted to ensure roads are wide enough to cater for large construction vehicles, identifying indicative locations for temporary highway improvements (for example passing places) on roads only suitable for single lane running. Further detail is available in section 8.3 of the Design Development Report (DDR) and on the Consultation Plans provided as part of Stage 2 consultation.
- 3.5.484 Ecology surveys are being completed to identify important ecological features, and these will be avoided wherever possible and mitigation will be provided where needed. Information on the habitats and species surveys is presented in **PEI Report Volume 2 Part B Section 3 Chapter 4 Ecology and Biodiversity**. A Preliminary Code of Construction Practice (CoCP) is provided in **PEI Report Volume 3 Part A Appendix 5A Preliminary Code of Construction Practice** and details the measures proposed to control and manage potential impacts on Ecology and Biodiversity during construction. The CoCP includes measures to control potential impacts from dust, waste, water, noise, vibration and soil during construction. Mitigation requirements for the protection of habitats and species will be confirmed once baseline surveys have been completed, however these are likely to include the restoration of habitats post construction and/or the creation of new habitats.
- 3.5.485 A CoCP and Construction Traffic Management Plan will be prepared and submitted with the Development Consent Order (DCO) application. These documents will include commitments to reduce construction impacts together with a framework for detailed management plans to be prepared at detailed design stage to reduce and mitigate potential impacts and/or disruptions that may arise during the construction phase. A Preliminary CoCP is available as part of the Stage 2 consultation.

Consultation

- 3.5.486 Several community members' responses identified the lack of detailed information available regarding the specific location of the substation and what it would look like.
- 3.5.487 **National Grid's response:** For National Grid's responses on consultation materials and feedback please refer to Our consultation - Question 6f and other , under Consultation materials.

Historic Environment

- 3.5.488 Several community members' responses raised various concerns in relation to the heritage assets, which are summarised as follows:
- i. The heritage sensitivities of Alford, which is described as a historic town;
 - ii. Impacts on a farm at "greenfield" near Mother Wood which is a protected Historic England site; and
 - iii. Impacts on Mother Wood which is described as historic with potential archaeological artefacts.

3.5.489 **National Grid's response:** The Project and draft Order Limits have been designed to avoid sensitive receptors as far as practicable. This is in accordance with the Holford Rules applicable to routing of new overhead lines and the Horlock Rules which apply to design and siting of substations. These approaches are explained in further detail within the Corridor and Preliminary Routeing and Siting Study (CPRSS), Design Development Report (DDR) and **PEI Report Volume 2 Part A Chapter 3 Main Alternatives Considered**. Principles include, but are not limited to, seeking to avoid areas of highest amenity, cultural or scientific value, taking advantage of natural screening provided by existing landform and features (e.g. woodland) and keeping visual, noise and other environmental effects to a minimum. For historic environment, such measures include the avoidance of physical impacts to designated heritage assets and where practicable non-designated heritage assets, and where possible reducing potential impacts to the setting of designated heritage assets and non-designated heritage assets.

3.5.490 National Grid has carried out a preliminary assessment of potential likely effects on the historic environment arising from the new LCS A substation, which is reported in **PEI Report Volume 2 Part B Section 3 Chapter 5 Historic Environment**. In summary:

- i. The historic core of the town of Alford is a designated conservation area. It includes a concentration of listed heritage buildings located within it including the grade I listed windmill (NHLE 1146936) and grade II* thatched Manor House (NHLE 1063001). Any impacts as a result of the Project would be limited to the northern end of the conservation area, with potential temporary impacts on its character and surrounding setting within the parish. However, there would be no permanent change to its setting, nor would views be altered into or out of the conservation area. Impacts on the conservation area, including the Windmill and Manor House, would be limited to those which are temporary in nature and would be negligible having a minor adverse effect and not significant.
- ii. Greenfield Farm (MLI118494) is a non-designated heritage asset located approximately 700 m to the south of the draft Order Limits. Temporary and permanent changes to its wider setting may be experienced arising from the Project which are assessed as having negligible adverse impacts which are not significant.
- iii. Mother Wood is a non-designated heritage asset recorded on the historic environment record as Hornby, Mother and Greenfield Woods (MLI43037). The draft Order Limits run along the north-east boundary of the heritage asset. There are not anticipated to be any intrusive activities or physical impacts arising from the construction of the Project to the asset resulting in no change from any potential impacts which would have a neutral effect which is not significant.

3.5.491 We will continue to engage with Historic England and relevant local planning authorities, on aspects relating to the historic environment and heritage assets, including appropriate mitigation measures and techniques and will take their views into account as the Project continues to develop.

Planning and Design

3.5.492 A large proportion of the community members' responses made design suggestions in relation to this Section of the route, which are summarised as follows

- i. Suggestion to locate the new LCS A substation at the disused Strubby Airfield to the north of the proposed sitting location.

National Grid's Response: During the routeing and siting stage of project development, a potential siting zone encompassing land at Strubby airfield was considered for substation siting (referred to as LCS12). Strubby airfield is an active airfield site which includes both powered flying and gliding activities. Siting LCS A at Strubby airfield is therefore not preferred because it would site infrastructure (including overhead lines that would connect into and out of the substation) very close to the runways and would likely have significant impacts to the flying activities that occur there. The proposed siting of LCS A seeks to maximise the distance from Strubby airfield, as far as practicable, to avoid any such potential impacts. For more information on siting zones considerations at this location, please refer to Chapter 10 and 13 of the Corridor and Preliminary Routeing and Siting Study (CPRSS).

- ii. Suggestion to locate the new LCS A substation at the disused Manby Airfield to the north of the proposed sitting location.

National Grid's Response: During the routeing and siting stage of project development, a potential siting zone overlapping land at the former RAF Manby was considered for substation siting (referred to as LCS11). On balance, LCS11 was not preferred as a siting zone due to potential impacts on a permitted anaerobic digester surrounding of grade II listed buildings and an existing operational waste site, in combination with limitations when considering the routes of other connections to the siting zone and the greater distance from the emerging preferred corridor. For more information on siting zones considerations at this location, please refer to Chapter 10 and 13 of the Corridor and Preliminary Routeing and Siting Study (CPRSS).

- iii. Suggestion to locate the new LCS A substation near the existing industrial buildings in Woodthorpe (near the garden centre).

National Grid's Response: During the routeing and siting stage of project development, a potential siting zone encompassing land at Woodthorpe was considered for substation siting (referred to as LCS12). Ultimately, LCS12 was not preferred as a siting zone due to proximity to features that, in seeking to avoid or reduce the potential for significant adverse effects, would considerably limit flexibility of substation siting and the routeing of customer connections and nearby settlements are likely to result in greater impacts on visual amenity. LCS5 was taken forward as the preferred siting zone for LCS A because it offers greater substation siting flexibility and presence of existing screening (Mother Wood) reduces potential landscape and visual impacts. For more information on siting zones considerations at this location, please refer to Chapter 10 and 13 of the Corridor and Preliminary Routeing and Siting Study (CPRSS).

- iv. Suggestion to combine LCS A and LCS B into a single substation.

National Grid's Response: Combining the proposed LCS A and B substations into one site is not possible primarily because of the required capacity for the generation connections across the two substations. Merging the two substations into one single site would introduce prohibitive additional security, safety and operational considerations and would result in a much larger substation site that would have more significant environmental impacts concentrated at a singular location compared to spreading potential environmental impacts across two separate, smaller sites where mitigation can be better managed. This single large substation would also significantly restrict the flexibility of routing and siting, because of the reduced number of available

siting zones for the substation and the additional constraints and receptors likely to be introduced.

- v. Suggestion that LCS A should be less than 15m high or located greater than 2 nautical miles from Strubby Airfield to minimise impact on aircraft movements.

National Grid's Response: National Grid has investigated this issue and whilst the substation is within 2 nautical miles of the airfield, the equipment within the substation is not expected to exceed 15 m in height. National Grid has also undertaken a broader analysis of potential impacts to aviation receptors as outlined in Chapter 6 of the Design Development Report (DDR) with support from specialist aviation consultants, which includes consideration of both substation infrastructure and overhead lines. Overhead lines are considered to be the primary source of interaction with any aviation receptors due to their increased height. In summary, it is considered that based on the proposed overhead alignment, both departing aircraft from Runway 26 and approaching aircraft to Runway 08 at both airfields operating at Strubby would be able to safely overfly the overhead line with sufficient clearance above standard height pylons. LCS A substation itself is also not expected to result in any impact to aircraft movements by virtue of its distance from Strubby and the much lower height of the substation equipment compared to the overhead line.

- vi. Suggestion to avoid the use of Rye Lane for construction to LCS A to minimise impact on Mother Wood.

National Grid's Response: The current construction routeing strategy recommends construction access from the east, avoiding Mother Wood, therefore no changes will be made as the construction access aligns with the current preference. Whilst Rye Lane (passing Mother Wood) has the potential to be used by Workers commuting to LCS A, our initial assessment does not forecast any traffic to use the section of Rye Lane passing Mother Wood as alternative more suitable roads are available.

- vii. Suggestion that LCS A should avoid Priory of St Mary scheduled ancient monument at Greenfield Farm, as it will create visual impact to the surrounding villages in Lincolnshire Wolds.

National Grid's Response: The current preferred siting of the LCS A is located approximately 640m northeast of the Site of St Mary's Priory, Greenfield scheduled monument, avoiding the scheduled earthwork and buried archaeological remains. As such, no changes will be considered for this suggestion.

- 3.5.493 Several of the community members' responses commented that Alford already has a substation and raised concerns about having two located too closely together.

- 3.5.494 **National Grid's response:** There are currently no substations at transmission voltage levels (275 kV or 400 kV) in or around Alford. However, there are many smaller, lower voltage distribution substations (132 kV and below) which are distributed throughout Lincolnshire to enable electricity supply to residential, commercial and industrial consumers. There is a very small indoor distribution substation on Millers Way within Alford, and a larger 33 kV substation on Farlesthorne Road to the south of Alford. Both of these substations are more than 2 km away from both LCS A and LCS B. At present, there are therefore no technical or environmental concerns regarding the new 400 kV substations being in close proximity to other substations at lower voltages.

Ecology, Biodiversity and Environment

- 3.5.495 A considerable proportion of the community members' responses, alongside technical stakeholder's feedback (Willoughby and District Parish Council) expressed concern about potential ecological effects, which are summarised as follows:
- i. Impacts on the environment and wildlife, particularly on the margins of and adjacent to land proposed for the substation; and
 - ii. Mother Wood (the woodland located north-east of Alford) and its habitats, including great crested newts and bats.
- 3.5.496 Furthermore, some responses noted that Mother Wood was one of the few woodlands in the area.
- 3.5.497 **National Grid Response:** The Project has been designed to avoid direct impacts upon European Designated Sites (Special Areas of Conservation, Special Protection Areas and Ramsar sites) and Sites of Special Scientific Interest.
- 3.5.498 Mother and Greenfield Woods Local Wildlife Site (LWS) are located within the draft Order Limits. There is therefore a risk of adverse effects on habitats and fauna (e.g. bats, birds) associated with this LWS, through habitat loss and degradation (for example through changes in air quality and hydrology). Further survey work will establish the nature and importance of any receptors associated with the Mother and Greenfield Woods LWS to inform appropriate mitigation. We do not expect any permanent impacts on Mother and Greenfield Woods LWS as no infrastructure would be sited within the wood.
- 3.5.499 Through routeing and siting National Grid has sought and will continue to seek to reduce potential impacts on biodiversity including habitats and protected species. The process of routeing takes account of existing biodiversity, the natural environment and, where practicable, seeks to avoid wildlife, and where not feasible, reduce potential impacts on areas of ecological sensitivity including protected and notable species and their associated habitats, through mitigation. A suite of habitat and species surveys will inform the ecological baseline, this data is still being collected and will be provided at the Environmental Statement (ES) stage per Chartered Institute of Ecology and Environmental Management guidance. The surveys include bats, badgers, great crested newts, otter, fish, aquatic macroinvertebrates, aquatic macrophytes, water vole, reptiles, and breeding and non-breeding birds. The Environmental Impact Assessment (EIA) for the Project will assess the effects on important ecological features using this baseline information. This will include collision risk with the overhead line once all bird data has been collected, and where/if required design changes and/or appropriate mitigation measures will be proposed. Some species are not protected or notable and therefore will not be assessed. However, the overall impact on ecology is taken into account as part of the EIA process for the Project.
- 3.5.500 The initial assessment including the surveys undertaken are reported in **PEI Report Volume 2 Part B Section 3 Chapter 4 Ecology and Biodiversity**. The initial assessment identifies that at this stage significant effects cannot be excluded, and further survey work (ongoing) will be used to confirm the status of these species, inform the design of appropriate mitigation and a full assessment of effects that will be reported in the ES.

Socio-economics

- 3.5.501 Community members' responses raised various concerns in relation to socio-economics, with a focus on tourism, which are summarised as follows:
- General concerns about impacts on tourism and holiday properties in the area;
 - Impacts on Woodthorpe which is described as having holiday caravans, a large garden centre, and other popular visitor attractions and retail;
 - Impacts on the caravan site at Galley Hill; and
 - Impacts on hospitality businesses in the area.
- 3.5.502 Several community members' responses also expressed concerns in relation to aviation and noted that not all existing airfields and landing strips have been identified, which should be addressed.
- 3.5.503 **National Grid Response:** Through the routeing and siting exercise National Grid has sought to reduce impacts to businesses and the local economy, as evidenced in the Strategic Options Report (SOR) and the Corridor and Preliminary Routeing and Siting Study (CPRSS) published at the Stage 1 consultation. To reduce potential impacts, we have identified businesses and enterprises and their primary function, and those that are likely to generate tourism. These have been and will continue to be considered during the iterative design process.
- 3.5.504 From a socioeconomic perspective, the potential likely effects of National Grid's proposals on local businesses including those operating in connection with tourism (e.g. holiday parks and caravan sites, including the Camping and Caravanning Club at Galley Hill) are considered in **PEI Report Volume 2 Part B Section 3 Chapter 11 Socio-economics, Recreation and Tourism**. In summary no significant adverse effects are anticipated for socio-economics, recreation and tourism receptors, noting this excludes above ground renewable energy generation infrastructure, within Section 3, as a result of the construction, operation and maintenance of the Project. An assessment of the direct effects of the Project on above ground renewable energy generation infrastructure (solar and onshore wind farms) as socio-economics receptors will be presented in the Environmental Statement (ES).
- 3.5.505 With regard to settlements and population, affected communities (local communities, including populations of towns and villages) **PEI Report Volume 2 Part C Route-wide Chapter 7 Socio-economics, Recreation and Tourism** identifies that at this stage it is anticipated that likely non-significant effects associated with construction activities would generally be minor adverse and temporary, with effects felt most by communities in closest proximity to the Project. We will report on any indirect amenity effects for affected communities as part of the socio-economics, recreation and tourism assessment, which might occur through in-combination effects across the Project (such as noise and vibration, visual, and transport and movement effects). **PEI Report Volume 2 Part C Route-wide Chapter 10 Cumulative Effects** presents a preliminary assessment of cumulative effects upon common receptors across environmental topics identified within **PEI Report Volume 2 Part B** (intra-project) and identifies a shortlist of other Committed Developments with which there may be potential for cumulative effects and the relevant environmental topics for such effects (inter-project). The full cumulative effects assessment will be reported within the ES.
- 3.5.506 With regard to tourism including strategic visitor attractions and the impact of construction workforce on tourist accommodation bedspace, **PEI Report Volume 2 Part C Route-wide Chapter 7 Socio-economics, Recreation and Tourism** identifies

that non-local workers would require accommodation in the local area, which is likely to be serviced from hotels and similar establishments such as B&Bs, and non-serviced accommodation including holiday lets, caravan parks and tourist campsites, and other collective accommodation. Overall, both temporary positive benefits to tourist accommodation businesses and temporary adverse effects through a reduction in tourist accommodation bed spaces are anticipated in relation to the labour market during construction. Given the preliminary number of construction workers anticipated to be employed on the Project, and the level of likely spare capacity for bedspace, the effects are not likely to be significant. For strategic visitor attractions the effects are not expected to be significant.

- 3.5.507 It should be noted that this is an ongoing assessment and is subject to changes due to the ongoing development of the Project. A full detailed assessment will be included within the ES submitted with the Development Consent Order (DCO) application.
- 3.5.508 Impacts on Woodthorpe receptors as described above are largely not considered within the socio-economics, recreation and tourism assessment because they are situated outside the relevant Study Area (within 500m of the development Order Limits) and therefore are not predicted to experience any significant effects as a result of construction, operation or maintenance of the Project.
- 3.5.509 National Grid is aware of several airfields in the region that are within varying proximities to the proposed Project. Where possible, we have been engaging with airfield operators to better understand their activities, aircraft types and annual movements to inform our design development. National Grid has undertaken a preliminary analysis of potential impacts to aviation receptors as outlined in Chapter 6 of the Design Development Report (DDR) with support from specialist aviation consultants.
- 3.5.510 With regard to users of airfields, aviation will be considered in the ES, whilst **PEI Report Volume 2 Part B Section 3 Chapter 11 Socio-economics, Recreation and Tourism** sets out the relevant baseline and explains how aviation will be assessed with a specialist standalone report in support of the ES.

Agricultural Land

- 3.5.511 A large proportion of the community members' responses noted concerns with loss of agricultural land due to pylons in this Section of the route.
- 3.5.512 **National Grid's response:** National Grid recognises that there is the potential for impacts on agricultural land. We look to limit the impact on agricultural land through careful and considered routeing and siting of infrastructure and through consultation with affected landowners. We are and will continue to work with all landowners who may be affected by the proposals to understand the impacts as the Project is developed.
- 3.5.513 The draft Order Limits shown include areas of land required for temporary construction activities including temporary construction compounds, and access etc, as well as permanent infrastructure including pylons and overhead line.
- 3.5.514 Attempts have been made to avoid Best and Most Versatile (BMV) agricultural land as part of the design evolution. Where BMV agricultural land is to be developed, if possible, this will be directed at land of the lowest possible grade.
- 3.5.515 Direct permanent loss of agricultural land per pylon is restricted to the area of the foundation plinths. Where pylons are located within pasture land, the area beneath the

pylon can still be grazed. It is acknowledged that where pylons are located within arable rotations or land used for hay and silage cropping, the area beneath the pylon is excluded from agricultural use during the operational phase, as agricultural machinery cannot be used in these areas.

- 3.5.516 **PEI Report Volume 2 Part B Section 3 Chapter 8 Agriculture and Soils** provides a preliminary assessment on the impacts of the Project on agricultural land, soil resources and agricultural landholdings using publicly available and purchased data related to land grades (according to the Agricultural Land Classification (ALC) system), soil profiles, and land use. The preliminary assessment has used publicly available Provisional ALC data, however, a detailed ALC survey will be conducted prior to the submission of the Environmental Statement (ES) to provide a full assessment of the extent of land grades and soil types affected.
- 3.5.517 The agricultural land within the draft Order Limits for Section 3 is provisionally mapped as ALC Grades 2 and 3, and as such is considered likely to comprise BMV land. **PEI Report Volume 2 Part B Section 3 Chapter 8 Agriculture and Soils** reports a likely significant effect due to the temporary and permanent loss of agricultural land and soil function. National Grid are committed to the implementation of effective soil handling, storage and reinstatement measures, which will be detailed in an Outline Soil Management Plan ('Outline SMP', to be submitted as part of the Development Consent Order (DCO) application) and would be critical in ensuring the minimisation of effects and ensuring successful reinstatement of soils and agricultural land grade, where practicable.

Health and Wellbeing

- 3.5.518 Several community members' responses expressed concerns about impacts on the mental wellbeing and health of residents in the area. Specifically, cancer and issues associated with electric and magnetic fields (EMFs) were mentioned.
- 3.5.519 **National Grid's response:** National Grid recognises people may have concerns about the potential impacts of living close to an overhead line and associated infrastructure and that the uncertainty whilst the proposals are developed may cause anxiety. Through the routeing and siting exercise National Grid has sought and will continue to reduce as far as practicable impacts on sensitive receptors, such as residential areas, education facilities and areas for recreation. A considerable amount of assessment work has been undertaken to allow preliminary judgements to be made about the design and routeing of the Project. This has been set out in various publications including the Corridor and Preliminary Routeing and Siting Study (CPRSS) and Strategic Options Report (SOR) as part of the Stage 1 consultation.
- 3.5.520 Further detailed assessment work has been undertaken since the Stage 1 consultation and will be published in **PEI Report Volume 2 Part C Route-wide Chapter 8 Health and Wellbeing**. A health and wellbeing baseline has been established for each Section to understand how the Project may specifically impact the health and wellbeing of different communities. This includes the following communities:
- Saleby
 - Thorethorpe
 - Bilsby
 - Asserby Turn
- 3.5.521 Policies and procedures are in place to make sure all equipment will comply with public EMF exposure limits. As such, physical health effects associated with the generation of EMFs is scoped out of the assessment on the basis that EMF levels would be low such that significant adverse effects are not expected. An EMF report, separate to the

Environmental Impact Assessment (EIA) process, will be prepared as part of the Project.

- 3.5.522 No mental health impacts as a result of EMF are expected as a result of the Project as described within **PEI Report Volume 2 Part C Route-wide Chapter 8 Health and Wellbeing**. Furthermore, no significant impact on health and wellbeing as a result of changes in access to promoted recreational routes and open space; or changes to employment were identified.
- 3.5.523 The health and wellbeing assessment recognises that concerns about the health impacts of EMF may adversely impact some people's mental health by heightening anxiety. However, it is anticipated that this group is likely to be very small, and that this impact will be effectively mitigated by National Grid's engagement with the community.
- 3.5.524 For further information on EMFs please refer to **The graduated swathe – Question 3a and other relevant feedback** under Health and Wellbeing.
- 3.5.525 The Health and Wellbeing assessment assesses the impact of changes to landscape and visual on health and wellbeing in conjunction with air quality, noise, and traffic and transport. This combination effect is assessed as 'Neighbourhood Quality'. For a neighbourhood quality effect to be identified, at least two significant residual effects must combine at the same location. There is evidence to suggest links between neighbourhood quality and health and wellbeing, as health and wellbeing can be adversely impacted by changes to air quality, noise, visual amenity, increased traffic. This will be assessed within the Environmental Statement (ES) and if required, mitigation put in place to address these impacts.
- 3.5.526 The Health and Wellbeing assessment will continue to be updated to ensure health and wellbeing concerns and impacts of local communities are taken into account.

Landscape and Visual

- 3.5.527 A considerable proportion of the community members' responses raised concerns in relation to landscape and visual impacts, which are summarised as follows:
- i. Screening in general will not be enough to mitigate visual impacts and suggestions that Mother Wood would not screen the development due to the height of the substation and overhead line;
 - ii. Impacts on Claythorpe; and
 - iii. General concerns with the substation damaging the rural character of the area and being visible from a distance due to flat landscape.
- 3.5.528 A few community members' responses suggested that the screening needs to be considered to mitigate visual impacts.
- 3.5.529 A few community members' responses stated that the planned screening (Mother and Greenfield Wood) would be suitable.
- 3.5.530 **National Grid Response:** National Grid develops its Projects in line with national policy and our statutory duties to develop an efficient, economic and co-ordinated network, and have regard to preserving amenity and mitigating impacts. We recognise that overhead lines and substations can give rise to adverse landscape and visual effects, and we carefully consider these along with other environmental and socio-economics considerations, technical requirements and cost when developing our Projects.

- 3.5.531 National Grid has carefully considered the potential impacts of the Project at an early stage, and the findings and justifications for the selection of the emerging preferred siting zones, can be found in the Corridor and Preliminary Routeing and Siting Study (CPRSS), which is available on our Project website. Through the routeing and siting exercise we have sought to reduce the impact on landscape character and visual amenity. We will continue to consider both landscape character and amenity value as we develop our proposals and seek to reduce effects.
- 3.5.532 The potential likely effects of National Grid's proposals at the new LCS A substation on landscape character and visual receptors are considered in **PEI Report Volume 2 Part B Section 3 Chapter 2 Landscape** and **Chapter 3 Visual**.
- 3.5.533 With regards to the new LCS A substation, the siting has made best use of existing mature woodland blocks and Greenfield Wood and Mother Wood to screen views from the Lincolnshire Wolds National Landscape (AONB) and communities to the west including Claythorpe. It is acknowledged that the overhead line will still be visible from these areas.
- 3.5.534 Mitigation planting is proposed around each of the substations to further reduce visual impacts and provide landscape integration. Locations for planting need to take account of the proposed overhead line and any underground cables connecting into the substation in terms of where planting would not be able to be planted for clearance and safety reasons. At the new LCS A, planting is proposed to the south and west, linking to the existing woodland blocks to further filter views. The tallest equipment within the substations will be the gantries which tend to be up to 15m tall, with most of the rest of the equipment being lower in height at approximately 7-8 m in height and some of the taller busbar equipment being 11-12 m in height. Proposed planting will include a range of species including trees, which at year 15 would be predicted to have grown to an average of 7-8 m tall therefore screening all but the gantries and tallest busbar equipment. Mounding may be considered to further increase heights of planting.
- 3.5.535 National Grid will be producing a Landscape and Visual Impact Assessment (LVIA) that will, in addition to other topic specific assessments, form the latter part of the Environmental Impact Assessment (EIA) for the Project. This will include a write-up of an assessment of the effects on the landscape character of the area and visual effects from communities. Where likely significant effects are anticipated, the LVIA will consider and identify areas where it may be necessary and appropriate to put forward potential mitigation as part of an iterative design and assessment process.
- 3.5.536 With regard to support expressed for the proposed screening, National Grid welcomes the respondents' views.

Noise and Vibration

- 3.5.537 Several community members' responses expressed concerns about the noise generated by the substation.
- 3.5.538 **National Grid's response:** National Grid will be undertaking a noise and vibration assessment that will form part of the Environmental Impact Assessment (EIA) for the Project. Noise levels and the effect on residential properties as well as other sensitive receptors, such as hospitals and schools are carefully considered during Project development, assessed according to the appropriate UK standards, and mitigated where necessary. The early findings are presented in a **PEI Report**, as part of the Stage 2 consultation before being refined and submitted in an Environmental

Statement (ES) which will form part of the eventual Development Consent Order (DCO) application.

- 3.5.539 An initial assessment of noise and vibration impacts from the LCS A substation is presented in **PEI Report Volume 2 Part B Section 3 Chapter 10 Noise and Vibration**. The assessment considers the potential effects from construction noise and vibration, construction traffic noise, and operational noise.
- 3.5.540 The new LCS A is currently proposed to only include connections for generation projects and transmission links at 400 kV, and is not proposed to include equipment which would generate noise under normal operation, such as transformers. Auxiliary equipment within the substation would not generate significant levels of noise and is scoped out of the assessment. As such, there are no proposed sources of operational noise from the proposed substation that would generate significant effects during its normal operation. Operational noise from the proposed substation is therefore not significant and scoped out of further assessment. Should such equipment be determined to be required during design development, a noise impact assessment would be undertaken, and mitigation measures would be specified, where required, to avoid significant adverse effects.

Flood Risk and Drainage

- 3.5.541 The Environment Agency's feedback identified that the preferred location looked to follow a sequential approach placing the development in Flood Zone 1, minimising flood risk implication, and that this area was outside of the floodplain and would not impede flow or remove capacity for floodwaters. The feedback also mentioned that the area North of Abbey Grange might interact with the fluvial floodplain and any removal of floodplain would need to be compensated for and the substation would need mitigation measures implemented to ensure it will remain safe and working during extreme flood events.
- 3.5.542 **National Grid's response:** The Project and draft Order Limits have been designed to avoid sensitive receptors as far as practicable. The Project seeks to avoid flood risk and potentially significant effects via the sequential approach to routing and siting, minimising significant effects where possible. This is in accordance with the Horlock Rules which apply to design and siting of substations. In Section 3 this has included locating the draft Order Limits to avoid sensitive Water Environment and Flood Risk receptors, where practicable, which is also consistent with the sequential approach to management of flood risk advocated in NPS EN-1.
- 3.5.543 As part of the process of ongoing Project design, the Water Environment and Flood Risk team will work alongside other environmental disciplines and the design team to ensure that appropriate mitigation is incorporated into the final design for permanent infrastructure, to minimise effects on Water Environment and Flood Risk receptors. This includes flood protection measures for the substation to be designed in accordance with National Grid internal guidance and consistent with planning policy requirements to ensure no increased flood risk to third parties. The permanent impacts of the substation upon flood risk are however subject to further design development and ongoing flood risk assessment whereby the area North of Abbey Grange will be investigated further.
- 3.5.544 Further investigations are required and consultations with the EA to understand the flood risk in the Study Area, review of existing flood models and agree a scope to future assessment to be reported in the Flood Risk Assessment (FRA) and Environmental

Statement (ES). This will include an assessment of the effects of climate change over the lifetime of the Project.

Groundwater

- 3.5.545 The Environment Agency's feedback identified that within the emerging preferred search locations there are a few abstraction licences which may be impacted by potential discharges to surrounding watercourses (the location of which could be requested from the Environment Agency). The feedback also noted that aspects of the search area near Claythorpe may fall into the Great Eau (downstream of South Thoresby) Drinking Water Protection catchment.
- 3.5.546 **National Grid's response:** The Project has been designed to take into account and avoid sensitive hydrological and hydrogeological receptors where possible, within the balance of other relevant design factors, to minimise/prevent any significant effects on these receptors. This includes surface water abstractions, groundwater abstractions and drinking water safeguard zones for both surface water and groundwater. Discharges directly to groundwater are not anticipated and any discharges to land would be of unpolluted water only.
- 3.5.547 No surface water abstractions were identified within the Section 3 Study Area. The two consented discharges identified within the Section 3 Study Area are both outside the draft Order Limits. There is therefore no scope for a direct effect on the discharge infrastructure as a result of the Project. Any indirect effects on flow or quality in receiving watercourses as a result of the construction of the Project will not affect the ability of the discharge to operate as consented. The Section 3 Study Area is not located within a surface water Drinking Water Protected Area (Great Eau (downstream of South Thoresby) GB105029061660) or Safeguarding Zone (SWSGZ1002). Information on groundwater Safeguard Zones is included in **PEI Report Volume 2 Part B Section 3 Chapter 7 Geology and Hydrogeology**.
- 3.5.548 Where construction and permanent infrastructure associated with the Project are required in areas adjacent to abstractions, these have been assessed within the **PEI Report** for an initial assessment of potentially significant effects, within **PEI Report Volume 2 Part B Section 3 Chapter 7 Geology and Hydrogeology** and **PEI Report Volume 2 Part B Section 3 Chapter 6 Water Environment and Flood Risk**. Further detail on groundwater abstractions will be obtained from the EA and utilised within the subsequent Environmental Statement (ES), to enable a detailed assessment for each high sensitivity area and determination of any likely significant and non-significant effects.

Lincolnshire Connection substation B – Question 3i and other feedback relevant to this Section of the route

- 3.5.549 Question 3i of the feedback form asked:
- ‘Do you have a preference for the location of the Lincolnshire Connection substation B within the siting area?’***
- 3.5.550 The feedback about Lincolnshire Connection substation B covered themes including construction; planning and design; ecology, biodiversity and environment; socio-economics; agricultural land; health and wellbeing; landscape and visual; noise and vibration; flood risk and drainage; and groundwater.

- 3.5.551 The following sections provide a summary of the comments made in relation to these topics and National Grid's responses. When narrating feedback, we refer to the Sections of the route as they were described at the time of the Stage 1 consultation. National Grid's responses refer to the revised Sections of the route as presented as part of the Stage 2 consultation. For further detail on the changes in sectioning please see Approach to route Sections.

Construction

- 3.5.552 Several community members' responses raised concerns that local access roads are already in poor condition and existing infrastructure is unsuitable for construction traffic. More information should be provided around mitigation.
- 3.5.553 **National Grid's response:** We recognise that construction of the Project would result in some temporary impacts to local areas. The Corridor and Preliminary Routeing and Siting Study (CPRSS), published at the Stage 1 consultation, explains that our approach to the appraisal of design options considered a range of topics with various technical considerations including.
- 3.5.554 The **PEI Report** appraises the suitability of local roads to accommodate the forecast volume of construction traffic movements. This includes consideration of road geometry, congestion, accidents and sensitive receptors that include local amenities, schools and non-motorised user activity. Sensitive routes will be avoided where possible, and construction haul roads used where appropriate along with maximising the use of suitable major and strategic roads. **PEI Report Volume 2 Part B Section 3 Chapter 9 Traffic and Movement, PEI Report Volume 3 Part B Sections 1 to 7 Appendix 9B Preliminary Construction Information and Appendix 9C Future Baseline and Impact Analysis** identify Primary Access Routes to construction access points (bellmouths), compounds and substations, along with an estimate of average daily flows based on the existing information available at the time of writing. Our initial appraisal included in **PEI Report Volume 2 Part B Section 3 Figure 9.5 Preliminary Impact Analysis** shows impacts on the roads that result in potential significant effects. These routes are identified as part of the Primary Access Route network to the substation and will require discussion with the local highway authority and possibly further assessment to determine the effect, if any, on users of the highway. Construction traffic routeing will be discussed with the appropriate highway authorities during the full Transport Assessment, which will be reported in the Environmental Statement (ES).
- 3.5.555 Where there is a requirement to use the local road network, a review has been conducted to ensure roads are wide enough to cater for large construction vehicles, identifying indicative locations for temporary highway improvements (for example passing places) on roads only suitable for single lane running. Further detail is available in section 8.3 of the Design Development Report (DDR) and on the Consultation Plans provided as part of Stage 2 consultation.
- 3.5.556 A Code of Construction Practice (CoCP) and Construction Traffic Management Plan will be prepared and submitted with the Development Consent Order (DCO) application. These documents will include commitments to reduce construction impacts together with a framework for detailed management plans to be prepared at detailed design stage to reduce and mitigate potential impacts and/or disruptions that may arise during the construction phase. A Preliminary CoCP is available as part of the Stage 2 consultation.

Planning and Design

3.5.557 A large proportion of the community members' responses made design suggestions in relation to the new LCS B substation, which are summarised as follows:

- i. Suggestion to relocate LCS B to farmland at Sloothby, instead of nearby Alford/Saleby/Asserby.

National Grid's response: During the routeing and siting stage of project development, a potential siting zone encompassing land at Sloothby was considered for substation siting (referred to as LCS10 in the Corridor and Preliminary Routeing and Siting Study (CPRSS)). Ultimately, LCS10 was not preferred as a siting zone due to proximity to the National Landscape (AONB), presence of a nearby scheduled monument and presence of larger clusters of properties within and surrounding the siting zone. From a technical perspective, LCS10 was not preferred because routeing for Customer connection is constrained on the eastern side (from the coast) due to presence of settlements.

- ii. Suggestion to relocate LCS B to Bicker Fen.

National Grid's response: Bicker Fen is an existing National Grid Electricity Transmission 400 kV substation located approximately 13 km south west of Boston. Locating the LCS B substation at Bicker Fen would undermine the Project's objective of positioning both LCS A and LCS B close to the East Coast so that they can act as connection hubs for multiple generation and interconnection projects feeding into the main on-shore National Electricity Transmission System (NETS). This is driven by the Project needs case as detailed in the Strategic Options Report (SOR) to provide connection capacity to the East Coast generation group.

The LCS B substation is required to provide a connection location for multiple generation, storage, interconnection and transmission projects, many of which are based or originate from offshore. Each of these projects will need to construct transmission infrastructure to connect between their landfall or generation equipment locations and the LCS B substation. Locating the proposed LCS B substation close to the coast in mid-Lincolnshire removes the need for these projects to build more extensive connection infrastructure travelling further inland to other substations and/or the existing transmission network, such as at Bicker Fen. Bicker Fen is approximately 50 km from the current proposed location for LCS B. Situating LCS B closer to Bicker Fen or any other location further inland and closer to existing transmission infrastructure would therefore necessitate the construction of multiple lengths of additional underground cables or overhead lines for interconnectors and generation projects to connect from their landfall or construction locations into the NETS. These would each have to be separate, resulting in greater environmental impact. Such connections may also not be technically feasible with constraints to routing and siting for multiple connection routes to access Bicker Fen.

These connections to Bicker Fen would also be in addition to a proposed new 400 kV Overhead Line which forms a part of this Project. The new 400 kV overhead line would still be a requirement of the Project regardless of the LCS A or LCS B substation locations because of the need to provide boundary capacity reinforcement as described in the SOR. Therefore, locating one or both of the LCS sites further inland would be likely to significantly extend the total number and length of overhead lines required to provide additional power flow capacity whilst maintaining a continuous transmission connection between Grimsby West, LCS A, LCS B and the Refined Weston Marsh Substation Siting Zone.

Due to the volume of connection capacity required, both LCS A and LCS B are required to provide system security and ensure compliance with the National Grid Security and Quality of Supply Standard (SQSS). This also means that connections cannot be diverted to connect into the NETS at LCS A and be accommodated at a single substation. Therefore, to minimise cumulative impact, National Grid has developed and appraised Study Areas in the Corridor and Preliminary Routeing and Siting Study (CPRSS) which would minimise the total amount of infrastructure required and, consequently, these Study Areas did not extend to include Bicker Fen as a feasible location for LCS B.

- iii. Suggestion to relocate LCS B to land between Saleby and Markby to avoid impacts to the village of Bilsby as well as to minimise access and traffic congestion to major routes that could impact tourism.

National Grid's response: National Grid has assessed a potential siting location between Saleby and Markby and concluded that, as this area is a natural high point in the landscape, landscape and visual impacts are likely to be more significant to nearby Beesby. Additionally, this sites LCS B closer to LCS A which present technical and network resilience considerations and siting both substations more closely generally increases cumulative environmental impacts.

- iv. Suggestion to relocate LCS A and LCS B to the Woodthorpe Hall Golf Course land.

National Grid's response: The size of the LCS A and LCS B substations is significant, with both substations approximately 500 m in length which is driven by the required capacity for connecting generation, interconnection and transmission projects. Selection of an appropriate siting zone for these substations must therefore ensure that sufficient space is available for the main substation compounds, but also that sufficient flexibility is provided in the immediate surrounding area for overhead line and underground cable connections. Merging the two sites into a single substation would result in a much larger continuous compound of up to 1 km or more in length, which would be significantly more difficult to site whilst maintaining flexibility for other connections, and from a technical perspective would introduce prohibitive security and resilience concerns and issues with the Security and Quality of Supply Standards (SQSS). Two smaller sites have been proposed to address this, and to avoid concentrating environmental effects in one small area, a separation of several kilometres has been incorporated into design.

From an engineering perspective, the land at Woodthorpe Hall Golf Course would be too small to accommodate two substations with the capacity of LCS A and LCS B without introducing a direct impact on other nearby receptors (including the Woodthorpe Camping and Leisure Park and local businesses sited off the B1373) and either from the substation compounds themselves or the connecting overhead lines. Siting both compounds so closely together in this area would also present challenges in terms of the number of customers which are proposed to connect at LCS A and B, with space for these connection works severely constrained. The land available across Woodthorpe Hall Golf Course would mean that both substations sited in this area would reduce separation between the substations to less than 1 km, intensifying environmental and visual impacts in the area. Merging the two substations into one larger substation within the Woodthorpe Hall Golf Course land is also not considered technically feasible, resulting in a large compound with network resilience concerns and an extremely limited area for siting the substation as described above. Siting one

or both LCS A and LCS B at Woodthorpe Golf Course would also present significant direct, adverse and permanent socio-economics impacts to the golf course itself, which is also registered as an open greenspace, as it would likely result in its closure. It would also indirectly impact Woodthorpe Leisure Park, and the associated businesses, potentially adversely impacting their operations during construction phase by noise/vibration, air quality/ dust and visual impacts, and may present indirect impacts by changes to access during construction, operation and maintenance activities necessary for the substations.. (likely resulting in their closure). The Woodthorpe Hall Golf Course receptor is of High sensitivity owing to its limited potential for substitution by virtue of its nature and scale. It would also site infrastructure closer to both Strubby North and Strubby South Airfields which would increase potential impacts to their flying activities from overhead lines routing into and out of the substation(s). Based on the requirements for two separate LCS sites, and the expected size of each site to meet connection capacity requirements, siting one or both of the substations on the land at Woodthorpe Hall Golf Course is not considered technically feasible and would introduce significant socio-economics impacts which would not be justified by any reduction to impact on agricultural land nearby. This option has therefore not been progressed.

- v. Suggestion to use land at Strubby Airfield as temporary land for construction activities.

National Grid's response: National Grid has assessed the suggested location of land at Strubby airfield to house potential construction activities and, following a site appraisal, concluded that Strubby airfield is located too far from the proposals to serve as a feasible location to host temporary infrastructure. Temporary infrastructure is proposed near the overhead line alignment and substation siting locations to better serve the construction phase and reduce spread of infrastructure.

- vi. Suggestion to route the siting boundary around the edges of property boundary at 3 Chapel Lane and 4 Chapel Lane in Huttoft as the current boundary will impact the back gardens of residential properties.

National Grid's response: National Grid has investigated the residential property referenced in the response and as part of design development (and in line with CRPSS methodology) have trimmed the cut-out to exclude the full extent of residential curtilage from land that may be required for the Project

- vii. Suggestion to reduce the substation siting area for LCS B adjacent to Huttoft to remove any land to the east of the old railway line to Sutton on Sea.

National Grid's response: The land referred to in this feedback was removed during design development and is sited approximately 2.5km from the proposals.

- viii. Suggestion to locate the LCS B substation away from Saleby.

National Grid's response: During the routeing and siting stage of Project development, a total of 12 potential siting zones were considered for the siting of LCS B which were labelled as LCS1 - LCS12. With respect to the location of Saleby, some of these zones were located further north, some in closer proximity to Saleby and some were located further to the south. Ultimately, a combination of LCS6 and LCS8 was preferred and was presented as the proposed LCS B siting zone at Stage 1 consultation. Comparative to other siting zones, LCS6-8 is located in closer proximity

to Saleby but it was preferred because it provides an appropriate balance of environmental and technical considerations. For further information on the conclusions of the siting assessment, please refer to Chapter 10 of the Corridor and Preliminary Routeing and Siting Study (CPRSS). The proposed location for LCS B is in accordance with the darker shading of the graduated swathe that was presented during Stage 1 consultation and is located to the east of the A111, north of Bilsby, and approximately 2km from Saleby.

- ix. Suggestion to avoid using the Thurlby Road to Alford for construction of LCS B to minimise traffic impacts.

National Grid's response: Thurlby Road has been identified for use by construction traffic to access bellmouths (serving haul roads) during construction of pylons and overhead line installation. The initial assessment identifies the road being of medium sensitivity in the **PEI Report** and estimated to accommodate a forecast of 25 HGV movements per day (i.e. less than an 10% uplift against background traffic flows) based on information available at the time of writing and this is likely to result with non-significant effects.

- x. Suggestion to avoid the farm track adjacent to Rose Cottage, Thurlby Road for construction access for LCS B, as well as to avoid using the fields neighbouring the house for construction compound, laydown or parking.

National Grid's response: The access track referenced in this comment is not proposed for construction access and the fields neighbouring Rose Cottage are not proposed for construction compounds, laydown areas or parking. However, we are proposing to impact the end of the farm track (at its northern end where it bears right) to accommodate a haul road and working area for a proposed overhead line pylon working areas. Movement along the access track between the cottage and its junction with Thurlby Road remains unchanged.

3.5.558 Some community members' responses raised concerns in relation to the Project's cumulative impact due to an existing substation in the area, with several describing the proposed location as being located too near to substation A.

3.5.559 **National Grid's response:** The proposed siting of LCS A and LCS B, which are approximately 5 kilometres apart, has been determined as a result of a lengthy design process including consideration as to how impacts on local communities could best be managed. In addition, a comprehensive cumulative effects assessment is being undertaken as part of the Environmental Statement (ES) to assess and understand the potential for any adverse impacts arising from the proximity between the two substations in this location, as well as proximity with other existing infrastructure in the locality. This exercise is informing potential mitigation measures, for example, screening by planting to soften the appearance of the substations in the landscape.

Ecology, Biodiversity and Environment

3.5.560 A large proportion of the community members' responses, alongside technical stakeholder's feedback (Willoughby and District Parish Council) expressed concern about potential ecological effects, which are summarised as follows:

- i. Impacts on the environment and wildlife, particularly on the margins of and adjacent to land proposed for the substation; and

- ii. Impacts on wildlife and habitats in the area, including bats, newts, owls, badgers, snipes, roe deer, common foxes, muntjac, and pheasants.

- 3.5.561 **National Grid Response:** The Project has been designed to avoid direct impacts upon European Designated Sites (Special Areas of Conservation, Special Protection Areas and Ramsar sites) and Sites of Special Scientific Interest.
- 3.5.562 Through routeing and siting National Grid has sought and will continue to reduce as far as practicable potential impacts on biodiversity including habitats and protected species. The process of routeing takes account of existing biodiversity, the natural environment and, where practicable, seeks to avoid wildlife, and where not feasible, reduce potential impacts on areas of ecological sensitivity including protected and notable species and their associated habitats, through mitigation. A suite of habitat and species surveys will inform the ecological baseline, this data is still being collected and will be provided at Environmental Statement (ES) stage per Chartered Institute of Ecology and Environmental Management guidance. The surveys include bats, badgers, great crested newts, otter, fish, aquatic macroinvertebrates, aquatic macrophytes, water vole, reptiles, and breeding and non-breeding birds. The Environmental Impact Assessment (EIA) for the Project will assess the effects on important ecological features using this baseline information. This will include collision risk with the overhead line once all bird data has been collected, and where/if required design changes and/or appropriate mitigation measures will be proposed. Some species are not protected or notable such as deer, foxes and pheasants, and therefore will not be assessed. However, the overall impact on ecology is taken into account as part of the EIA process for the Project.
- 3.5.563 The initial assessment including the surveys undertaken are reported in **PEI Report Volume 2 Part B Section 3 Chapter 4 Ecology and Biodiversity**. The initial assessment identifies that at this stage significant effects cannot be excluded, and further survey work (ongoing) will be used to confirm the status of these species, inform the design of appropriate mitigation and a full assessment of effects that will be reported in the ES.

Socio-economics

- 3.5.564 Several community members' responses raised concerns about the impact on tourism and businesses in the area, including tourist attractions such as Mablethorpe and equestrian establishments, specifically around Huttoft and Alford.
- 3.5.565 **National Grid Response:** Through the routeing and siting exercise National Grid has sought to reduce impacts to businesses and the local economy, as evidenced in the Strategic Options Report (SOR) and the Corridor and Preliminary Routeing and Siting Study (CPRSS) published at the Stage 1 consultation. To reduce potential impacts, we have identified businesses and enterprises, including equestrian centres and their primary function, and those that are likely to generate tourism. These have been and will continue to be considered during the iterative design process.
- 3.5.566 From a socioeconomic perspective, the potential likely effects of National Grid's proposals on local businesses including equestrian establishments and those operating in connection with tourism (e.g. holiday parks and caravan sites) are considered in **PEI Report Volume 2 Part B Section 3 Chapter 11 Socio-economics, Recreation and Tourism**. In summary no significant adverse effects are anticipated for socio-economics, recreation and tourism receptors, noting this excludes above ground renewable energy generation infrastructure, within Section 3, as a result of the construction, operation and maintenance phase of the Project. An assessment of the

direct effects of the Project on above ground renewable energy generation infrastructure (solar and onshore wind farms) as socio-economics receptors will be presented in the Environmental Statement (ES).

- 3.5.567 The impact of horse-riding within private land, such as equestrian establishments has not been assessed, however engagement with impacted businesses and landowners will be undertaken as part of land access discussions. Generally, the way to mitigate an impact of the overhead line on equestrian features, where leisure activities may be elevated due to a horse jumping (for example), is to increase the clearance of the overhead line (i.e. the height of the conductors from the ground). Due to the rural nature of the Study Area, encountering equestrian activity is highly likely. Where such uses are identified through landowner discussions and site surveys, mitigations in the form of increased clearances may need to be applied.
- 3.5.568 With regard to settlements and population, affected communities (local communities, including populations of towns and villages) **PEI Report Volume 2 Part C Route-wide Chapter 7 Socio-economics, Recreation and Tourism** identifies that at this stage it is anticipated that likely non-significant effects associated with construction activities would generally be minor adverse and temporary, with effects felt most by communities in closest proximity to the Project. We will report on any indirect amenity effects for affected communities as part of the socio-economics, recreation and tourism assessment, which might occur through in-combination effects across the Project (such as noise and vibration, visual, and transport and movement effects). **PEI Report Volume 2 Part C Route-wide Chapter 10 Cumulative Effects** presents a preliminary assessment of cumulative effects upon common receptors across environmental topics identified within **PEI Report Volume 2 Part B** (intra-project) and identifies a shortlist of other Committed Developments with which there may be potential for cumulative effects and the relevant environmental topics for such effects (inter-project). The full cumulative effects assessment will be reported within the ES.
- 3.5.569 With regard to tourism including strategic visitor attractions and the impact of construction workforce on tourist accommodation bedspace, **PEI Report Volume 2 Part C Route-wide Chapter 7 Socio-economics, Recreation and Tourism** identifies that non-local workers would require accommodation in the local area, which is likely to be serviced from hotels and similar establishments such as B&Bs, and non-serviced accommodation including holiday lets, caravan parks and tourist campsites, and other collective accommodation. Overall, both temporary positive benefits to tourist accommodation businesses and temporary adverse effects through a reduction in tourist accommodation bed spaces are anticipated in relation to the labour market during construction. Given the preliminary number of construction workers anticipated to be employed on the Project, and the level of likely spare capacity for bedspace, the effects are not likely to be significant. For strategic visitor attractions the effects are not expected to be significant.
- 3.5.570 It should be noted that this is an ongoing assessment and is subject to changes due to the ongoing development of the Project. A full detailed assessment will be included within the ES submitted with the Development Consent Order (DCO) application.

Agricultural Land

- 3.5.571 A large proportion of the community members' responses noted concerns with loss of agricultural land due to the substation in this Section of the route.
- 3.5.572 **National Grid's response:** National Grid recognises that there is the potential for impacts on agricultural land. We look to limit the impact on agricultural land through

careful and considered routeing and siting of infrastructure and through consultation with affected landowners. We are and will continue to work with all landowners who may be affected by the proposals to understand the impacts as the Project is developed.

- 3.5.573 The draft Order Limits include areas of land required for temporary construction activities including temporary construction compounds and accesses etc. as well as permanent infrastructure including substations.
- 3.5.574 Attempts have been made to avoid Best and Most Versatile (BMV) agricultural land as part of the design evolution. Where BMV agricultural land is to be developed, if possible, this will be directed at land of the lowest possible grade.
- 3.5.575 **PEI Report Volume 2 Part B Section 3 Chapter 8 Agriculture and Soils** provides a preliminary assessment on the impacts of the Project on agricultural land, soil resources and agricultural landholdings using publicly available and purchased data related to land grades (according to the Agricultural Land Classification (ALC) system), soil profiles, and land use. The preliminary assessment has used publicly available Provisional ALC data, however, a detailed ALC survey will be conducted prior to the submission of the Environmental Statement (ES) to provide a full assessment of the extent of land grades and soil types affected.
- 3.5.576 The agricultural land within the draft Order Limits for Section 3 is provisionally mapped as ALC Grades 2 and 3, and as such is considered likely to comprise BMV land. **PEI Report Volume 2 Part B Section 3 Chapter 8 Agriculture and Soils** reports a likely significant effect due to the temporary and permanent loss of agricultural land and soil function. National Grid are committed to the implementation of effective soil handling, storage and reinstatement measures, which will be detailed in an Outline Soil Management Plan ('Outline SMP', to be submitted as part of the Development Consent Order (DCO) application) and would be critical in ensuring the minimisation of effects and ensuring successful reinstatement of soils and agricultural land grade, where practicable.

Health and Wellbeing

- 3.5.577 Several community members' responses expressed concerns with impacts on the mental wellbeing and health of residents in the area.
- 3.5.578 **National Grid's response:** National Grid recognises people may have concerns about the potential impacts of living close to an overhead line and that the uncertainty whilst the proposals are developed may cause anxiety. Through the routeing and siting exercise National Grid has sought and will continue to reduce as far as practicable impacts on sensitive receptors, such as residential areas, education facilities and areas for recreation. A considerable amount of assessment work has been undertaken to allow preliminary judgements to be made about the design and routeing of the Project. This has been set out in various publications including the Corridor and Preliminary Routeing and Siting Study (CPRSS) and Strategic Options Report (SOR) as part of the Stage 1 consultation.
- 3.5.579 Further detailed assessment work has been undertaken since the Stage 1 consultation and will be published in **PEI Report Volume 2 Part C Route-wide Chapter 8 Health and Wellbeing**. A health and wellbeing baseline has been established for each Section to understand how the Project may specifically impact the health and wellbeing of different communities. This includes the following communities:

- Saleby
- Thoresthorpe
- Bilby
- Asserby Turn

- 3.5.580 Policies and procedures are in place to make sure all equipment will comply with public electric and magnetic fields (EMF) exposure limits. As such, physical health effects associated with the generation of EMFs is scoped out of the health and wellbeing assessment on the basis that EMF levels would be low such that significant adverse effects are not expected. An EMF report, separate to the Environmental Impact Assessment (EIA) process, will be prepared as part of the Project.
- 3.5.581 No mental health impacts as a result of EMFs are expected as a result of the Project as described within **PEI Report Volume 2 Part C Route-wide Chapter 8 Health and Wellbeing**. Furthermore, no significant impact on health and wellbeing as a result of changes in access to promoted recreational routes and open space; or changes to employment were identified.
- 3.5.582 The health and wellbeing assessment recognises that concerns about the health impacts of EMF may adversely impact some people's mental health by heightening anxiety. However, it is anticipated that this group is likely to be very small, and that this impact will be effectively mitigated by National Grid's engagement with the community.
- 3.5.583 For further information on EMFs please refer to **The graduated swathe – Question 3a and other relevant feedback** under Health and Wellbeing.
- 3.5.584 The Health and Wellbeing assessment assesses the impact of changes to landscape and visual on health and wellbeing in conjunction with air quality, noise, and traffic and transport. This combination effect is assessed as 'Neighbourhood Quality'. For a neighbourhood quality effect to be identified, at least two significant residual effects must combine at the same location. There is evidence to suggest links between neighbourhood quality and health and wellbeing, as health and wellbeing can be adversely impacted by changes to air quality, noise, visual amenity, increased traffic. This will be assessed within the Environmental Statement (ES) and if required, mitigation put in place to address these impacts.
- 3.5.585 The health and wellbeing assessment will continue to be updated to ensure health and wellbeing concerns and impacts of local communities are taken into account.

Landscape and Visual

- 3.5.586 A considerable proportion of the community members' responses raised concerns in relation to landscape and visual impact, particularly impacts on the rural character of the area and on views to/from the Lincolnshire Wolds National Landscape (AONB) due to the substation. Furthermore, some community members' responses noted that the substation would need to be appropriately screened to minimise visual impacts.
- 3.5.587 **National Grid's response:** National Grid develops its Projects in line with national policy and our statutory duties to develop an efficient, economic and co-ordinated network, and have regard to preserving amenity and mitigating impacts. We recognise that overhead lines and substations can give rise to adverse landscape and visual effects, and we carefully consider these along with other environmental and socio-economics considerations, technical requirements and cost when developing our Projects.

- 3.5.588 National Grid has carefully considered the potential impacts of the Project at an early stage, and the findings and justifications for the selection of the emerging preferred siting zones, can be found in the Corridor and Preliminary Routeing and Siting Study (CPRSS), which is available on our Project website. Through the routeing and siting exercise we have sought to reduce the impact on landscape character and visual amenity. We will continue to consider both landscape character and amenity value as we develop our proposals and seek to reduce effects.
- 3.5.589 The potential likely effects of National Grid's proposals at LCS B substation on landscape character and visual receptors are considered in **PEI Report Volume 2 Part B Section 3 Chapter 2 Landscape** and **Chapter 3 Visual**.
- 3.5.590 The proposed LCS B substation has been located over 4.5 km from the National Landscape (AONB) to ensure the substation is not within its setting (Refer to **PEI Report Volume 3 Part C Appendix 2A Lincolnshire Wolds National Landscape (AONB) Setting Study**) as there is limited existing vegetation to provide screening in this area.
- 3.5.591 Mitigation planting is proposed around each of the substations to further reduce visual impacts and provide landscape integration. Locations for planting need to take account of the proposed overhead line and any underground cables connecting into the substation. At LCS B, planting is proposed around the substation to screen views from Bilsby and properties to the north and east in the wider landscape. Due to the flat landform, planting will be effective in screening views of the substation but it is acknowledged the overhead line will still remain visible for these communities. Mitigation planting is also proposed at Bilsby and along the B1449 to further filter views.
- 3.5.592 National Grid will be producing a Landscape and Visual Impact Assessment (LVIA) that will, in addition to other topic specific assessments, form the latter part of the Environmental Impact Assessment (EIA) for the Project. This will include a write-up of an assessment of the effects on the landscape character of the area and visual effects from communities. Where likely significant effects are anticipated, the LVIA will consider and identify areas where it may be necessary and appropriate to put forward potential mitigation as part of an iterative design and assessment process.

Noise and Vibration

- 3.5.593 Several community members' responses expressed concerns with the noise that would be generated by the substation.
- 3.5.594 **National Grid's response:** National Grid will be undertaking a noise and vibration assessment that will form part of the Environmental Impact Assessment (EIA) for the Project. Noise levels and the effect on residential properties as well as other sensitive receptors, such as hospitals and schools are carefully considered during Project development, assessed according to the appropriate UK standards, and mitigated where necessary. The early findings are presented in a **PEI Report**, as part of the Stage 2 consultation before being refined and submitted in an Environmental Statement (ES) which will form part of the eventual Development Consent Order (DCO) application.
- 3.5.595 An initial assessment of potential noise and vibration impacts from the new LCS B substation is presented in **PEI Report Volume 2 Part B Section 3 Chapter 10 Noise and Vibration**. The assessment considers the potential effects from construction noise and vibration, construction traffic noise, and operational noise.

- 3.5.596 The new LCS B substation is currently proposed to only include connections for generation projects and transmission links at 400 kV, and is not proposed to include equipment which would generate noise under normal operation, such as transformers. Auxiliary equipment within the substation would not generate significant levels of noise as is scoped out of the assessment. As such, there are no proposed sources of operational noise from the proposed substation that would generate significant effects during its normal operation. Operational noise from the proposed substation is therefore not significant and scoped out of further assessment. Should such equipment be determined to be required during design development, a noise impact assessment would be undertaken, and mitigation measures would be specified, where required, to avoid significant adverse effects.

Flood Risk and Drainage

- 3.5.597 The Environment Agency's feedback identified that the emerging preferred location looked to follow a sequential approach placing the development in Flood Zone 1, minimising flood risk implication and that this area was outside of the floodplain and would not impede flow or remove capacity for floodwaters. The feedback also mentioned that the area North of Abbey Grange might interact with the fluvial floodplain and; any removal of floodplain would need to be compensated for and the substation would need mitigation measure implemented to ensure it will remain safe and working during extreme flood events.
- 3.5.598 **National Grid's response:** The Project and draft Order Limits have been designed to avoid sensitive receptors as far as practicable. The Project seeks to avoid flood risk and potentially significant effects via the sequential approach to routing and siting, minimising significant effects where possible. This is in accordance with the Horlock Rules which apply to design and siting of substations. In Section 3 this has included locating the draft Order Limits to avoid sensitive Water Environment and Flood Risk receptors, where practicable, which is also consistent with the sequential approach to management of flood risk advocated in NPS EN-1.
- 3.5.599 As part of the process of ongoing Project design, the Water Environment and Flood Risk team will work alongside other environmental disciplines and the design team to ensure that appropriate mitigation is incorporated into the final design for permanent infrastructure, to minimise effects on Water Environment and Flood Risk receptors. This includes flood protection measures for the substation to be designed in accordance with National Grid internal guidance and consistent with planning policy requirements to ensure no increased flood risk to third parties. The permanent impacts of the substation upon flood risk are however subject to further design development and ongoing flood risk assessment.
- 3.5.600 The Project infrastructure within the Section 3 draft Order Limits is within an area of defended floodplain. Therefore, under normal conditions, there will be no effect on floodplain storage and conveyance arising from the Project. However, under conditions of flood defence overtopping or breach, the presence of the Project infrastructure could lead to a change in residual flood risk for external receptors through reducing floodplain storage or impeding flood conveyance.
- 3.5.601 Further investigations are being undertaken and consultations with the EA to understand the flood risk in the Study Area, review of existing flood models and agree a scope to future assessment to be reported in the Flood Risk Assessment (FRA) and Environmental Statement (ES). This will include an assessment of the effects of climate change over the lifetime of the Project.

Groundwater

- 3.5.602 The Environment Agency's feedback confirmed that within the emerging preferred search locations there are a few abstraction licences which may be impacted by potential discharges to surrounding watercourses (the location of which can be requested from the Environment Agency). Aspects of the search area near Claythorpe may fall into the Great Eau (downstream of South Thoresby) Drinking Water Protection catchment.
- 3.5.603 **National Grid's response:** The Project has been designed to take into account and avoid sensitive hydrological and hydrogeological receptors where possible, within the balance of other relevant design factors, to minimise/prevent any significant effects on these receptors. This includes surface water abstractions, groundwater abstractions and drinking water safeguard zones for both surface water and groundwater. Discharges directly to groundwater are not anticipated and any discharges to land would be of unpolluted water only.
- 3.5.604 No surface water abstractions were identified within the Section 3 Study Area. The two consented discharges identified within the Section 3 Study Area are both outside the draft Order Limits. There is therefore no scope for a direct effect on the discharge infrastructure as a result of the Project. Any indirect effects on flow or quality in receiving watercourses as a result of the construction of the Project will not affect the ability of the discharge to operate as consented. The Section 3 Study Area is not located within a surface water Drinking Water Protected Area (Great Eau (downstream of South Thoresby) GB105029061660) or Safeguarding Zone (SWSGZ1002). Information on groundwater Safeguard Zones is included in **PEI Report Volume 2 Part B Section 3 Chapter 7 Geology and Hydrogeology**.
- 3.5.605 Where construction and permanent infrastructure associated with the Project are required in areas adjacent to abstractions, these have been assessed within the **PEI Report** for an initial assessment of potentially significant effects, within **PEI Report Volume 2 Part B Section 3 Chapter 7 Geology and Hydrogeology** and **PEI Report Volume 2 Part B Section 3 Chapter 6 Water Environment and Flood Risk**. Further detail on groundwater abstractions will be obtained from the EA and utilised within the subsequent Environmental Statement (ES), to enable a detailed assessment for each high sensitivity area and determination of any likely significant and non-significant effects.

Section 5: Tothill to Cumberworth – Question 3j and other feedback relevant to this Section of the route

- 3.5.606 Question 3j of the feedback form asked:
- ‘Do you have any comments about this Section of the route?’***
- 3.5.607 The feedback about Section 5 Tothill to Cumberworth covered themes including construction; consultation; historic environment; planning and design; ecology, biodiversity and environment; socio-economics; agricultural land; health and wellbeing; landscape and visual; noise and vibration; flood risk and drainage and groundwater.
- 3.5.608 The following sections provide a summary of the comments made in relation to these themes and National Grid's responses. When narrating feedback, we refer to the Sections of the route as they were described at the time of the Stage 1 consultation. National Grid's responses refer to the revised Sections of the route as presented as

part of the Stage 2 consultation. For further detail on the changes in sectioning please see Approach to route Sections.

Construction

- 3.5.609 A few community members' responses raised concerns regarding the local road network being considered insufficient to accommodate the increased traffic during construction, causing disruption and potential damages to properties.
- 3.5.610 **National Grid's response:** We recognise that construction of the Project would result in some temporary impacts to local areas. The Corridor and Preliminary Routeing and Siting Study (CPRSS), published at the Stage 1 consultation, explains that our approach to the appraisal of design options considered a range of topics with various technical considerations including.
- 3.5.611 The **PEI Report** appraises the suitability of local roads to accommodate the forecast volume of construction traffic movements. This includes consideration of road geometry, congestion, accidents and sensitive receptors that include local amenities, schools and non-motorised user activity. Sensitive routes will be avoided where possible, and construction haul roads used where appropriate along with maximising the use of suitable major and strategic roads. **PEI Report Volume 2 Part B Sections 2, 3 and 4 Chapter 9 Traffic and Movement, PEI Report Volume 3 Part B Sections 1 to 7 Appendix 9B Preliminary Construction Information and Appendix 9C Future Baseline and Impact Analysis** identify Primary Access Routes to construction access points (bellmouths), compounds and substations, along with an estimate of average daily flows based on the existing information available at the time of writing. Our initial appraisal included in **PEI Report Volume 2 Part B Sections 2, 3 and 4 Figure 9.5 Preliminary Impact Analysis** shows impacts on the roads that result in potential significant effects. These routes are identified as part of the Primary Access Route network to Section 2, 3 and 4 and will require discussion with the local highway authority and possibly further assessment to determine the effect, if any, on users of the highway. Construction traffic routeing will be discussed with the appropriate highway authorities during the full Transport Assessment, which will be reported in the Environmental Statement (ES).
- 3.5.612 A Code of Construction Practice (CoCP) and Construction Traffic Management Plan will be prepared and submitted with the Development Consent Order (DCO) application. These documents will include commitments to reduce construction impacts together with a framework for detailed management plans to be prepared at detailed design stage to reduce and mitigate potential impacts and/or disruptions that may arise during the construction phase. A Preliminary CoCP is available as part of the Stage 2 consultation.

Consultation

- 3.5.613 Several community members' responses made comments about the consultation material and identified what they considered to be missing information or matters that have not adequately been considered, including:
- i. The Lincolnshire Gliding Club airfield and Tothill Wood were not identified for the Stage 1 consultation; and
 - ii. Assessments on heritage assets in the area did not provide in-depth findings.

- 3.5.614 **National Grid's response:** For National Grid's responses on consultation materials and feedback please refer to Our consultation - Question 6f and other , under Consultation materials and Consultation feedback.
- 3.5.615 Lincolnshire Gliding Club is part of Strubby airfield which is noted within the Corridor and Preliminary Routeing and Siting Study (CPRSS) published as part of the Stage 1 consultation. Strubby Airfield (North) and Strubby Airfield (South) are also considered as part of the preliminary analysis of potential impacts to aviation receptors as outlined in Chapter 6 of the Design Development Report (DDR) with support from specialist aviation consultants. Strubby Airfield (South) in particular will be reviewed in more detail between Stage 2 Consultation and Development Consent Order (DCO) Submission noting its closer proximity to the Project and any additional sensitivities around gliding operations. With regard to users of airfields, aviation will be considered in the Environmental Statement (ES), whilst **PEI Report Volume 2 Part B Section 2 Chapter 11 Socio-economics, Recreation and Tourism** will set out the relevant baseline and explain how aviation will be assessed with a specialist standalone report in support of the ES.
- 3.5.616 Tothill Wood was referenced in the CPRSS provided at Stage 1 consultation, although it is acknowledged that the heronry (which is part of the wood) is not specifically identified. Tothill Wood is identified and assessed as part of **PEI Report Volume 2 Part B Section 2 Chapter 4 Ecology and Biodiversity**.

Historic Environment

- 3.5.617 Several community members' responses identified the importance of considering and avoiding impacts on local heritage assets and features in this Section of the route including both Bronze Age and Roman workings present in the area, Toot Hill motte and bailey castle, Tothill Manor Farm, Alford Mill, St Mary's Priory in Greenfield and Church of St Wilfred.
- 3.5.618 **National Grid's response:** The Project and draft Order Limits have been designed to avoid sensitive receptors as far as practicable. This is in accordance with the Holford Rules applicable to routing of new overhead lines and the Horlock Rules which apply to design and siting of substations. These approaches are explained in further detail within the Corridor and Preliminary Routeing and Siting Study (CPRSS), Design Development Report (DDR) and **PEI Report Volume 2 Part A Chapter 3 Main Alternatives Considered**. Principles include, but are not limited to, seeking to avoid areas of highest amenity, cultural or scientific value, taking advantage of natural screening provided by existing landform and features (e.g. woodland) and keeping visual, noise and other environmental effects to a minimum. For historic environment, such measures include the avoidance of physical impacts to designated heritage assets and where practicable non-designated heritage assets, and where possible reducing potential impacts to the setting of designated heritage assets and non-designated heritage assets.
- 3.5.619 National Grid has carried out a preliminary assessment of potential likely effects on the historic environment arising from this proposed Section of the route, which is presented in **PEI Report Volume 2 Part B Sections 2, 3 and 4 Chapter 5 Historic Environment**. In summary:
- i. Toot Hill motte and bailey castle (NHLE 1016782) is located approximately 140 m west of the draft Order Limits. The monument comprises extant earthworks and buried remains of the medieval motte and bailey castle which is enclosed by ditches and banks. The remains of the motte and bailey castle have been

- avoided by the new overhead lines. The draft Order Limits are, however, located within the setting of the monument. Construction of the Project may temporarily alter the setting of this high value heritage asset through construction traffic, noise, plant movement and scaffolds to the east of the monument. Permanent changes to the setting of the monument would arise from the presence of the new pylons and overhead lines within the landscape and against the skyline. These impacts would have a medium magnitude, resulting in a major adverse effect which would be significant.
- ii. The grade II listed Manor House (NHLE 1062994) is located within the scheduled Toot Hill motte and bailey castle (NHLE 1016782) and is situated 213 m from the draft Order Limits, avoiding the listed building itself. The building dates from the 17th century and has undergone various modifications in later centuries comprising two floors over seven bays. The Manor House is located within the western part of the former bailey of the Toot Hill motte and bailey castle and the land beneath the grade II listed building is included within the scheduled designation. The temporary construction works, as well as the associated noise and intervisibility would noticeably alter the setting. The permanency of the infrastructure in the landscape would noticeably alter the wider setting of the Manor House, having a medium magnitude of impact which would result in a moderate adverse effect which would be significant.
 - iii. The Site of St Mary's Priory, Greenfield is scheduled monument located approximately 480m south west of the draft Order Limits. The monument comprises earthworks and below ground archaeological remains of a Cistercian nunnery founded before 1153 and dissolved in 1536. These buried archaeological remains have been avoided by the proposed alignment. The setting of the asset includes the scheduled remains of the priory and the surrounding fields which would have formed its agricultural land holdings which may have been cleared and enclosed from ancient woodland, of which Greenfield Woods survives. Greenfield Woods provides screening, between the asset and the Project. Construction of the Project may temporarily alter the setting of the monument. The long-term presence of the overhead line in the landscape would be visible against the skyline to the south east of the scheduled monument. These impacts to the setting of the monument would result in a moderate adverse effect which would be significant.
 - iv. The route avoids the remains of the churchyard of St Marys, Tothill, which will remain undisturbed. Temporarily construction activities and the permanent presence of the Project within the setting of the churchyard would result in a negligible adverse effect which would not be significant.
 - v. The grade I listed Alford Mill located approximately 1.2km south west of the Project forming a part of a group of related mill buildings together with the grade II listed former mill offices, pigsty and engine shed and outbuildings within the Alford Conservation Area. The mill has a historic relationship with the town of Alford, which forms part of its wider setting, as well as the agricultural fields within the historic parish to the north and west. The Project would not impact upon the setting of the asset, nor views towards or from the Windmill, resulting in no change and a neutral effect, which is not significant.
 - vi. The grade I listed Church of St Wilfred is located at the heart of the Alford Conservation Area, with its setting defined by the historic core of the market town. The Project lies approximately 1.8km to the north east. The long term

presence of the Project within the wider landscape will not change the setting of the church or its heritage value. This will result in a neutral effect which is not significant.

- 3.5.620 The potential for the discovery of previously unknown archaeological remains in this area is acknowledged, and National Grid will continue to engage with Historic England and relevant local planning authorities on aspects relating to the historic environment and heritage assets, including appropriate mitigation measures and techniques and will take their views into account as the Project evolves.

Planning and Design

- 3.5.621 A large proportion of the community members' responses made design suggestions in relation to this Section of the route, which are summarised as follows:

- i. Suggestion that overhead line should avoid the Toot Hill scheduled monument and old churchyard at Tothill as well as its impact on rare wet grassland and species.

National Grid's Response: National Grid assessed a potential alignment that routes further east at this location and identified a network of field drains that would present challenges for pylon placement. Additionally, the suggested alignment would introduce angle pylons that are more intrusive in the landscape and therefore increases potential landscape and visual impacts to nearby receptors. The proposed alignment is preferred because it avoids challenges associated with pylon placements and avoids requirements for additional angle pylons, thereby achieving a straighter alignment in compliance with Holford Rules which is less visually intrusive in the landscape.

- ii. Suggestion to straighten the overhead line to take a direct route following the line of the B1373 from Withern, towards Beesby and Saleby to minimise pylons and avoid routing across the scenery between Aby and Withern.

National Grid's Response: National Grid has considered a potential alignment in line with the suggested route but have determined that no feasible alignment is possible without directly impacting several receptors, including residential receptors and businesses at Withern, Woodthorpe Golf Course, Woodthorpe Leisure Park and Strubby Airfield. Therefore, it is not preferred in favour of the proposed alignment, which avoids direct impacts to these receptors.

- iii. Suggestion that overhead line and the siting of the LCS B substation should avoid impacting views of the grade I listed Alford Windmill.

National Grid's Response: National Grid has reviewed this comment and concluded that the Project infrastructure would not impact upon the setting of the Alford Windmill, nor views towards or from the Windmill, with the proposed overhead line located over 1 km away. Impacts on the conservation area at Alford, including the Windmill, would be limited to those which are temporary in nature and would be negligible having a minor adverse effect and not significant.

- iv. Suggestion to upgrade pumping capacity at the George Hay sluice on Lords Drain, near the River Welland, to address concerns about flooding at Weston Marsh due to the new substation development.

National Grid's Response: At Stage 2 consultation, we are consulting on a Refined Weston Marsh Substation Siting Zone that may site up to two substations in proximity to the Spalding Tee-Point. Therefore, because we are not consulting on a proposed design for substation siting at Weston Marsh at Stage 2 consultation, this comment has been captured and will be considered during the design process. A response will be provided in a future consultation report once the design becomes known.

The IDB drainage network conveys flows to the River Welland (Main River) via several water level control structures. The nearest water control structures to the Siting Zone are Lord's Drain Pumping Station and Lord's Drain Sluice (NGR TF295307). The risk of flooding from reservoirs, canals and supporting infrastructure such as pumping stations is assessed as a residual risk. This is detailed more in the supporting **PEI Report Volume 3 Part C Appendix 5A Preliminary Flood Risk Assessment**. This includes consideration of construction related activities such as access tracks, construction compounds and working areas" work. Consequently, there is a residual risk of flooding posed to the Refined Weston Marsh Substation Siting Zone associated with a potential failure of this structure, along with any other IDB drainage assets which manage water levels in the catchment, that will require further assessment within the Flood Risk Assessment (FRA) submitted in support of the Development Consent Order (DCO) application for the Project.

- v. Suggestion to route the overhead lines towards Burgh le Marsh to the west of Alford due to concerns regarding impacts on Bilsby, including grade II listed buildings, and impacts on landscape around the A1111 which is a major route for tourists.

National Grid's response: During the routeing and siting stage of Project development, two separate corridors were assessed that route west of Alford (referred to as W14 in the Corridor and Preliminary Routeing and Siting Study (CPRSS)) and east of Alford (referred to as E13 in the CPRSS). Following a comparative appraisal of both, the western corridor was less preferred overall due to its closer proximity to the Lincolnshire Wolds National Landscape (AONB), proximity to heritage assets, the Branch Line LNR, an area of peaty soils and visual receptors at Alford. More information on routeing and siting considerations, including ascribing weights to environmental constraints ahead of potential corridor identification, is set out in the CPRSS.

- vi. Suggestion that overhead lines and the pylons should be moved to the west along the A18 road to reduce impact on households.

National Grid's Response: Routeing the alignment parallel to the A18 is not preferred over the proposed alignment because this would site infrastructure along the eastern boundary of the designated Lincolnshire Wolds National Landscape (AONB) and therefore significantly increase impacts on the setting. As set out in the routeing and siting methodology in the Corridor and Preliminary Routeing and Siting Study (CPRSS), the National Landscape is afforded the highest weighting as an environmental constraint and therefore the proposed alignment seeks to reduce potential impacts to the setting by maximising the distance as much as possible whilst balancing distance from local communities.

- vii. Suggestion to relocate pylons closer to the A16 trunk road and west of Alford.

National Grid's Response: Routeing the alignment closer to the A16 is not preferred over the proposed alignment because this would site infrastructure closer to the eastern boundary of the designated Lincolnshire Wolds National Landscape (AONB) and therefore significantly increase impacts on the setting. As set out in the routeing and siting methodology in the Corridor and Preliminary Routeing and Siting Study (CPRSS), the National Landscape is afforded the highest weighting as an environmental constraint and therefore the proposed alignment seeks to reduce potential impacts to the setting by maximising the distance as much as possible whilst balancing distances from environmental designations to the east (closer to the coast) and from local communities.

3.5.622 The following suggestions have been considered together:

- i. Suggestion to underground the overhead lines between Gayton le Marsh and Llistoft to avoid the visual impact and unique scenery between Mablethorpe to Chapel Street Leonards.
- ii. Suggestion that overhead lines be routed underground between Louth and Alford, adjacent to the Lincolnshire Wolds National Landscape (AONB) to protect the visual amenity of the area, to avoid the transmission line crossing Trout Farm Fishing Lakes and to protect existing bird habitats areas.

National Grid's Response: National Policy Statement (NPS) EN-5 makes it clear that the Government expects overhead lines to be appropriate in most instances, although it recognises that there may be, at particularly sensitive locations such as National Landscapes, potential adverse landscape and visual impacts of an overhead line which may make it unacceptable in planning terms, taking account of the specific local environment and context. Undergrounding of overhead lines also needs to be considered in the context of a higher cost to bill-paying consumers, potential environmental implications of installation (due to the wider construction corridor required) and potential maintenance implications, as well as a requirement for sealing end compounds at the start and end point of the underground sections. Between Gayton le Marsh and Llistoft and between Louth and Alford, there are not considered to be any particularly sensitive location from a landscape and visual perspective where overhead lines would be considered inappropriate. The Project is located at a sufficient distance from the National Landscape that is not considered that this area is particularly sensitive from a landscape and visual perspective. The proposed alignment routes approximately 200m to the west (at its closest point) of Withern Mill Trout Farm fishing lakes and as such, no direct impacts are anticipated. Therefore, there are no proposals to underground at these locations.

- iii. Suggestion (including by Withern with Stain Parish Council) to amend the overhead line route to avoid aircraft movements at Strubby Airfield, particularly at the eastern edge of the emerging preferred corridor.

National Grid's Response: The proposed alignment at this location is routed approximately 300m further west than previously indicated by the darkest shading of the graduated swathe presented at Stage 1 consultation, which further increases the distance between the runway threshold at both Strubby Airfield (North) and Strubby Airfield (South) and the proposed pylon locations.

National Grid has also undertaken a preliminary analysis of potential impacts to aviation receptors as outlined in Chapter 6 of the Design Development Report (DDR) with support from specialist aviation consultants. Based on the currently proposed

overhead line alignment, it is considered that both departing aircraft from Runway 26 and approaching aircraft to Runway 08 at both airfields would be able to safely overfly the overhead line with sufficient clearance above standard height pylons. Low height pylons have also been considered where the overhead line routes in proximity to Strubby Airfield (North) and Strubby Airfield (South). However, based on the above results of the preliminary aviation assessment it is not considered that low height pylons will provide any significant benefit to flight operations compared to standard height pylons. This decision will be kept under review as the Project design progresses and as more thorough assessments are undertaken, as well as through ongoing engagement with both airfields at Strubby. Strubby Airfield (South) in particular will undergo further analysis between Stage 2 Consultation and Development Consent Order (DCO) Submission noting its closer proximity to the Project and any additional sensitivities around gliding operations.

- iv. Suggestion to route the overhead lines to the north of Mother Wood to avoid visual impacts from the Wolds.

National Grid's Response: National Grid can confirm that this suggestion is reflected in the proposed design.

- v. The back garden at Willoughby Road, Alford, falls within the graduated swathe and should be removed.

National Grid's Response: National Grid has investigated the residential property referenced in the response and as part of design development (and in line with CRPSS methodology) have trimmed the cut-out to exclude the full extent of residential curtilage from land that may be required for the Project.

- vi. Suggestion to re-locate substation at LCS A and overhead line to the north east of Mother Wood to protect the farm as a Historic England site.

National Grid's Response: National Grid can confirm that this suggestion is reflected in the proposed design.

Ecology, Biodiversity and Environment

3.5.623 A large proportion of the community members' responses, alongside technical stakeholders' feedback (Great and Little Carlton Parish Council and Withern with Stain Parish Council) expressed concern about potential environmental effects, including the impact on local wildlife, particularly in relation to Mother Wood, the woodland located north-east of Alford. These concerns are summarised as follows.

- i. General adverse impacts on wildlife and habitats in the area;
- ii. General impacts on the environment;
- iii. Impacts on bees and their ability to pollinate, as well as bee hives, which would suffer detrimental consequences from pylons;
- iv. Impacts on wildlife and birds in the area including newts and migratory birds such as Canadian geese, swans, cranes in the winter, owls and other birds of prey, pheasants, deer and bats;

- v. Impacts on wooded areas which are also wildlife habitats, including Mother Wood and Greenfield Wood, Swinn Wood, Tothill Wood (and the Heronry in this wood), and Rigsby Wood, as well as Grange Plantation; and
- vi. Impacts on wildlife habitats along the river Great Eau, including geese, swans, grey and white herons, ducks, egrets and cormorants.

3.5.624 **National Grid Response:** The Project has been designed to avoid direct impacts upon European Designated Sites (Special Areas of Conservation, Special Protection Areas and Ramsar sites) and Sites of Special Scientific Interest.

3.5.625 Due to proximity to the draft Order Limits, significant effects cannot be excluded at this stage of the assessment, for Mother and Greenfield Woods Local Wildlife Site, as well as the Grange Plantation and Great Eau. Further survey work will establish the nature and importance of any receptors associated with these habitats to inform appropriate mitigation. Due to the distances between Tothill Wood and Swinn Wood and the draft Order Limits, and the lack of ecological or hydrological connectivity, there is not considered to be a pathway to effects. Rigsby Wood is outside the Study Area and therefore no impacts are expected at this stage.

3.5.626 Through routeing and siting National Grid has sought and will continue to reduce as far as practicable potential impacts on biodiversity including habitats and protected species. The process of routeing takes account of existing biodiversity, the natural environment and, where practicable, seeks to avoid wildlife, and where not feasible, reduce potential impacts on areas of ecological sensitivity including protected and notable species and their associated habitats through mitigation. A suite of habitat and species surveys will inform the ecological baseline, this data is still being collected and will be provided at the Environmental Statement (ES) stage per Chartered Institute of Ecology and Environmental Management guidance. The surveys include bats, badgers, great crested newts, otter, fish, aquatic macroinvertebrates, aquatic macrophytes, water vole, reptiles, and breeding and non-breeding birds. The Environmental Impact Assessment (EIA) for the Project will assess the effects on important ecological features using this baseline information. This will include collision risk with the overhead line once all bird data has been collected, and where/if required design changes and/or appropriate mitigation measures will be proposed. Some species are not protected or notable such as deer and pheasants and therefore will not be assessed. However, the overall impact on ecology is taken into account as part of the EIA process for the Project.

3.5.627 The initial assessment including the surveys undertaken are reported in **PEI Report Volume 2 Part B Sections 2, 3 and 4 Chapter 4 Ecology and Biodiversity**. The initial assessment identifies that at this stage significant effects cannot be excluded, and further survey work (ongoing) will be used to confirm the status of these species, inform the design of appropriate mitigation and a full assessment of effects that will be reported in the ES.

3.5.628 With regard to electric and magnetic fields impacts on bees please refer to The graduated swathe – Question 3a and other relevant feedback , under Impacts on bees and ability to pollinate.

Socio-economics

3.5.629 Several community members' responses raised various concerns in relation to socio-economics, with a focus on tourism. These are summarised as follows:

- i. General impacts on the rural villages in the area that offer holiday properties; and
 - ii. Impacts on hospitality venues in the area such as Railway Tavern in Aby, a Trout farm along with holiday cottages; the pine lodge holiday homes hidden in the woods at Park Farm Withern; a five sail windmill on the outskirts of Alford, which is the sole example of the type and which is said to be a tourist attraction; a and Woodthorpe Leisure Park.
- 3.5.630 Several community members' responses also expressed concerns with proximity to Strubby Airfield, near Alford and the Lincolnshire Gilding Club airfield and questioned the safety clearance allocated.
- 3.5.631 **National Grid Response:** Through the routeing and siting exercise National Grid has sought to reduce impacts to on businesses and the local economy, as evidenced in the Strategic Options Report (SOR) and the Corridor and Preliminary Routeing and Siting Study (CPRSS) published at the Stage 1 consultation. To reduce potential impacts, we have identified businesses and enterprises and their primary function, and those that are likely to generate tourism. These have been and will continue to be considered during the iterative design process.
- 3.5.632 From a socioeconomic perspective, the potential likely effects of National Grid's proposals on local businesses including those operating in connection with tourism (e.g. holiday parks and caravan sites, including Park Farm, Withern Mill trout farm and fishery camping site) are considered in **PEI Report Volume 2 Part B Sections 2, 3 and 4 Chapter 11 Socio-economics, Recreation and Tourism**. In summary no significant adverse effects are anticipated for socio-economics, recreation and tourism receptors, noting this excludes above ground renewable energy generation infrastructure, within Section 2, 3 and 4, as a result of the construction, operation and maintenance phase of the Project. An assessment of the direct effects of the Project on above ground renewable energy generation infrastructure (solar and onshore wind farms) as socio-economic receptors will be presented in the Environmental Statement (ES).
- 3.5.633 With regard to settlements and population, affected communities (local communities, including populations of towns and villages) **PEI Report Volume 2 Part C Route-wide Chapter 7 Socio-economics, Recreation and Tourism** identifies that at this stage it is anticipated that likely non-significant effects associated with construction activities would generally be minor adverse and temporary, with effects felt most by communities in closest proximity to the Project. We will report on any indirect amenity effects for affected communities as part of the socio-economics, recreation and tourism assessment, which might occur through in-combination effects across the Project (such as noise and vibration, visual, and transport and movement effects). **PEI Report Volume 2 Part C Route-wide Chapter 10 Cumulative Effects** presents a preliminary assessment of cumulative effects upon common receptors across environmental topics identified within **PEI Report Volume 2 Part B** (intra-project) and identifies a shortlist of other Committed Developments with which there may be potential for cumulative effects and the relevant environmental topics for such effects (inter-project). The full cumulative effects assessment will be reported within the ES.
- 3.5.634 With regard to tourism including strategic visitor attractions and the impact of construction workforce on tourist accommodation bedspace, **PEI Report Volume 2 Part C Route-wide Chapter 7 Socio-economics, Recreation and Tourism** identifies that non-local workers would require accommodation in the local area, which is likely to be serviced from hotels and similar establishments such as B&Bs, and non-serviced accommodation including holiday lets, caravan parks and tourist campsites, and other

collective accommodation. Overall, both temporary positive benefits to tourist accommodation businesses and temporary adverse effects through a reduction in tourist accommodation bed spaces are anticipated in relation to the labour market during construction. Given the preliminary number of construction workers anticipated to be employed on the Project, and the level of likely spare capacity for bedspace, the effects are not likely to be significant. For strategic visitor attractions the effects are not expected to be significant.

- 3.5.635 It should be noted that this is an ongoing assessment and is subject to changes due to the ongoing development of the Project. A full detailed assessment will be included within the ES submitted with the Development Consent Order (DCO) application.
- 3.5.636 The Railway Tavern in Aby, Windmill at Alford, and Woodthorpe Leisure Park, are not considered within the socio-economics, recreation and tourism assessment because they are situated outside the relevant Study Area (within 500m of the development Order Limits) and therefore are not predicted to experience any significant effects as a result of construction, operation or maintenance of the Project.
- 3.5.637 National Grid is aware of several airfields in the region that are within varying proximities to the proposed Project. Where possible, we have been engaging with airfield operators (including Strubby Airfield and the Lincolnshire Gilding Club) to better understand their activities, aircraft types and annual movements to inform our design development. National Grid has considered potential impacts to aviation receptors as outlined in Chapter 6 of the Design Development Report (DDR) with support from specialist aviation consultants. Based on the proposed overhead line alignment, it is considered that both departing aircraft from Runway 26 and approaching aircraft to Runway 08 at both airfields would be able to safely overfly the overhead line with sufficient clearance above standard height pylons. Low height pylons have also been considered where the overhead line routes in proximity to Strubby Airfield (North) and Strubby Airfield (South), however based on the above results of the preliminary aviation analysis it is not considered that low height pylons will provide any significant benefit to flight operations compared to standard height pylons. However, this decision will be kept under review as the Project design progresses and as more thorough assessments are undertaken, as well as through ongoing engagement with both airfields at Strubby. Strubby Airfield (South) in particular will undergo further analysis between Stage 2 Consultation and Development Consent Order (DCO) Submission noting its closer proximity to the Project and any additional sensitivities around gliding operations.
- 3.5.638 With regard to users of airfields, aviation will be considered in the ES, whilst **PEI Report Volume 2 Part B Section 2** and **Section 4 Chapter 11 Socio-economics, Recreation and Tourism** sets out the relevant baseline and explains how aviation will be assessed with a specialist standalone report in support of the ES.

Agricultural Land

- 3.5.639 A large proportion of the community members' responses noted concerns with loss of agricultural land due to pylons in this Section of the route.
- 3.5.640 **National Grid's response:** National Grid recognises that there is the potential for impacts on agricultural land. We look to limit the impact on agricultural land through careful and considered routeing and siting of infrastructure and through consultation with affected landowners. We are and will continue to work with all landowners who may be affected by the proposals to understand the impacts as the Project is developed.

- 3.5.641 The draft Order Limits shown include areas of land required for temporary construction activities including temporary construction compounds, and access etc. as well as permanent infrastructure including pylons and overhead line.
- 3.5.642 Attempts have been made to avoid Best and Most Versatile (BMV) agricultural land as part of the design evolution. Where BMV agricultural land is to be developed, if possible, this will be directed at land of the lowest possible grade.
- 3.5.643 Direct permanent loss of agricultural land per pylon is restricted to the area of the foundation plinths. Where pylons are located within pasture land, the area beneath the pylon can still be grazed. It is acknowledged that where pylons are located within arable rotations or land used for hay and silage cropping, the area beneath the pylon is excluded from agricultural use during the operational phase, as agricultural machinery cannot be used in these areas.
- 3.5.644 **PEI Report Volume 2 Part B Section 2, 3 and 4 Chapter 8 Agriculture and Soils** provide a preliminary assessment on the impact of the Project on agricultural land, soil resources, and agricultural landholdings using publicly available and purchased data related to land grades (according to the Agricultural Land Classification (ALC) system), soil profiles, and land use. The preliminary assessment has used publicly available Provisional ALC data, however, a detailed ALC survey will be conducted prior to the submission of the Environmental Statement (ES) to provide a full assessment of the extent of land grades and soil types affected.
- 3.5.645 The agricultural land within the draft Order Limits for Section 2 is provisionally mapped as ALC Grades 3, within the draft Order Limits for Section 3 is provisionally mapped as ALC Grades 2 and 3 and within the draft Order Limits for Section 4 is provisionally mapped as ALC Grades 1, 2, 3, and 4 agricultural land. Grades 1, 2, and 3 are classified as being BMV land, as such Section 4 is considered likely to comprise BMV land. **PEI Report Volume 2 Part B Section 2, 3 and 4 Chapter 8 Agriculture and Soils** reports a likely significant effect due to the temporary and permanent loss of agricultural land and soil function. National Grid are committed to the implementation of effective soil handling, storage, and reinstatement measures, which will be detailed in an Outline Soil Management Plan ('Outline SMP', submitted as part of the Development Consent Order (DCO) application), and would be critical in ensuring the minimisation of the effects and ensuring successful reinstatement of soils and agricultural land grade, where practicable.

Health and Wellbeing

- 3.5.646 Several community members' responses expressed concerns with impacts on mental wellbeing and health of residents in the area. Specifically, cancer and issues associated with electric and magnetic fields (EMFs) were mentioned. Furthermore, it was noted that schools in the local area should be protected from additional risks e.g. EMF linked to conditions such as leukaemia.
- 3.5.647 **National Grid's response:** National Grid recognises people may have concerns about the potential impacts of living close to an overhead line and associated infrastructure and that the uncertainty whilst the proposals are developed may cause anxiety. Through the routeing and siting exercise National Grid has sought and will continue to reduce as far as practicable impacts on sensitive receptors, such as residential areas, education facilities and areas for recreation. A considerable amount of assessment work has been undertaken to allow preliminary judgements to be made about the design and routeing of the Project. This has been set out in various publications

including the Corridor and Preliminary Routeing and Siting Study (CPRSS) and Strategic Options Report (SOR) as part of the Stage 1 consultation.

3.5.648 Further assessment work has been undertaken since the Stage 1 consultation as reported in **PEI Report Volume 2 Part C Route-wide Chapter 8 Health and Wellbeing**. A health and wellbeing baseline has been established for each Section to understand how the Project may specifically impact the health and wellbeing of different communities. This includes the following communities:

- Saleby
- Thoresthorpe
- Withern
- Tothill
- Bilsby
- Asserby Turn

3.5.649 Policies and procedures are in place to make sure all equipment will comply with public EMF exposure limits. As such, physical health effects associated with the generation of EMFs is scoped out of the assessment on the basis that EMF levels would be low such that significant adverse effects are not expected. An EMF report, separate to the Environmental Impact Assessment (EIA) process, will be prepared as part of the Project.

3.5.650 No mental health impacts as a result of EMFs are expected as a result of the Project as described within **PEI Report Volume 2 Part C Route-wide Chapter 8 Health and Wellbeing**. Furthermore, no significant impact on health and wellbeing as a result of changes in access to promoted recreational routes and open space; or changes to employment were identified.

3.5.651 The assessment recognises that concerns about the health impacts of EMF may adversely impact some people's mental health by heightening anxiety. However, it is anticipated that this group is likely to be very small, and that this impact will be effectively mitigated by National Grid's engagement with the community.

3.5.652 For further information on EMFs please refer to The graduated swathe – Question 3a and other relevant feedback under Health and Wellbeing.

3.5.653 The health and wellbeing assessment assesses the impact of changes to landscape and visual on health and wellbeing in conjunction with air quality, noise, and traffic and transport. This combination effect is assessed as 'Neighbourhood Quality'. For a neighbourhood quality effect to be identified, at least two significant residual effects must combine at the same location. There is evidence to suggest links between neighbourhood quality and health and wellbeing, as health and wellbeing can be adversely impacted by changes to air quality, noise, visual amenity, increased traffic. This will be assessed within the Environmental Statement (ES) and if required, mitigation put in place to address these impacts.

3.5.654 The health and wellbeing assessment will continue to be updated to ensure health and wellbeing concerns and impacts of local communities are taken into account.

Landscape and Visual

3.5.655 A considerable proportion of the community members' responses raised concerns in relation to landscape and visual impact, which are summarised as follows:

- i. General concerns about impacts on landscape in the area;
- ii. Impacts on the views from/to the Lincolnshire Wolds National Landscape (AONB) in villages around the area;

- iii. Impacts on views for residents in the area, including residents of Alford, Bilsby, Huttoft, Saleby, Swaby and Aby;
 - iv. Impacts on wooded areas, coastal and rural character of the area due to the height of the pylons;
 - v. Concerns about screening being a woodland that can be harvested at any time; and
 - vi. Impacts on the views from the A16/A1104 which is used by majority of tourists travelling to Mablethorpe, Sutton-on-Sea, Huttoft, Chapel St Leonards.
- 3.5.656 A few community members' responses expressed support for the rationale of locating the corridor towards the west of the options considered along Section 5 so that the visual impact is lower with the pylons blending into the backdrop of the Lincolnshire Wolds.
- 3.5.657 **National Grid's response:** National Grid develops its Projects in line with national policy and our statutory duties to develop an efficient, economic and co-ordinated network, and have regard to preserving amenity and mitigating impacts. We recognise that overhead lines can give rise to adverse landscape and visual effects, and we carefully consider these along with other environmental and socio-economics considerations, technical requirements and cost when developing our Projects.
- 3.5.658 National Grid has carefully considered the potential impacts of the Project at an early stage, and the findings and justifications for the selection of the emerging preferred corridor in which the new overhead line is proposed to be routed, can be found in the Corridor and Preliminary Routeing and Siting Study (CPRSS), which is available on our Project website. Through the routeing and siting exercise we have sought to reduce the impact on landscape character and visual amenity. We will continue to consider both landscape character and amenity value as we develop our proposals and seek to reduce effects.
- 3.5.659 The potential likely effects of National Grid's proposals in this area on landscape character and visual receptors are set out in **PEI Report Volume 2 Part B Section 2 and Section 4 New Lincolnshire Connection Substation B to Refined Weston Marsh Substation Siting Zone Chapter 2 Landscape and Chapter 3 Visual**. A preliminary visual assessment has been undertaken for each community, or parish, within the Study Area. A number of viewpoints have been selected to represent the views from local communities. These are presented in **PEI Report Volume 3 Part B Sections 1 to 7 Appendix 3A Proposed Viewpoints** and will form the basis for the Landscape and Visual Impact Assessment (LVIA). Viewpoint locations have been identified for the communities including Alford, Bilsby, Huttoft and Saleby and Aby.
- 3.5.660 Significant visual effects have been predicted for a number of communities with views to and from the Lincolnshire Wolds National Landscape (AONB). This includes communities that would be directly affected by a new overhead line and for communities to the east of the Project with strong visual links towards the Wolds. This includes Aby, Alford, Bilsby, Saleby, Huttoft, Farlesworth and Cumberworth where there would be close proximity views of the Project as it routes through or close to these community areas. Swaby is located within the National Landscape (AONB) over 5 km from the Project with a high level of vegetation covers which will screen views of the Project and therefore effects are not considered to be significant.
- 3.5.661 Mablethorpe, Sutton-on-Sea and Chapel St Leonards are located on the coast. Although the Project would be visible to the west, the effects of the Project on the

communities is not considered to be significant due to distance and the presence of intervening vegetation which would filter views. It is acknowledged that people travelling to these communities and along the A16 and A1104 will have views of the Project, the A1104 will pass under the Project to the north of Alford, but close proximity views would only be seen over a short section of the route.

- 3.5.662 Existing vegetation including woodland is prevalent in this Section, particularly along the eastern boundary of the National Landscape (AONB). The Project has looked to avoid areas of woodland and there will be a reinstatement and replacement plan for any vegetation removed to facilitate the Project. Further a field from the Project, it is considered unlikely that larger blocks of woodland, which currently provide screening and filtering of the Project, would be removed as none are areas of forestry, but there is always a chance that trees may be removed by a landowner and would be subject to licence. There may be existing woodlands which National Grid deem essential for screening and ways of protecting these areas will be explored e.g. existing woodland around LCS B.
- 3.5.663 In terms of the coastal and rural character more generally, it is acknowledged that the introduction of an overhead line in a landscape where there is currently no overhead line infrastructure is likely to result in significant landscape effects. With the exception of wind turbines to the north, there are few vertical elements in the landscape, and the introduction of pylons in excess of 50 m will be a noticeable change.
- 3.5.664 **PEI Report Volume 2 Part C Route-wide Chapter 2 Landscape** reports early findings of the assessment of impacts on Lincolnshire Wolds National Landscape (AONB). This considers the purposes of the designation and its special qualities which also includes views. A full assessment of the impacts on National Landscape (AONB) will be provided as part of the LVIA, which will be reported in the Environmental Statement (ES) that would be submitted with the Development Consent Order (DCO) application of the Project.
- 3.5.665 National Grid will be producing a LVIA that will, in addition to other topic specific assessments, form the latter part of the Environmental Impact Assessment (EIA) for the Project. This will include a write-up of an assessment of the effects on the landscape character of the area and visual effects from communities. Where likely significant effects are anticipated, the LVIA will consider and identify areas where it may be necessary and appropriate to put forward potential mitigation as part of an iterative design and assessment process

Noise and Vibration

- 3.5.666 Several community members' responses expressed concerns with the noise generated by the pylons and overhead line in this Section.
- 3.5.667 **National Grid's response:** National Grid will be undertaking a noise and vibration assessment that will form part of the Environmental Impact Assessment (EIA) for the Project. Noise levels and the effect on residential properties as well as other sensitive receptors, such as hospitals and schools are carefully considered during Project development, assessed according to the appropriate UK standards, and mitigated where necessary. The early findings are presented in a **PEI Report**, as part of the Stage 2 consultation before being refined and submitted in an Environmental Statement (ES) which will form part of the eventual Development Consent Order (DCO) application.

- 3.5.668 An assessment of noise and vibration effects from the Project is presented in **PEI Report Volume 2 Part B Section 2 and Section 4 Lincolnshire Connection Substation B to Weston Marsh Substation Chapter 10 Noise and Vibration**. The assessment considers the potential effects from construction noise and vibration, construction traffic noise, and operational noise.
- 3.5.669 The initial assessment of construction and operation noise and vibration, and construction traffic noise indicates no likely significant adverse noise effects in Section 2 or 4 with mitigation in the form of Best Practicable Means (BPM) in place. The contractor will be required to employ BPM as described in the Preliminary Code of Construction Practice (CoCP) to reduce the effects of construction noise and vibration.
- 3.5.670 A low noise conductor system is proposed for the overhead line. As such, operational noise is scoped out of the assessment on the basis that operational noise levels would be low, even directly underneath the line, such that significant adverse effects are not expected. A brief explanation is provided in **PEI Report Volume 2 Part B Section 4 Chapter 10 Noise and Vibration** and further information will be provided in the ES.

Flood Risk and Drainage

- 3.5.671 Several community members' responses raised concerns about increased flood risk, as the area in this Section is classified as flood region 2 and 3. Furthermore, it was noted that drainage will be substantially compromised due to the Project.
- 3.5.672 **National Grid's response:** The Project and draft Order Limits have been designed to avoid sensitive receptors as far as practicable. The Project seeks to avoid flood risk and potentially significant effects via the sequential approach to routing and siting, minimising significant effects where possible.
- 3.5.673 **PEI Report Volume 2 Part B Sections 2, 3 and 4 Chapter 6 Water Environment and Flood Risk** identifies the initial assessment of impact on the water environment and flood risk using desk-based assessment of existing data.
- 3.5.674 Based upon the preliminary assessment, no significant effects are predicted for Water Environment and Flood Risk receptors within the Sections 2 and 3 Study Area, as a result of the construction, operation and maintenance phases of the Project.
- 3.5.675 The loss of floodplain storage as a result of the overhead line construction within Section 4 could result in adverse impacts upon flood risk, as cumulatively, the volumes of flood storage displaced could be significant, given the location of infrastructure and associated temporary works in Flood Zone 3. The potential for loss of the floodplain and changes in floodplain flow conveyance will be managed through embedded control measures. A full assessment of potential changes in flood risk to external third party receptors has not yet been completed. There are several factors which require further assessment to inform the final Flood Risk Assessment (FRA) and Environmental Statement (ES), informed by engagement with the EA. No significant effects are predicted for Water Environment and Flood Risk receptors within the Section 4 Study Area, as a result of the operation and maintenance phase of the Project.
- 3.5.676 It is noted that this is an ongoing assessment and is subject to change due to the ongoing design development of the Project, statutory consultation feedback and further stakeholder engagement. A full assessment will be included within the ES submitted with the Development Consent Order (DCO) application

Groundwater

- 3.5.677 The Environment Agency noted that 3 abstractions are present between Bilsby and Huttoft in this Section. They all have associated SPZs, although one of the abstractions is confined. The entire Section is within an SPZ3. Avoidance of the highly sensitive SPZ1 and SPZ2 would be preferable, but where they cannot be avoided careful consideration of groundwater protection must be included in the Environmental Statement.
- 3.5.678 **National Grid's response:** The Project has been designed to take into account and avoid sensitive hydrogeological receptors wherever possible, within the balance of other relevant design factors, to minimise/prevent any significant effects on these receptors. This includes groundwater source protection zones, groundwater abstractions and aquifers of high sensitivity.
- 3.5.679 There is one groundwater abstraction within the Study Area for this Section (the draft Order Limits plus a 500 m buffer) at Bilsby. Complete avoidance of this SPZ 1 and 2 area has not been possible through the design process, but the pylons have been moved out of the SPZ 1 and into the SPZ 2 during this process, within the limits of any engineering constraints for the overhead line.
- 3.5.680 The two abstractions to the east of the Study Area and the corresponding SPZ 1 area are located outside of the Study Area for Geology and Hydrogeology, and the only proposed land use within the SPZ 2 area is use of an existing track for construction access.
- 3.5.681 Where construction and permanent infrastructure associated with the Project are required within SPZ 1 and SPZ 2 areas, these have been initially assessed for potentially significant effects, within **PEI Report Volume 2 Part B Section 2, 3 and 4 Chapter 7 Geology and Hydrogeology**. This references the control measures that would be applied during construction, as set out in the Preliminary Code of Construction Practice (CoCP). With these measures the Project's exposure pathways would be reduced/prevented such that the effects would not be significant.
- 3.5.682 Further detail on groundwater abstractions and the SPZ areas will be obtained from Anglian Water and the EA and utilised within the subsequent Environmental Statement (ES), to enable a detailed assessment for each high sensitivity area and determination of any likely significant and non-significant effects.

Section 6 Cumberworth to Burgh le Marsh – Question 3k and other feedback relevant to this Section of the route

- 3.5.683 Question 3k of the feedback form asked:
- 'Do you have any comments about this Section of the route?'***
- 3.5.684 The feedback about Section 6 Cumberworth to Burgh le Marsh covered themes including construction; historic environment; planning and design; ecology, biodiversity and environment; socio-economics; agricultural land; health and wellbeing; landscape and visual; flood risk and drainage; and groundwater.
- 3.5.685 The following sections provide a summary of the comments made in relation to these themes and National Grid's response to those. When narrating feedback, we refer to the Sections of the route as they were described at the time of the Stage 1 consultation. National Grid's responses refer to the revised Sections of the route as presented as

part of the Stage 2 consultation. For further detail on the changes in sectioning please see Approach to route Sections.

Construction

- 3.5.686 A few community members' responses identified concerns regarding the local road network being considered insufficient to accommodate the increased traffic during construction. Specific concerns were raised about A158.
- 3.5.687 Natural England's feedback raised that Sections 6 and 7 of the overhead line route includes areas in proximity to Bratoft Meadows SSSI, which is notified for its lowland neutral grassland feature. Any construction activity within 200m will need to review air pollution impacts to the site including dust and NOx from increased traffic movements during construction and any maintenance activities once operational.
- 3.5.688 **National Grid's response:** We recognise that construction of the Project would result in some temporary impacts to local areas. The Corridor Preliminary Routeing and Siting Study (CPRSS), published at the Stage 1 consultation, explains that our approach to the appraisal of design options considered a range of topics with various technical considerations including construction.
- 3.5.689 The **PEI Report** appraises the suitability of local roads to accommodate the forecast volume of construction traffic movements. This includes consideration of road geometry, congestion, accidents and sensitive receptors that include local amenities, schools and non-motorised user activity. Sensitive routes will be avoided where practicable, and construction haul roads used where appropriate along with maximising the use of suitable major and strategic roads. **PEI Report Volume 2 Part B Section 4 Chapter 9 Traffic and Movement**, and **PEI Report Volume 3 Part B Sections 1 to 7 Appendix 9B Preliminary Construction Information and Appendix 9C Future Baseline and Impact Analysis** identify Primary Access Routes to construction access points (bellmouths), compounds and substations, along with an estimate of average daily flows based on the existing information available at the time of writing. Our initial appraisal included in **PEI Report Volume 2 Part B Section 4 Figure 9.5 Preliminary Impact Analysis** shows impacts on the roads that result in potential significant effects. These routes are identified as part of the Primary Access Route network to Section 4 and will require discussion with the local highway authority and possibly further assessment to determine the effect, if any, on users of the highway. Construction traffic routeing will be discussed with the appropriate highway authorities during the full Transport Assessment, which will be reported in the Environmental Statement (ES). The A158 in the Cumberworth to Burgh le Marsh part of the Project was identified for further assessment for the short Section from Gunby Lane to the A1028.
- 3.5.690 **PEI Report Volume 2 Part B Section 4 Chapter 12 Air Quality** considers construction dust and construction traffic emission. The assessment in the **PEI Report** also considers changes in local air quality including the potential for changes in nutrient nitrogen deposition due to emissions oxides of nitrogen and ammonia resulting from construction vehicle movements. The preliminary assessment concludes no significant effects are likely from construction dust, and significant effects upon ecological sites due to changes in air quality resulting from the Project are considered unlikely as the vehicle movements are below to the EPUK/IAQM thresholds.
- 3.5.691 The potential for changes in air quality from traffic to impact designated sites and habitats, such as Bratoft Meadows SSSI, will be assessed within the ES.

- 3.5.692 A Code of Construction Practice (CoCP) and a Construction Traffic Management Plan will be prepared and submitted with the Development Consent Order (DCO) application. These documents will include commitments to reduce construction impacts together with a framework for detailed management plans to be prepared at the detailed design stage to reduce and mitigate potential impacts and/or disruptions that may arise during the construction phase. A Preliminary CoCP is available as part of the Stage 2 consultation.

Historic Environment

- 3.5.693 A few community members' responses identified the importance of considering and avoiding impacts on local heritage assets and features in this Section of the route including the Burgh le Marsh due to its historic importance, including the Windmill at this location and a Bronze Age historical site (not specified).
- 3.5.694 **National Grid's response:** The Project and draft Order Limits have been designed to avoid sensitive receptors as far as practicable. This is in accordance with the Holford Rules applicable to routeing of new overhead lines and the Horlock Rules which apply to design and siting of substations. These approaches are explained in further detail within the Corridor and Preliminary Routeing and Siting Study (CPRSS), Design Development Report (DDR) and **PEI Report Volume 2 Part A Chapter 3 Main Alternatives Considered**. Principles include, but are not limited to, seeking to avoid areas of highest amenity, cultural or scientific value, taking advantage of natural screening provided by existing landform and features (e.g. woodland) and keeping visual, noise and other environmental effects to a minimum. For historic environment, such measures include the avoidance of physical impacts to designated heritage assets and where practicable non-designated heritage assets, and where possible reducing potential impacts to the setting of designated heritage assets and non-designated heritage assets.
- 3.5.695 National Grid has carried out a preliminary assessment of likely effects on the historic environment arising from the proposals in this Section of the route, which is reported on in **PEI Report Volume 2 Part B Section 4 Chapter 5 Historic Environment**. In summary:
- i. Listed buildings within the town of Burgh le Marsh all fall within the conservation area, except the grade II listed Hanson's Windmill (NHLE 1223034) located to the west. The Burgh le Marsh Conservation Area includes 16 grade II listed buildings and one grade I listed building, the Church of St Peter and St Paul (NHLE 1222765) and a scheduled monument Cock Hill Saxon burial mound (NHLE 1003609). These assets have been considered in the heritage assessment and no impacts upon them or their settings are anticipated from the Project.
 - ii. The Burgh le Marsh Windmill, Dobson's Windmill (NHLE 1222723), is a grade I listed building located just to the south of High Street on the eastern outskirts of Burgh le Marsh and outside the conservation area. This asset of high value has been taken into consideration in the heritage assessment. Potential minor adverse effects resulting from negligible impacts altering its wider setting are anticipated, which are not significant. Further consultation will be undertaken with Historic England in relation to this heritage asset and the assessment will be reviewed in the Environmental Statement (ES).
- 3.5.696 The potential for the discovery of previously unknown archaeological remains in the Burgh le Marsh area is acknowledged. We will undertake further archaeological

evaluation to understand the full extent and significant of non-designated buried archaeological remains that will inform suitable archaeological mitigation measure to be presented in the ES, which will be submitted with the Development Consent Order (DCO) application.

- 3.5.697 National Grid will continue to engage with Historic England and relevant local planning authorities, on aspects relating to the historic environment and heritage assets, including appropriate mitigation measures and techniques and will take their views into consideration as the Project evolves.

Planning and Design

- 3.5.698 A large proportion of the community members' responses made design suggestions in relation to this Section of the route, which are summarised as follows:

- i. Suggestion to amend the overhead line routeing or underground to avoid impacting aircraft movements at Ashley's Field.

National Grid's response: National Grid has considered potential impacts on aviation receptors as outlined in Chapter 6 of the Design Development Report (DDR) with support from specialist aviation consultants. This analysis included Ashley's Field Airstrip.

Undergrounding near Ashley's Field has not been investigated as constraints in the area are not considered to be sufficient to require this. The overhead line near Ashley's Field Airstrip has been routed to balance proximity to the airfield to the east and the villages of Sloothby and Habertoft and the Sloothby Meadows Local Wildlife Site to the west. The overhead line has been routed as far west as possible without encroaching onto these other constraints to the west of the airfield. Based on the current proposed overhead line alignment (approximately 1 km west of Ashley's Field), it is considered that both departing aircraft from Runway 25 and approaching aircraft to Runway 07 would be able to safely overfly the overhead line with sufficient clearance above standard height pylons. Where initial assessments determine clearances to be unsafe, undergrounding alternatives would be considered. However, our initial review has determined the clearances to be safe, so for this reason we are not proposing to adopt undergrounding at this stage. A change from standard height lattice to low height lattice pylons has been considered in this area to potentially further increase clearance for overflying aircraft, however based on preliminary analysis it is not expected that the increase in clearance would provide significant benefit which would outweigh the negative impacts of a short stretch of alternative pylon design on nearby receptors. This includes an increase in vegetation loss due to wider cross arms on low height pylons, and inconsistent appearance in longer distance views. It is also noted that Ashley's Field Airstrip has a second, longer runway (Runway 18/36) which is orientated at an angle closer to parallel with the overhead line alignment in this area, providing significantly greater distance between the runway and the overhead line for straight-ahead approaches and departures. On balance, low height pylons have therefore not been implemented between pylons LW21 and LW23, noting that such a short section of alternative pylon design with transitions to standard height at each end would have other negative impacts for biodiversity and visual, and that a second runway is available which is not considered to be impacted. However, this decision will be kept under review as the Project design progresses and as more thorough assessments are undertaken, as well as through ongoing engagement directly with Ashley's Field Airstrip.

- ii. Suggestion to route the overhead line to avoid cattle farm located in Burgh le Marsh.

National Grid's response: National Grid considered a potential alignment to avoid the cattle shed referenced in this feedback but ultimately it is not preferred because the routeing is generally more constrained by the presence of fishing lakes and the proposed Outer Dowsing underground cable (which the proposed alignment seeks to avoid as far as possible). Additionally, the alternative would site infrastructure closer to residential properties on Younger's Lane as well as closer to environmentally designated sites and would introduce two angle pylons, that are more visually intrusive in the landscape. The proposed alignment strikes the best balance between Holford compliance (it is shorter and straighter) whilst managing distance from visual receptors and both existing and proposed underground infrastructure (including the existing Triton Knoll underground cable and the proposed Outer Dowsing underground cable).

Ecology, Biodiversity and Environment

- 3.5.699 A large proportion of the community members' responses raised concerns about impacts on ecology and the environment, which are summarised as follows:
- i. General concerns regarding adverse impacts on wildlife and habitats in the area;
 - ii. General concerns regarding impacts on the environment;
 - iii. Impacts on bees and their ability to pollinate, as well as bee hives, which would suffer detrimental consequences from pylons;
 - iv. Impacts on protected and notable species including bats and migratory birds such as flocks of geese, swans, eagles and cranes in the winter;
 - v. Impacts on wildlife in the area including roe deer, muntjac deer, buzzards, marsh harriers, as well as wildfowl such as whooper swans and pink footed geese; and
 - vi. Proximity and impacts to the coast, the Wash, the wetlands of the Fens and Chapel Pit Nature Reserve.
- 3.5.700 Natural England's feedback noted that the proposed route, Sections 6 and 7, are within the vicinity of Gibraltar Point SPA, Ramsar and Saltfleetby – Theddlethorpe Dunes & Gibraltar Point SAC. The site is also notified on a national level as the Gibraltar Point SSSI. Direct impacts from the Project are unlikely, however impacts to land functionally linked to the designated features should be reviewed and the Habitats Regulations Assessments (HRA) should consider wintering and passage bird surveys; proposed mitigation for designated bird species, if necessary; visual disturbance to adjacent land once the overhead line is in situ; temporary noise and visual disturbances to adjacent land during construction.
- 3.5.701 **National Grid's response:** The Project has been designed to avoid direct impacts upon European Designated Sites (Special Areas of Conservation, Special Protection Areas and Ramsar sites) and Sites of Special Scientific Interest. The potential for impacts upon European designated sites, such as Gibraltar Point SPA, Ramsar and Saltfleetby – Theddlethorpe Dunes & Gibraltar Point SAC will be assessed within a Report to inform HRA and the Environmental Statement (ES). The HRA will consider all potential pathways of effect between the Project and the designated sites during construction and operation. These will include (but not be limited to), loss of functionally linked habitat, noise and visual disturbance within functionally linked habitats, changes

in lighting, changes in air quality and changes in water quality. Further consultation with Natural England is proposed to agree the scope of information to inform the HRA and the in-combination assessment. Impacts on SSSIs will be assessed within the ES. Due to the distances between Chapel Point and Wola Bank SSSI and the draft Order Limits and the nature of the designations there will be no habitat loss within this nationally designated site

- 3.5.702 Through routeing and siting National Grid has sought and will continue to reduce as far as practicable potential impacts on biodiversity including habitats and protected species. The process of routeing takes account of existing biodiversity, the natural environment and, where practicable, seeks to avoid wildlife, and where not feasible, reduce potential impacts on areas of ecological sensitivity including protected and notable species and their associated habitats through mitigation. A suite of habitat and species surveys will inform the ecological baseline, this data is still being collected and will be provided at ES stage per Chartered Institute of Ecology and Environmental Management guidance. The surveys include bats, badgers, great crested newts, otter, fish, aquatic macroinvertebrates, aquatic macrophytes, water vole, reptiles, and breeding and non-breeding birds. The Environmental Impact Assessment (EIA) for the Project will assess the effects on important ecological features using this baseline information. This will include collision risk with the overhead line once all bird data has been collected, and where/if required design changes and/or appropriate mitigation measures will be proposed. National Grid note the concerns regarding larger wetland bird species which may form part of designated site assemblages. Some species are not protected or notable such as deer and bees (kept by beekeepers) and therefore will not be assessed. However, the overall impact on ecology is taken into account as part of the EIA process for the Project.
- 3.5.703 The initial assessment including the surveys undertaken are reported in **PEI Report Volume 2 Part B Section 4 Chapter 4 Ecology and Biodiversity**. The initial assessment identifies that at this stage significant effects cannot be excluded, and further survey work (ongoing) will be used to confirm the status of these species, inform the design of appropriate mitigation and a full assessment of effects that will be reported in the ES.
- 3.5.704 With regard to electric and magnetic fields impacts on bees please refer to The graduated swathe – Question 3a and other relevant feedback , under Impacts on bees and ability to pollinate.

Socio-economics

- 3.5.705 A large proportion of the community members' responses identified concerns about the adverse effects of the proposals on the appeal of the open countryside and villages in this area, which support local businesses with associated employees and custom. Concerns were also raised about adverse impact of the proposals on visitor numbers and tourism in the area.
- 3.5.706 Specific concerns from community members' responses are summarised as follows:
- i. General concerns about impacts on tourism and holiday properties within the area, and particularly Burgh le Marsh;
 - ii. Impacts on the numerous caravan sites in the area, including Windmill Park, Sycamore Lake Park, and Lyndhurst Country Park;

- iii. Impacts on tourism in places such as Skegness and Ingoldmells, as well as other smaller seaside resorts;
- iv. Impacts on a free-range chicken farm (not specified) in the area; and
- v. Impacts on Ashley's Field in Sloothby and on Skegness airfield regarding aviation operations.

- 3.5.707 **National Grid's response:** Through the routeing and siting exercise National Grid has sought to reduce impacts to on businesses and the local economy, as evidenced in the Strategic Options Report (SOR) and the Corridor and Preliminary Routeing and Siting Study (CPRSS) published at the Stage 1 consultation. To reduce potential impacts, we have identified businesses and enterprises and their primary function, and those that are likely to generate tourism. These have been and will continue to be considered during the iterative design process.
- 3.5.708 From a socioeconomic perspective, the likely effects of National Grid's proposals on local businesses including those operating in connection with tourism in Skegness and Ingoldmells and smaller seaside resorts (e.g. holiday parks and caravan sites, including Windmill Caravan Park and various holiday cottages, Lyndhurst Country Park and Sycamore Lake Park) are considered in **PEI Report Volume 2 Part B Section 4 Chapter 11 Socio-economics, Recreation and Tourism**. In summary, no significant adverse effects are anticipated for socio-economics, recreation and tourism receptors, noting this excludes above ground renewable energy generation infrastructure, within Section 4, as a result of the construction, operation and maintenance phases of the Project. An assessment of the direct effects of the Project on above ground renewable energy generation infrastructure (solar and onshore wind farms) as socio-economics receptors will be presented in the Environmental Statement (ES).
- 3.5.709 With regard to settlements and population, affected communities (local communities, including populations of towns and villages) **PEI Report Volume 2 Part C Route-wide Chapter 7 Socio-economics, Recreation and Tourism** identifies that at this preliminary stage it is anticipated that likely non-significant effects associated with construction activities would generally be minor adverse and temporary, with effects felt most by communities in closest proximity to the Project. We will report on any indirect amenity effects for affected communities as part of the socio-economics, recreation and tourism assessment, which might occur through in-combination effects across the Project (such as noise and vibration, visual, and transport and movement effects). **PEI Report Volume 2 Part C Route-wide Chapter 10 Cumulative Effects** presents a preliminary assessment of cumulative effects upon common receptors across environmental topics identified within **PEI Report Volume 2 Part B** (intra-project) and identifies a shortlist of other Committed Developments with which there may be potential for cumulative effects and the relevant environmental topics for such effects (inter-project). The full cumulative effects assessment will be reported within the ES.
- 3.5.710 With regard to tourism including strategic visitor attractions and the impact of construction workforce on tourist accommodation bedspace, **PEI Report Volume 2 Part C Route-wide Chapter 7 Socio-economics, Recreation and Tourism** identifies that non-local workers would require accommodation in the local area, which is likely to be serviced from hotels and similar establishments such as B&Bs, and non-serviced accommodation including holiday lets, caravan parks and tourist campsites, and other collective accommodation. Overall, both temporary positive benefits to tourist accommodation businesses and temporary adverse effects through a reduction in tourist accommodation bed spaces are anticipated in relation to the labour market

during construction. Given the preliminary estimated number of construction workers anticipated to be employed on the Project, and the level of likely spare capacity for bedspace, the preliminary assessment of effects sets out that these are not likely to be significant. For strategic visitor attractions, the preliminary assessment of these receptors is that effects are not expected to be significant.

- 3.5.711 It should be noted that this is an ongoing assessment and is subject to changes due to the ongoing development of the Project. A full detailed assessment will be included within the ES submitted with the Development Consent Order (DCO) application.
- 3.5.712 Some of the caravan sites and chicken farm referenced in community members' responses may not be considered within the socio-economics, recreation and tourism assessment because they may be situated outside the relevant Study Area (within 500m of the development Order Limits) and therefore are not predicted to experience any significant effects as a result of construction, operation or maintenance of the Project.
- 3.5.713 National Grid is aware of several airfields in the region that are within varying proximities to the proposed Project. Where possible, we have been engaging with airfield operators (including Ashley's Field in Sloothby and Skegness airfield) to better understand their activities, aircraft types and annual movements to inform our design development. National Grid has considered potential impacts to aviation receptors as outlined in Chapter 6 of the Design Development Report (DDR) with support from specialist aviation consultants. Skegness Airfield is located approximately 3.2 km away from the overhead line and therefore no impact on aircraft movements is expected. The overhead line near Ashley's Field Airstrip has been routed to balance proximity to the airfield to the east and the villages of Sloothby and Habertoft and the Sloothby Meadows Local Wildlife Site to the west. The overhead line has been routed as far west as possible without encroaching onto these other constraints to the west of the airfield.
- 3.5.714 With regard to users of airfields, aviation will be considered in the ES. **PEI Report Volume 2 Part B Section 4 Chapter 11 Socio-economics, Recreation and Tourism** sets out the relevant baseline and explains how aviation will be assessed with a specialist standalone report in support of the ES.

Agricultural land

- 3.5.715 A large proportion of the community members' responses raised concerns with loss of agricultural land due to pylons in this Section of the route.
- 3.5.716 **National Grid's response:** National Grid recognises that there is the potential for impacts on agricultural land. We look to limit the impact on agricultural land through careful and considered routeing and siting of infrastructure and through consultation with affected landowners. We are and will continue to work with all landowners who may be affected by the proposals to understand the impacts as the Project is developed.
- 3.5.717 The draft Order Limits shown include areas of land required for temporary construction activities including temporary construction compounds, working areas, and access etc, as well as permanent infrastructure including pylons and overhead lines.
- 3.5.718 Attempts have been made to avoid Best and Most Versatile (BMV) agricultural land as part of the design evolution. Where BMV agricultural land is to be developed, if possible, this will be directed at land of the lowest possible grade.

- 3.5.719 Direct permanent loss of agricultural land per pylon is restricted to the area of the foundation plinths. Where pylons are located within pasture land, the area beneath the pylon can still be grazed. It is acknowledged that where pylons are located within arable rotations or land used for hay and silage cropping, the area beneath the pylon is excluded from agricultural use during the operational phase, as agricultural machinery cannot be used in these areas.
- 3.5.720 **PEI Report Volume 2 Part B Section 4 Chapter 8 Agriculture and Soils** provide a preliminary assessment on the impact of the Project on agricultural land, soil resources, and agricultural landholdings using publicly available and purchased data related to land grades (according to the Agricultural Land Classification (ALC) system), soil profiles, and land use. The preliminary assessment has used publicly available Provisional ALC data, however, a detailed ALC survey will be conducted to inform a full assessment of the extent of land grades and soil types affected and will be reported in the Environmental Statement (ES).
- 3.5.721 The agricultural land within the draft Order Limits for Section 4 is provisionally mapped as ALC Grades 1, 2, 3, and 4 agricultural land. Grades 1,2, and 3 are classified as being BMV land, as such Section 4 is considered likely to comprise BMV land. **PEI Report Volume 2 Part B Section 4 Chapter 8 Agriculture and Soils** reports a likely significant effect due to the temporary and permanent loss of agricultural land and soil function. National Grid are committed to the implementation of effective soil handling, storage, and reinstatement measures, which will be detailed in an Outline Soil Management Plan ('Outline SMP', submitted as part of the Development Consent Order (DCO) application), and would be critical in ensuring the minimisation of the effects and ensuring successful reinstatement of soils and agricultural land grade, where practicable.
- 3.5.722 **Health and Wellbeing**
- 3.5.723 Several community members' responses expressed concerns about impacts on mental wellbeing and health of residents in the area; specifically, cancer and issues associated with electric and magnetic fields (EMFs) were mentioned.
- 3.5.724 **National Grid's response:** National Grid recognises people may have concerns about the potential impacts of living close to an overhead line and associated infrastructure and that the uncertainty whilst the proposals are developed may cause anxiety. Through the routeing and siting exercise National Grid has sought and will continue to reduce as far as practicable impacts on sensitive receptors, such as residential areas, education facilities and areas for recreation. A considerable amount of assessment work has been undertaken to allow preliminary judgements to be made about the design and routeing of the Project. This has been set out in various publications including the Strategic Options Report (SOR) and the Corridor and Preliminary Routeing and Siting Study (CPRSS) as part of the Stage 1 consultation.
- 3.5.725 Further assessment work has been undertaken since the Stage 1 consultation as reported in **PEI Report Volume 2 Part C Route-wide Chapter 8 Health and Wellbeing**. A health and wellbeing baseline has been established for each Section to understand how the Project may specifically impact the health and wellbeing of different communities. This includes the following communities:
- Thurlby
 - Sloothby
 - Hogsthorpe
 - Hobhole Drain and Fodder Dike Bank
 - Northlands
 - Hubberts Bridge
 - Kirton End
 - Wigtoft

- Small settlements east of Burgh le Marsh
- Irby in the Marsh
- Frithville
- Gipse Bridge
- Langrick Bridge
- Brothertoft
- Burtoft
- Bicker Haven
- Thorpe Fendyke

- 3.5.726 Policies and procedures are in place to make sure all equipment will comply with public EMF exposure limits. As such, physical health effects associated with the generation of EMFs is scoped out of the health and wellbeing assessment on the basis that EMF levels would be low such that significant adverse effects are not expected. An EMF report, separate to the Environmental Impact Assessment (EIA) process, will be prepared as part of the Project.
- 3.5.727 No mental health impacts as a result of EMFs are expected as a result of the Project as described within **PEI Report Volume 2 Part C Route-wide Chapter 8 Health and Wellbeing**. Furthermore, no significant impact on health and wellbeing as a result of changes in access to promoted recreational routes and open space; or changes to employment were identified.
- 3.5.728 The health and wellbeing assessment recognises that concerns about the health impacts of EMF may adversely impact some people's mental health by heightening anxiety. However, it is anticipated that this group is likely to be very small, and that this impact will be effectively mitigated by National Grid's engagement with the community.
- 3.5.729 For further information on EMFs please refer to The graduated swathe – Question 3a and other relevant feedback under Health and Wellbeing.
- 3.5.730 The health and wellbeing assessment assesses the impact of changes to landscape and visual on health and wellbeing in conjunction with air quality, noise, and traffic and transport. This combination effect is assessed as 'Neighbourhood Quality'. For a neighbourhood quality effect to be identified, at least two significant residual effects must combine at the same location. There is evidence to suggest links between neighbourhood quality and health and wellbeing, as health and wellbeing can be adversely impacted by changes to air quality, noise, visual amenity, increased traffic. This will be assessed within the Environmental Statement (ES) and if required, mitigation put in place to address these impacts.
- 3.5.731 The health and wellbeing assessment will continue to be updated to ensure health and wellbeing concerns and impacts of local communities are taken into account.

Landscape and Visual

- 3.5.732 A large proportion of the community members' responses raised concerns about potential landscape and visual impacts in this Section of the route, which are summarised as follows:
- General concerns about impacts on landscape and views;
 - Concerns that the impact of pylons would be greater on the overall landscape due to this Section of the route being flatter than others, particularly in relation to the Marshes Character Landscape;
 - Impacts on the natural beauty of Burgh le Marsh, particularly the area immediately to the east given the importance of the rural landscape to the holiday parks in this area; and

- iv. Impacts on the views from/to the Lincolnshire Wolds National Landscape (AONB) for the communities in the area including Welton le Marsh, Sloothby, Cumberworth and Burgh le Marsh.

- 3.5.733 **National Grid's response:** National Grid develops its Projects in line with national policy and our statutory duties to develop an efficient, economic and co-ordinated network, and have regard to preserving amenity and mitigating impacts. We recognise that overhead lines can give rise to adverse landscape and visual effects, and we carefully consider these along with other environmental and socio-economics considerations, technical requirements and cost when developing our Projects.
- 3.5.734 National Grid has carefully considered the potential impacts of the Project at an early stage, and the findings and justifications for the selection of the emerging preferred corridor in which the new overhead line is proposed to be routed can be found in the Corridor and Preliminary Routeing and Siting Study (CPRSS), which is available on our Project website. Through the routeing and siting exercise we have sought to reduce the impact on landscape character and visual amenity. We will continue to consider both landscape character and amenity value as we develop our proposals and seek to reduce effects.
- 3.5.735 The likely effects of National Grid's proposals in this area on landscape character and visual receptors are set out in **PEI Report Volume 2 Part B Section 4 Chapter 2 Landscape** and **Chapter 3 Visual**. A preliminary visual assessment has been undertaken for each community, or parish, within the Study Area. A number of viewpoints have been selected to represent the views from local communities. Viewpoint locations have been identified for the communities including Burgh le Marsh, Cumberworth, Willoughby with Sloothby and Welton le Marsh. These are presented in **PEI Report Volume 3 Part B Sections 1 to 7 Appendix 3A Proposed Viewpoints** and will form the basis for the Landscape and Visual Impact Assessment (LVIA).
- 3.5.736 Significant visual effects have been predicted for a number of communities with views to and from the Lincolnshire Wolds National Landscape (AONB). This includes communities that would be directly affected by a new overhead line and for communities to the east of the Project with strong visual links towards the Wolds. This includes Cumberworth where there would be close proximity views of the Project as it routes through these community areas. The National Landscape (AONB) has numerous mature woodland blocks along its eastern and southern edges in the Section which help to screen and filter views towards the Project, although it is acknowledged the Project will be visible from the designation. Significant effects are not predicted for Burgh le Marsh, Willoughby with Sloothby and Welton le Marsh regarding views to/from the National Landscape (AONB). Significant visual effects have been predicted for the east of Burgh le Marsh, as the Project would change the character of views and passes recreational receptors including three caravan parks.
- 3.5.737 Lincolnshire Coast and Marshes has not been assessed at this preliminary stage. An assessment of the effects of the Project on the Lincolnshire Coast and Marshes will be provided at the Environmental Statement (ES) stage.
- 3.5.738 **PEI Report Volume 2 Part C Route-wide Chapter 2 Landscape** reports early findings of the assessment of impacts on National Landscape (AONB). This considers the purposes of the designation and its special qualities which also includes views. A full assessment of the impacts on National Landscape (AONB) will be provided as part of the LVIA, which will be reported in the ES that would be submitted with the Development Consent Order (DCO) application of the Project.

- 3.5.739 National Grid will be producing a LVIA that will, in addition to other topic specific assessments, form the latter part of the Environmental Impact Assessment (EIA) for the Project. This will include a write-up of an assessment of the effects on the landscape character of the area and visual effects from communities. Where likely significant effects are anticipated, the LVIA will consider and identify areas where it may be necessary and appropriate to put forward potential mitigation as part of an iterative design and assessment process.

Flood Risk and Drainage

- 3.5.740 Several members of the community members' responses stated that flooding must be considered, as most of the land in this Section of the route is marsh land. There was a concern that given the amount of concrete that would be required to anchor the pylons, this in itself will lead to flooding. Concerns about flooding were noted specifically for Burgh le Marsh.
- 3.5.741 **National Grid's response:** The Project and draft Order Limits have been designed to avoid sensitive receptors as far as practicable. The Project seeks to avoid flood risk and potentially significant effects via the sequential approach to routeing and siting, minimising significant effects where possible.
- 3.5.742 **PEI Report Volume 2 Part B Section 4 Chapter 6 Water Environment and Flood Risk** identifies the initial assessment of impact on the water environment and flood risk using desk-based assessment of existing data.
- 3.5.743 The area within the Section 4 draft Order Limits is mostly defended floodplain with small parts undefended or in Flood Zone 1. Therefore, under normal conditions, there will be no effect on floodplain storage and conveyance arising from the Project's construction activities. However, under conditions of flood defence overtopping or breach, the presence of the Project construction works could lead to a change in residual flood risk for external receptors, through reducing floodplain storage or impeding flood conveyance. The potential for loss of the floodplain and changes in floodplain flow conveyance will be managed through embedded control measures as outlined in the Preliminary Code of Construction Practice (CoCP).
- 3.5.744 A full assessment of potential changes in flood risk to external third party receptors has not yet been completed. There are several factors which require further assessment to inform the final Flood Risk Assessment (FRA) and Environmental Statement (ES), informed by engagement with the EA. Specifically these include confirmation of the standard of defence provided by the existing system of flood risk management assets; confirmation of compensatory storage requirements; review existing flood models and confirmation of the scope of future assessment to be reported within the FRA and ES. Further information has been provided in **PEI Report Volume 3 Part C Appendix 5A Preliminary Flood Risk Assessment**.
- 3.5.745 The operational overhead line will not involve a large amount of ground disturbance nor large amounts of concrete. Ultimately, there will be no significant increase in permanent impermeable area associated with the foundation elements of pylons along this Section of the route and therefore these elements alone are not likely to result in significant loss of floodplain storage capacity. The presence of pylons in the floodplain could result in snagging of debris causing debris accumulation on the pylon legs. This too is unlikely to result in significant effects upon flood risk due to impacts upon floodplain storage or flow conveyance.

Groundwater

- 3.5.746 Environment Agency's feedback identified where the emerging preferred corridor encroaches on groundwater source protection zones avoidance of the highly sensitive SPZ1 and SPZ2 would be preferable, but where they cannot be avoided careful consideration of groundwater protection must be included in the Environmental Statement (ES). SPZ 3 is present across this Section.
- 3.5.747 **National Grid's response:** The Project has been designed to take into account and avoid sensitive hydrogeological receptors wherever possible, within the balance of other relevant design factors, to minimise/prevent any significant effects on these receptors. This includes groundwater source protection zones, groundwater abstractions and aquifers of high sensitivity.
- 3.5.748 The extent of the draft Order Limits has been reduced through the design process and there are now no groundwater abstractions or SPZ 1 or 2 areas within the draft Order Limits for this Section of the Project.
- 3.5.749 The effects from construction and permanent infrastructure on hydrogeological receptors within this Section, including SPZ 3 areas, have been assessed within **PEI Report Volume 2 Part B Section 4 Chapter 7 Geology and Hydrogeology**. This references the control measures that would be applied during construction, as set out in the Preliminary Code of Construction Practice (CoCP). With these measures the Project's exposure pathways would be reduced/prevented such that the effects would not be significant.
- 3.5.750 Further detail on groundwater abstractions and the SPZ areas will be obtained from Anglian Water and the EA and utilise within the subsequent ES, to enable a detailed assessment for each high sensitivity area and determination of any likely significant effects and non-significant effects.

Section 7 Burgh le Marsh to Midville – Question 3I and other feedback relevant to this Section of the route

- 3.5.751 Question 3I of the feedback form asked:
'Do you have any comments about this Section of the route?'
- 3.5.752 The feedback about Section 7 Burgh le Marsh to Midville covered themes including construction; consultation; historic environment; planning and design; ecology, biodiversity and environment; socio-economics; agricultural land; health and wellbeing; landscape and visual; noise and vibration; flood risk and drainage; and groundwater.
- 3.5.753 The following sections provide a summary of the comments made in relation to these themes and National Grid's response to those. When narrating feedback, we refer to the Sections of the route as they were described at the time of the Stage 1 consultation. National Grid's responses refer to the revised Sections of the route as presented as part of the Stage 2 consultation. For further detail on the changes in sectioning please see Approach to route Sections.

Construction

- 3.5.754 A few community members' responses identified concerns regarding the local road network being considered insufficient to accommodate increased traffic during construction. Specific concerns were raised with accessing land due to previous experiences that landowners had with other projects (not specified).

- 3.5.755 Natural England's feedback raised that Sections 6 and 7 of the overhead line includes areas in proximity to Bratoft Meadows SSSI, which is notified for its lowland neutral grassland feature. Any construction activity within 200m will need to review air pollution impacts to the site including from dust and NOx from increased traffic movements during construction and any maintenance activities once operational.
- 3.5.756 **National Grid's response:** We recognise that construction of the Project would result in some temporary impacts to local areas. The Corridor Preliminary Routeing and Siting Study (CPRSS), published at the Stage 1 consultation, explains that our approach to the appraisal of design options considered a range of topics with various technical considerations including construction.
- 3.5.757 The **PEI Report** appraises the suitability of local roads to accommodate the forecast volume of construction traffic movements. This includes consideration of road geometry, congestion, accidents and sensitive receptors that include local amenities, schools and non-motorised user activity. Sensitive routes will be avoided where practicable, and construction haul roads used where appropriate along with maximising the use of suitable major and strategic roads. **PEI Report Volume 2 Part B Section 4 Chapter 9 Traffic and Movement, PEI Report Volume 3 Part B Sections 1 to 7 Appendix 9B Preliminary Construction information and Appendix 9C Future Baseline and Impact Analysis** identify Primary Access Routes to construction access points (bellmouths), compounds and substations, along with an estimate of average daily flows based on the existing information available at the time of writing. Our initial appraisal included in **PEI Report Volume 2 Part B Section 4 Figure 9.5 Preliminary Impact Analysis** shows impacts on the roads that result in potential significant effects. These routes are identified as part of the Primary Access Route network to Section 4 and will require discussion with the local highway authority and possibly further assessment to determine the effect, if any, on users of the highway. Construction traffic routeing will be discussed with the appropriate highway authorities during the full Transport Assessment, which will be reported in the Environmental Statement (ES).
- 3.5.758 **PEI Report Volume 2 Part B Section 4 Chapter 12 Air Quality** considers construction dust and construction traffic emission. The assessment in the **PEI Report** also considers changes in local air quality including the potential for changes in nutrient nitrogen deposition due to emissions oxides of nitrogen and ammonia resulting from construction vehicle movements. The preliminary assessment concludes no significant effects are likely from construction dust, and significant effects upon ecological sites due to changes in air quality resulting from the Project are considered unlikely as the vehicle movements are below to the EPUK/IAQM thresholds.
- 3.5.759 The potential for changes in air quality from traffic to impact designated sites and habitats, such as Bratoft Meadows SSSI, will be assessed within the ES.
- 3.5.760 A Code of Construction Practice (CoCP) and Construction Traffic Management Plan will be prepared and submitted with the Development Consent Order (DCO) application. These documents will include commitments to reduce construction impacts together with a framework for detailed management plans to be prepared at detailed design stage to reduce and mitigate potential impacts and/or disruptions that may arise during the construction phase. A Preliminary CoCP is available as part of the Stage 2 consultation.

Consultation

- 3.5.761 A few community members' responses noted that the Corridor and Preliminary Routeing and Siting Study (CPRSS) and the Project Background Document mention The Hollies Wind Farm, but the plans for this were unclear.
- 3.5.762 A few community members' responses stated that the CPRSS identified Sycamore Lakes Caravan Park as a nearby receptor but not Windfarm Park.
- 3.5.763 **National Grid's response:** For National Grid's responses on consultation materials and feedback please refer to Our consultation - Question 6f and other , under Consultation materials.
- 3.5.764 The overhead line has been routed to avoid direct impacts on The Hollies Wind Farm as described in section 5.3 of the Design Development Report (DDR). **PEI Report Volume 2 Part B Section 4 Chapter 11 Socio-economics, Recreation and Tourism** identifies The Hollies Wind Farm as being located at its closest point approximately 470m from the draft Order Limits. An assessment of the direct effects of the Project on above ground renewable energy generation infrastructure (solar and onshore wind farms) as socio-economics receptors will be presented in the Environmental Statement (ES).
- 3.5.765 **PEI Report Volume 2 Part B Section 4 Chapter 11 Socio-economics, Recreation and Tourism** also identifies Windfarm Park as being located approximately 490m from the draft Order Limits. It is anticipated that there would be a minor change likely given construction activities in the surrounding areas, and it is assumed that access would be maintained at all times.

Historic Environment

- 3.5.766 A few community members' responses expressed concerns about:
- Impacts on the windmill at Burgh le Marsh and listed buildings of Burgh le Marsh, as well as The Hollies Farmhouse grade II Listed Building and Bland's Farmhouse grade II Listed Building; and
 - The proposed route in this Section not being compliant with the Holford Rules 1, 2 and 3 when considering the historic environment.
- 3.5.767 **National Grid's response:** The Project and draft Order Limits have been designed to avoid sensitive receptors as far as practicable. This is in accordance with the Holford Rules applicable to routeing of new overhead lines and the Horlock Rules which apply to design and siting of substations. These approaches are explained in further detail within the Corridor and Preliminary Routeing and Siting Study (CPRSS), Design Development Report (DDR) and **PEI Report Volume 2 Part A Chapter 3 Main Alternatives Considered**. Principles include, but are not limited to, seeking to avoid areas of highest amenity, cultural or scientific value, taking advantage of natural screening provided by existing landform and features (e.g. woodland) and keeping visual, noise and other environmental effects to a minimum. For historic environment, such measures include the avoidance of physical impacts to designated heritage assets and where practicable non-designated heritage assets, and where possible reducing potential impacts to the setting of designated heritage assets and non-designated heritage assets.
- 3.5.768 National Grid has carried out a preliminary assessment of likely effects on the historic environment arising from the proposals in this Section of the route, which is reported

on in **PEI Report Volume 2 Part B Section 4 Chapter 5 Historic Environment**. In summary:

- i. The Burgh le Marsh Windmill, Dobson's Windmill (NHLE 1222723), is a grade I listed building located just to the south of High Street on the eastern outskirts of Burgh le Marsh and outside the conservation area. This asset of high value has been taken into consideration in the heritage assessment. Potential minor adverse effects resulting from negligible impacts altering its wider setting are anticipated, which are not significant. Further consultation will be undertaken with Historic England in relation to this heritage asset and the assessment will be reviewed in the Environmental Statement (ES).
- ii. Listed buildings within the town of Burgh le Marsh all fall within the conservation area, bar the grade II listed Hanson's Windmill (NHLE 1223034) located to the west. The Burgh le Marsh Conservation Area includes 16 grade II listed buildings and one grade I listed building, the Church of St Peter and St Paul (NHLE 1222765) and a scheduled monument Cock Hill Saxon burial mound (NHLE 1003609). These assets have been considered in the heritage assessment and no impacts upon them or their settings are anticipated from the Project.
- iii. The Hollies Farmhouse (NHLE 1267487) is a grade II listed property located to the south of Burgh le Marsh and west of the Project alignment. The heritage asset has been taken into consideration in the assessment. Negligible changes are anticipated to its setting arising from the Project that would result in negligible adverse effects that would not be significant.
- iv. Bland's Farmhouse (NHLE 1224571) is a grade II listed property located south east of Burgh le Marsh and to the west of the Project alignment. This heritage asset has been taken into consideration in the heritage assessment. Small changes to the setting of the heritage asset are anticipated arising from the Project that would result in minor adverse effects, which are not significant.

3.5.769 We will continue to engage with Historic England and relevant local planning authorities on aspects relating to the historic environment and heritage assets, including appropriate mitigation measures and techniques and will take their views into consideration as the Project evolves.

Planning and Design

3.5.770 A large proportion of the community members' responses made design suggestions in relation to this Section of the route, these are summarised with National Grid's response as follows.

- i. Suggestion to use T-pylons between Irby in the Marsh and Little Steeping.

National Grid's response: T-pylons have been considered for the Project from a general technical and visual perspective and Section specific reviews have been undertaken to understand visual benefits. Please refer to Chapter 6 and 7 of the Design Development Report (DDR) for more information on the preferred pylon technology and why T-pylons are not being proposed as part of the Project in this area.

- ii. Suggestion to underground the overhead line at Burgh le Marsh to protect listed buildings and the 'Windmill Brewery'.

National Grid's response: National Policy Statement (NPS) EN-5 makes it clear that the Government expects overhead lines to be appropriate in most instances, although it recognises that there may be, at particularly sensitive locations such as National Landscapes, potential adverse landscape and visual impacts of an overhead line which may make it unacceptable in planning terms, taking account of the specific local environment and context. The listed buildings located in Burgh le Marsh are approximately 1.5km away from the draft Order Limits. Potential minor adverse effects resulting from negligible impacts altering its wider setting are anticipated, which are not significant. Further consultation will be undertaken with Historic England in relation to this heritage asset and the assessment will be reviewed in the Environmental Statement (ES). As part of the routing and siting study and ongoing design development we have sought to route the proposed Project infrastructure away from residential property on grounds of general amenity where practicable. Due to distance, the listed buildings within Burgh le Marsh are not considered to be a particularly sensitive location from a landscape and visual perspective and therefore overhead lines are considered to be appropriate. Undergrounding of overhead lines also needs to be considered in the context of a higher cost to bill-paying consumers, potential environmental implications of installation (due to the wider construction corridor required) and potential maintenance implications, as well as a requirement for sealing end compounds at the start and end point of the underground sections.

- iii. Suggestion to extend and merge the swathe cutout from Chapel Farm to Rich Pastures Dairy Farm at Thorpe Fendykes.

National Grid's response: National Grid has reviewed this comment and identified that extending the swathe cutout at this location is not possible because there are no residential properties located between these existing cutouts to require this. Extending the cutout at suggested location would not align with the routeing and siting methodology set out in the Corridor and Preliminary Routeing and Siting Study (CPRSS), which was applied equally across the entirety of the proposals. The proposed alignment is routed to avoid holiday cottages immediately west of the Steeping River and avoids the requirement for multiple angle pylons. Further information on the routeing considerations at this location can be found in Chapter 7 of the Design Development Report (DDR).

- iv. Suggestion to amend the overhead line to avoid impacting aircraft movements at Skegness Airfield.

National Grid's response: Skegness Airfield is located approximately 3.2 km away from the draft Order Limits and as such, no impacts to aircraft movements are anticipated. However, Skegness Airfield will continue to be included in ongoing stakeholder engagement regarding potential airfield interfaces with the Project.

- v. Suggestion to avoid routeing the overhead line at Fen Road, Stickford

National Grid's response: Fen Road was not included within the boundary of the emerging preferred corridor that was presented at Stage 1 consultation and is located approximately 2 km from our proposals.

- vi. Suggestion to route the overhead line to avoid wind turbines at Thorpe Fendykes.

National Grid's response: The proposed alignment avoids both wind turbines at Thorpe Fendykes.

- vii. Suggestion to route the overhead line to avoid The Hollies Solar Park and Wind Farm as pylons would interfere with conditions in the area and hence impact the productivity of the windfarm.

National Grid's response: National Grid has considered this feedback and the proposed alignment has been refined to route more centrally through the emerging preferred corridor presented at Stage 1 consultation at this location, avoiding potential impacts to the wind farm and adjacent solar park. For more information on the routing considerations at The Hollies, please refer to Chapter 5 of the Design Development Report (DDR).

- viii. Suggestion to utilise the existing Triton Knoll underground route through this Section.

National Grid's response: Whilst our proposals and the existing Triton Knoll Project both generally route south west from Addlethorpe to Anton's Gowt (north west of Boston), the proposed alignment seeks to remain separate (as much as possible) to existing underground infrastructure because of the associated technical complexity of routing in proximity (primarily related to the effects of electrical interference which can occur when multiple high voltage assets route in parallel with each other over long distances). Additionally, following the route of Triton Knoll would not be possible because of the significant, unavoidable impacts on residential receptors throughout.

- ix. Suggestion to route the overhead line to avoid the Lincoln Skegness Solar Farm.

National Grid's response: The proposed alignment is routed approximately 420m south of the Lincoln Skegness Solar Farm as it crosses Wainfleet Road and as such, no impacts to this site are anticipated.

- x. Suggestion to avoid routing overhead line across farmland at Scarborough Bank, Stickford.

National Grid's response: The proposed alignment avoids farmland at Scarborough Bank, crossing Bell Water Drain further east between Black Drove and Midville.

- xi. Suggestion that the overhead line should be routed to the western extent of the swathe away from marshland soils and to protect the already weak drain banks in Sections 7 and 8.

National Grid's response: We are not proposing to route the overhead line along the entirety of western extent of the corridor between Sections 7 to 8 (Burgh le Marsh to River Witham). Broadly, the proposed alignment is reflective of the darkest shading of the graduated swathe presented at Stage 1 consultation (where there are deviations, these are set out in more detail in the Design Development Report (DDR)). We are aware of the drain banks referred to in this comment and do not consider there to be risks significant enough to merit the suggested alignment. A full suite of soil and Agricultural Land Classification surveys will be undertaken and reported in the Environmental Statement (ES). These surveys will be used to develop an understanding of the soil characteristics and to inform the development of an Outline

Soil Management Plan (Outline SMP), setting out how soils will be handled to ensure the pre-construction soil characteristics can be restored.

Ecology, Biodiversity and Environment

- 3.5.771 A large proportion of the community members' responses expressed concerns about:
- Impacts on ecology, biodiversity and the environment;
 - Impacts on birds, including swans and geese on the Hollies Fishing Lake and adjoining Higher Level Stewardship Wetland;
 - Impacts on wildlife and habitats in the area including deer, badgers, bats, migratory birds, marsh harriers, newts, natterjack toads, voles, wintering fowl, otters and birds of prey;
 - Impacts on flora including Cash Lips flowers; and
 - Impacts on the Gibraltar Point Natural Nature Reserve.
- 3.5.772 Natural England's feedback noted that the proposed route, Sections 6 and 7, are within the vicinity of Gibraltar Point SPA, Ramsar and Saltfleetby – Theddlethorpe Dunes & Gibraltar Point SAC. The site is also notified on a national level as the Gibraltar Point SSSI. Direct impacts from the Project are unlikely, however impacts to land functionally linked to the designated features should be reviewed and the HRA should consider wintering and passage bird surveys; proposed mitigation for designated bird species, if necessary; visual disturbance to adjacent land once the overhead line is in situ; temporary noise and visual disturbances to adjacent land during construction.
- 3.5.773 **National Grid's response:** The Project has been designed to avoid direct impacts upon European Designated Sites (Special Areas of Conservation, Special Protection Areas and Ramsar sites) and Sites of Special Scientific Interest. The potential for impacts upon European designated sites, such as Gibraltar Point SPA, Ramsar and Saltfleetby – Theddlethorpe Dunes & Gibraltar Point SAC will be assessed within a Report to inform Habitats Regulations Assessments (HRA) and the Environmental Statement (ES). The HRA will consider all potential pathways of effect between the Project and the designated sites during construction and operation. These will include (but not be limited to), loss of functionally linked habitat, noise and visual disturbance within functionally linked habitats, changes in lighting, changes in air quality and changes in water quality. Further consultation with Natural England is proposed to agree the scope of information to inform the HRA and the in-combination assessment. Impacts on SSSIs will be assessed within the ES.
- 3.5.774 Through routeing and siting National Grid has sought and will continue to reduce as far as practicable potential impacts on biodiversity including habitats and protected species. The process of routeing takes account of existing biodiversity, the natural environment and, where practicable, seeks to avoid wildlife, and where not feasible, reduce potential impacts on areas of ecological sensitivity including protected and notable species and their associated habitats through mitigation. A suite of habitat and species surveys will inform the ecological baseline, this data is still being collected and will be provided at ES stage per Chartered Institute of Ecology and Environmental Management guidance. The surveys include bats, badgers, great crested newts, otter, fish, aquatic macroinvertebrates, aquatic macrophytes, water vole, reptiles, and breeding and non-breeding birds. The Environmental Impact Assessment (EIA) for the Project will assess the effects on important ecological features using this baseline information. This will include collision risk with the overhead line once all bird data has

been collected, and where/if required design changes and/or appropriate mitigation measures will be proposed. Regarding larger wetland bird species which may form part of designated site assemblages, the ES will assess potential impacts on breeding and non-breeding birds once all baseline bird data has been collected. Some species are not protected or notable such as deer and in the case of natterjack toads there is no suitable habitat and therefore will not be assessed. Species such as Cash Lips flowers will be considered based on their statutory and policy protection status as part of the EIA process to the extent relevant. However, the overall impact on ecology is taken into account as part of the EIA process for the Project.

- 3.5.775 The initial assessment including the surveys undertaken are reported in **PEI Report Volume 2 Part B Section 4 Chapter 4 Ecology and Biodiversity**. The initial assessment identifies that at this stage significant effects cannot be excluded, and further survey work (ongoing) will be used to confirm the status of these species, inform the design of appropriate mitigation and a full assessment of effects that will be reported in the ES.

Socio-economics

- 3.5.776 A large proportion of the community members' responses raised concerns about the adverse effects of the proposals on the appeal of the open countryside and villages in this area, which support local businesses and associated employees and custom. Concerns were raised that visitor numbers and tourism in the area will be adversely impacted by the proposals.
- 3.5.777 Specific community members' responses highlighted concerns for this Section of the route which are summarised as follows:
- i. Impacts on the Windfarm Park and Windfarm Fisheries;
 - ii. Impacts on The Hollies Wind Farm, The Hollies Solar Park and Lincoln Farm Solar Park;
 - iii. Impacts on holiday parks, properties and garden centres in the area, including Waites Farm Glamping; and
 - iv. Impacts on small family farms (not specified) in the area.
- 3.5.778 **National Grid's response:** Through the routeing and siting exercise National Grid has sought to reduce impacts to businesses and the local economy, as evidenced in the Strategic Options Report (SOR) and the Corridor and Preliminary Routeing and Siting Study (CPRSS) published at the Stage 1 consultation. To reduce potential impacts, we have identified businesses and enterprises and their primary function, and those that are likely to generate tourism. These have been and will continue to be considered during the iterative design process.
- 3.5.779 From a socioeconomic perspective, the likely effects of National Grid's proposals on local businesses including those operating in connection with tourism (e.g. holiday parks and caravan sites) are considered **PEI Report Volume 2 Part B Section 4 Chapter 11 Socio-economics, Recreation and Tourism**. In summary no significant adverse effects are anticipated for socio-economics, recreation and tourism receptors including Windfarm Park and Waites Farm Glamping, noting this excludes above ground renewable energy generation infrastructure, within Section 4, as a result of the construction, operation and maintenance phases of the Project. An assessment of the direct effects of the Project on above ground renewable energy generation infrastructure (solar and onshore wind farms) such as The Hollies Wind Farm, The

Hollies Solar Park and Lincoln Farm Solar Park as socio-economic receptors will be presented in the Environmental Statement (ES).

- 3.5.780 With regard to settlements and population, affected communities (local communities, including populations of towns and villages) **PEI Report Volume 2 Part C Route-wide Chapter 7 Socio-economics, Recreation and Tourism** identifies that at this preliminary stage it is anticipated that likely non-significant effects associated with construction activities would generally be minor adverse and temporary, with effects felt most by communities in closest proximity to the Project. We will report on any indirect amenity effects for affected communities as part of the socio-economics, recreation and tourism assessment, which might occur through in-combination effects across the Project (such as noise and vibration, visual, and transport and movement effects). **PEI Report Volume 2 Part C Route-wide Chapter 10 Cumulative Effects** presents a preliminary assessment of cumulative effects upon common receptors across environmental topics identified within **PEI Report Volume 2 Part B** (intra-project) and identifies a shortlist of other Committed Developments with which there may be potential for cumulative effects and the relevant environmental topics for such effects (inter-project). The full cumulative effects assessment will be reported within the ES.
- 3.5.781 With regard to tourism including strategic visitor attractions and the impact of construction workforce on tourist accommodation bedspace, **PEI Report Volume 2 Part C Route-wide Chapter 7 Socio-economics, Recreation and Tourism** identifies that non-local workers would require accommodation in the local area, which is likely to be serviced from hotels and similar establishments such as B&Bs, and non-serviced accommodation including holiday lets, caravan parks and tourist campsites, and other collective accommodation. Overall, both temporary positive benefits to tourist accommodation businesses and temporary adverse effects through a reduction in tourist accommodation bed spaces are anticipated in relation to the labour market during construction. Given the preliminary estimated number of construction workers anticipated to be employed on the Project, and the level of likely spare capacity for bedspace, the preliminary assessment of effects sets out that these are not likely to be significant. For strategic visitor attractions, the preliminary assessment of these receptors is that effects are not expected to be significant.
- 3.5.782 It should be noted that this is an ongoing assessment and is subject to changes due to the ongoing development of the Project. A full detailed assessment will be included within the ES submitted with the Development Consent Order (DCO) application.

Agricultural Land

- 3.5.783 A large proportion of the community members' responses noted concerns with loss of agricultural land due to pylons in this Section of the route.
- 3.5.784 **National Grid's response:** National Grid recognises that there is the potential for impacts on agricultural land. We look to limit the impact on agricultural land through careful and considered routeing and siting of infrastructure and through consultation with affected landowners. We are and will continue to work with all landowners who may be affected by the proposals to understand the impacts as the Project is developed.
- 3.5.785 The draft Order Limits shown include areas of land required for temporary construction activities including temporary construction compounds, and access etc, as well as permanent infrastructure including pylons and overhead line.

- 3.5.786 Attempts have been made to avoid Best and Most Versatile (BMV) agricultural land as part of the design evolution. Where BMV agricultural land is to be developed, if possible, this will be directed at land of the lowest possible grade.
- 3.5.787 Direct permanent loss of agricultural land per pylon is restricted to the area of the foundation plinths. Where pylons are located within pasture land, the area beneath the pylon can still be grazed. It is acknowledged that where pylons are located within arable rotations or land used for hay and silage cropping, the area beneath the pylon is excluded from agricultural use during the operational phase, as agricultural machinery cannot be used in these areas.
- 3.5.788 **PEI Report Volume 2 Part B Section 4 Chapter 8 Agriculture and Soils** provides a preliminary assessment on the impact of the Project on agricultural land, soil resources, and agricultural landholdings using publicly available and purchased data related to land grades (according to the Agricultural Land Classification (ALC) system), soil profiles, and land use. The preliminary assessment has used publicly available Provisional ALC data, however, a detailed ALC survey will be conducted to inform a full assessment of the extent of land grades and soil types affected and will be reported in the Environmental Statement (ES).
- 3.5.789 The agricultural land within the draft Order Limits for Section 4 is provisionally mapped as ALC Grades 1, 2, 3, and 4 agricultural land. Grades 1, 2, and 3 are classified as being of BMV land, as such Section 4 is considered likely to comprise BMV land. **PEI Report Volume 2 Part B Section 4 Chapter 8 Agriculture and Soils** reports a likely significant effect due to the temporary and permanent loss of agricultural land and soil function. National Grid are committed to the implementation of effective soil handling, storage, and reinstatement measures, which will be detailed in an Outline Soil Management Plan ('Outline SMP', submitted as part of the Development Consent Order (DCO) application), and would be critical in ensuring the minimisation of the effects and ensuring successful reinstatement of soils and agricultural land grade, where practicable.

Health and Wellbeing

- 3.5.790 A large proportion of the community members' responses expressed concerns about impacts on mental wellbeing and health of residents in the area. Furthermore, a few community members' responses raised concerns about health and wellbeing impacts on children.
- 3.5.791 **National Grid's response:** National Grid recognises people may have concerns about the potential impacts of living close to an overhead line and associated infrastructure and that the uncertainty whilst the proposals are developed may cause anxiety. Through the routeing and siting exercise National Grid has sought and will continue to reduce as far as practicable impacts on sensitive receptors, such as residential areas, education facilities and areas for recreation. A considerable amount of assessment work has been undertaken to allow preliminary judgements to be made about the design and routeing of the Project. This has been set out in various publications including the Strategic Options Report (SOR) and the Corridor and Preliminary Routeing and Siting Study (CPRSS) as part of the Stage 1 consultation.
- 3.5.792 Further assessment work has been undertaken since the Stage 1 consultation as reported in **PEI Report Volume 2 Part C Route-wide Chapter 8 Health and Wellbeing**. A health and wellbeing baseline has been established for each Section to understand how the Project may specifically impact the health and wellbeing of different communities. This includes the following communities:

- Thurlby
- Sloothby
- Hogsthorpe
- Small settlements east of Burgh le Marsh
- Irby in the Marsh
- Hobhole Drain and Fodder Dike Bank
- Northlands
- Frithville
- Gipsy Bridge
- Langrick Bridge
- Brothertoft
- Hubberts Bridge
- Kirton End
- Wigtoft
- Burtoft
- Bicker Haven
- Thorpe Fendyke

- 3.5.793 Policies and procedures are in place to make sure all equipment will comply with public electric and magnetic fields (EMF) exposure limits. As such, physical health effects associated with the generation of EMFs is scoped out of the health and wellbeing assessment on the basis that EMF levels would be low such that significant adverse effects are not expected. An EMF report, separate to the Environmental Impact Assessment (EIA) process, will be prepared as part of the Project.
- 3.5.794 No mental health impacts as a result of EMFs are expected as a result of the Project as described within **PEI Report Volume 2 Part C Route-wide Chapter 8 Health and Wellbeing**. Furthermore, no significant impact on health and wellbeing as a result of changes in access to promoted recreational routes and open space; or changes to employment were identified. The pylon route does not cross Windfarm Park and therefore the associated possible risks listed above should be avoided.
- 3.5.795 The health and wellbeing assessment recognises that concerns about the health impacts of EMF may adversely impact some people's mental health by heightening anxiety. However, it is anticipated that this group is likely to be very small, and that this impact will be effectively mitigated by National Grid's engagement with the community.
- 3.5.796 For further information on EMFs please refer to The graduated swathe – Question 3a and other relevant feedback under Health and Wellbeing.
- 3.5.797 The Health and Wellbeing assessment assesses the impact of changes to landscape and visual on health and wellbeing in conjunction with air quality, noise, and traffic and transport. This combination effect is assessed as 'Neighbourhood Quality'. For a neighbourhood quality effect to be identified, at least two significant residual effects must combine at the same location. There is evidence to suggest links between neighbourhood quality and health and wellbeing, as health and wellbeing can be adversely impacted by changes to air quality, noise, visual amenity, increased traffic. This will be assessed within the Environmental Statement (ES) and if required, mitigation put in place to address these impacts.
- 3.5.798 The health and wellbeing assessment will continue to be updated to ensure health and wellbeing concerns and impacts of local communities are taken into account.
- 3.5.799 In addition to health and wellbeing considerations, an Equality Impact Assessment (EqIA) will be undertaken in order to identify any differential or disproportionate impacts on vulnerable people (including children), as a result of the Project, in line with the Equality Act 2010. If any impacts are identified, the EqIA will recommend mitigations and actions to be put in place to reduce any impact.

Landscape and Visual

- 3.5.800 A large proportion of the community members' responses expressed concerns with pylons destroying the unique open landscape, affecting local residents' existing views,

including those at Thorpe St Peter, Thorpe Fendykes, Midville, Eastville, New Leake, Spilsby, Keals and Thorpe Bank. It was noted the view from the hill above Old Bolingbroke, towards Boston, has not changed since the time of the Civil War and this would be altered due to the Project.

- 3.5.801 Several community members' responses noted that this is an area of predominantly flat farmland thus leading to panoramic views with large structures to be seen for considerable distances.
- 3.5.802 **National Grid's response:** National Grid develops its Projects in line with national policy and our statutory duties to develop an efficient, economic and co-ordinated network, and have regard to preserving amenity and mitigating impacts. We recognise that overhead lines can give rise to adverse landscape and visual effects, and we carefully consider these along with other environmental and socio-economics considerations, technical requirements and cost when developing our Projects.
- 3.5.803 National Grid has carefully considered the potential impacts of the Project at an early stage, and the findings and justifications for the selection of the emerging preferred corridor in which the new overhead line is proposed to be routed, can be found in the Corridor and Preliminary Routeing and Siting Study (CPRSS), which is available on our Project website. Through the routeing and siting exercise we have sought to reduce the impact on landscape character and visual amenity. We will continue to consider both landscape character and amenity value as we develop our proposals and seek to reduce effects.
- 3.5.804 The likely effects of National Grid's proposals in this area on landscape character and visual receptors are set out in **PEI Report Volume 2 Part B Section 4 Chapter 2 Landscape** and **Chapter 3 Visual**. A preliminary visual assessment has been undertaken for each community, or parish, within the Study Area. A number of viewpoints have been selected to represent the views from local communities including Burgh le Marsh, Croft, Thorpe St Peter and Midville. These are presented in **PEI Report Volume 3 Part B Sections 1 to 7 Appendix 3A Proposed Viewpoints** and will form the basis for the Landscape and Visual Impact Assessment (LVIA).
- 3.5.805 It is acknowledged that this Section of the Project does contain a number of communities identified as having potential significant effects due to the flat landscape and expansive views. Significant effects have been identified for the communities of Thorpe St Peter, which includes Thorpe Bank and Thorpe Fendykes, Midville, Eastville, New Leake and East Keal as the Project passes through these community areas and people would therefore have close proximity views where there is currently no overhead line infrastructure. Additional mitigation measures will be considered to filter views from properties during the Environmental Statement (ES) stage.
- 3.5.806 Spilsby is located over 5 km from the Project and due to the distance and high level of vegetation cover, significant effects on this community are unlikely. Old Bolingbroke is located over 6 km from the Project. Although it is acknowledged that the Project would be visible from the hill, it would be at distance and therefore significant effects are unlikely. The village itself would not have views of the Project.
- 3.5.807 National Grid will be producing a LVIA that will, in addition to other topic specific assessments, form the latter part of the Environmental Impact Assessment (EIA) for the Project. This will include a write-up of an assessment of the effects on the landscape character of the area and visual effects on communities. Where likely significant effects are anticipated, the LVIA will consider and identify areas where it

may be necessary and appropriate to put forward potential mitigation as part of an iterative design and assessment process.

Noise and Vibration

- 3.5.808 Several community members' responses expressed concerns about the noise generated by the pylons and wires. Furthermore, it was noted that the noise from the wires would have a detrimental impact upon visitors to Windfarm Park caravan site.
- 3.5.809 **National Grid's response:** National Grid will be undertaking a noise and vibration assessment that will form part of the Environmental Impact Assessment (EIA) for the Project. Noise levels and the effect on residential properties as well as other sensitive receptors, such as hospitals and schools are carefully considered during Project development, assessed according to the appropriate UK standards, and mitigated where necessary. The early findings are presented in a **PEI Report**, as part of the Stage 2 consultation and will be further refined and submitted in the Environmental Statement (ES) which will form part of the eventual Development Consent Order (DCO) application.
- 3.5.810 An initial assessment of noise and vibration effects from the Project is presented in **PEI Report Volume 2 Part B Section 4 Chapter 10 Noise and Vibration**. The assessment considers the potential effects from construction noise and vibration, and construction traffic noise and indicates that no likely significant adverse noise effects are expected in Section 4 with mitigation in the form of Best Practicable Means (BPM) in place. The contractor will be required to employ BPM as described in the Preliminary CoCP to reduce the effects of construction noise and vibration.
- 3.5.811 A low noise conductor system is proposed for the overhead line. As such, operational noise is scoped out of the assessment on the basis that operational noise levels would be low, even directly underneath the line, such that significant adverse effects are not expected. A brief explanation is provided in **PEI Report Volume 2 Part B Section 4 Chapter 10 Noise and Vibration** and further information will be provided in the ES.

Flood Risk and Drainage

- 3.5.812 A few community members' responses raised that this is an area which is renowned for having excess surface water, passing over low lying land which is prone to flooding. Some of the feedback mentioned that the main drainage network in the area could be compromised as the preferred route is too close to the already weak drain banks.
- 3.5.813 **National Grid's response:** The Project and draft Order Limits have been designed to avoid sensitive receptors as far as practicable. The Project seeks to avoid flood risk and potentially significant effects via the sequential approach to routeing and siting, minimising significant effects where possible.
- 3.5.814 **PEI Report Volume 2 Part B Section 4 Chapter 6 Water Environment and Flood Risk** identifies the initial assessment of impact on the water environment and flood risk using desk-based assessment of existing data.
- 3.5.815 **PEI Report Volume 2 Part B Section 4 Figure 6.1 Water Environment Receptors and Study Area** and **PEI Report Volume 2 Part B Section 4 Figure 6.3 Surface Water Flood Risk**. Identifies that the area comprises a dense network of either heavily modified or artificial drains that are maintained by riparian landowners and IDBs, primarily for agricultural drainage purposes.

- 3.5.816 The area within the Section 4 draft Order Limits is mostly defended floodplain with small parts undefended or in Flood Zone 1. Therefore, under normal conditions, there will be no effect on floodplain storage and conveyance arising from the Project's construction activities. However, under conditions of flood defence overtopping or breach, the presence of the Project construction works could lead to a change in residual flood risk for external receptors, through reducing floodplain storage or impeding flood conveyance. The potential for loss of the floodplain and changes in floodplain flow conveyance will be managed through embedded control measures as outlined in the Preliminary Code of Construction Practice (CoCP).
- 3.5.817 Surface water drainage systems will provide attenuation of runoff from impermeable surfaces to greenfield rates (the rate expected on an undeveloped site and the rate that needs to be maintained after site development) and incorporate appropriate pollution prevention measures, incorporating the use of Sustainable Urban Drainage Systems (SuDS) as far as practicable. Watercourse conveyance capacity of the existing watercourses will incorporate morphological features to promote aquatic biodiversity to a level that is consistent with maintaining effective land drainage.
- 3.5.818 A full assessment of potential changes in flood risk to external third-party receptors has not yet been completed. There are several factors which require further assessment to inform the final Flood Risk Assessment (FRA) and Environmental Statement (ES), informed by engagement with the EA. Specifically these include confirmation of the standard of defence provided by the existing system of flood risk management assets; confirmation of compensatory storage requirements; review existing flood models and confirmation of the scope of future assessment to be reported within the FRA and ES. Further information has been provided in **PEI Report Volume 3 Part C Appendix 5A Preliminary Flood Risk Assessment**.
- 3.5.819 For all works and pylon locations, where possible, a stand-off distance from the top of bank of all watercourses/waterbodies will be established as set out under Control Measure W01 in the preliminary Code of Construction Practice (CoCP) provided in **PEI Report Volume 3 Part A Appendix 5A Preliminary Code of Construction Practice**.

Groundwater

- 3.5.820 Environment Agency feedback raised that where the emerging preferred corridor encroaches on groundwater source protection zones avoidance of the highly sensitive SPZ1 and SPZ2 would be preferable, but where they cannot be avoided careful consideration of groundwater protection must be included in the Environmental Statement (ES). SPZ3s are present in 2 parts of the Section - the north and a small area in the centre.
- 3.5.821 **National Grid's response:** The Project has been designed to take into account and avoid sensitive hydrogeological receptors wherever possible, within the balance of other relevant design factors, to minimise/prevent any significant effects on these receptors. This includes groundwater source protection zones, groundwater abstractions and aquifers of high sensitivity.
- 3.5.822 The extent of the draft Order Limits has been reduced through the design process and there are now no groundwater abstractions or SPZ 1 or 2 areas within the draft Order Limits for this Section of the Project.
- 3.5.823 The effects from construction and permanent infrastructure on hydrogeological receptors within this Section, including SPZ 3 areas, have been assessed within **PEI Report Volume 2 Part B Section 4 Chapter 7 Geology and Hydrogeology**, for an

initial assessment of potentially significant effects. This references the control measures that would be applied during construction, as set out in the Preliminary CoCP. With these measures the Project's exposure pathways would be reduced/prevented such that the effects would not be significant.

- 3.5.824 Further detail on groundwater abstractions and the SPZ areas will be obtained from Anglian Water and the EA and utilise within the subsequent ES, to enable a detailed assessment for each high sensitivity area and determination of any likely significant effects and non-significant effects.

Section 8 Midville to River Witham – Question 3m and other feedback relevant to this Section of the route

- 3.5.825 Question 3m of the feedback form asked:

‘Do you have any comments about this Section of the route?’

- 3.5.826 The feedback about Section 8 Midville to River Witham covered themes including construction; consultation; historic environment; planning and design; ecology, biodiversity and environment; socio-economics; health and wellbeing; landscape and visual; walkers, cyclists and horse riders; flood risk and drainage; and groundwater.
- 3.5.827 The following sections provide a summary of the comments made in relation to these themes and National Grid's response to those. When narrating feedback, we refer to the Sections of the route as they were described at the time of the Stage 1 consultation. National Grid's responses refer to the revised Sections of the route as presented as part of the Stage 2 consultation. For further detail on the changes in sectioning please see Approach to route Sections.

Construction

- 3.5.828 A few community members' responses identified that local roads are unsuitable for construction traffic, and that HGV construction traffic is a concern.
- 3.5.829 **National Grid Response:** We recognise that construction of the Project would result in some temporary impacts to local areas. The Corridor Preliminary Routeing and Siting Study (CPRSS), published at the Stage 1 consultation, explains that our approach to the appraisal of design options considered a range of topics with various technical considerations including construction.
- 3.5.830 The **PEI Report** appraises the suitability of local roads to accommodate the forecast volume of construction traffic movements. This includes consideration of road geometry, congestion, accidents and sensitive receptors that include local amenities, schools and non-motorised user activity. Sensitive routes will be avoided where practicable, and construction haul roads used where appropriate along with maximising the use of suitable major and strategic roads. **PEI Report Volume 2 Part B Section 4 Chapter 9 Traffic and Movement, PEI Report Volume 3 Part B Sections 1 to 7 Appendix 9B Preliminary Construction information and Appendix 9C Future Baseline and Impact Analysis** identify Primary Access Routes to construction access points (bellmouths), compounds and substations, along with an estimate of average daily flows based on the existing information available at the time of writing. Our initial appraisal included in **PEI Report Volume 2 Part B Section 4 Figure 9.5 Preliminary Impact Analysis** shows impacts on the roads that result in potential significant effects. These routes are identified as part of the Primary Access

Route network to Section 4 and will require discussion with the local highway authority and possibly further assessment to determine the effect, if any, on users of the highway. Construction traffic routing will be discussed with the appropriate highway authorities during the full Transport Assessment, which will be reported in the Environmental Statement (ES).

- 3.5.831 A Code of Construction Practice (CoCP) and Construction Traffic Management Plan will be prepared and submitted with the Development Consent Order (DCO) application. These documents will include commitments to reduce construction impacts together with a framework for detailed management plans to be prepared at detailed design stage to reduce and mitigate potential impacts and/or disruptions that may arise during the construction phase. A Preliminary CoCP is available as part of the Stage 2 consultation.

Consultation

- 3.5.832 A few community members' responses mentioned the consultation materials for the Sibsey area, stating that they are not clear and that the map contains no scale making it difficult to understand how close the swathe is to properties.
- 3.5.833 **National Grid's response:** For National Grid's responses on consultation materials and feedback please refer to Our consultation - Question 6f and other , under Consultation materials.

Historic Environment

- 3.5.834 A few community members' responses raised concerns about the impact on the Avro Lancaster Aircraft Site and War Memorial (also known as the Memorial in the Field), a memorial located at the crash site of a Royal Air Force Lancaster where crew members sadly lost their lives. It was noted that students from local schools and air cadets also use this site as part of an educational programme, and that an WWII grave (not specified) could be impacted in this area.
- 3.5.835 Another concern was noted that there could be impacts to sensitive heritage assets including Hobhole Drain and a number of listed brick arch buildings (not specified) within the area.
- 3.5.836 **National Grid's response:** The Project and draft Order Limits have been designed to avoid sensitive receptors as far as practicable. This is in accordance with the Holford Rules applicable to routing of new overhead lines and the Horlock Rules which apply to design and siting of substations. These approaches are explained in further detail within the Corridor and Preliminary Routing and Siting Study (CPRSS), Design Development Report (DDR) and **PEI Report Volume 2 Part A Chapter 3 Main Alternatives Considered**. Principles include, but are not limited to, seeking to avoid areas of highest amenity, cultural or scientific value, taking advantage of natural screening provided by existing landform and features (e.g. woodland) and keeping visual, noise and other environmental effects to a minimum. For historic environment, such measures include the avoidance of physical impacts to designated heritage assets and where practicable non-designated heritage assets, and where possible reducing potential impacts to the setting of designated heritage assets and non-designated heritage assets.
- 3.5.837 National Grid has carried out a preliminary assessment of likely effects on the historic environment arising from the proposals in this Section of the route, which is reported

on in **PEI Report Volume 2 Part B Section 4 Chapter 5 Historic Environment**. In summary:

- i. Avro Lancaster Aircraft Site and War Memorial, Sibsey Northlands (MLI116028) is located approximately 110 m south of the draft Order Limits. There would be intervisibility with some of the construction activities for the Project to the north, along with noise and plant traffic movements, which would temporarily alter the setting of this asset. These works would have medium magnitude of impact on the non-designated heritage asset, resulting in a minor adverse impact which is not significant. The introduction of the infrastructure into the landscape would be softened by the planting of filtering vegetation along the field boundary between the Project and the memorial. The long-term impact of the infrastructure in the landscape would result in a small magnitude of impact changing the setting of the asset and slightly affecting the ability to experience and appreciate the asset. This would result in a negligible adverse effect that would not be significant.
- ii. Some historic bridges that are associated with John Rennie along the Hobhole Drain and associated features including a pumping station have been taken into consideration in the historic environment assessment. Where possible, impacts to their physical fabric are avoided by the Project though their settings may be altered which would not result in likely significant effects.

3.5.838 National Grid will continue to engage with Historic England and relevant local planning authorities on aspects relating to the historic environment and heritage assets, including appropriate mitigation measures and techniques and will take their views into account as the Project evolves.

Planning and Design

3.5.839 Suggestions in relation to the routeing in this Section are summarised as follows:

- i. Suggestion to route the overhead line west to avoid Anton's Gowt and the Gipse Bridge Primary School.

National Grid's response: National Grid has assessed a potential alignment in line with this feedback and concluded that this would increase potential impacts on residential properties at Langrick Bridge and along Main Road (B1192) to the west. With the proposed alignment routeing between Langrick Bridge (to the west) and Anton's Gowt (to the east), it is recognised that visual impacts are likely to be unavoidable in this location. As such, equidistance is sought (as far as possible) due to potential visual impacts to residential receptors on both sides of the proposed alignment. Langrick Bridge is located approximately 1.2 km from the proposals and Anton's Gowt is located approximately 1.4 km from the proposals.

- ii. Suggestion to route the overhead line to avoid the Avro Lancaster Aircraft Site and War Memorial.

National Grid's response: National Grid has reviewed the location of the war memorial and has determined that the proposed alignment is located at a sufficient distance from the memorial site and as such no significant impacts are anticipated.

- iii. Suggestion to route the overhead line directly from Sibsey Fen to Hubberts Bridge to reduce residential impact on Langrick and Langrick Bridge residential areas.

National Grid's response: National Grid has investigated this suggestion and has considered the alternative route as part of the Corridor and Preliminary Routeing and Siting Study (CPRSS). The alternative route would be closer to coastal designations, interacts with existing 132 kV overhead lines and would require two railway crossings. It would also be closer to urban areas and priority habitats. The alternative route is also close to an aerodrome and key visual receptors, which include various settlements and users of local parks and pathways. The requirement for crossing three watercourses in quick succession combined with the proximity and density of settlements could result in widespread landscape and visual impacts.

- iv. Suggestion that the overhead line should avoid a memorial near Canister Lane, Gipsey Bridge.

National Grid's response: National Grid has reviewed the location of the memorial and considers that the proposed alignment is a sufficient distance from this location.

- v. Suggestion to route the overhead line further south to avoid residential impact on Thorndales Lane.

National Grid's response: The proposed alignment is routed to cross Main Road (A16) south of Thorndales Lane. Routeing further south within the emerging preferred corridor presented at Stage 1 consultation is not preferred because routeing further south (between the cut out on the A16 and the southern edge of the Stage 1 consultation corridor) offers overall less siting flexibility (it is narrower) and would site infrastructure in very close proximity to Barbridge House and residential properties at Northlands. The proposed alignment achieves a straight routeing (in compliance with the Holford Rules) whilst striking the best balance between potential impacts on nearby residential properties.

- vi. Suggestion to remove the overhead line swathe at Canister Lane, Gipsey Bridge as the current boundary impacts the garden of the property.

National Grid's response: National Grid has investigated the residential property referenced in the response and as part of design development (and in line with Corridor and Preliminary Routeing and Siting Study (CPRSS) methodology) have trimmed the cut-out to exclude the full extent of residential curtilage from land that may be required for the Project.

- vii. Suggestion to route the overhead line away from land surrounding White House Farm, Carrington Road, Frithville and Boston.

National Grid's response: The proposed alignment routes north west of White House Farm and as such, no direct impacts are anticipated. With respect to Carrington Road, the proposed alignment routes near to the northern end of Carrington Road at a distance of approximately 380m (the proposed alignment maintains as short and straight an alignment as possible as it routes east to west) and continues to route south west to the western edge of the corridor presented at Stage 1 consultation, which overall increases the distance from both Carrington Road and Frithville (at approximately 2.4km). With respect to Boston, the proposed alignment routes along the western side of the corridor presented at Stage 1 consultation and is located approximately 2.5km away. During the routeing and siting stage of Project development, two additional corridors were considered that were located further west of Boston and Frithville but were not preferred and not taken

forward to Stage 1 consultation. For further information on the routeing and siting considerations across Boston and Frithville, please refer to Chapter 7 of the Corridor and Preliminary Routeing and Siting Study (CPRSS).

- viii. Suggestion to route the overhead line away from White House Farm as the Carrington Rally Steam and Heritage Show is held on the site of the large grain store each year, as well as other public events.

National Grid's response: Feedback received from Stage 1 consultation for Section 5 (at Stage 1 consultation this was feedback referring to Section 10 – River Welland to B1165) has been captured by the Project team, however, we are consulting on a Refined Weston Marsh Substation Siting Zone and therefore no design changes received during Stage 1 consultation have been considered in the current design. Relevant feedback submitted at Stage 1 will be considered alongside feedback received at Stage 2 consultation (and any subsequent additional targeted consultation) when the network requirements in the area become known.

Ecology, Biodiversity and Environment

- 3.5.840 A few community members' responses provided feedback that the waterways in this location are important habitats for swans, notably due to a swan sanctuary being located in this Section of the route. They expressed concerns that the overhead line would increase bird strikes and have a general negative impact on wildlife along the River Witham.
- 3.5.841 A few community members' responses also noted that the emerging preferred corridor is close to the Wash, crossing the wetlands of the fens, which has a high concentration of birds such as geese, swans and cranes. Additional concerns were raised around the negative impact on a local pond and owls near Peacocks Lane and Canister Lane, with potential impacts noted to owls, hawks and harriers. It was noted that barn owl are particularly at risk where the route turns west towards the Witham.
- 3.5.842 **National Grid's response:** The Project has been designed to avoid direct impacts upon European Designated Sites (Special Areas of Conservation, Special Protection Areas and Ramsar sites) and Sites of Special Scientific Interest. The likely significant effects upon sites such as the Wash SPA and Ramsar site, will be assessed within the Report to inform Habitats Regulations Assessments (HRA) and the Environmental Statement (ES), and significant effects cannot be excluded at this stage in the assessment.
- 3.5.843 Survey work will continue through 2025 to characterise the aquatic habitat types which are present within the Section 4 Survey Area, including River Witham, and their constituent flora and fauna, and to confirm the condition of relevant habitats, in order to inform the design of appropriate mitigation and the assessment of impacts and effects reported within the ES.
- 3.5.844 Through routeing and siting National Grid has sought and will continue to reduce as far as practicable potential impacts on biodiversity including habitats and protected species. The process of routeing takes account of existing biodiversity, the natural environment and, where practicable, seeks to avoid wildlife, and where not feasible, reduce potential impacts on areas of ecological sensitivity including protected and notable species and their associated habitats through mitigation. A suite of habitat and species surveys will inform the ecological baseline, this data is still being collected and will be provided at ES stage per Chartered Institute of Ecology and Environmental

Management guidance. The surveys include bats, badgers, great crested newts, otter, fish, aquatic macroinvertebrates, aquatic macrophytes, water vole, reptiles, and breeding and non-breeding birds. The Environmental Impact Assessment (EIA) for the Project will assess the effects on important ecological features using this baseline information. This will include collision risk with the overhead line once all bird data has been collected, and where/if required design changes and/or appropriate mitigation measures will be proposed. Regarding larger wetland bird species which may form part of designated site assemblages, the ES will assess potential impacts on breeding and non-breeding birds once all baseline bird data has been collected. Some species are not protected or notable and therefore will not be assessed. However, the overall impact on ecology is taken into account as part of the EIA process for the Project

- 3.5.845 The initial assessment including the surveys undertaken are reported in **PEI Report Volume 2 Part B Section 4 Chapter 4 Ecology and Biodiversity**. The initial assessment identifies that at this stage significant effects cannot be excluded, and further survey work (ongoing) will be used to confirm the status of these species, inform the design of appropriate mitigation and a full assessment of effects that will be reported in the ES.

Socio-economics

- 3.5.846 Several community members' responses raised the following points:
- i. Impact of the Project on Carrington Estate and tourism in the area;
 - ii. Impacts for Sibsey Primary School, Air Cadets, Sea Cadets and local scouts groups that use an area of the Sibsey Lancaster Memorial, or the 'Memorial in the Field', for free visits; and
 - iii. Impacts on tourism in the area.
- 3.5.847 **National Grid's response:** Through the routeing and siting exercise National Grid has sought to reduce impacts to businesses and the local economy, as evidenced in the Strategic Options Report (SOR) and the Corridor and Preliminary Routeing and Siting Study (CPRSS) published at the Stage 1 consultation. To reduce potential impacts, we have identified businesses and enterprises and their primary function, and those that are likely to generate tourism. These have been and will continue to be considered during the iterative design process.
- 3.5.848 From a socioeconomic perspective, the likely effects of National Grid's proposals on local businesses including those operating in connection with tourism (e.g. holiday parks and caravan sites) are considered in **PEI Report Volume 2 Part B Section 4 Chapter 11 Socio-economics, Recreation and Tourism**. In summary no significant adverse effects are anticipated for socio-economics, recreation and tourism receptors, noting this excludes above ground renewable energy generation infrastructure, within Section 4, as a result of the construction, operation and maintenance phases of the Project. An assessment of the direct effects of the Project on above ground renewable energy generation infrastructure (solar and onshore wind farms) as socio-economic receptors will be presented in the Environmental Statement (ES).
- 3.5.849 With regard to settlements and population, affected communities (local communities, including populations of towns and villages) **PEI Report Volume 2 Part C Route-wide Chapter 7 Socio-economics, Recreation and Tourism** identifies that at this preliminary stage it is anticipated that likely non-significant effects associated with construction activities would generally be minor adverse and temporary, with effects

felt most by communities in closest proximity to the Project. We will report on any indirect amenity effects for affected communities as part of the socio-economics, recreation and tourism assessment, which might occur through in-combination effects across the Project (such as noise and vibration, visual, and transport and movement effects). **PEI Report Volume 2 Part C Route-wide Chapter 10 Cumulative Effects** presents a preliminary assessment of cumulative effects upon common receptors across environmental topics identified within **PEI Report Volume 2 Part B** (intra-project) and identifies a shortlist of other Committed Developments with which there may be potential for cumulative effects and the relevant environmental topics for such effects (inter-project). The full cumulative effects assessment will be reported within the ES.

- 3.5.850 With regard to tourism including strategic visitor attractions and the impact of construction workforce on tourist accommodation bedspace, **PEI Report Volume 2 Part C Route-wide Chapter 7 Socio-economics, Recreation and Tourism** identifies that non-local workers would require accommodation in the local area, which is likely to be serviced from hotels and similar establishments such as B&Bs, and non-serviced accommodation including holiday lets, caravan parks and tourist campsites, and other collective accommodation. Overall, both temporary positive benefits to tourist accommodation businesses and temporary adverse effects through a reduction in tourist accommodation bed spaces are anticipated in relation to the labour market during construction. Given the preliminary estimated number of construction workers anticipated to be employed on the Project, and the level of likely spare capacity for bedspace, the preliminary assessment of effects sets out that these are not likely to be significant. For strategic visitor attractions, the preliminary assessment of these receptors is that effects are not expected to be significant.
- 3.5.851 It should be noted that this is an ongoing assessment and is subject to changes due to the ongoing development of the Project. A full detailed assessment will be included within the ES submitted with the Development Consent Order (DCO) application.
- 3.5.852 It should be noted that impacts on the Sibsey Primary School, Sibsey Lancaster Memorial, or the 'Memorial in the Field' and Carrington Estate are not considered within the socio-economics, recreation and tourism assessment because they are situated outside the relevant Study Area (within 500m of the development Order Limits) and therefore are not predicted to experience any significant effects as a result of construction, operation or maintenance of the Project.

Health and Wellbeing

- 3.5.853 A few community members' responses raised concerns that routeing next to a primary school and pre-schools puts future generations at risk due to health issues. They also noted that local villages in this area have an aging population, which will also be at risk of health conditions due to radiation (EMFs) from sleeping near the overhead line. It was noted that there would be a particular impact on Sibsey, Boston, due to the proximity to homes.
- 3.5.854 **National Grid's response:** National Grid recognises people may have concerns about the potential impacts of living close to an overhead line and associated infrastructure and that the uncertainty whilst the proposals are developed may cause anxiety. Through the routeing and siting exercise National Grid has sought and will continue to reduce as far as practicable impacts on sensitive receptors, such as residential areas, education facilities and areas for recreation. A considerable amount of assessment work has been undertaken to allow preliminary judgements to be made about the

design and routing of the Project. This has been set out in various publications including the Corridor and Preliminary Routing and Siting Study (CPRSS) and Strategic Options Report (SOR) as part of the Stage 1 consultation.

3.5.855 Further assessment work has been undertaken since the Stage 1 consultation as reported in **PEI Report Volume 2 Part C Route-wide Chapter 8 Health and Wellbeing**. A health and wellbeing baseline has been established for each Section to understand how the Project may specifically impact the health and wellbeing of different communities. This includes the wards of Boston and Sibsey & Stickney and the following communities:

- Thurlby
- Sloothby
- Hogsthorpe
- Small settlements east of Burgh le Marsh
- Irby in the Marsh
- Hobhole Drain and Fodder Dike Bank
- Northlands
- Frithville
- Gipsey Bridge
- Langrick Bridge
- Brothertoft
- Hubberts Bridge
- Kirton End
- Wigtoft
- Burtoft
- Bicker Haven
- Thorpe Fendyke

3.5.856 Policies and procedures are in place to make sure all equipment will comply with public EMF exposure limits. As such, physical health effects associated with the generation of EMFs is scoped out of the assessment on the basis that EMF levels would be low such that significant adverse effects are not expected. An EMF report, separate to the Environmental Impact Assessment (EIA) process, will be prepared as part of the Project.

3.5.857 No mental health impacts as a result of EMFs are expected as a result of the Project as described within **PEI Report Volume 2 Part C Route-wide Chapter 8 Health and Wellbeing**. Furthermore, no significant impact on health and wellbeing as a result of changes in access to promoted recreational routes and open space; or changes to employment were identified.

3.5.858 The health and wellbeing assessment recognises that concerns about the health impacts of EMF may adversely impact some people's mental health by heightening anxiety. However, it is anticipated that this group is likely to be very small, and that this impact will be effectively mitigated by National Grid's engagement with the community.

3.5.859 For further information on EMFs please refer to The graduated swathe – Question 3a and other relevant feedback under Health and Wellbeing.

3.5.860 The health and wellbeing assessment assesses the impact of changes to landscape and visual on health and wellbeing in conjunction with air quality, noise, and traffic and transport. This combination effect is assessed as 'Neighbourhood Quality'. For a neighbourhood quality effect to be identified, at least two significant residual effects must combine at the same location. There is evidence to suggest links between neighbourhood quality and health and wellbeing, as health and wellbeing can be adversely impacted by changes to air quality, noise, visual amenity, increased traffic. This will be assessed within the Environmental Statement (ES) and if required, mitigation put in place to address these impacts.

3.5.861 The health and wellbeing assessment will continue to be updated to ensure health and wellbeing concerns and impacts of local communities are taken into account.

- 3.5.862 In addition to health and wellbeing considerations, an Equality Impact Assessment (EqIA) will be undertaken in order to identify any differential or disproportionate impacts on vulnerable people (including children and older people) as a result of the Project, in line with the Equality Act 2010. If any impacts are identified, the EqIA will recommend mitigations and actions to be put in place to reduce any impact.

Landscape and Visual

- 3.5.863 A few community members' responses raised concerns about the visual impact on the villages and countryside around Stickney, Carrington and Frithville. It was noted that this area should be avoided due to pylons ruining the beautiful landscape. Other community members' responses raised concerns about the impact on the views to/from the Lincolnshire Wolds National Landscape (AONB).
- 3.5.864 A few community members' responses noted that properties around the West Fen Drain are avoided however their views will still be impacted for miles due to the flat countryside. Other feedback highlighted concerns around the visual impact across fields where the route turns west towards the Witham, near Canister Lane.
- 3.5.865 **National Grid Response:** National Grid develops its Projects in line with national policy and our statutory duties to develop an efficient, economic and co-ordinated network, and have regard to preserving amenity and mitigating impacts. We recognise that overhead lines can give rise to adverse landscape and visual effects, and we carefully consider these along with other environmental and socio-economics considerations, technical requirements and cost when developing our Projects.
- 3.5.866 National Grid has carefully considered the potential impacts of the Project at an early stage, and the findings and justifications for the selection of the emerging preferred corridor in which the new overhead line is proposed to be routed, can be found in the Corridor and Preliminary Routeing and Siting Study (CPRSS), which is available on our Project website. Through the routeing and siting exercise we have sought to reduce the impact on landscape character and visual amenity. We will continue to consider both landscape character and amenity value as we develop our proposals and seek to reduce effects.
- 3.5.867 The likely effects of National Grid's proposals in this area on landscape character and visual receptors are set out in **PEI Report Volume 2 Part B Section 4 Chapter 2 Landscape** and **Chapter 3 Visual**. A preliminary visual assessment has been undertaken for each community, or parish, within the Study Area. A number of viewpoints have been selected to represent the views from local communities, including Stickney, Carrington, Frithville. These are presented in **PEI Report Volume 3 Part B Sections 1 to 7 Appendix 3A Proposed Viewpoints** and will form the basis for the Landscape and Visual Impact Assessment (LVIA).
- 3.5.868 It is acknowledged that this Section of the Project does contain a number of communities identified as having potential significant effects due to the flat landscape and expansive views. Additional mitigation measures will be considered to filter views from properties during the Environmental Statement (ES) stage.
- 3.5.869 The Lincolnshire Wolds National Landscape (AONB) is over 9 km from this Section of the Project. Although it may form a distant skyline in views, it is considered that the Project in this Section would not have significant effects on the designation.
- 3.5.870 National Grid will be producing a LVIA that will, in addition to other topic specific assessments, form the latter part of the Environmental Impact Assessment (EIA) for

the Project. This will include a write-up of an assessment of the effects on the landscape character of the area and visual effects from communities. Where likely significant effects are anticipated, the LVIA will consider and identify areas where it may be necessary and appropriate to put forward potential mitigation as part of an iterative design and assessment process.

Walkers, Cyclists and Horse Riders

- 3.5.871 It was noted that the Project could result in a negative impact on walking and cycling routes along the River Witham.
- 3.5.872 **National Grid's response:** Through routeing and siting, National Grid has sought and will continue to reduce, as far as practicable, impacts and disruption to Public Rights of Way (PRoW). The design process has identified the existing PRoW network and wider connectivity and has sought where practicable to reduce and where possible, remove impacts to PRoW. In the event that any significant impacts on PRoW are identified that cannot be avoided and mitigation is required, mitigation measures may include the temporary closure of PRoW during the construction phase, and where possible a diversion to allow for the continued use and movement through the wider PRoW network. We will work closely with the relevant local authorities to understand and gain information on PRoW and the local road network.
- 3.5.873 Effects on PRoW will be mitigated where possible, maintaining access where practicable, with closures as a last resort. We will continue to engage with the interested parties and stakeholders on the PRoW network to enable feedback and input to be considered as the Project develops.
- 3.5.874 **PEI Report Volume 2 Part B Section 4 Chapter 9 Traffic and Movement** reports our early assessment findings on traffic and movement, and this includes equestrian routes (i.e. bridleways). The **PEI Report** identifies the PRoWs affected by construction activity and the likely level of disruption anticipated. In most cases, PRoWs will be retained as open routes except for some activities during the end of the programme where routes will be temporarily closed for safety reasons. There are some routes that will be locally diverted (to join together) to minimise crossings of the haul road.
- 3.5.875 Walking and cycling routes alongside River Witham are maintained throughout the majority of the construction of the Section 4 overhead line. There will be some temporary closure of the routes required during the overhead line installation for safety reasons, this will be discussed with the local authority and limited as far as possible to limit impact on users.

Flood Risk and Drainage

- 3.5.876 A few members of the community highlighted low-lying land in this area which is prone to flooding, which could be exacerbated by the Project. A few community members' responses noted that there is a risk to the drainage network in the area, which could be compromised due to the swathe being too close to weak drain banks near marshland soil.
- 3.5.877 **National Grid's response:** The Project and draft Order Limits have been designed to avoid sensitive receptors as far as practicable. The Project seeks to avoid flood risk and potentially significant effects via the sequential approach to routeing and siting, minimising significant effects where possible.

- 3.5.878 Surface water features identified within the Section are shown in **PEI Report Volume 2 Part B Section 4 Figure 6.1 Water Environment Receptors and Study Area** and **PEI Report Volume 2 Part B Section 4 Figure 6.3 Surface Water Flood Risk**. The area comprises a dense network of either heavily modified or artificial drains that are maintained by riparian landowners and IDBs, primarily for agricultural drainage purposes.
- 3.5.879 The area within the Section 4 draft Order Limits is mostly defended floodplain with small parts undefended or in Flood Zone 1. Therefore, under normal conditions, there will be no effect on floodplain storage and conveyance arising from the Project's construction activities. However, under conditions of flood defence overtopping or breach, the presence of the Project construction works could lead to a change in residual flood risk for external receptors, through reducing floodplain storage or impeding flood conveyance. The potential for loss of the floodplain and changes in floodplain flow conveyance will be managed through embedded control measures as outlined in the Preliminary CoCP.
- 3.5.880 Surface water drainage systems will provide attenuation of runoff from impermeable surfaces to greenfield rates (the rate expected on an undeveloped site and the rate that needs to be maintained after site development) and incorporate appropriate pollution prevention measures, incorporating the use of Sustainable Urban Drainage Systems (SuDS) as far as practicable. Watercourse conveyance capacity of the existing watercourses will incorporate morphological features to promote aquatic biodiversity to a level that is consistent with maintaining effective land drainage.
- 3.5.881 A full assessment of potential changes in flood risk to external third-party receptors has not yet been completed. There are several factors which require further assessment to inform the final Flood Risk Assessment (FRA) and Environmental Statement (ES), informed by engagement with the EA. Specifically these include confirmation of the standard of defence provided by the existing system of flood risk management assets; confirmation of compensatory storage requirements; review existing flood models and confirmation of the scope of future assessment to be reported within the FRA and ES. Further information has been provided in **PEI Report Volume 3 Part C Appendix 5A Preliminary Flood Risk Assessment**.

Groundwater

- 3.5.882 The Environment Agency noted that there are no SPZs in this area.
- 3.5.883 **National Grid's response:** The Project has been designed to take into account and avoid sensitive hydrogeological receptors where practicable, within the balance of other relevant design factors, to minimise/prevent any significant effects on these receptors. This includes groundwater abstractions and SPZs. There are no SPZs within this Section of the Project, therefore no action to avoid such features through the design process was required.

Section 9 River Witham to River Welland – Question 3n and other feedback relevant to this Section of the route

- 3.5.884 Question 3n of the feedback form asked:
- 'Do you have any comments about this Section of the route?'***
- 3.5.885 The feedback about Section 9 River Witham to River Welland covered themes including construction; consultation; historic environment; planning and design;

ecology, biodiversity and environment; socio-economics; agricultural land; health and wellbeing; landscape and visual; noise and vibration; flood risk and drainage; and groundwater.

- 3.5.886 The following sections provide a summary of the comments made in relation to these topics and National Grid's response to those. When narrating feedback, we refer to the Sections of the route as they were described at the time of the Stage 1 consultation. National Grid's responses refer to the revised Sections of the route as presented as part of the Stage 2 consultation. For further detail on the changes in sectioning please see Approach to route Sections.

Construction

- 3.5.887 Several community members' responses expressed concern that there may be an impact on the local road network and commuter routes, with congestion and road closures likely as a result of the construction.
- 3.5.888 **National Grid Response:** We recognise that construction of the Project would result in some temporary impacts to local areas. The Corridor Preliminary Routeing and Siting Study (CPRSS), published at the Stage 1 consultation, explains that our approach to the appraisal of design options considered a range of topics with various technical considerations including construction,
- 3.5.889 The **PEI Report** appraises the suitability of local roads to accommodate the forecast volume of construction traffic movements. This includes consideration of road geometry, congestion, accidents and sensitive receptors that include local amenities, schools and non-motorised user activity. Sensitive routes will be avoided where practicable, and construction haul roads used where appropriate along with maximising the use of suitable major and strategic roads. **PEI Report Volume 2 Part B Section 4 Chapter 9 Traffic and Movement, PEI Report Volume 3 Part B Sections 1 to 7 Appendix 9B Preliminary Construction information and Appendix 9C Future Baseline and Impact Analysis** identify Primary Access Routes to construction access points (bellmouths), compounds and substations, along with an estimate of average daily flows based on the existing information available at the time of writing. Our initial appraisal included in **PEI Report Volume 2 Part B Section 4 Figure 9.5 Preliminary Impact Analysis** shows impacts on the roads that result in potential significant effects. These routes are identified as part of the Primary Access Route network to Section 4 and will require discussion with the local highway authority and possibly further assessment to determine the effect, if any, on users of the highway. Construction traffic routeing will be discussed with the appropriate highway authorities during the full Transport Assessment, which will be reported in the Environmental Statement (ES).
- 3.5.890 A Code of Construction Practice (CoCP) and Construction Traffic Management Plan will be prepared and submitted with the Development Consent Order (DCO) application. These documents will include commitments to reduce construction impacts together with a framework for detailed management plans to be prepared at detailed design stage to reduce and mitigate potential impacts and/or disruptions that may arise during the construction phase. A Preliminary CoCP is available as part of the Stage 2 consultation.

Consultation

- 3.5.891 Missing information in the consultation documents specifically a lack of mention of the swathe that goes around Hubberts Bridge.
- 3.5.892 **National Grid Response:** For National Grid's responses on consultation materials and feedback please refer to Our consultation - Question 6f and other , under Consultation materials.

Historic Environment

- 3.5.893 Several community members' responses identified the importance of considering and avoiding impacts on local heritage assets and features in this Section of the route, including grade I Listed St Botolph's Church, historic Boston stump, which was referenced as the tallest church in the UK that can be seen for many miles, listed buildings in Wigtoft, Casterton House and Clover Lane.
- 3.5.894 **National Grid Response:** The Project and draft Order Limits have been designed to avoid sensitive receptors as far as practicable. This is in accordance with the Holford Rules applicable to routeing of new overhead lines and the Horlock Rules which apply to design and siting of substations. These approaches are explained in further detail within the Corridor and Preliminary Routeing and Siting Study (CPRSS), Design Development Report (DDR) and **PEI Report Volume 2 Part A Chapter 3 Main Alternatives Considered**. Principles include, but are not limited to, seeking to avoid areas of highest amenity, cultural or scientific value, taking advantage of natural screening provided by existing landform and features (e.g. woodland) and keeping visual, noise and other environmental effects to a minimum. For historic environment, such measures include the avoidance of physical impacts to designated heritage assets and where practicable non-designated heritage assets, and where possible reducing potential impacts to the setting of designated heritage assets and non-designated heritage assets.
- 3.5.895 National Grid has carried out a preliminary assessment of likely effects on the historic environment arising from the proposals in this Section of the route, which is reported on in **PEI Report Volume 2 Part B Section 4 Chapter 5 Historic Environment**. In summary:
- i. The parish Church of St Botolph, Boston (NHLE 1388844), also known as Boston Stump, is a grade I listed building approximately 4.86 km east of the draft Order Limits. The land to the west of Boston consists of a flat, agricultural landscape with kinetic views of the church tower apparent moving through the landscape, as well as views out across the Fenland afforded from the top of the tower. The tower is visible on the approach roads to the west of Boston leading to the surrounding settlements, including from the land in and beyond the draft Order Limits near Brothertoft, namely Langrick Road (B1192) and Punchbowl Lane. There is potential for the wider setting of the church to experience a temporary change during the construction works with intervisibility to and from the tower, along with noise and traffic. This would result in a minor adverse effect on an asset of high value, which would not be significant. The addition of the modern infrastructure into the landscape would interrupt views of the church tower from the roads to the west of the Project. The permanency of the infrastructure within the landscape would have a small impact slightly changing the wider setting of the church and how it is appreciated. On an asset of high value this would result in a moderate adverse effect that is significant.

- ii. Casterton House (NHLE 1232910), and associated coach house and gin house (NHLE 1232867) and pigeoncote (NHLE 1276845) are all grade II listed buildings within a farm complex located approximately 350 m east of the draft Order Limits. There is potential for the buildings to experience a temporary change to their setting from increased noise, light and traffic associated with the construction activities. There may also be glimpsed views of the Project infrastructure to the west of the house, particularly during the winter months. The temporary construction works and the permanency of the infrastructure in the landscape would have a negligible magnitude of impact slightly altering the setting of the buildings. On assets of medium value these would result in negligible adverse effects, which are not significant.
- iii. Wigtoft Conservation Area is located approximately 710 m north-east of the proposed Project alignment. Located within the conservation area is the grade I listed Church of St Peter and St Paul (NHLE 1237405), approximately 940 m north-east of the draft Order Limits, and two grade II listed buildings: Stanhope Cottage (NHLE 1276849) and The Old Vicarage (NHLE 1232868). The A17 runs parallel to Main Road to the south-west of the village, with intervening screening by mature trees and hedges helping to reduce noise and visual impacts from the road. The proximity of the A17 to the historic core of the village has effectively severed it from its wider agricultural setting to the south-west. Taking into account the screening along the A17 and the traffic associated with this road, there are anticipated to be no setting alterations or changes to the character of the Wigtoft Conservation Area or value of the listed buildings within it from the Project.

3.5.896 National Grid will continue to engage with Historic England and relevant local planning authorities on aspects relating to the historic environment and heritage assets, including appropriate mitigation measures and techniques and will take their views in account at the Project evolves.

Planning and Design

3.5.897 Suggestions in relation to the routeing in this Section are summarised as follows:

- i. Suggestion to route the overhead line to the east of Boston.

National Grid's response: The routeing options to the east of Boston were not taken forward for detailed appraisal due to significant technical and environmental constraints. Positioning new infrastructure closer to the coast would increase maintenance costs due to salt water corrosion, and introduce greater engineering complexity with existing overhead line crossings and underground cables. The area also presents multiple drain crossings, challenging access during coastal flooding, and constrained crossings of the A17 and 'The Haven' river. Environmental challenges include potential impacts on designated sites associated with the Wash, Frampton Marsh RSPB, and local nature reserves, as well as flood risks and heritage impacts on scheduled monuments and conservation areas. Socio-economics constraints include scattered properties, larger settlements, and potential impacts on recreational areas and visual amenity. Overall, these factors led to the conclusion that routeing options to the east of Boston would perform less favourably compared to the west.

- ii. Suggestion to route the overhead line as far east from Orchard Holiday Park as possible at Hubberts Bridge.

National Grid's response: National Grid has assessed a potential alignment in line with this feedback and has concluded that it is not preferred because a route to the east is significantly constrained when crossing Swineshead Road (A52) due to the presence of multiple pinch points, would introduce additional angle pylons and would increase potential impacts to residential properties along Holmes Lane and Fen Drove. An eastern alignment would also significantly impact flying activities at Boston Aerodrome. Additionally, National Grid projects Eastern Green Link 3 and Eastern Green Link 4 are proposing to route through land covered by the eastern corridor optionality at this location, and so a western alignment would accommodate all projects.

- iii. Suggestion to route the overhead line north of Sutterton, between Sutterton and Kirton, then follow the A16 to Weston Marsh Substation.

National Grid's response: National Grid considered a potential alignment in line with this feedback and concluded that it was not preferred. An alignment between Sutterton and Kirton to follow the A16 would site infrastructure closer to environmental designations associated with the Wash, residential settlements (with less existing screening) and presence of planning applications and underground infrastructure may constrain siting flexibility.

3.5.898 The following suggestions have been considered together:

- i. Route the overhead line on the western boundary of the corridor at Boston to minimise visual impact on views of the historic Boston Stump and farmland.
- ii. Move the overhead line further west between Langrick Bridge and Hubberts Bridge to avoid visual impacts from Langrick Bridge-Hubberts Bridge Road.

National Grid's response: National Grid has considered a potential alignment in line with this feedback but it is not preferred because a western route (further west than the current alignment) is more constrained (presence of several pinch points) and would increase the number of angle pylons required, that would be more visually intrusive in the landscape. The proposed alignment achieves Holford Rules compliance and is sited approximately 5 km from the Boston Stump as such, no visual impacts on its setting are anticipated.

- iii. Suggestion to amend the overhead line routeing to avoid impacting aircraft movements at Boston Aerodrome.

National Grid's response: National Grid has considered potential impacts to aviation receptors as outlined in Chapter 6 of the Design Development Report (DDR) with support from specialist aviation consultants. This assessment included Boston Aerodrome.

At Boston Aerodrome, it is considered that both departing aircraft from Runway 27 and approaching aircraft to Runway 09 would be able to safely overfly the proposed overhead line route with sufficient clearance. This includes an assessment of the required height extension to some of the nearby pylons due to the crossing of South Forty Foot Drain and a railway line to the west of Boston Aerodrome. This conclusion will be kept under review as the Project design progresses and as more thorough assessments are undertaken, as well as through ongoing engagement directly with Boston Aerodrome. Considerations related to flight training activities at Boston Aerodrome in particular, including engine failure after take off (EFATO) exercises, will

require ongoing assessment between Stage 2 Consultation and Development Consent Order (DCO) Submission.

- iv. Suggestion to route the overhead line further west in Section 9 at the less productive and predominantly Provisional Grade 2 agricultural land, to avoid impact on agricultural land as it will reduce visual impacts on Kirton End and Frampton West.

National Grid's response: During the identification of potential route corridors phase of project development, agricultural land grading (including Provisional Grade 1) was not determined to be a differentiating factor due to its overall prevalence throughout the region. Routeing further west and onto Provisional Grade 2 land in Section 9 (now Section 4 at Stage 2 consultation) would significantly increase the length of overhead line and number of pylons required and route through a more constrained area due to increased presence of scattered properties at Holland Fen. This suggestion would not present a Holford Rules compliant alignment, and it is not preferred by National Grid. For more information on the methodology to identify Study Areas, feasible route corridors and routeing and siting, please refer to Chapter 3 of the Corridor and Preliminary Routeing and Siting Study (CPRSS).

- v. Suggestion to route the overhead line along the western edge of the swathe at Wigtoft to route away from residents and a grade II listed building.

National Grid's response: National Grid has considered this feedback and has refined the proposed alignment to route further west within the emerged preferred corridor presented at Stage 1 consultation as it passes Wigtoft. For more information on alignment development considerations at Wigtoft, please refer to Chapter 5 of the Design Development Report (DDR).

- vi. Suggestion to route the overhead line to avoid Blackitts Farm located between Burtoft and Sutterton Dowdyke to avoid any impacts on production of high-value irreplaceable seeds for trials and research.

National Grid's response: The proposed alignment routes south of land holding at Blackitts Farm as it crosses between Spalding Road (B1397) and Kit Cat Lane and as such, no direct impacts to this land are anticipated.

- vii. Suggestion to route the overhead line toward the solar farm at Wigtoft and away from Asperton Cottage.

National Grid's response: The proposed alignment routes in a north east to south west direction and crosses Asperton Road, south of Asperton Cottage and north of Mill Farm (represented by the cut out in the Stage 1 consultation corridor). Routeing along the eastern edge of the consultation corridor (and closer to the existing solar farm) was considered but not preferred because it would require several angle pylons to facilitate an alignment near Wigtoft (just south of Asperton) that seeks to reduce potential impacts to grade II listed buildings associated with Casterton House, a grade I and grade II listed buildings at Wigtoft, as well as increase distance from the village of Wigtoft itself. It is considered that the proposed design provides the best balance between impacts to residential receptors and heritage assets whilst maintaining the shortest and straightest route possible, in compliance with the Holford Rules.

- viii. Suggestion to route the overhead line as far as possible from Sunnyside Farm, Holme Road, Kirton Holme to avoid noise and health impacts at their property.

National Grid's response: During design development following Stage 1 consultation, an opportunity was identified to refine the proposed alignment and retain a western routeing as it crosses Kirton Holme Road, south east of Kirton Holme. Routeing west at this location keeps the alignment shorter and straighter compared to the preferences set out in the graduated swathe at Stage 1 consultation (which routes north east of Sunnyside Farm and crosses Kirton Holme Road just west of Kirton End) and is considered to reduce visual, ecology and heritage impacts. Additionally, this removes the need for an angle pylon that would be required routeing east at this location. For more information on design development considerations at this location, please refer to Chapter 7 of the Design Development Report (DDR).

Ecology, Biodiversity and Environment

- 3.5.899 A considerable proportion of community members' responses raised concerns about the impact on wildlife which live and visit the river areas, including their ongoing ability to feed and breed, which are summarised as follows:
- i. Potential impact on wildlife habitats, otters, owls, bats, crested newts and other species that reside in the area;
 - ii. Impacts on the fields in the local area which are important feeding grounds for Whooper and Bewick's swans and several goose species overwinter;
 - iii. Impacts on shoreline areas and migrating birds (such as RSPB Frampton Marsh);
 - iv. Impacts on the Wash, which is a nature reserve, and on the East Coast Wetlands areas with high concentrations of birds;
 - v. Impacts on geese, swans and cranes which frequent these areas;
 - vi. Impacts on other species that overwinter in the marshes of the Wash;
 - vii. Impacts on Canada Geese and Swans travelling to the water reservoir on Clover Lane;
 - viii. Impacts on bees and their ability to pollinate, as well as beehives; and
 - ix. Impacts on Moulton Marsh Nature Reserve, RSPB Freiston Shore, and RSPB Frampton Marsh.
- 3.5.900 **National Grid Response:** The Project has been designed to avoid direct impacts upon European Designated Sites (Special Areas of Conservation, Special Protection Areas and Ramsar sites) and Sites of Special Scientific Interest. Moulton River is hydrologically linked to The Wash SPA and Ramsar site and The Wash and North Norfolk Coast SAC. The likely significant effects upon sites such as the Wash SPA and Ramsar site, will be assessed within the Report to inform Habitats regulations assessments and the Environmental Statement (ES), and significant effects cannot be excluded at this stage in the assessment. RSPB Freiston Shore and RSPB Frampton Marsh are located outside of the Study Area.
- 3.5.901 Through routeing and siting National Grid has sought and will continue to seek to reduce potential impacts on biodiversity including habitats and protected species. The process of routeing takes account of existing biodiversity, the natural environment and,

where practicable, seeks to avoid wildlife, and where not feasible, reduce potential impacts on areas of ecological sensitivity including protected and notable species and their associated habitats, through mitigation. A suite of habitat and species surveys will inform the ecological baseline, this data is still being collected and will be provided at ES stage per Chartered Institute of Ecology and Environmental Management guidance. The surveys include bats, badgers, great crested newts, otter, fish, aquatic macroinvertebrates, aquatic macrophytes, water vole, reptiles, and breeding and non-breeding birds. The Environmental Impact Assessment (EIA) for the Project will assess the effects on important ecological features using this baseline information. This will include collision risk with the overhead line once all bird data has been collected, and where/if required design changes and/or appropriate mitigation measures will be proposed. Some species are not protected or notable such as bees (kept by beekeepers), and therefore will not be assessed. However, the overall impact on ecology is taken into account as part of the EIA process for the Project.

3.5.902 The initial assessment including the surveys undertaken are reported in **PEI Report Volume 2 Part B Section 4 Chapter 4 Ecology and Biodiversity**. The initial assessment identifies that at this stage significant effects cannot be excluded, and further survey work (ongoing) will be used to confirm the status of these species, inform the design of appropriate mitigation and a full assessment of effects that will be reported in the ES.

3.5.903 With regard to electric and magnetic fields impacts on bees please refer to The graduated swathe – Question 3a and other relevant feedback , under Impacts on bees and ability to pollinate.

Socio-economics

3.5.904 Several community members' responses raised concerns about:

- i. The impact of the Project on the quality of life of residents in areas such as Wigtoft and Sutterton, and the quiet enjoyment of their properties in the area;
- ii. The impact of tourism and businesses in the area, including equestrian establishments;
- iii. The potential impact on local tourism, including the ability to rent out holiday houses located nearby to proposed overhead pylons and the flow on effect to businesses that are supported by tourism; and
- iv. The proximity to Boston Aerodrome specifically how learner pilots would negotiate the pylons safely.

3.5.905 **National Grid Response:** Through the routeing and siting exercise National Grid has sought to reduce impacts to businesses and the local economy, as evidenced in the Strategic Options Report (SOR) and the Corridor and Preliminary Routeing and Siting Study (CPRSS) published at the Stage 1 consultation. To reduce potential impacts, we have identified businesses, including equestrian centres and enterprises and their primary function, and those that are likely to generate tourism. These have been and will continue to be considered during the iterative design process.

3.5.906 From a socioeconomic perspective, the likely effects of National Grid's proposals on local businesses including tourist accommodation and equestrian centres are considered in **PEI Report Volume 2 Part B Section 4 Chapter 11 Socio-economics, Recreation and Tourism**. In summary no significant adverse effects are anticipated for Socio-economics, recreation and tourism receptors within Section 4, noting this

excludes above ground renewable energy generation infrastructure, as a result of the operation and maintenance phase of the Project. An assessment of the direct effects of the Project on above ground renewable energy generation infrastructure (solar and onshore wind farms) as socio-economics receptors will be presented in the Environmental Statement (ES).

- 3.5.907 With regard to settlements and population, affected communities (local communities, including populations of towns and villages, including Wigtoft and Sutterton) **PEI Report Volume 2 Part C Route-wide Chapter 7 Socio-economics, Recreation and Tourism** identifies that at this preliminary stage it is anticipated that likely non-significant effects associated with construction activities would generally be minor adverse and temporary, with effects felt most by communities in closest proximity to the Project. We will report on any indirect amenity effects for affected communities as part of the socio-economics, recreation and tourism assessment, which might occur through in-combination effects across the Project (such as noise and vibration, visual, and transport and movement effects). **PEI Report Volume 2 Part C Route-wide Chapter 10 Cumulative Effects** presents a preliminary assessment of cumulative effects upon common receptors across environmental topics identified within **PEI Report Volume 2 Part B** (intra-project) and identifies a shortlist of other Committed Developments with which there may be potential for cumulative effects and the relevant environmental topics for such effects (inter-project). The full cumulative effects assessment will be reported within the ES.
- 3.5.908 With regard to tourism including strategic visitor attractions and the impact of construction workforce on tourist accommodation bedspace, **PEI Report Volume 2 Part C Route-wide Chapter 7 Socio-economics, Recreation and Tourism** identifies that non-local workers would require accommodation in the local area, which is likely to be serviced from hotels and similar establishments such as B&Bs, and non-serviced accommodation including holiday lets, caravan parks and tourist campsites, and other collective accommodation. Overall, both temporary positive benefits to tourist accommodation businesses and temporary adverse effects through a reduction in tourist accommodation bed spaces are anticipated in relation to the labour market during construction. Given the preliminary estimated number of construction workers anticipated to be employed on the Project, and the level of likely spare capacity for bedspace, the preliminary assessment of effects sets out that these are not likely to be significant. For strategic visitor attractions, the preliminary assessment of these receptors is that effects are not expected to be significant.
- 3.5.909 It should be noted that this is an ongoing assessment and is subject to changes due to the ongoing development of the Project. A full detailed assessment will be included within the ES submitted with the Development Consent Order (DCO) application.
- 3.5.910 National Grid is aware of several airfields in the region that are within varying proximities to the proposed Project, including Boston Aerodrome. Where possible, we have been engaging with airfield operators to better understand their activities, aircraft types and annual movements to inform our design development. National Grid has considered potential impacts to aviation receptors as outlined in Chapter 6 of the Design Development Report (DDR) with support from specialist aviation consultants. At Boston Aerodrome, it is considered that both departing aircraft from Runway 27 and approaching aircraft to Runway 09 would be able to safely overfly the proposed overhead line route with sufficient clearance. This conclusion will be kept under review as the Project design progresses and as more thorough assessments are undertaken, as well as through ongoing engagement directly with Boston Aerodrome. Considerations related to flight training activities at Boston Aerodrome in particular,

including engine failure after take off (EFATO) exercises, will require ongoing assessment between Stage 2 Consultation and Development Consent Order (DCO) Submission.

- 3.5.911 With regard to users of airfields, aviation will be considered in the ES, whilst **PEI Report Volume 2 Part B Section 4 Chapter 11 Socio-economics, Recreation and Tourism** will set out the relevant baseline and explain how aviation will be assessed with a specialist standalone report in support of the ES.

Agricultural Land

- 3.5.912 Several community members' responses expressed concern about the impacts of this Section on high quality agricultural land. This included both loss of arable land and reduced quality of land. Specific concerns about impact on high-value, irreplaceable vegetable seed trials at Backitts Farm and Sakata UK Ltd were raised.
- 3.5.913 **National Grid's response:** National Grid recognises that there is the potential for impacts on agricultural land. We look to limit the impact on agricultural land through careful and considered routeing and siting of infrastructure and through consultation with affected landowners. We are and will continue to work with all landowners who may be affected by the proposals to understand the impacts as the Project is developed.
- 3.5.914 The draft Order Limits shown include areas of land required for temporary construction activities including temporary construction compounds, and access etc, as well as permanent infrastructure including pylons and overhead line.
- 3.5.915 Attempts have been made to avoid Best and Most Versatile (BMV) agricultural land as part of the design evolution. Where BMV agricultural land is to be developed, if possible, this will be directed at land of the lowest possible grade.
- 3.5.916 Direct permanent loss of agricultural land per pylon is restricted to the area of the foundation plinths. Where pylons are located within pasture land, the area beneath the pylon can still be grazed. It is acknowledged that where pylons are located within arable rotations or land used for hay and silage cropping, the area beneath the pylon is excluded from agricultural use during the operational phase, as agricultural machinery cannot be used in these areas.
- 3.5.917 **PEI Report Volume 2 Part B Section 4 Chapter 8 Agriculture and Soils** provides a preliminary assessment on the impact of the Project on agricultural land, soil resources, and agricultural landholdings using publicly available and purchased data related to land grades (according to the Agricultural Land Classification (ALC) system), soil profiles, and land use. The preliminary assessment has used publicly available Provisional ALC data, however, a detailed ALC survey will be conducted to inform a full assessment of the extent of land grades and soil types affected and will be reported in the Environmental Statement (ES).
- 3.5.918 The agricultural land within the draft Order Limits for Section 4 is provisionally mapped as ALC Grades 1, 2, 3, and 4 agricultural land. Grades 1,2, and 3 are classified as being of BMV land, as such Section 4 is considered likely to comprise BMV land. **PEI Report Volume 2 Part B Section 4 Chapter 8 Agriculture and Soils** reports a likely significant effect due to the temporary and permanent loss of agricultural land and soil function. National Grid are committed to the implementation of effective soil handling, storage, and reinstatement measures, which will be detailed in an Outline Soil Management Plan ('Outline SMP', submitted as part of the Development Consent

Order (DCO) application), and would be critical in ensuring the minimisation of the effects and ensuring successful reinstatement of soils and agricultural land grade, where practicable.

- 3.5.919 In relation to Blackitts Farm and Sakata UK Ltd, sensitive land uses such as orchards or livery stables, also including seed trial sites, will be assessed as part of the ES stage.

Health and Wellbeing

- 3.5.920 A large proportion of the community members' responses expressed concerns with the potential impacts on mental wellbeing and health because of the proposal, and that this impact may be felt long-term.

- 3.5.921 **National Grid Response:** National Grid recognises people may have concerns about the potential impacts of living close to an overhead line and associated infrastructure and that the uncertainty whilst the proposals are developed may cause anxiety. Through the routeing and siting exercise National Grid has sought and will continue to reduce as far as practicable impacts on sensitive receptors, such as residential areas, education facilities and areas for recreation. A considerable amount of assessment work has been undertaken to allow preliminary judgements to be made about the design and routeing of the Project. This has been set out in various publications including the Corridor and Preliminary Routeing and Siting Study (CPRSS) and Strategic Options Report (SOR) as part of the Stage 1 consultation.

- 3.5.922 Further assessment work has been undertaken since the Stage 1 consultation as reported in **PEI Report Volume 2 Part C Route-wide Chapter 8 Health and Wellbeing**. A health and wellbeing baseline has been established for each Section to understand how the Project may specifically impact the health and wellbeing of different communities. This includes the following communities:

- | | | |
|--|--------------------------------------|-------------------|
| • Thurlby | • Hobhole Drain and Fodder Dike Bank | • Hubberts Bridge |
| • Sloothby | • Northlands | • Kirton End |
| • Hogsthorpe | • Frithville | • Wigtoft |
| • Small settlements east of Burgh le Marsh | • Gipsey Bridge | • Burtoft |
| • Irby in the Marsh | • Langrick Bridge | • Bicker Haven |
| | • Brothertoft | • Thorpe Fendyke |

- 3.5.923 Policies and procedures are in place to make sure all equipment will comply with public electric and magnetic fields (EMF) exposure limits. As such, physical health effects associated with the generation of EMFs is scoped out of the health and wellbeing assessment on the basis that EMF levels would be low such that significant adverse effects are not expected. An EMF report, separate to the Environmental Impact Assessment (EIA) process, will be prepared as part of the Project.

- 3.5.924 No mental health impacts as a result of EMFs are expected as a result of the Project as described within **PEI Report Volume 2 Part C Route-wide Chapter 8 Health and Wellbeing**. Furthermore, no significant impact on health and wellbeing as a result of changes in access to promoted recreational routes and open space; or changes to employment were identified.

- 3.5.925 The health and wellbeing assessment recognises that concerns about the health impacts of EMF may adversely impact some people's mental health by heightening

anxiety. However, it is anticipated that this group is likely to be very small, and that this impact will be effectively mitigated by National Grid's engagement with the community.

- 3.5.926 For further information on EMFs please refer to **The graduated swathe – Question 3a and other relevant feedback** under Health and Wellbeing.
- 3.5.927 The health and wellbeing assessment assesses the impact of changes to landscape and visual on health and wellbeing in conjunction with air quality, noise, and traffic and transport. This combination effect is assessed as 'Neighbourhood Quality'. For a neighbourhood quality effect to be identified, at least two significant residual effects must combine at the same location. There is evidence to suggest links between neighbourhood quality and health and wellbeing, as health and wellbeing can be adversely impacted by changes to air quality, noise, visual amenity, increased traffic. This will be assessed within the Environmental Statement (ES) and if required, mitigation put in place to address these impacts.
- 3.5.928 The health and wellbeing assessment will continue to be updated to ensure health and wellbeing concerns and impacts of local communities are taken into account.

Landscape and Visual

- 3.5.929 A large proportion of the community members' responses expressed concerns with landscape and visual impacts, which are summarised as follows:
- i. Impacts on local hamlets and villages, including Weston and surrounding villages and their views and character;
 - ii. Impacts on the views to/from the Lincolnshire Wolds National Landscape (AONB);
 - iii. Impacts on the landscape due to flat topography; and
 - iv. Impacts on the landscape around the River Witham.
- 3.5.930 **National Grid Response:** National Grid develops its Projects in line with national policy and our statutory duties to develop an efficient, economic and co-ordinated network, and have regard to preserving amenity and mitigating impacts. We recognise that overhead lines can give rise to adverse landscape and visual effects, and we carefully consider these along with technical requirements and cost when developing our projects.
- 3.5.931 National Grid has carefully considered the potential impacts of the Project at an early stage, and the findings and justifications for the selection of the emerging preferred corridor in which the new overhead line is proposed to be routed, can be found in the Corridor and Preliminary Routeing and Siting Study (CPRSS), which is available on our Project website. Through the routeing and siting exercise we have sought to reduce the impact on landscape character and visual amenity. We will continue to consider both landscape character and amenity value as we develop our proposals and seek to reduce effects.
- 3.5.932 The likely effects of National Grid's proposals in this area on landscape character and visual receptors are set out in **PEI Report Volume 2 Part B Section 4 Chapter 2 Landscape** and **Chapter 3 Visual**. A preliminary visual assessment has been undertaken for each community, or parish, within the Study Area. A number of viewpoints have been selected to represent the views from local communities. Viewpoints have been included along the River Witham to ensure these are considered in the assessment. These are presented in **PEI Report Volume 3 Part B Sections 1**

to 7 Appendix 3A Proposed Viewpoints and will form the basis for the Landscape and Visual Impact Assessment (LVIA).

- 3.5.933 It is acknowledged that this Section of the Project does contain a number of communities identified as having potential significant effects due to the flat landscape and expansive views. Significant effects have been identified for the communities of Holland Fen with Brothertoft, Frampton, Kirton, Swineshead and Wigtoft. The Project will also cross the River Witham and the River Welland where receptors would have close proximity views and some significant effects are possible. Additional mitigation measures will be considered to filter views from properties and waterways during the Environmental Statement (ES) stage.
- 3.5.934 The Lincolnshire Wolds National Landscape (AONB) is over 20 km from this Section of the Project. Although it may form a distant skyline in views, it is considered that the Project in this Section would not have significant effects on the designation.
- 3.5.935 National Grid will be producing a LVIA that will, in addition to other topic specific assessments, form the latter part of the Environmental Impact Assessment (EIA) for the Project. This will include a write-up of an assessment of the effects on the landscape character of the area and visual effects from communities. Where likely significant effects are anticipated, the LVIA will consider and identify areas where it may be necessary and appropriate to put forward potential mitigation as part of an iterative design and assessment process.

Noise and Vibration

- 3.5.936 Several community members' responses raised concerns the constant noise emitted from pylons, given they have a buzzing sound and felt it would pose a constant nuisance for local residents and those with sensitive hearing.
- 3.5.937 **National Grid's response:** National Grid will be undertaking a noise and vibration assessment that will form part of the Environmental Impact Assessment (EIA) for the Project. Noise levels and the effect on residential properties as well as other sensitive receptors, such as hospitals and schools are carefully considered during Project development, assessed according to the appropriate UK standards, and mitigated where necessary. The early findings are presented in a **PEI Report**, as part of the Stage 2 consultation before being refined and submitted in an Environmental Statement (ES) which will form part of the eventual Development Consent Order (DCO) application.
- 3.5.938 An initial assessment of noise and vibration effects from the Project is presented in **PEI Report Volume 2 Part B Section 4 Chapter 10 Noise and Vibration**. The assessment considers the potential effects from construction noise and vibration, and construction traffic noise, and indicates no likely significant noise effects in Section 4 with mitigation (BPM) in place. The contractor will be required to employ BPM as described in the Preliminary CoCP to reduce the effects of construction noise and vibration.
- 3.5.939 A low noise conductor system is proposed for the overhead line. As such, operational noise is scoped out of the assessment on the basis that operational noise levels would be low, even directly underneath the line, such that significant adverse effects are not expected. A brief explanation is provided in **PEI Report Volume 2 Part B Section 4 Chapter 10 Noise and Vibration** and further information will be provided in the ES which will form part of the Development Consent Order (DCO) application.

Flood Risk and Drainage

- 3.5.940 A few community members' responses raised concerns about flooding due to the amount of concrete associated with the construction of overhead lines, and that this may cause more flooding around the area, particularly in Boston.
- 3.5.941 **National Grid's response:** The Project and draft Order Limits have been designed to avoid sensitive receptors as far as practicable. The Project seeks to avoid flood risk and potentially significant effects via the sequential approach to routing and siting, minimising significant effects where possible.
- 3.5.942 **PEI Report Volume 2 Part B Section 4 Chapter 6 Water Environment and Flood Risk** identifies the initial assessment of impact on the water environment and flood risk using desk-based assessment of existing data. The potential for loss of the floodplain and changes in floodplain flow conveyance will be managed through embedded control measures.
- 3.5.943 The area within the Section 4 draft Order Limits is mostly defended floodplain with small parts undefended or in Flood Zone 1. Therefore, under normal conditions, there will be no effect on floodplain storage and conveyance arising from the Project's construction activities. However, under conditions of flood defence overtopping or breach, the presence of the Project construction works could lead to a change in residual flood risk for external receptors, through reducing floodplain storage or impeding flood conveyance.
- 3.5.944 A full assessment of potential changes in flood risk to external third party receptors has not yet been completed. There are several factors which require further assessment to inform the final Flood Risk Assessment (FRA) and Environmental Statement (ES), informed by engagement with the EA. Specifically these include confirmation of the standard of defence provided by the existing system of flood risk management assets; confirmation of compensatory storage requirements; review existing flood models and confirmation of the scope of future assessment to be reported within the FRA and ES. Further information has been provided in **PEI Report Volume 3 Part C Appendix 5A Preliminary Flood Risk Assessment**.
- 3.5.945 The operational overhead line will not involve a large amount of ground disturbance nor large amounts of concrete. Ultimately, there will be no significant increase in permanent impermeable area associated with the foundation elements of pylons along this Section of the route and therefore these elements alone are not likely to result in significant loss of floodplain storage capacity. The presence of pylons in the floodplain could result in snagging of debris causing debris accumulation on the pylon legs. This too is unlikely to result in significant effects upon flood risk due to impacts upon floodplain storage or flow conveyance. It should be noted that Boston is located outside of the Study Area and situated in a low lying area, already in Flood Zone 3 with the predominant source of flood risk being tidal.

Groundwater

- 3.5.946 The Environment Agency noted that there are no SPZs in this area.
- 3.5.947 **National Grid's response:** The Project has been designed to take into account and avoid sensitive hydrogeological receptors where practicable, within the balance of other relevant design factors, to minimise/prevent any significant effects on these receptors. This includes groundwater abstractions and SPZs. There are no SPZs within this Section of the Project, therefore no action to avoid such features through the design process was required.

Weston Marsh substation – Question 3o and other feedback relevant to this Section of the route

3.5.948 Question 3o of the feedback form asked:

‘Do you have a preference for the location of the Weston Marsh substation within the siting area?’

3.5.949 Additional design considerations related to Weston Marsh substation have emerged since Stage 1 consultation which are still being progressed. The area around the Weston Marsh substation graduated swathe has therefore not been refined into a more detailed design with an associated set of draft Order Limits in a similar manner to the other parts of the Project. Instead, a wider area which is slightly more refined than the graduated swathe presented at Stage 1 Consultation has been developed for Stage 2 Consultation, referred to as the Refined Weston Marsh Substation Siting zone, within which up to two substations could be sited along with the associated construction works and overhead line connections. As the design details in this area are yet to be refined, responses to feedback in this area are not able to be provided with the same level of detail as for other Sections of the Project, however initial responses based on the information currently available have been provided.

3.5.950 The feedback about Weston Marsh substation covered themes including construction; consultation; planning and design; ecology, biodiversity and environment; socio-economics; agricultural land; health and wellbeing; landscape and visual; noise and vibration; flood risk and drainage; and groundwater.

3.5.951 The following sections provide a summary of the comments made in relation to these themes and National Grid’s response to those. When narrating feedback, we refer to the Sections of the route as they were described at the time of the Stage 1 consultation. National Grid’s responses refer to the revised Sections of the route as presented as part of the Stage 2 consultation. For further detail on the changes in sectioning please see Approach to route Sections.

Construction

3.5.952 A few community members’ responses noted that the existing roads in the area are currently in poor condition and could be worsened by construction traffic impacts. Furthermore, it was highlighted that the available routes for construction traffic are inappropriate and concerns were raised regarding adverse impacts on road safety due to construction vehicles.

3.5.953 More information was requested about access routes, identifying Marsh Road as being narrow and unsuitable. A suggestion was made that a new access road to the Weston Marsh substation should be provided from the A17. Concern was expressed about construction traffic routeing via the A16, due to its collision record.

3.5.954 A few community members’ responses highlighted that increased traffic associated with the construction of the Project will negatively impact commuter routes and cause traffic disruption for local residents.

3.5.955 **National Grid Response:** We recognise that construction of the Project would result in potential impacts to local areas, including the use of temporary land for construction activities including working areas for construction equipment and machinery, site offices, welfare, storage and vehicular access routes. The Corridor and Preliminary Routeing and Siting Study (CPRSS), published at the stage 1 consultation, explains

that our approach to the appraisal of design options considers a range of topics with various technical considerations including construction and delivery issues.

- 3.5.956 The **PEI Report** undertakes an initial appraisal of the suitability of local roads to accommodate the forecast volume of construction traffic movements. This includes consideration of road geometry, congestion, accidents and sensitive receptors that include local amenities, schools and non-motorised user activity. Sensitive routes will be avoided where practicable, and construction haul roads used where appropriate along with maximising the use of suitable major and strategic roads. **PEI Report Volume 2 Part B Section 5 Chapter 9 Traffic and Movement** and **PEI Report Volume 3 Part B Sections 1 to 7 Appendix 9B Preliminary Construction Information** and **Appendix 9C Future Baseline and Impact Analysis** identify Primary Access Routes to construction access points (bellmouths), compounds and substations, along with an estimate of average daily traffic based on the existing information available at the time of writing. Our initial appraisal included in **PEI Report Volume 2 Part B Section 5 Figure 9.5 Preliminary Impact Analysis** shows impacts on the roads that result in potential significant effect. These routes are identified as part of the Primary Access Route network to the substation(s) and will require discussion with the local highway authority and possibly further assessment to determine the effect, if any, on users of the highway. This will consider operation of roads and junctions during commuter peak periods if required. Construction traffic routeing will be discussed with the appropriate highway authorities during preparation of the Transport Assessment, which will be reported in the Environmental Statement (ES).
- 3.5.957 Access routes to Weston Marsh substation(s) are not confirmed at this stage. Within the **PEI Report** Marsh Road is considered as a possible route for construction vehicles and identified for further assessment. The suitability of the road will be considered in more detail and if improvement works are required, such as localised widening, this will be discussed with the local highway authority. Alternative access options are still under consideration.
- 3.5.958 A review of the available accident data has been considered in assessing the sensitivity of the A16, a summary of which is provided in the **PEI Report** with the location of recorded accidents shown on **PEI Report Volume 2 Part B Section 5 Figure 9.4 Route Sensitivity**. The initial findings set out in the **PEI Report**, i.e. the suitability of the A16 for construction access, is subject to further discussion with the local highway authority and will consider the estimated number of construction vehicle movements, existing baseline conditions and if any mitigation works are required to accommodate the estimated increase in construction traffic.
- 3.5.959 A Code of Construction Practice (CoCP) and Construction Traffic Management Plan will be prepared and submitted with the Development Consent Order (DCO) application. These documents will include commitments to reduce construction impacts together with a framework for detailed management plans to be prepared at detailed design stage to reduce and mitigate potential impacts and/or disruptions that may arise during the construction phase. Road conditions will be monitored and remediated, as required, to safely accommodate construction traffic. A Preliminary CoCP is available as part of the Stage 2 consultation.

Consultation

- 3.5.960 A few community members' responses stated that insufficient information was available to provide meaningful comments on the proposed substation. Information

highlighted as absent in the consultation documents included the scale/size and appearance of the substation and the precise location of the proposed substation. Furthermore, Weston Parish Council requested specific details about the proposals at Weston Marsh and the potential impacts to the area.

3.5.961 **National Grid Response:** For National Grid's responses on consultation materials and feedback please refer to Our consultation - Question 6f and other , under Consultation materials.

3.5.962 Information on substations, including their purpose on the energy network, how they work, the different types in operation and the substations proposed as part of this Project are discussed in Chapter 2 of the Corridor and Preliminary Routeing and Siting Study (CPRSS) that was published as part of the Stage 1 consultation.

Planning and Design

3.5.963 A few community members' responses made design suggestions in relation to the new Weston Marsh substation, which are summarised as follows:

- i. Suggestion to underground the Weston Marsh Substation to reduce visual impacts to the fen landscape and countryside.

National Grid's response: National Grid is not considering undergrounding of substations across the entirety of the proposals. Undergrounding a substation bears significant constraints, including maintenance, flood risk, construction challenges, the volume of earth works required and associated adverse environmental impacts and cost. Undergrounding a large 400 kV substation is therefore not considered technically feasible or justified in the Weston Marsh area, or across the Project route. This is not being further considered as a mitigation strategy.

Ecology, Biodiversity and Environment

3.5.964 A large proportion of the community members' responses made comments relating to the proposed Weston Marsh substation siting area having potentially adverse impacts upon wildlife and the natural environment, which are summarised as follows:

- i. General concerns about the environment and local wildlife;
- ii. Concern about potential adverse impacts of the substation on buzzards, roe deer, white barn owls, muntjacs, foxes, rabbits, hares, pheasant, English partridges, fieldfares and insects; and
- iii. Concerns about bats, bees, owls and migrating birds.

3.5.965 It was suggested that tree planting around the proposed substation could help encourage more wildlife to the area.

3.5.966 **National Grid's Response:** The Project has been designed to avoid direct impacts upon European Designated Sites (Special Areas of Conservation, Special Protection Areas and Ramsar sites) and Sites of Special Scientific Interest.

3.5.967 Through routeing and siting National Grid has sought and will continue to reduce as far as practicable potential impacts on biodiversity including habitats and protected species. The process of siting will take account of existing biodiversity, the natural environment and, where practicable, seeks to avoid wildlife, and where not feasible, reduce potential impacts on areas of ecological sensitivity including protected and

notable species and their associated habitats through mitigation. A suite of habitat and species surveys will inform the ecological baseline, this data is still being collected and will be provided at the Environmental Statement (ES) stage per Chartered Institute of Ecology and Environmental Management guidance. The surveys include bats, badgers, great crested newts, otter, fish, aquatic macroinvertebrates, aquatic macrophytes, water vole, reptiles, and breeding and non-breeding birds. The Environmental Impact Assessment (EIA) for the Project will assess the effects on important ecological features using this baseline information. Some species are not protected or notable such as deer, foxes, rabbits, pheasants and bees (kept by beekeepers) and therefore will not be assessed. However, the overall impact on ecology is taken into account as part of the EIA process for the Project.

- 3.5.968 The initial assessment including the surveys undertaken are reported in **PEI Report Volume 2 Part B Section 5 Chapter 4 Ecology and Biodiversity**. The initial assessment identifies that at this stage significant effects cannot be excluded, and further survey work (ongoing) will be used to confirm the status of these species, inform the design of appropriate mitigation and a full assessment of effects that will be reported in the ES.
- 3.5.969 National Grid note the suggestion that additional planting could encourage wildlife to the area. Locations for ecological mitigation and landscape screening will be identified as the Project design evolves. The Project is committed to delivering a Biodiversity Net Gain (BNG) for the Project and the baseline ecology surveys and BNG unit calculations will be used to inform the Project design. Opportunities to enhance biodiversity will be sought both within the draft Order Limits and through delivery with partners in the wider area.
- 3.5.970 With regard to electric and magnetic fields impacts on bees please refer to The graduated swathe – Question 3a and other relevant feedback , under Impacts on bees and ability to pollinate.

Socio-economics

- 3.5.971 Several community members' responses commented that any infrastructure would have adverse impacts on tourism and businesses in the area, specifically local caravan sites (not specified), and Crowtree Wigwams.
- 3.5.972 **National Grid's response:** Through the routeing and siting exercise National Grid has sought to reduce impacts to businesses and the local economy, as evidenced in the Strategic Options Report (SOR) and the Corridor and Preliminary Routeing and Siting Study (CPRSS) published at the Stage 1 consultation. To reduce potential impacts, we have identified businesses, including equestrian centres and enterprises and their primary function, and those that are likely to generate tourism. These have been and will continue to be considered during the iterative design process.
- 3.5.973 From a socioeconomic perspective, the likely effects of National Grid's proposals on local businesses including those operating in connection with tourism (e.g. holiday parks and caravan sites, including Crowtree Wigwams) are considered in **PEI Report Volume 2 Part B Section 5 Chapter 11 Socio-economics, Recreation and Tourism**. In summary no significant adverse effects are anticipated for socio-economics, recreation and tourism receptors, noting this excludes above ground renewable energy generation infrastructure, within Section 5, as a result of the construction, operation and maintenance phase of the Project. An assessment of the direct effects of the Project on above ground renewable energy generation

infrastructure (solar and onshore wind farms) as socio-economics receptors will be presented in the Environmental Statement (ES).

- 3.5.974 With regard to settlements and population, affected communities (local communities, including populations of towns and villages) **PEI Report Volume 2 Part C Route-wide Chapter 7 Socio-economics, Recreation and Tourism** identifies that at this preliminary stage it is anticipated that likely non-significant effects associated with construction activities would generally be minor adverse and temporary, with effects felt most by communities in closest proximity to the Project. We will report on any indirect amenity effects for affected communities as part of the socio-economics, recreation and tourism assessment, which might occur through in-combination effects across the Project (such as noise and vibration, visual, and transport and movement effects). **PEI Report Volume 2 Part C Route-wide Chapter 10 Cumulative Effects** presents a preliminary assessment of cumulative effects upon common receptors across environmental topics identified within **PEI Report Volume 2 Part B** (intra-project) and identifies a shortlist of other Committed Developments with which there may be potential for cumulative effects and the relevant environmental topics for such effects (inter-project). The full cumulative effects assessment will be reported within the ES.
- 3.5.975 **PEI Report Volume 2 Part C Route-wide Chapter 7 Socio-economics, Recreation and Tourism** identifies that at this stage it is anticipated that likely non-significant effects associated with construction activities would generally be minor adverse and temporary with effects felt most by communities in closest proximity to the Project. The **PEI Report** also assesses that non-local workers would require accommodation in the local area, which is likely to be serviced from hotels and similar establishments such as B&Bs, and non-serviced accommodation including holiday lets, caravan parks and tourist campsites, and other collective accommodation. Overall, both temporary positive benefits to tourist accommodation businesses and temporary adverse effects through a reduction in tourist accommodation bed spaces are anticipated in relation to the labour market during construction. Given the preliminary number of construction workers anticipated to be employed on the Project, and the level of likely spare capacity for bedspace, the effects are not likely to be significant.
- 3.5.976 It should be noted that this is an ongoing assessment and is subject to changes due to the ongoing development of the Project. A full detailed assessment will be included within the ES submitted with the Development Consent Order (DCO) application.
- 3.5.977 The caravan sites referenced in community members' responses may not be considered within the socio-economics, recreation and tourism assessment because they may be situated outside the relevant Study Area (within 500m of the development Order Limits) and therefore are not predicted to experience any significant effects as a result of construction, operation or maintenance of the Project.

Agricultural land

- 3.5.978 Several community members' responses expressed concern about the impacts of the substation on high quality agricultural land. This included both loss of arable land and reduced quality of land.
- 3.5.979 **National Grid's response:** National Grid recognises that there is the potential for impacts on agricultural land. We look to limit the impact on agricultural land through careful and considered routeing and siting of infrastructure and through consultation with affected landowners. We are and will continue to work with all landowners who

may be affected by the proposals to understand the impacts as the Project is developed.

- 3.5.980 The draft Order Limits shown include areas of land required for temporary construction activities including temporary construction compounds, and access etc, as well as permanent infrastructure including substations.
- 3.5.981 Attempts have been made to avoid Best and Most Versatile (BMV) agricultural land as part of the design evolution. Where BMV agricultural land is to be developed, if possible, this will be directed at land of the lowest possible grade.
- 3.5.982 **PEI Report Volume 2 Part B Section 5 Chapter 8 Agriculture and Soils** provides a preliminary assessment on the impact of the Project on agricultural land, soil resources, and agricultural landholdings using publicly available and purchased data related to land grades (according to the Agricultural Land Classification (ALC) system), soil profiles, and land use. The preliminary assessment has used publicly available Provisional ALC data, however, a detailed ALC survey will be conducted to inform a full assessment of the extent of land grades and soil types affected and will be reported in the Environmental Statement (ES).
- 3.5.983 The agricultural land within the draft Order Limits for Section 5 is provisionally mapped as ALC Grades 1 agricultural land. Grades 1, 2, and 3 are classified as being of Best and Most Versatile (BMV) land, as such Section 5 is considered likely to comprise BMV land. **PEI Report Volume 2 Part B Section 5 Chapter 8 Agriculture and Soils** reports a likely significant effect due to the temporary and permanent loss of agricultural land and soil function. National Grid are committed to the implementation of effective soil handling, storage, and reinstatement measures, which will be detailed in an Outline Soil Management Plan ('Outline SMP', submitted as part of the Development Consent Order (DCO) application), and would be critical in ensuring the minimisation of the effects and ensuring successful reinstatement of soils and agricultural land grade, where practicable.

Health and Wellbeing

- 3.5.984 A few community members' responses expressed general concerns about health and wellbeing impacts, resulting from the construction and operation of the Weston Marsh substation(s).
- 3.5.985 **National Grid's Response:** National Grid recognises people may have concerns about the potential impacts of living close to an overhead line and associated infrastructure and that the uncertainty whilst the proposals are developed may cause anxiety. Through the routeing and siting exercise National Grid has sought and will continue to reduce as far as practicable impacts on sensitive receptors, such as residential areas, education facilities and areas for recreation. A considerable amount of assessment work has been undertaken to allow preliminary judgements to be made about the design and routeing of the Project. This has been set out in various publications including the Corridor and Preliminary Routeing and Siting Study (CPRSS) and Strategic Options Report (SOR) as part of the Stage 1 consultation.
- 3.5.986 Further detailed assessment work has been undertaken since the Stage 1 consultation as reported in **PEI Report Volume 2 Part C Route-wide Chapter 8 Health and Wellbeing**. A health and wellbeing baseline has been established for each Section to understand how the Project may specifically impact the health and wellbeing of different communities. This includes the community of Weston.

- 3.5.987 Policies and procedures are in place to make sure all equipment will comply with public electromagnetic field (EMF) exposure limits, including the International Commission on Non-Ionizing Radiation Protection guidelines for electric and magnetic fields. As such, physical health effects associated with the generation of EMFs is scoped out of the assessment on the basis that EMF levels would be low such that significant adverse effects are not expected. An EMF report, separate to the Environmental Impact Assessment (EIA) process, will be prepared as part of the Project.
- 3.5.988 No mental health impacts as a result of EMFs are expected as a result of the Project as described within **PEI Report Volume 2 Part C Route-wide Chapter 8 Health and Wellbeing**. Furthermore, no significant impact on health and wellbeing as a result of changes in access to promoted recreational routes and open space; or changes to employment were identified.
- 3.5.989 For further information on EMFs please refer to The graduated swathe – Question 3a and other relevant feedback under Health and Wellbeing.
- 3.5.990 The Health and Wellbeing assessment assesses the impact of changes to landscape and visual on health and wellbeing in conjunction with air quality, noise, and traffic and transport. This combination effect is assessed as ‘Neighbourhood Quality’. For a neighbourhood quality effect to be identified, at least two significant residual effects must combine at the same location. There is evidence to suggest links between neighbourhood quality and health and wellbeing, as health and wellbeing can be adversely impacted by changes to air quality, noise, visual amenity, increased traffic. This will be assessed within the Environmental Statement (ES) and if required, mitigation put in place to address these impacts.
- 3.5.991 The health and wellbeing assessment will continue to be updated to ensure health and wellbeing concerns and impacts of local communities are taken into account.

Landscape and Visual

- 3.5.992 Several community members’ responses raised concerns about the potential landscape and visual impacts of the proposed Weston Marsh substation.
- 3.5.993 A few community members’ responses requested that the visual impact of the substation be sufficiently mitigated, and suggested natural screening such as trees or dense shrubs.
- 3.5.994 **National Grid’s response:** National Grid develops its Projects in line with national policy and our statutory duties to develop an efficient, economic and co-ordinated network, and have regard to preserving amenity and mitigating impacts. We recognise that overhead lines can give rise to adverse landscape and visual effects, and we carefully consider these along with other environmental and socio-economics considerations, technical requirements and cost when developing our Projects.
- 3.5.995 National Grid has carefully considered the potential impacts of the Project at an early stage, and the findings and justifications for the selection of the emerging preferred corridor in which the new overhead line is proposed to be routed and substation sites located, can be found in the Corridor and Preliminary Routeing and Siting Study (CPRSS), which is available on our Project website. Through the routeing and siting exercise we have sought to reduce the impact on landscape character and visual amenity. We will continue to consider both landscape character and amenity value as we develop our proposals and seek to reduce effects.

- 3.5.996 The likely landscape and visual effects of National Grid's proposals at Weston Marsh substation/s are considered in **PEI Report Volume 2 Part B Section 5 Chapter 2 Landscape** and **Chapter 3 Visual**. Currently the location of the substation/s is unknown and only a high level of potential effects reported.
- 3.5.997 Mitigation planting will be proposed around any substation/s locations to further reduce visual impacts and provide landscape integration. This is standard practice for new substation(s) and locations for planting will need to take account of the proposed overhead line and any underground cables connecting into the substation. At Weston Marsh the location of the substation/s is not defined, however planting will be proposed to screen and filter views from surrounding visual receptors. Due to the flat landform, screening planting will be effective for the substation/s but it is acknowledged that the overhead line will remain visible for communities.
- 3.5.998 National Grid will be producing a LVIA that will, in addition to other topic specific assessments, form the latter part of the Environmental Impact Assessment (EIA) for the Project. This will include an assessment of the effects on the landscape character of the area. Where likely significant effects are anticipated the LVIA will consider and identify areas where it may be necessary and appropriate to put forward potential mitigation as part of an iterative design and assessment process.

Noise and Vibration

- 3.5.999 A few community members' responses raised concerns regarding the impact of operational noise from the proposed substation.
- 3.5.1000 **National Grid's response:** National Grid will be undertaking a noise and vibration assessment that will form part of the Environmental Impact Assessment (EIA) for the Project. Noise levels and the effect on residential properties as well as other sensitive receptors, such as hospitals and schools are carefully considered during Project development, assessed according to the appropriate UK standards, and mitigated where necessary. The early findings are presented in a **PEI Report**, as part of the Stage 2 consultation before being refined and submitted in an Environmental Statement (ES) which will form part of the eventual Development Consent Order (DCO) application.
- 3.5.1001 An initial assessment of noise and vibration effects from the Project is presented in **PEI Report Volume 2 Part B Section 5 Chapter 10 Noise and Vibration**. The assessment considers the potential effects from construction noise and vibration, construction traffic noise, and operational noise.
- 3.5.1002 The new Weston Marsh substation(s) are currently proposed to only include connections and are not proposed to include equipment which would generate noise under normal operation, such as transformers. Auxiliary equipment within the substation would not generate significant levels of noise as is scoped out of the assessment. As such, there are no proposed sources of operational noise from the proposed substation that would generate significant effects during its normal operation. Operational noise from the proposed substation is therefore not significant and scoped out of further assessment. Should such equipment be determined to be required during design development, a noise impact assessment would be undertaken and mitigation measures would be specified in the ES, where required, to avoid significant adverse effects.

Flood Risk and Drainage

- 3.5.1003 A few community members' responses raised concerns around the Weston Marsh substation being in a flood-prone area and the potential for new infrastructure to contribute to further flooding. It was noted that the siting area is in Flood Zone 3 and further information was requested on how the substation proposals will adhere to Policy 4 of the South East Lincolnshire Local Plan regarding 'approach to flood risk'.
- 3.5.1004 A few community members' responses suggested that the pumping capacity of the Lords Drain Pumping Station on the River Welland be upgraded due to the large scale of the proposed substation. Some form of bunding around the site to protect from flooding was also suggested, as was dredging of local rivers around the substation.
- 3.5.1005 The Environment Agency's feedback noted that the whole siting zone sits within Flood Zone 3 with most risk being from extreme tidal events however the preferred location looks to avoid interaction with the river which is preferable. However, due to the location mitigation measures will need to be implemented to ensure the substation remains safe and working during breach and/or overtopping of coastal defence events.
- 3.5.1006 **National Grid Response:** The Project and draft Order Limits have been designed to avoid sensitive receptors as far as practicable. The Project seeks to avoid flood risk and potentially significant effects via the sequential approach to routeing and siting, minimising significant effects where possible.
- 3.5.1007 A full assessment of potential changes in flood risk to external third party receptors has not yet been completed. There are several factors which require further assessment to inform the final Flood Risk Assessment (FRA) and Environmental Statement (ES), informed by engagement with the EA. Specifically these include confirmation of the standard of defence provided by the existing system of flood risk management assets; confirmation of compensatory storage requirements; review existing flood models and confirmation of the scope of future assessment to be reported within the FRA and ES. Further information has been provided in **PEI Report Volume 3 Part C Appendix 5A Preliminary Flood Risk Assessment**.
- 3.5.1008 In accordance with Policy 4 of South East Lincolnshire Local Plan, the Project will ensure that development in flood-risk areas is carefully assessed, requiring site-specific flood risk evaluations, mitigation measures, and sustainable drainage systems while restricting high-risk uses to protect people and infrastructure. The potential for loss of the floodplain and changes in floodplain flow conveyance will be managed through embedded control measures as outlined in the Preliminary CoCP.
- 3.5.1009 Surface water drainage systems will provide attenuation of runoff from impermeable surfaces to greenfield rates (the rate expected on an undeveloped site and the rate that needs to be maintained after site development) and incorporate appropriate pollution prevention measures, incorporating the use of Sustainable Urban Drainage Systems (SuDS) as far as practicable. Watercourse conveyance capacity of the existing watercourses will incorporate morphological features to promote aquatic biodiversity to a level that is consistent with maintaining effective land drainage.
- 3.5.1010 The IDB drainage network conveys flows to the River Welland (Main River) via several water level control structures. The nearest water control structures to the Siting Zone are Lord's Drain Pumping Station and Lord's Drain Sluice (NGR TF295307). The risk of flooding posed to, and arising from, the Project, from tidal, fluvial, surface water, groundwater and sewer sources are all considered to require further assessment and is considered in detail in **PEI Report Volume 3 Part C Appendix 5A Preliminary Flood Risk Assessment**, with the risk of flooding from reservoirs, canals and

supporting infrastructure such as pumping stations assessed as a residual risk. This includes consideration of construction related activities such as access tracks, construction compounds and working areas” work. Consequently, there is a residual risk of flooding posed to the Refined Weston Marsh Substation Siting Zone associated with a potential failure of this structure, along with any other IDB drainage assets which manage water levels in the catchment, that will require further assessment within the FRA submitted in support of the Development Consent Order (DCO) application for the Project.

Groundwater

- 3.5.1011 The Environment Agency’s feedback identified there are a few licenced abstraction points within or close to the emerging preferred search location for this substation.
- 3.5.1012 **National Grid’s response:** The Project has been designed to take into account and avoid sensitive hydrogeological receptors wherever possible, within the balance of other relevant design factors, to minimise/prevent any significant effects on these receptors. This includes groundwater abstractions and aquifers of high sensitivity.
- 3.5.1013 There are no recorded groundwater abstractions within the Study Area for this Section, therefore there are no effects to be assessed for such receptors. Further detail on groundwater abstractions and the SPZ areas will be obtained from Anglian Water and the EA and utilise within the subsequent Environmental Statement (ES), to enable a detailed assessment for each high sensitivity area and determination of any likely significant effects and non-significant effects.
- 3.5.1014 Data to characterise existing water interests has been collected from the Environment Agency and Local Authorities. Based on the available data, four licensed surface water abstractions have been identified within the Section 5 Study Area. Additionally, correspondence with South Holland District Council indicates that there are no private water supplies located within the Section 5 Study Area.
- 3.5.1015 Further details are provided within **PEI Report Volume 2 Part B Section 5 Chapter 6 Water Environment and Flood Risk** and the predicted effects on these water resource receptors are considered Not Significant. National Grid will continue to engage with the Environment Agency and other relevant authorities regarding baseline conditions and receptors relevant to the assessment of effects upon water quality and any subsequent information provided will be taken into account in the assessment presented in the ES.

Section 10 River Welland to B1165 – Question 3p and other feedback relevant to this Section of the route

- 3.5.1016 Question 3p of the feedback form asked:
‘Do you have any comments about this Section of the route?’
- 3.5.1017 The feedback about Section 10 River Welland to B1165 covered themes including construction; consultation; historic environment; planning and design; ecology, biodiversity and environment; socio-economics; health and wellbeing; landscape and visual; and noise and vibration.
- 3.5.1018 The following sections provide a summary of the comments made in relation to these themes and National Grid’s response to those. When narrating feedback, we refer to the Sections of the route as they were described at the time of the Stage 1 consultation.

National Grid's responses refer to the revised Sections of the route as presented as part of the Stage 2 consultation. For further detail on the changes in sectioning please see Approach to route Sections.

Construction

- 3.5.1019 A few community members' responses noted that the existing roads in the area are currently in poor condition, describing them as "damaged", "narrow" and "unsuitable". Concerns were highlighted that the condition of the roads could be worsened by construction traffic impacts. Some of the responses mentioned that increased through traffic would be associated with improving the roads.
- 3.5.1020 Specific concerns were raised about potential construction traffic impacts at Moulton Seas Ends, where the existing HGV traffic is already too much. It is also noted that the pavements in this area are damaged due to misuse by road traffic.
- 3.5.1021 **National Grid's response:** We recognise that construction of the Project would result in some temporary impacts to local areas. The Corridor and Preliminary Routeing and Siting Study (CPRSS), published at the Stage 1 consultation, explains that our approach to the appraisal of design options considered a range of topics with various technical considerations including construction.
- 3.5.1022 The **PEI Report** appraises the suitability of local roads to accommodate the forecast volume of construction traffic movements. This includes consideration of road geometry, congestion, accidents and sensitive receptors that include local amenities, schools and non-motorised user activity. Sensitive routes will be avoided where practicable, and construction haul roads used where appropriate along with maximising the use of suitable major and strategic roads. **PEI Report Volume 2 Part B Section 6 Chapter 9 Traffic and Movement, PEI Report Volume 3 Part B Sections 1 to 7 Appendix 9B Preliminary Construction information and Appendix 9C Future Baseline and Impact Analysis** identify Primary Access Routes to construction access points (bellmouths), compounds and substations, along with an estimate of average daily flow, and also identify whether significant environmental effects are anticipated based on the existing information available at the time of writing. Our initial appraisal included in **PEI Report Volume 2 Part B Section 6 Figure 9.5 Preliminary Impact Analysis** shows impacts on the roads that result in potential significant effects. These routes are identified as part of the Primary Access Route network to Section 6 and will require discussion with the local highway authority and possibly further assessment to determine the effect, if any, on users of the highway. Construction traffic routeing will be agreed with the appropriate highway authorities during the full Transport Assessment, which will be reported in the Environmental Statement (ES).
- 3.5.1023 At this stage, it is not anticipated that construction HGV traffic will route through Moulton Seas End but will use the A151 and A16. Parts of the A151 (near Holbeach) and Weston are identified for further assessment as is Marsh Road, Stone Gate and the B1165.
- 3.5.1024 Where there is a requirement to use the local road network, a review has been conducted to ensure roads are wide enough to cater for large construction vehicles, identifying indicative locations for temporary highway improvements (for example passing places) on roads only suitable for single lane running. Further detail is available in section 8.3 of the Design Development Report (DDR) and on the Consultation Plans provided as part of Stage 2 consultation.

- 3.5.1025 A Code of Construction Practice (CoCP) and Construction Traffic Management Plan will be prepared and submitted with the Development Consent Order (DCO) application. These documents will include commitments to reduce construction impacts together with a framework for detailed management plans to be prepared at the detailed design stage to reduce and mitigate potential impacts and/or disruptions that may arise during the construction phase. Any requirements for monitoring of condition of roads and remediation will also be identified. A Preliminary CoCP is available as part of the Stage 2 consultation.

Consultation

- 3.5.1026 Several community members' responses made comments about the consultation material and identified what they considered to be missing information or matters that have not adequately been considered. In particular, it was noted that the preferred area around Moulton Seas End or Moulton is not very clear on the consultation materials.
- 3.5.1027 **National Grid's response:** For National Grid's responses on consultation materials and feedback please refer to Our consultation - Question 6f and other , under Consultation materials.

Historic Environment

- 3.5.1028 A few community members' responses identified the importance of considering and avoiding impacts of the Project on local heritage assets and features within this Section of the route including Moulton Church, Moulton Windmill, and assets at Delgate Bank. Concerns were also raised about in potential impacts of the Project on grade I and II Listed Buildings in general.
- 3.5.1029 **National Grid's response:** The Project and draft Order Limits have been designed to avoid sensitive receptors as far as practicable. This is in accordance with the Holford Rules applicable to routing of new overhead lines and the Horlock Rules which apply to design and siting of substations. These approaches are explained in further detail within the Corridor and Preliminary Routeing and Siting Study (CPRSS), Design Development Report (DDR) and **PEI Report Volume 2 Part A Chapter 3 Main Alternatives Considered**. Principles include, but are not limited to, seeking to avoid areas of highest amenity, cultural or scientific value, taking advantage of natural screening provided by existing landform and features (e.g. woodland) and keeping visual, noise and other environmental effects to a minimum.
- 3.5.1030 National Grid has carried out a preliminary assessment of likely effects on the historic environment arising from the proposals, which is reported in **PEI Report Volume 2 Part B Section 6 Chapter 5 Historic Environment**. In summary:
- i. The Church of All Saints (NHLE 1147325) is the only surviving medieval building in the Moulton Conservation Area, located east of the High Street and surrounded by urbanisation. The value of the grade I listed church is derived from its architectural interest and its historic relationship with the village, located within the old historic core of the settlement. The spire of the church is visible on roads into the village from the south and south-west, and across the wider agricultural landscape, with possible glimpses from the Project of the church spire. Urban development outside of the conservation area along with mature vegetation to the south and west screens views of the Project. Temporary construction works and the introduction of new infrastructure in the landscape within the wider setting of the Church of All Saints would constitute a negligible

- impact having little effect on how it is understood or appreciated. This would result in a negligible adverse effect, which is not significant.
- ii. The grade I listed Moulton Windmill is located within the Moulton Conservation Area approximately 1.8 – 2 km north of the draft Order Limits. Built in 1822, it has eight storeys and is the tallest windmill in the country, at 100 feet high to the top of its ogee cap, being fully restored as an operational wind-driven windmill. The setting of the windmill includes its location and historic relationship with the village of Moulton, including the grade II listed millhouse (to its immediate west), as well as the wider agricultural landscape over which it commands views enabled by its construction on what was the outskirts of the village. Temporary construction works and the permanency of the infrastructure in the landscape within the wider agricultural setting of the windmill would cause a slight change to the setting of the windmill and the way in which it is appreciated. This would result in a moderate adverse effect which would be significant.
 - iii. A group of three non-designated heritage assets are recorded at New England Farm, Delegate Bank to the east of the draft Order Limits. These comprise New England Farm a 19th century farmstead, farmhouse and former farm buildings. This complex of buildings has been converted and modernised. The principal elevation of the farmhouse is to the west with views across the surrounding fields which contribute to its agricultural setting and heritage value. The setting of these non-designated heritage assets includes the agricultural land within which the Project would be located. Construction activities would result in a temporary change to the setting of these non-designated heritage assets resulting in a temporary significant adverse effect. However, the long-term presence of the Project within the wider agricultural setting of the assets would only slightly change their setting and heritage resulting in a negligible adverse significance of effect which is not significant.

3.5.1031 We will continue to engage with Historic England and relevant local planning authorities on aspects relating to the historic environment and heritage assets, including appropriate mitigation measures and techniques and will take their views in account as the Project evolves.

Planning and Design

3.5.1032 Suggestions in relation to the routeing in this Section are summarised as follows:

- i. Suggestion to adopt more direct route across Holbeach Marsh as this presents a shorter, more direct route avoiding populated areas.

National Grid's response: During the development of potential overhead line, an early route corridor option between the area of Weston Marsh to Walpole, which routed closer to the coast (and the Wash) and crossing the general vicinity of Holbeach Marsh, was considered as part of the options appraisal. However, the option was discarded at an early stage and was not taken through as an option for more detailed appraisal (and therefore is not referenced in the Corridor and Preliminary Routeing and Siting Study (CPRSS)). The corridor was not preferred because of the technical complexities associated with multiple crossings of the existing 132 kV overhead line and a crossing of the existing 400 kV overhead line as well as a high-pressure gas pipeline. A northern corridor across Holbeach Marsh would also site infrastructure closer to environmental designations associated with the Wash and

presence of Flood Zone 2 and 3 (and generally being closer to the coast) presents greater risk of flooding.

- ii. Suggestion to underground the overhead line to avoid health and visual impacts to residents in South Holland.

National Grid's response: National Policy Statement (NPS) EN-5 makes it clear that the Government expects overhead lines to be appropriate in most instances, although it recognises that there may be, at particularly sensitive locations such as National Landscapes, potential adverse landscape and visual impacts of an overhead line which may make it unacceptable in planning terms, taking account of the specific local environment and context. As part of the routing and siting study and ongoing design development we have sought to route the proposed Project infrastructure away from residential property and environmental features. Undergrounding of overhead lines also needs to be considered in the context of a higher cost to bill-paying consumers, potential environmental implications of installation (due to the wider construction corridor required) and potential maintenance implications, as well as a requirement for sealing end compounds at the start and end point of the underground sections. Within the South Holland boundary there are not considered to be any particularly sensitive locations from a landscape and visual perspective where overhead lines would be considered inappropriate. Therefore, there are no proposals to underground within the district of South Holland. Please refer to the response under Health and Wellbeing which addresses health impacts associated with the Project.

- iii. Suggestion to underground the route between Sutterton Dowdyke and Tydd Gote to avoid impacts on the landscape.

National Grid's response: National Policy Statement (NPS) EN-5 makes it clear that the Government expects overhead lines to be appropriate in most instances, although it recognises that there may be, at particularly sensitive locations such as National Landscapes, potential adverse landscape and visual impacts of an overhead line which may make it unacceptable in planning terms, taking account of the specific local environment and context. As part of the routing and siting study and ongoing design development we have sought to route the proposed Project infrastructure away from residential property and environmental features. Undergrounding of overhead lines also needs to be considered in the context of a higher cost to bill-paying consumers, potential environmental implications of installation (due to the wider construction corridor required) and potential maintenance implications, as well as a requirement for sealing end compounds at the start and end point of the underground sections. Between Sutterton Dowdyke and Tydd Gote there are not considered to be any particularly sensitive locations from a landscape and visual perspective where overhead lines would be considered inappropriate. Therefore, there are no proposals to underground between Sutterton Dowdyke and Tydd Gote.

- iv. Suggestion to expand and make use of the Spalding Power Station in place of new substations.

National Grid's response: During the routeing and siting phase of project development, 4 potential siting areas were considered for siting of a proposed Weston Marsh substation (WM1, WM2, WM3 and WM4 as described in the Corridor and Preliminary Routeing and Siting Study (CPRSS)). However, none of these were located at the existing Spalding Power Station because proximity to the 'Spalding Tee-Point' (the point at which the existing 4ZM and 2WS 400 kV overhead lines meet) was

identified as a key engineering requirement for the substation location because diversions of the existing overhead lines into and out of the substation would be required, therefore siting zones in proximity to the Spalding Tee-Point were considered to reduce the significance of diversions. This remains a key consideration for future design work for the Refined Weston Marsh Substation Siting Zone.

- v. Suggestion to route the overhead line south of the corridor at Moulton to achieve a straighter, less congested route.

National Grid's response: National Grid has considered a potential route south of the emerging preferred corridor at Moulton and concluded that this would trigger significant adverse impacts to the setting of the King's Hall Moated Site, which is a designated Scheduled Monument and as such, this route is not preferred.

- vi. Suggestion to provide an alternative overhead line route at Weston to reduce the impact on their farmland, offer a shorter, more direct route, impact fewer dwellings overall and provide easier construction access (Route from Hall Lane, Weston in a slightly south-easterly direction, cross over the A151 east of Delgate Bank and then travel southwards on the west side of the Moulton Mere Drain all the way to where the proposed route turns east near the B1165).

National Grid's response: National Grid has considered a potential route in line with this suggestion; however it was not preferred over the proposed alignment because this, in addition to an existing overhead line, would encircle Weston to the north west and south east. Crossing High Road would be technically challenging because of the very limited space (roughly 100m) and presence of a planned housing development which would further constrain routeing. From an environmental perspective, this route would also site infrastructure closer to a conservation area in Moulton and closer to residential receptors.

3.5.1033 The following suggestions have been considered together:

- i. Suggestion to route the overhead line to avoid Broadgate House Farmhouse near Spalding to protect the architectural heritage of the farmhouse and its cultural significance.
- ii. Suggestion to shift the overhead line away from properties on Delgate Bank, Weston Hills avoiding the narrow gap between property cutouts, and impact on agricultural pastureland with rare historical agricultural features on Delgate Bank.

National Grid's response: The suggestions above were considered together as part of the design development process due to the nature of comments and proximity to one another and, as such, both are addressed in this response. Alternative alignments crossing Broadgate and Delgate Bank were considered during design development and ultimately this feedback has influenced the alignment design at this location. The proposed alignment routes south east and crosses Broadgate via a softer angle pylon (that is less visually intrusive in the landscape) and crosses further south of two properties (represented by cut outs in the Stage 1 consultation emerging preferred corridor) on Delgate Bank. For more information on the alignment considerations at this location, please refer to Chapter 5 of the Design Development Report (DDR).

- iii. Suggestion that the overhead line crosses the A151 west of the existing pumping facility so that it is equidistant between Fun Farm/Baytree Nurseries leisure destination and the Lincolnshire Field Products depot and domestic dwelling.

National Grid's response: The proposed alignment is reflective of this suggestion and routes between the pumping station (to the east) and the Lincolnshire Field Products depot (to the west).

- iv. Suggestion to avoid land owned by WM Morrisons at Spalding.

National Grid's response: The proposed alignment routes to the east of the land referred to in the response and as such, no direct impacts are anticipated.

- v. Suggestion that the overhead line should not be routed to the east of the roundabout on the A51 (that connects to High Road) near Weston to avoid affecting the car boot sale event.

National Grid's response: The proposed alignment is reflective of this suggestion and routes to the west of the A151/High Road roundabout, between the pumping station (to the east) and the Lincolnshire Field Products depot (to the west).

- vi. Suggestion to avoid using Sandy Gate, Sutton St James for construction traffic.

National Grid's response: National Grid has investigated this suggestion and can confirm that Sandy Gate will not be used for construction traffic due to its narrow carriageway. There will be crossovers for construction traffic on the haul road to cross Sandy Gate, but no construction traffic will enter or leave the haul road using Sandy Gate. Minor works maybe required at the vehicle crossover to provide suitable visibility between construction traffic and users of Sandy Gate. This will be agreed with the local highway authority.

Ecology, Biodiversity and Environment

- 3.5.1034 A considerable proportion of the community members' responses raised concerns about the potential negative impact of the Project on the natural environment, habitats, wildlife and ecology, including protected species, which are summarised as follows:

- i. General concerns about the environment and local wildlife;
- ii. Adverse impacts on ornithology, including impacts on bird migration routes, and concerns that overhead lines would be a collision risk to birds in the area;
- iii. Impacts on the coast, especially the Wash;
- iv. Impacts on wildlife in the area, including birds, newts, deer, bats, foxes, rabbits, hares, and insects. Specific species mentioned include swans, wader, geese, buzzards, white barn owl, muntjacs, pheasants, English partridges and fieldfares; and
- v. Impacts on habitats in the area, specifically bee hives and the ability of bees to pollinate.

- 3.5.1035 **National Grid's response:** The Project has been designed to avoid direct impacts upon European Designated Sites (Special Areas of Conservation, Special Protection Areas and Ramsar sites) and Sites of Special Scientific Interest. The likely significant effects upon sites such as the Wash SPA and Ramsar site, will be assessed within the Report to inform Habitats regulations assessments and the Environmental Statement (ES), and significant effects cannot be excluded at this stage in the assessment.

- 3.5.1036 Through routeing and siting National Grid has sought and will continue to reduce as far as practicable potential impacts on biodiversity including habitats and protected species. The process of routeing takes account of existing biodiversity, the natural environment and, where practicable, seeks to avoid wildlife, and where not feasible, reduce potential impacts on areas of ecological sensitivity including protected and notable species and their associated habitats through mitigation. A suite of habitat and species surveys will inform the ecological baseline, this data is still being collected and will be provided at ES stage as per Chartered Institute of Ecology and Environmental Management guidance. The surveys include bats, badgers, great crested newts, otter, fish, aquatic macroinvertebrates, aquatic macrophytes, water vole, reptiles, and breeding and non-breeding birds. The Environmental Impact Assessment (EIA) for the Project will assess the effects on important ecological features using this baseline information. This will include collision risk with the overhead line once all bird data has been collected, and where/if required design changes and/or appropriate mitigation measures will be proposed. National Grid note the concerns regarding larger wetland bird species which may form part of designated site assemblages. Some species are not protected or notable such as deer, foxes, rabbits, pheasants and bees (kept by beekeepers), and therefore will not be assessed. However, the overall impact on ecology is taken into account as part of the EIA process for the Project.
- 3.5.1037 The initial assessment including the surveys undertaken are reported in **PEI Report Volume 2 Part B Section 6 Chapter 4 Ecology and Biodiversity**. The initial assessment identifies that at this stage significant effects cannot be excluded, and further survey work (ongoing) will be used to confirm the status of these species, inform the design of appropriate mitigation and a full assessment of effects that will be reported in the ES.
- 3.5.1038 With regard to electric and magnetic fields impacts on bees please refer to The graduated swathe – Question 3a and other relevant feedback , under Impacts on bees and ability to pollinate.

Socio-economics

- 3.5.1039 A considerable proportion of the community members' responses raised concerns in relation to socioeconomic impacts, which are summarised as follows:
- i. Impacts on farming businesses in Spalding;
 - ii. Impact on the visitor economy and tourism businesses, particularly referring to holiday sites and large caravan sites located in the area and holiday rental owners, which may suffer as a result of a reduced attractiveness of the area. Particular concern was raised about the impact at Wigwam Holidays Crowtree;
 - iii. Impacts on WM Morrisons;
 - iv. Potential impact on a factory business which employs 300 people and provides 25% of the UK's retail onions; and
 - v. There are lots of small airfields (not specified) in the area, which is a safety concern with regards to the location of the proposed pylons and overhead lines.
- 3.5.1040 **National Grid's response:** Through the routeing and siting exercise National Grid has sought to reduce impacts to businesses and the local economy, as evidenced in the Strategic Options Report (SOR) and the Corridor and Preliminary Routeing and Siting Study (CPRSS) published at the Stage 1 consultation. To further reduce potential impacts, we have identified businesses and enterprises and their primary function,

including those in connection with tourism. These have been and will continue to be considered during the iterative design process.

- 3.5.1041 From a socioeconomic perspective, the likely effects of National Grid's proposals on local businesses including those operating in connection with tourism (e.g. holiday parks and caravan sites, including Wigwam Holidays) and farms that operate as commercial entities are considered in **PEI Report Volume 2 Part B Section 6 Chapter 11 Socio-economics, Recreation and Tourism**. In summary, no significant adverse effects are anticipated for socio-economics, recreation and tourism receptors within Section 6, as a result of the construction, operation and maintenance phase of the Project. An assessment of the direct effects of the Project on above ground renewable energy generation infrastructure (solar and onshore wind farms) as socio-economic receptors will be presented in the Environmental Statement (ES).
- 3.5.1042 With regard to settlements and population within affected communities (local communities, including populations of towns and villages), **PEI Report Volume 2 Part C Route-wide Chapter 7 Socio-economics, Recreation and Tourism** identifies that at this preliminary stage it is anticipated that likely non-significant effects upon amenity associated with construction activities would generally be minor adverse and temporary, with effects felt most by communities in closest proximity to the Project. We will report on any indirect amenity effects for affected communities as part of the socio-economics, recreation and tourism assessment, which might occur through in-combination effects across the Project (such as noise and vibration, visual, and transport and movement effects). **PEI Report Volume 2 Part C Route-wide Chapter 10 Cumulative Effects** presents a preliminary assessment of cumulative effects upon common receptors across environmental topics identified within **PEI Report Volume 2 Part B** (intra-project) and identifies a shortlist of other Committed Developments with which there may be potential for cumulative effects and the relevant environmental topics for such effects (inter-project). The full cumulative effects assessment will be reported within the ES.
- 3.5.1043 With regard to tourism including strategic visitor attractions and the impact of construction workforce on tourist accommodation bedspace, **PEI Report Volume 2 Part C Route-wide Chapter 7 Socio-economics, Recreation and Tourism** identifies that non-local workers would require accommodation in the local area, which is likely to be serviced from hotels and similar establishments such as B&Bs, and non-serviced accommodation including holiday lets, caravan parks and tourist campsites, and other collective accommodation. Overall, both temporary positive benefits to tourist accommodation businesses and temporary adverse effects through a reduction in tourist accommodation bed spaces are anticipated in relation to the labour market during construction. Given the preliminary estimated number of construction workers anticipated to be employed on the Project, and the level of likely spare capacity for bedspace, the preliminary assessment of effects sets out that these are not likely to be significant. For strategic visitor attractions, the preliminary assessment of these receptors is that effects are not expected to be significant.
- 3.5.1044 It should be noted that WM Morrisons is not considered within the socio-economics, recreation and tourism assessment because it is situated outside the relevant Study Area (within 500m of the development Order Limits) and therefore is not predicted to experience any significant effects as a result of construction, operation or maintenance of the Project. Similarly, no factory business has been identified of the description in consultation comments above in the Study Area.

- 3.5.1045 It should be noted that this is an ongoing assessment and is subject to changes due to the ongoing development of the Project. A full detailed assessment will be included within the ES submitted with the Development Consent Order (DCO) application.
- 3.5.1046 National Grid is aware of several airfields in the region that are within varying proximities to the proposed Project. Where possible, we have been engaging with airfield operators to better understand their activities, aircraft types and annual movements to inform our design development. National Grid has considered potential impacts to aviation receptors as outlined in Chapter 6 of the Design Development Report (DDR) with support from specialist aviation consultants. The closest known operational airfield to the Project in this area is Fenland Airfield, which has been included in the analysis of aviation receptors. This airfield is more than 2 km away from the proposed overhead line alignment, and as such no impacts on operations at this airfield are expected.
- 3.5.1047 With regard to users of airfields, aviation will be considered in the ES, whilst **PEI Report Volume 2 Part B Section 6 Chapter 11 Socio-economics, Recreation and Tourism** sets out the relevant baseline and explains how aviation will be assessed with a specialist standalone report in support of the ES.

Agricultural Land

- 3.5.1048 Several members of the community members' responses identified challenges for farming due to the presence of pylons and that this would lead to a loss of good quality agricultural land.
- 3.5.1049 **National Grid's response:** National Grid recognises that there is the potential for impacts on agricultural land. We look to limit the impact on agricultural land through careful and considered routeing and siting of infrastructure and through consultation with affected landowners. We are and will continue to work with all landowners who may be affected by the proposals to understand the impacts and potential mitigations as the Project is developed.
- 3.5.1050 The draft Order Limits shown include areas of land required for temporary construction activities including temporary construction compounds, and access etc, as well as permanent infrastructure including pylons and overhead line.
- 3.5.1051 Attempts have been made to avoid Best and Most Versatile (BMV) as part of the design evolution. Where BMV agricultural land is to be developed, if possible, this will be directed at land of the lowest possible grade.
- 3.5.1052 Direct permanent loss of agricultural land per pylon is restricted to the area of the foundation plinths. Where pylons are located within pasture land, the area beneath the pylon can still be grazed. It is acknowledged that where pylons are located within arable rotations or land used for hay and silage cropping, the area beneath the pylon is excluded from agricultural use during the operational phase, as agricultural machinery cannot be used in these areas.
- 3.5.1053 **PEI Report Volume 2 Part B Section 6 Chapter 8 Agriculture and Soils** provides a preliminary assessment on the impact of the Project on agricultural land, soil resources and agricultural landholdings using publicly available and purchased data related to land grades (according to the Agricultural Land Classification (ALC) system) soil profiles and land use. The preliminary assessment has used publicly available Provisional ALC data, however, a detailed ALC survey will be conducted to inform a

full assessment of the extent of land grades and soil types affected and will be reported in the Environmental Statement (ES).

- 3.5.1054 The agricultural land within the draft Order Limits for Section 6 is provisionally mapped as ALC Grade 1 and Grade 2, and as such is considered likely to comprise Best and Most Versatile land. **PEI Report Volume 2 Part B Section 6 Chapter 8 Agriculture and Soils** reports a likely significant effect due to the temporary and permanent loss of agricultural land and soil function. National Grid are committed to the implementation of effective soil handling, storage and reinstatement measures, which will be detailed in an Outline Soil Management Plan ('Outline SMP', submitted as part of the Development Consent Order (DCO) application), and would be critical in ensuring minimisation of effects and ensuring successful reinstatement of soils and agricultural land grade, where practicable.

Health and Wellbeing

- 3.5.1055 Several community members' responses raised concerns about the impacts of the Project on physical and mental health and wellbeing of the local communities. Specifically, there were concerns about the effects of living in proximity to pylons, the associated electric and magnetic fields (EMFs) radiation, and potential links to health conditions such as cancer.
- 3.5.1056 A few community members' responses were particularly worried about health impacts on residents at Bakestraw Gate in Moulton, Whaplode St Catherine and Spalding.
- 3.5.1057 **National Grid's response:** National Grid recognises people may have concerns about the potential impacts of living close to an overhead line and associated infrastructure, such as those in Moulton, Whaplode St Catherine and Spalding, and that the uncertainty whilst the proposals are developed may cause anxiety. Through the routeing and siting exercise National Grid has sought and will continue to reduce as far as practicable impacts on sensitive receptors, such as residential areas, education facilities and areas for recreation. A considerable amount of assessment work has been undertaken to allow preliminary judgements to be made about the design and routeing of the Project. This has been set out in various publications including the Strategic Options Report (SOR) and the Corridor and Preliminary Routeing and Siting Study (CPRSS) as part of the Stage 1 consultation.
- 3.5.1058 Further assessment work has been undertaken since the Stage 1 consultation as reported in **PEI Report Volume 2 Part C Route-wide Chapter 8 Health and Wellbeing**. A health and wellbeing baseline has been established for each Section to understand how the Project may specifically impact the health and wellbeing of different communities. This includes the following communities:
- Weston
 - Spalding
 - Low Fulney
 - Moulton
 - Whaplode
 - Whaplode Fen
 - Whaplode St Catherine
 - Holbeach St Johns
 - Newton- in - the Isle
 - Tydd St Giles
 - Tydd Gote
 - Four Gotes
 - Ingleborough
- 3.5.1059 Policies and procedures are in place to make sure all equipment will comply with public EMF exposure limits, including the International Commission on Non-Ionizing Radiation Protection guidelines for electric and magnetic fields. As such, physical health effects associated with the generation of EMFs is scoped out of the assessment

on the basis that EMF levels would be low such that significant adverse effects are not expected. An EMF report, separate to the Environmental Impact Assessment (EIA) process, will be prepared as part of the Project.

- 3.5.1060 No mental health impacts as a result of EMFs are expected as a result of the Project as described within **PEI Report Volume 2 Part C Route-wide Chapter 8 Health and Wellbeing**. Furthermore, no significant impact on health and wellbeing as a result of changes in access to promoted recreational routes and open space; or changes to employment were identified.
- 3.5.1061 The health and wellbeing assessment recognises that concerns about the health impacts of EMF may adversely impact some people's mental health by heightening anxiety. However, it is anticipated that this group is likely to be very small, and that this impact will be effectively mitigated by National Grid's engagement with the community.
- 3.5.1062 For further information on EMFs please refer to The graduated swathe – Question 3a and other relevant feedback under Health and Wellbeing.
- 3.5.1063 The health and wellbeing assessment assesses the impact of changes to landscape and visual on health and wellbeing in conjunction with air quality, noise, and traffic and transport. This combination effect is assessed as 'Neighbourhood Quality'. For a neighbourhood quality effect to be identified, at least two significant residual effects must combine at the same location. There is evidence to suggest links between neighbourhood quality and health and wellbeing, as health and wellbeing can be adversely impacted by changes to air quality, noise, visual amenity, and increased traffic. This will be assessed within the Environmental Statement (ES) and if required, mitigation put in place to address these impacts.
- 3.5.1064 The health and wellbeing assessment will continue to be updated to ensure health and wellbeing concerns and impacts of local communities are taken into account.
- 3.5.1065 In addition to health and wellbeing considerations, an Equality Impact Assessment (EqIA) will be undertaken in order to identify any differential or disproportionate impacts on vulnerable people as a result of the Project, in line with the Equality Act 2010. If any impacts are identified, the EqIA will recommend mitigations and actions to be put in place to reduce any impact.

Landscape and Visual

- 3.5.1066 A considerable proportion of the community members' responses raised concerns in relation to landscape and visual impact, which are summarised as follows:
- i. The potential for adverse impact on the landscape character of the area, which is noted by several community members as a flat, fenland landscape;
 - ii. Landscape and visual impact and potential for blight on the countryside in local areas such as Weston, Whaplode St Catherine, Sutton St. James, and The Moultons;
 - iii. Visual impacts from individual residential properties; and
 - iv. Impacts on views of and from Moulton Church and Moulton Windmill, which are both noted as grade I listed buildings.
- 3.5.1067 **National Grid's response:** National Grid develops its Projects in line with national policy and our statutory duties to develop an efficient, economic and co-ordinated network, and have regard to preserving amenity and mitigating impacts. We recognise

that overhead lines can give rise to adverse landscape and visual effects, and we carefully consider these along with other environmental and socio-economics considerations, technical requirements and cost when developing our Projects.

- 3.5.1068 National Grid has carefully considered the potential impacts of the Project at an early stage, and the findings and justifications for the selection of the emerging preferred corridor in which the new overhead line is proposed to be routed, can be found in the Corridor and Preliminary Routeing and Siting Study (CPRSS), which is available on our Project website. Through the routeing and siting exercise we have sought to reduce the impact on landscape character and visual amenity. We will continue to consider both landscape character and amenity value as we develop our proposals and seek to reduce effects.
- 3.5.1069 The likely effects of National Grid's proposals in this area on landscape character and visual receptors are set out in **PEI Report Volume 2 Part B Section 5** and **Section 6 Chapter 2 Landscape and Chapter 3 Visual**. A preliminary visual assessment has been undertaken for each community, or parish, within the Study Area. A number of viewpoints have been selected to represent the views from local communities. Viewpoints have been included along the River Welland and to illustrate views of Moulton Church and Moulton Windmill to ensure these are considered in the assessment. These are presented in **PEI Report Volume 3 Part B Sections 1 to 7 Appendix 3A Proposed Viewpoints** and will form the basis for the Landscape and Visual Impact Assessment (LVIA).
- 3.5.1070 No communities have been identified as experiencing likely significant visual effects during construction of the Project in Section 6. It is acknowledged that this Section of the Project does contain a number of communities identified as having potential significant effects during operation due to the flat landscape and expansive views. The preliminary visual impact assessment identifies effects for communities including Sutton St James, The Moultons, Weston, and Whaplode St Catherine. The preliminary landscape impact assessment concludes no significant effects for landscape receptors during construction or operation of the Project.
- 3.5.1071 National Grid will be producing a LVIA that will, in addition to other topic specific assessments, form the latter part of the Environmental Impact Assessment (EIA) for the Project. This will include a write-up of an assessment of the effects on the landscape character of the area and visual effects from communities. Where likely significant effects are anticipated, the LVIA will consider and identify areas where it may be necessary and appropriate to put forward potential mitigation as part of an iterative design and assessment process.

Noise and Vibration

- 3.5.1072 Several community members' responses expressed concerns about the noise and vibration generated by the pylons and overhead lines in this route Section, including the effects of noise on local communities, animals and wildlife.
- 3.5.1073 Specific concerns were raised about the effect of noise on the rehabilitation and wellbeing of rescue dogs at a residential property.
- 3.5.1074 **National Grid's response:** National Grid will be undertaking a noise and vibration assessment that will form part of the Environmental Impact Assessment (EIA) for the Project. Noise levels and the effect on residential properties as well as other sensitive receptors, such as hospitals and schools are carefully considered during Project development, assessed according to the appropriate UK standards, and mitigated

where necessary. The early findings are presented in a **PEI Report**, as part of the Stage 2 consultation before being refined and submitted in an Environmental Statement (ES) which will form part of the eventual Development Consent Order (DCO) application.

- 3.5.1075 An initial assessment of noise and vibration effects from the Project is presented in **PEI Report Volume 2 Part B Section 6 Chapter 10 Noise and Vibration**. The assessment considers the potential effects from construction noise and vibration, construction traffic noise, and operational noise and indicates that significant adverse effects are not expected at any noise sensitive locations in Section 6. The contractor will be required to employ best practicable means as described in the Preliminary CoCP to reduce the effects of construction noise and vibration. This is particularly the case where the route passes close to residential and other sensitive areas.
- 3.5.1076 A low noise conductor system is proposed for the overhead line. As such, operational noise is scoped out of the assessment on the basis that operational noise levels would be low, even directly underneath the line, such that significant adverse effects are not expected. A brief explanation is provided in **PEI Report Volume 2 Part B Section 6 Chapter 10 Noise and Vibration** and further information will be provided in the ES.

New Walpole substation – Question 3q and other feedback relevant to this Section of the route

- 3.5.1077 Question 3q of the feedback form asked:
- ‘Do you have a preference for the location of the New Walpole substation within the siting area?’***
- 3.5.1078 Comments on the new Walpole substation covered themes including construction; consultation; historic environment; planning and design; ecology, biodiversity and environment; socio-economics; agricultural land; health and wellbeing; landscape and visual; noise and vibration; walkers, cyclists and horse riders; flood risk and drainage; groundwater; and minerals and waste.
- 3.5.1079 The following sections provide a summary of the comments made in relation to these themes and National Grid’s response to those. When narrating feedback, we refer to the Sections of the route as they were described at the time of the Stage 1 consultation. National Grid’s responses refer to the revised Sections of the route as presented as part of the Stage 2 consultation. For further detail on the changes in sectioning please see Approach to route Sections.

Construction

- 3.5.1080 A few community members’ responses suggested that increased traffic associated with the construction of the Project will negatively impact commuter routes, cause traffic disruption for residents and have the potential to worsen the quality of existing roads. West Drove North was mentioned specifically.
- 3.5.1081 Furthermore, some community members’ responses noted potential adverse impacts on drainage due to compaction of soil by heavy construction machinery.
- 3.5.1082 Norfolk County Council’s feedback suggested that assessments for the construction traffic should be undertaken and discussed with relevant highways authorities. The feedback also provided advice on what the assessments should consider.

- 3.5.1083 **National Grid's Response:** We recognise that construction of the Project would result in some temporary impacts to local areas. The Corridor and Preliminary Routeing and Siting Study (CPRSS), published at the Stage 1 consultation, explains that our approach to the appraisal of design options considered a range of topics with various technical considerations including construction.
- 3.5.1084 The **PEI Report** appraises the suitability of local roads to accommodate the forecast volume of construction traffic movements. This includes consideration of road geometry, congestion, accidents and sensitive receptors that include local amenities, schools and non-motorised user activity. Sensitive routes will be avoided where practicable, and construction haul roads used where appropriate along with maximising the use of suitable major and strategic roads. **PEI Report Volume 2 Part B Section 7 Chapter 9 Traffic and Movement** and **PEI Report Volume 3 Part B Sections 1 to 7 Appendix 9B Preliminary Construction information** and **Appendix 9C Future Baseline and Impact Analysis** identify Primary Access Routes to construction access points (bellmouths), compounds and substations, along with an estimate of average daily flow based on the existing information available at the time of writing. Our initial appraisal included in **PEI Report Volume 2 Part B Section 7 Figure 9.5 Preliminary Impact Analysis** shows impacts on the roads that result in potential significant effects. These routes are identified as part of the Primary Access Route network to access the substation and will require discussion with the local highway authority and possibly further assessment to determine the effect, if any, on users of the highway. Construction traffic routeing will be discussed with the appropriate highway authorities during the full Transport Assessment, which will be reported in the Environmental Statement (ES). This includes West Drove North which is identified for further assessment due to the amount of traffic predicted to use it for construction. This will consider operation of roads and junctions during commuter peak periods if required.
- 3.5.1085 A Code of Construction Practice (CoCP) and a Construction Traffic Management Plan will be prepared and submitted with the Development Consent Order (DCO) application. These documents will include commitments to reduce construction impacts together with a framework for detailed management plans to be prepared at the detailed design stage to reduce and mitigate potential impacts and/or disruptions that may arise during the construction phase. Road conditions will be monitored and remediated, as required, to safely accommodate construction traffic. A Preliminary CoCP is available as part of the Stage 2 consultation.
- 3.5.1086 As set out within the Preliminary CoCP, appropriate control of runoff from working areas will be achieved through implementation of a Drainage Management Plan (DrMP) for the construction phase, which will cover all aspects of construction works and temporary infrastructure. The DrMP will use sustainable urban drainage systems (SuDS) principles, promoting infiltration of runoff wherever possible and specifying appropriate treatment and attenuation storage to ensure any discharges to watercourses are uncontaminated and limited to greenfield rates.
- 3.5.1087 Construction vehicles will utilise dedicated haul roads, which will be established within the site boundary. Measure W06 of the Preliminary CoCP requires the Project to incorporate appropriate surface water drainage measures into its final design for the haul roads, access tracks, works compounds and laydown areas so that they do not lead to a significant increase in flood risk.
- 3.5.1088 Use of dedicated haul routes will manage the risk of topsoil and subsoil compaction due to the movement of construction plant. Notwithstanding this, the Preliminary CoCP

measure AS08 also specifies a Soil Management Plan, which will set out how topsoil and subsoil will be stripped and stockpiled during establishment of haul roads, and an approach to reinstating soil that has been compacted, where required.

Consultation

- 3.5.1089 A few community members' responses emphasised the need to consult the local community and enable residents to meaningfully influence decision-making regarding the location of the new Walpole substation. Furthermore, concerns were raised about a decision already being made in relation the siting of the substation.
- 3.5.1090 A few community members' responses stated that insufficient information was available to provide meaningful comments on the proposed substation. Information highlighted as absent in the consultation documents included scale/size/footprint of the substation and the precise location of the proposed substation. Furthermore, it was noted that the new substation is to be located in Walpole, yet the proposed location sits within West Walton.
- 3.5.1091 A few community members' responses felt there was insufficient evidence as to why the substation siting location had been chosen.
- 3.5.1092 **National Grid's Response:** For National Grid's responses on consultation materials and feedback please refer to Our consultation - Question 6f and other , under Consultation materials.
- 3.5.1093 The new Walpole siting areas have been developed through definition of a Study Area (Step 1), mapping and weighting of features (Step 2 and Step 3), and an iterative identification, review and refinement process (Steps 4, 5 and 6), followed by Options Appraisal (Step 7). Following the selection of the emerging preferred siting zones and siting areas, a preliminary exercise was undertaken, in accordance with the Horlock Rules, to identify where it might be more appropriate to locate the required infrastructure. The outcome of the preliminary exercise was a 'graduated swathe'. The graduated swathe presented at Stage 1 consultation was both preliminary and indicative, and it was developed for the purposes of consultation and engagement. For the new Walpole substation, it was identified that the area most likely for infrastructure to be located was an area primarily encompassing WLPS5 as the emerging preference due to its position on/adjacent to the 4ZM 400 kV overhead line, reducing the required deviations of this overhead line and limiting the spread of impacts into the surrounding environment, which was reflected withing the 'graduated swathe'. Information on substations, including their purpose on the energy network, how they work, the different types in operation and the substations proposed as part of this Project are discussed in Chapter 2 of the Corridor and Preliminary Routeing and Siting Study (CPRSS) that was published as part of the Stage 1 consultation.

Historic Environment

- 3.5.1094 A few community members' responses expressed concern about negative impacts of the substation on heritage assets, including, a 14th century moat, and historic buildings such as the grade II listed Faulkner House.
- 3.5.1095 Some community members' responses noted concerns about negative impacts on land of archaeological interest in the vicinity of the proposed new Walpole substation, mentioning that the land has been the subject of explorative digs in the past.

- 3.5.1096 Norfolk County Council's feedback noted that the location is approximately 3 km south of the existing Walpole Bank substation and the scheme aligns closely with the Eastern Green Link 3 and 4 project. A recommendation was made that the council should be engaged directly on these matters.
- 3.5.1097 **National Grid Response:** The Project and draft Order Limits have been designed to avoid sensitive receptors as far as practicable. This is in accordance with the Holford Rules applicable to routeing of new overhead lines and the Horlock Rules which apply to design and siting of substations. These approaches are explained in further detail within the Corridor and Preliminary Routeing and Siting Study (CPRSS), Design Development Report (DDR) and **PEI Report Volume 2 Part A Chapter 3 Main Alternatives Considered**. Principles include, but are not limited to, seeking to avoid areas of highest amenity, cultural or scientific value, taking advantage of natural screening provided by existing landform and features (e.g. woodland) and keeping visual, noise and other environmental effects to a minimum. For historic environment, such measures include the avoidance of physical impacts to designated heritage assets and where practicable non-designated heritage assets, and where possible reducing potential impacts to the setting of designated heritage assets and non-designated heritage assets.
- 3.5.1098 National Grid has carried out a preliminary assessment of likely effects on the historic environment arising from the proposed new Walpole substation, which is reported in **PEI Report Volume 2 Part B Section 7 Chapter 5 Historic Environment**. In summary:
- i. The presence of the proposed substation within the landscape and the setting of Faulkner House (a grade II listed building) is considered to be significant. The permanency of the Project infrastructure in the landscape, from construction and throughout the duration of its operation, to the north-west of the property will be partially mitigated by vegetation screening with details of species types and height maturity to be confirmed at Environmental Statement (ES) stage. Whilst screening would reduce the intervisibility with the new infrastructure to some extent, the mass and height of the substation and pylons will still be apparent and will introduce an industrial change to the landscape within the setting of the listed building.
 - ii. The site of a medieval moated enclosure and great house, possibly site of the Rochford family mansion and a focus for medieval settlement along West Drove North, is located immediately east of the Project. The moat is rectangular in shape, and partially extant, with the north and west sides surviving. The feedback does not specify which land of archaeological interest is referred to. However, it is understood that this may refer to this particular asset. Archaeological investigations within the moat and the immediate surrounding area have identified the foundations of a wall, several layers of demolition material, pottery and brick dating to the late medieval period. There is potential for further surviving archaeological features within the moated area, including ancillary structures and linear features. These remains have the potential to be of national significance. The field containing the heritage asset has been excluded from the draft Order Limits meaning that the earthwork remains of the medieval moat, great house and any associated archaeological remains will not experience any physical impacts. The setting of the medieval moated enclosure and great house comprises the former extent of settlement along West Drove North, the historic relationship with the former Chapel of St Edmund/St Catherine to the east and surrounding medieval agricultural landscape. This setting already

includes the existing high voltage overhead line located west of the medieval moated enclosure which detracts from the wider agricultural setting. Construction of the Project to the west of the heritage asset may temporarily alter its setting of the heritage assets. The presence of the proposed Walpole B Substation and associated pylons within the landscape, also change the setting of the medieval moated enclosure and great house, although existing hedgerows and planned landscape planting would partially screen and soften views towards the Project. These temporary and long-term changes to the setting of the heritage asset would result in a significant adverse effect.

3.5.1099 National Grid are engaging directly with Norfolk County Council regarding the historic environment and archaeological matters, and the possible interactions and impacts arising from Grimsby to Walpole and the Eastern Green Links 3 and 4. Where practical we are developing an appropriate and combined approach to archaeological surveys and mitigation measures.

3.5.1100 National Grid will also continue to engage with Historic England and relevant local planning authorities, on aspects relating to the historic environment and heritage assets, including appropriate mitigation measures and techniques and will take their views into account as the Project evolves.

Planning and Design

3.5.1101 A large proportion of the community members' responses made design suggestions in relation to the new Walpole substation, which are summarised as follows:

- i. Suggestion to site the new Walpole substation in the Walpole Marshes area, south of Sutton Bridge Power Station, away from homes, schools and businesses.

National Grid's response: The Corridor and Preliminary Routeing and Siting Study (CPRSS) provides information regarding the identification of potential siting zones for Walpole substation within an identified Study Area (pages 154 to 156 and Figure 5-21). The identification of potential siting zones looked at relatively unconstrained areas of at least 45 hectares and revealed seven strategic areas, having regard to the proximity to homes, schools and businesses among other things. Siting areas assessed during routeing and siting were not proposed at this location because planning applications and presence of existing overhead lines reduce overall siting flexibility. Siting north of existing Walpole substation also triggers significant and complex overhead line realignment that a southern siting location reduces.

- ii. Suggestion to site the new Walpole substation next to West Drove North to minimise the impact of construction traffic on the villages.

National Grid's response: National Grid can confirm that this suggestion reflects the proposed design. Access to and from the substation site is proposed to come from the south from the A47 and onto West Drove North via Lynn Road, building a proposed new access road off the existing 'S' bend. The road would serve as a permanent access during both construction and operational phases.

3.5.1102 The following suggestions have been considered together:

- i. Suggestion to site the new Walpole substation near existing National Grid Walpole substation, far north east within the substation siting area and away from residential areas.
- ii. Suggestion to site the new Walpole substation further back from the road, to avoid disrupting footpaths and local businesses, as well as devaluation of homes.

National Grid's response: National Grid has considered a potential siting location north east of the substation siting zone presented at Stage 1 consultation (the preference at that time being to site to the south east). Following consideration, this potential location was not preferred because the presence of a high-pressure gas pipeline through the siting zone and to the north constrains overall siting flexibility and potential significant impacts of the proposed overhead line and existing connections to the Rose and Crown Solar Farm.

- iii. Suggestion to site the new Walpole substation adjacent to the sewage works on River Road.

National Grid's response: The area adjacent to the sewage works on River Road was considered within the Corridor and Preliminary Routeing and Siting Study (CPRSS) as part of the hybrid WLP4/WLP5 siting zones. The WLP4 siting area comprised the area to the west, near the sewage works, and WLP5 was further to the east on the other side of Mill Road.

An area primarily encompassing WLP5 was presented as the emerging preference and most likely location for the infrastructure due to its position on/adjacent to the 4ZM 400 kV overhead line, reducing the required deviations of the overhead line and limiting the spread of impacts into the surrounding environment. The key differentiator being the presence of the existing 4ZM 400kV line within WLP5, compared with no existing energy infrastructure within WLP4.

- iv. Suggestion to relocate the new Walpole substation to the west of River Nene due to the large number of green energy projects already being located in the area.

National Grid's response: The area to the west of River Nene was considered within the Corridor and Preliminary Routeing and Siting Study (CPRSS) as part of the WLP1, WLP2 and WLP3 siting zones (Chapter 12 of the CPRSS). However, an area primarily encompassing WLP4 and WLP5 were presented as the emerging preference and most likely location for the infrastructure due to its position on/adjacent to the 4ZM 400 kV overhead line, reducing the required deviations of the overhead line, offering the most siting flexibility and limiting the spread of impacts into the surrounding environment.

- v. Suggestion to site the new Walpole substation within a 'tanked hole' in the ground.

National Grid's response: The proposed substation is sited within a Flood Zone 2 and 3, which presents technical issues associated with lowering the substation. Furthermore, this would require significant earthworks and would likely result in increased ground disturbance, produce a larger footprint, increase anticipated

numbers of traffic movements and increase the overall cost of the Project. Impacts on the flood zone would remain, whatever the benefits in terms of visual impacts may be.

- vi. Suggestion that construction traffic for the new Walpole substation should use A47 and avoid Walpole Highway.

National Grid's response: Access to and from the substation site is proposed to come from the south from the A47 and onto West Drove North via Lynn Road, building a proposed new access road from the existing 'S' bend. The road would serve as a permanent access during both construction and operational phases.

- vii. Suggestion to site the new Walpole substation near Peterborough where impacts to residents could be reduced.

National Grid's response: Providing a connection point into the network at Peterborough would not meet the Project needs case. The Strategic Options Report (SOR) identified that an onshore strategic solution that achieves the Project needs case includes the requirement for an additional connection point sited at Walpole, located south of the B9 boundary. This substation is required to facilitate customer connections and uplift boundary capability across the B9 boundary.

An appraisal of several possible options and network configurations was carried out to identify which circuits the new Walpole substation should connect into, and the results of this appraisal are summarised in the New Walpole Substation Location Options Report. The outcome of this appraisal work recommended a connection into the Walpole – Burwell circuits. Therefore, the Study Area for the substation location was developed along these existing circuits.

- viii. Suggestion to site the new Walpole north of the A17.

National Grid's response: As detailed in Chapter 5 of the Corridor and Preliminary Routeing and Siting Study (CPRSS), an initial Walpole substation search area of 5 km from the existing 400 kV 4ZM overhead line between the existing Walpole substation and the Middle Level Main Drain was identified. The initial search area of 5 km was considered likely to yield suitable locations for siting while addressing the key drivers. Only a very small area of land north of the A17 was included within this initial Study Area but it was not preferred because it would significantly increase the works associated with diverting existing overhead lines into the substation and locate infrastructure closer to environmental designations associated with the Wash, including Sites of Special Scientific Interest, Ramsar sites, special areas of conservation and special protection areas.

- ix. Suggestion to site the new Walpole substation in the field opposite to the existing National Grid Walpole substation, on the other side of Walpole Bank, as an extension to the existing substation would have less impact than a new site.

National Grid's response: The suggested location at Walpole Bank for a substation siting area was assessed during the Design Change Control (DCC) process. Following our appraisal of this location, it was identified that siting directly adjacent to existing Walpole substation is not possible because of the security, safety and operational considerations associated with a site of that scale. Additionally, there is

already an extension proposed at existing Walpole substation to facilitate new connections and, combined with an existing planning application at this location, the overall siting flexibility would be significantly reduced.

- x. Suggestion to site the new Walpole substation in the western part of the proposed siting area.

National Grid's response: Within the Walpole siting zone presented at Stage 1 consultation, five siting areas were considered. Of these, two siting areas were located in the west of the siting zone - WLPS4 to the northwest and WLPS5 to the southwest. The emerging preference as per the graduated swathe in the Corridor and Preliminary Routeing and Siting Study (CPRSS) is WLPS1. A potential siting to the west, within the siting boundary, was assessed under the Design Change Control (DCC) process but it was concluded that siting in this location (north west) would interact existing network, a gas pipeline, be located too close to the River Nene and too close to the existing Walpole substation. Generally siting to the west would increase the significance of works associated with diverting existing overhead lines. Following the DCC process, this suggestion was not preferred.

As presented in the CPRSS an area primarily encompassing WLPS1 (located south east in the siting zone) was the emerging preference for substation infrastructure to be located due to its position on/adjacent to the 4ZM 400 kV overhead line, reducing the required deviations of this overhead line and limiting the spread of impacts into the surrounding environment.

- xi. Suggestion to site the new Walpole substation in Sandringham, which is a less populated area and would reduce impacts.

National Grid's response: Siting the new Walpole substation at this location would not be feasible due to the need to connect to the Walpole–Burwell circuits, thereby reinforcing the network south of B9 boundary to achieve the Project need case. Additionally, Sandringham is located in a National Landscape (AONB) and as such would not be an appropriate location for a substation.

- xii. West Walton Parish Council raised concerns about impacts of Walpole substation on green lanes and permissive paths, some of which form the Jubilee Path around the village. This will have an impact on health and well-being of the residents who use the green lanes and permissive paths regularly for walking, cycling and horse riding.

National Grid's response: No Public Rights of Way (PRoW) are crossed by the Section 7 draft Order Limits, however, the Jubilee Walk recreational route passes within the draft Order Limits. It provides a local walking route around West Walton. Whilst Jubilee Walk is not identified as a PRoW route, access to the walking route will be maintained through construction with interactions with construction traffic managed. It is envisaged that Jubilee Walk will remain open except for some activities at the beginning and end of the programme where routes will be closed for safety reasons.

- xiii. Support was expressed for the location of the new Walpole substation, permitting that cables are delivered underground or offshore.

National Grid's response: National Grid welcomes the respondents' views. Regarding having the cables offshore or underground please refer to Strategic options – Question 1a and other relevant feedback , under Alternative options.

- 3.5.1103 A few community members' responses noted concerns about the potential effect of the Project on existing or planned housing developments, while others raised concerns about the cumulative impacts of this Project in conjunction with other planned or consented schemes.
- 3.5.1104 **National Grid's response:** National Grid undertake regular monitoring of emerging development proposals, including housing developments, to keep informed of other development activity in the local area/region and enable collaboration and coordination with other projects where possible. As a result, National Grid is in ongoing discussions with a number of developers in the vicinity of the Grimsby to Walpole scheme. This process is informing design decisions (e.g. the routeing of the proposed transmission lines) and mitigation measures where needed, which is collectively helping to minimise impacts on local communities and the environment.
- 3.5.1105 National Grid are also aware of various projects that are currently identified as expected to connect to the proposed substation infrastructure included as part of the Project. These connections will either be network reinforcements or customer connections. National Grid is working closely with a number of these projects to provide a co-ordinated approach to project development, where possible as the design of the Project evolves. Where possible, we have been engaging with developers to understand and assess the interactions between projects and where appropriate, have made design changes or introduced mitigation measures to help reduce potential cumulative impacts as far as practicable.
- 3.5.1106 Furthermore, all identified emerging and committed developments will be considered as part of the inter-project cumulative effects assessment in the **PEI Report** prepared for the Stage 2 consultation. This will subsequently be published in the Environmental Statement (ES) accompanying the Development Consent Order (DCO) application.

Ecology, Biodiversity and Environment

- 3.5.1107 A large proportion of the community members' responses made comments relating to the proposed new Walpole substation siting area having potentially adverse impacts upon wildlife and the natural environment, which are summarised as follows:
- i. General concerns about the environment and local wildlife;
 - ii. Concern about potential adverse impacts of the substation on skylarks, hares and deer in the area; and
 - iii. Concerns about bats, bees, owls and migrating birds.
- 3.5.1108 Furthermore, some community members' responses suggested that more detailed environmental assessments should be undertaken to identify and mitigate potential impacts on the local environment.
- 3.5.1109 Norfolk County Council provided general comments regarding ecology due to the graduated swathe being imprecise. The Council asserted that the preferred route should be carefully refined, taking account of all relevant ecological impacts, including locally designated wildlife sites. All relevant habitat and species data from the Norfolk Biodiversity Information Service (NBIS), including all Local Wildlife Site information

should be included in desk studies and all surveys will need to be no older than 18 months.

- 3.5.1110 **National Grid's Response:** The Project has been designed to avoid direct impacts upon European Designated Sites (Special Areas of Conservation, Special Protection Areas and Ramsar sites) and Sites of Special Scientific Interest. There are no statutory or non-statutory designated sites overlapping with the proposed substation. The Wash and North Norfolk Coast SAC and the Wash SPA and Ramsar site fall within 10 km of the draft Order Limits. In addition, the Nene Washes SPA and Ramsar site and Ouse Washes SPA and Ramsar site, where bird species with large foraging ranges are noted as qualifying features, fall within approximately 11.7 km and 17.2 km of the draft Order Limits respectively. Potential impacts upon European designated sites will be assessed within the Environmental Statement (ES) and a Report to inform Habitats regulations assessment. The potential for impacts upon statutory and non-statutory designated sites such as SSSI, Local Wildlife Sites and County Wildlife Sites will be assessed and reported within the ES. Based upon the UKHab surveys completed within this area, and a review of desktop sources, the primary habitat present is cropland, with the surrounding habitats including arable field margins, hedgerows, patches of low diversity scrub and ditches. These features provide ecological connectivity through the landscape.
- 3.5.1111 Through routeing and siting National Grid has sought and will continue to reduce as far as practicable potential impacts on biodiversity including habitats and protected species. The process of siting will take account of existing biodiversity, the natural environment and, where practicable, seeks to avoid wildlife, and where not feasible, reduce potential impacts on areas of ecological sensitivity including protected and notable species and their associated habitats, through mitigation. A suite of habitat and species surveys will inform the ecological baseline, this data is still being collected and will be provided at ES stage per Chartered Institute of Ecology and Environmental Management guidance. The surveys include bats, badgers, great crested newts, otter, fish, aquatic macroinvertebrates, aquatic macrophytes, water vole, reptiles, and breeding and non-breeding birds. The Environmental Impact Assessment (EIA) for the Project will assess the effects on important ecological features using this baseline information. Some species are not protected or notable such as deer and bees (kept by beekeepers), and therefore will not be assessed. However, the overall impact on ecology is taken into account as part of the EIA process for the Project.
- 3.5.1112 The initial assessment including the surveys undertaken are reported in **PEI Report Volume 2 Part B Section 7 Chapter 4 Ecology and Biodiversity**. The initial assessment identifies that at this stage significant effects cannot be excluded, and further survey work (ongoing) will be used to confirm the status of these species, inform the design of appropriate mitigation and a full assessment of effects that will be reported in the ES.
- 3.5.1113 With regard to electric and magnetic fields impacts on bees please refer to The graduated swathe – Question 3a and other relevant feedback , under Impacts on bees and ability to pollinate.
- 3.5.1114 National Grid welcomes Norfolk County Council's feedback on ecology and with regard to using data from NBIS, the desk study data collected for the **PEI Report** included LERCs as data sources.

Socio-economics

- 3.5.1115 A few community members' responses, alongside technical stakeholder's feedback (West Walton Parish Council) noted that any infrastructure in the area would have adverse impacts on tourism and businesses in the area, including equestrian establishments in the area. Some community members' responses noted concerns that the substation could interfere with the siting of the Rose and Crown Solar Park.
- 3.5.1116 **National Grid's response:** Through the routeing and siting exercise National Grid has sought to reduce impacts to businesses and the local economy, as evidenced in the Strategic Options Report (SOR) and the Corridor and Preliminary Routeing and Siting Study (CPRSS) published at the Stage 1 consultation. To reduce potential impacts, we have identified businesses and enterprises, including equestrian centres and their primary function, and those that are likely to generate tourism. These have been and will continue to be considered during the iterative design process.
- 3.5.1117 From a socioeconomic perspective, the likely effects of National Grid's proposals on local businesses including those operating in connection with tourism (including equestrian centres) are assessed in **PEI Report Volume 2 Part B Section 7 Chapter 11 Socio-economics, Recreation and Tourism**. In summary no significant adverse effects are anticipated for socio-economics, recreation and tourism receptors, noting this excludes above ground renewable energy generation infrastructure, within Section 7, as a result of the construction, operation and maintenance of the Project. The Rose and Crown Solar Park was identified at Stage 1 and is discussed within the CPRSS and is considered in the **PEI Report**. An assessment of the direct effects of the Project on above ground renewable energy generation infrastructure (solar and onshore wind farms) as socio-economics receptors will be presented in the Environmental Statement (ES).
- 3.5.1118 With regard to settlements and population, affected communities (local communities, including populations of towns and villages) **PEI Report Volume 2 Part C Route-wide Chapter 7 Socio-economics, Recreation and Tourism** identifies that at this stage it is anticipated that likely non-significant effects associated with construction activities would generally be minor adverse and temporary, with effects felt most by communities in closest proximity to the Project. We will report on any indirect amenity effects for affected communities as part of the socio-economics, recreation and tourism assessment, which might occur through in-combination effects across the Project (such as noise and vibration, visual, and transport and movement effects). **PEI Report Volume 2 Part C Route-wide Chapter 10 Cumulative Effects** presents a preliminary assessment of cumulative effects upon common receptors across environmental topics identified within **PEI Report Volume 2 Part B** (intra-project) and identifies a shortlist of other Committed Developments with which there may be potential for cumulative effects and the relevant environmental topics for such effects (inter-project). The full cumulative effects assessment will be reported within the ES.
- 3.5.1119 With regard to tourism including strategic visitor attractions and the impact of construction workforce on tourist accommodation bedspace, **PEI Report Volume 2 Part C Route-wide Chapter 7 Socio-economics, Tourism and Recreation** identifies that non-local workers would require accommodation in the local area, which is likely to be serviced from hotels and similar establishments such as B&Bs, and non-serviced accommodation including holiday lets, caravan parks and tourist campsites, and other collective accommodation. Overall, both temporary positive benefits to tourist accommodation businesses and temporary adverse effects through a reduction in tourist accommodation bed spaces are anticipated in relation to the labour market during construction. Given the preliminary number of construction workers anticipated

to be employed on the Project, and the level of likely spare capacity for bedspace, the preliminary assessment of effects sets out that these are not likely to be significant. For strategic visitor attractions the preliminary assessment of these receptors is that the effects are not expected to be significant.

- 3.5.1120 It should be noted that this is an ongoing assessment and is subject to changes due to the ongoing development of the Project. A full detailed assessment will be included within the ES submitted with the Development Consent Order (DCO) application.

Agricultural Land

- 3.5.1121 Several community members' responses expressed concern about the impacts of the substation on high quality agricultural land. This includes both loss of arable land and reduced quality of land.
- 3.5.1122 **National Grid's response:** National Grid recognises that there is the potential for impacts on agricultural land. We look to limit the impact on agricultural land through careful and considered routeing and siting of infrastructure and through consultation with affected landowners. We are and will continue to work with all landowners who may be affected by the proposals to understand the impacts as the Project is developed.
- 3.5.1123 The draft Order Limits shown include areas of land required for temporary construction activities including temporary construction compounds, and access etc, as well as permanent infrastructure including substations.
- 3.5.1124 Attempts have been made to avoid Best and Most Versatile (BMV) agricultural land as part of the design evolution. Where BMV agricultural land is to be developed, if possible, this will be directed at land of the lowest possible grade.
- 3.5.1125 **PEI Report Volume 2 Part B Section 7 Chapter 8 Agriculture and soils** provides a preliminary assessment on the impact of the Project on agricultural land, soil resources and agricultural landholdings using publicly available and purchased data related to land grades (according to the Agricultural Land Classification (ALC) system) soil profiles and land use. The preliminary assessment has used publicly available Provisional ALC data, however, a detailed ALC survey will be conducted prior to submission the Environmental Statement (ES) to provide a full assessment of the extent of land grades and soil types affected.
- 3.5.1126 The agricultural land within the draft Order Limits at Walpole B is provisionally mapped as ALC Grade 2, and as such is considered likely to comprise Best and Most Versatile land. **PEI Report Volume 2 Part B Section 7 Chapter 8 Agriculture and soils** reports a likely significant effect due to the temporary and permanent loss of agricultural land and soil function. National Grid are committed to the implementation of effective soil handling, storage and reinstatement measures, which will be detailed in an Outline Soil Management Plan ('Outline SMP', submitted as part of the Development Consent Order (DCO) application), and would be critical in ensuring minimisation of effects and ensuring successful reinstatement of soils and agricultural land grade, where practicable.

Health and Wellbeing

- 3.5.1127 A few community members' responses expressed concern about health and wellbeing impacts, resulting from the construction and operation of the substation.

- 3.5.1128 **National Grid's Response:** National Grid recognises people may have concerns about the potential impacts of living close to an overhead line and associated infrastructure and that the uncertainty whilst the proposals are developed may cause anxiety. Through the routeing and siting exercise National Grid has sought and will continue to reduce as far as practicable impacts on sensitive receptors, including residential areas. A considerable amount of assessment work has been undertaken to allow preliminary judgements to be made about the design and routeing of the Project. This has been set out in various publications, including the Corridor and Preliminary Routeing and Siting Study (CPRSS) and Strategic Options Report, (SOR) published as part of the Stage 1 consultation.
- 3.5.1129 Further detailed assessment work has been undertaken since the Stage 1 consultation as reported in **PEI Report Volume 2 Part C Route-wide Chapter 8 Health and Wellbeing**. A health and wellbeing baseline has been established for each Section to understand how the Project may specifically impact the health and wellbeing of different communities. This includes the community of Walton.
- 3.5.1130 Policies and procedures are in place to make sure all equipment will comply with public electric and magnetic fields (EMF) exposure limits. As such, physical health effects associated with the generation of EMFs is scoped out of the health and wellbeing assessment on the basis that EMF levels would be low such that significant adverse effects are not expected. An EMF report, separate to the Environmental Impact Assessment (EIA) process, will be prepared as part of the Project.
- 3.5.1131 No mental health impacts as a result of EMFs are expected as a result of the Project as described within **PEI Report Volume 2 Part C Route-wide Chapter 8 Health and Wellbeing**. Furthermore, no significant impact on health and wellbeing as a result of changes in access to promoted recreational routes and open space; or changes to employment were identified.
- 3.5.1132 For further information on EMFs please refer to **The graduated swathe – Question 3a and other relevant feedback** under Health and Wellbeing.
- 3.5.1133 The Health and Wellbeing assessment assesses the impact of changes to landscape and visual on health and wellbeing in conjunction with air quality, noise, and traffic and transport. This combination effect is assessed as 'Neighbourhood Quality'. For a neighbourhood quality effect to be identified, at least two significant residual effects must combine at the same location. There is evidence to suggest links between neighbourhood quality and health and wellbeing, as health and wellbeing can be adversely impacted by changes to air quality, noise, visual amenity, increased traffic. This will be assessed within the Environmental Statement (ES) and if required, mitigation put in place to address these impacts.
- 3.5.1134 The health and wellbeing assessment will continue to be updated to ensure health and wellbeing concerns and impacts of local communities are taken into account.

Landscape and Visual

- 3.5.1135 Several community members' responses, alongside technical stakeholders' feedback noted concerns about the potential landscape and visual impacts of the proposed new Walpole substation.
- 3.5.1136 Several community members' responses expressed concern about new infrastructure changing the character of the existing rural landscape, especially the scale and height of the substation.

- 3.5.1137 A few community members' responses requested that the visual impact of the substation be sufficiently mitigated and suggested screening with dense planting and native trees.
- 3.5.1138 Norfolk County Council's feedback suggested that a LVIA should be undertaken, including a townscape assessment where necessary, and should consider all potential impacts, both during construction and operation, and cumulative impacts. The feedback noted that impacts on the Landscape Character and Visual Amenity should be avoided or minimised where possible, and mitigation measures should be identified where impacts cannot be avoided; also that careful consideration should be given to the new Walpole substation, where landscape and visual impacts have the potential to be significantly adverse and both short distance and long distance views should be taken into account. The feedback also suggested that in addition to layered planting consideration should be given to finishes, orientation of elements and siting of elements within the site to avoid continuous change on the horizon.
- 3.5.1139 **National Grid's response:** National Grid develops its Projects in line with national policy and our statutory duties to develop an efficient, economic and co-ordinated network, and have regard to preserving amenity and mitigating impacts. We recognise that substations can give rise to adverse landscape and visual effects, and we carefully consider these along with other environmental and socio-economics considerations, technical requirements and cost when developing our Projects.
- 3.5.1140 National Grid has carefully considered the potential impacts of the Project at an early stage, and the findings and justifications for the selection of the emerging preferred siting zones, can be found in the Corridor and Preliminary Routeing and Siting Study (CPRSS), which is available on our Project website. Through the routeing and siting exercise we have sought to reduce the impact on landscape character and visual amenity. We will continue to consider both landscape character and amenity value as we develop our proposals and seek to reduce effects.
- 3.5.1141 The likely effects of National Grid's proposals at Walpole B substation on landscape character and visual receptors are considered in **PEI Report Volume 2 Part B Section 7 Chapter 2 Landscape** and **Chapter 3 Visual**.
- 3.5.1142 Existing vegetation around the proposed Walpole B substation will be supplemented by additional planting, including woodland blocks and vegetation along field boundaries to create layers of filtering, which will help reduce the effects of the substation on the surrounding landscape and visual receptors, although some localised significant effects are predicted which is inevitable for a development of this size and scale.
- 3.5.1143 National Grid will be producing a Landscape and Visual Impact Assessment (LVIA) that will, in addition to other topic specific assessments, form the latter part of the Environmental Impact Assessment (EIA) for the Project. This will include a write-up of an assessment of the effects on the landscape character of the area and visual effects from communities. Where likely significant effects are anticipated, the LVIA will consider and identify areas where it may be necessary and appropriate to put forward potential mitigation as part of an iterative design and assessment process.

Noise and Vibration

- 3.5.1144 A few community members' responses raised concerns regarding the impact of noise from the proposed substation.

- 3.5.1145 **National Grid's response:** National Grid will be undertaking a noise and vibration assessment that will form part of the Environmental Impact Assessment (EIA) for the Project. Noise levels and the effect on residential properties as well as other sensitive receptors, such as hospitals and schools are carefully considered during Project development, assessed according to the appropriate UK standards, and mitigated where necessary. The early findings are presented in a **PEI Report**, as part of the Stage 2 consultation before being refined and submitted in an Environmental Statement (ES) which will form part of the eventual Development Consent Order (DCO) application.
- 3.5.1146 An initial assessment of potential noise impacts from the Walpole B substation has been undertaken. The operational noise impact has been assessed and presented in **PEI Report Volume 3 Part B Section 7 Appendix 10C Initial Operational Substation Noise Assessment**. The assessment indicates that the noise rating from the proposed Walpole B Substation would be low at nearby noise sensitive receptors where suitable noise mitigation measures are incorporated into the design. Potential impacts of operational noise from the new Walpole B substation would therefore likely not be significant.

Walkers, Cyclists and Horse Riders

- 3.5.1147 A few community members' responses raised concerns about disruption of closures of Public Rights of Way (PRoWs) and bridleways, including the Jubilee path and bridleways in the area.
- 3.5.1148 **National Grid's Response:** Through routeing and siting, National Grid has sought and will continue to reduce, as far as practicable, impacts and disruption to PRoW. The design process has identified the existing PRoW network and wider connectivity and has sought where practicable to reduce and where possible, remove impacts to PRoW. In the event that any significant impacts on PRoW are identified that cannot be avoided and mitigation is required, mitigation measures may include the temporary closure of PRoW during the construction phase, and where possible a diversion to allow for the continued use and movement through the wider PRoW network. We will work closely with the relevant local authorities to understand and gain information on PRoW and the local road network.
- 3.5.1149 Effects on PRoW will be mitigated where possible, maintaining access where practicable, with closures as a last resort. We will continue to engage with the interested parties and stakeholders on the PRoW network to enable feedback and input to be considered as the Project develops.
- 3.5.1150 The **PEI Report** reports our early assessment findings on traffic and transport, and this includes equestrian routes (i.e. bridleways). The **PEI Report** identifies the PRoWs affected by construction activity and the likely level of disruption anticipated. In most cases, PRoWs will be retained as open routes except for some activities during the end of the programme where routes will be temporarily closed for safety reasons. There are some routes that will be locally diverted (to join together) to minimise crossings of the haul road.
- 3.5.1151 No PRoW are crossed by the Section 7 draft Order Limits, however, the Jubilee Walk recreational route passes within the draft Order Limits. It provides a local walking route around West Walton. Whilst Jubilee Walk is not identified as a PRoW route, access to the walking route will be maintained through construction with interactions with construction traffic managed. It is envisaged that Jubilee Walk will remain open except

for some activities at the beginning and end of the programme where routes will be closed for safety reasons.

- 3.5.1152 From a socioeconomic perspective, the likely effects of National Grid's proposals on users of PRoW and promoted recreational routes are considered in **PEI Report Volume 2 Part B Section 7 Chapter 11 Socio-economics, Recreation and Tourism**. An assessment of the direct effects of the Project on users of PRoW and promoted recreational routes in relation to diversions, closures and management measures will be presented at Environmental Statement (ES) stage.

Flood Risk and Drainage

- 3.5.1153 A few community members' responses raised concerns around the new Walpole substation being located in a flood-prone area and the potential for new infrastructure contributing to further flooding.
- 3.5.1154 Norfolk County Council's feedback noted that the location of the proposed substation was not clear in the consultation material presented and that no consideration of flood risk and surface water management was made available. There is an expectation that appropriate details will be provided as the Project develops. Furthermore, it was noted that consideration of other ongoing NSIP schemes and major developments from outside of the energy sector and the cumulative impact on the flood risk need to be considered.
- 3.5.1155 The Environment Agency noted that the entirety of the siting zone sits within Flood Zone 3 and is affected by tidal flooding. All development will need to be mitigated for overtopping and/or breach events which may occur and have measures in place to ensure the substation is safe and remains working in major storm events.
- 3.5.1156 **National Grid's Response:** The Project and draft Order Limits have been designed to avoid sensitive receptors as far as practicable. The Project seeks to avoid flood risk and potentially significant effects via the sequential approach to routeing and siting, minimising significant effects where possible.
- 3.5.1157 National Grid has sought to and will continue to seek to reduce the impact on areas prone to flooding through the routeing and siting exercise. **PEI Report Volume 2 Part B Section 7 Chapter 6 Water Environment and Flood Risk** outlines the current and future flood risk at the new Walpole substation, from all sources of flooding in accordance with National Planning Policy Framework. The substation will be made safe for its lifetime without increasing flood risk elsewhere.
- 3.5.1158 As set out within **PEI Report Volume 2 Part B Section 7 Chapter 6 Water Environment and Flood Risk**, embedded design mitigation measures include, but are not limited to, the following:
- i. Flood protection measures for the substation are to be designed in accordance with National Grid internal guidance and consistent with planning policy requirements to ensure no increased flood risk to third parties.
 - ii. Substation surface water drainage systems will provide attenuation of runoff from impermeable surfaces to greenfield rates and incorporate appropriate pollution prevention measures, incorporating the use of Sustainable Urban Drainage Systems (SuDS) as far as practicable.
 - iii. If watercourse diversions are required to provide sufficient space for the substation platform, then these will be designed to provide an equivalent

conveyance capacity to the existing watercourses, and will incorporate morphological features to promote aquatic biodiversity to a level that is consistent with maintaining effective land drainage. Culverting will be avoided as far as practicable.

- iv. Any requirements for water supply and foul water treatment and disposal for office and welfare facilities at substations will be designed to minimise impacts on water resources and receiving water quality.

3.5.1159 Given that the Walpole B Substation is located within Flood Zone 3, in the absence of additional mitigation measures, the preliminary assessment identifies potential significant effects upon third party flood risk due to loss of floodplain storage and/or change in floodplain flow conveyance.

3.5.1160 However, a full assessment of potential changes in flood risk to external third-party receptors has not yet been completed. There are several factors which require further assessment to inform the final Flood Risk Assessment (FRA) and Environmental Statement (ES), informed by engagement with the EA. Specifically these include confirmation of the standard of defence provided by the existing system of flood risk management assets; confirmation of compensatory storage requirements; review existing flood models and agreement of the scope of future assessment to be reported within the FRA and ES.

3.5.1161 The full assessment of the effects of the Project upon flood risk within the Section 7 Study Area will be reported within the ES, including the details of any required additional mitigation measures necessary to avoid significant effects upon third party flood risk. This will include assessment of potential cumulative effects, including those resulting from other ongoing NSIP Schemes. A list of developments intended to be included within the Cumulative Effects Assessment reported within the ES is included within **PEI Report Volume 3 Part C Appendix 10B Cumulative Effects Assessment Shortlist of Committed Developments**.

Groundwater

3.5.1162 The Environment Agency's feedback noted that there is an abstraction licence on the River Nene near the siting location.

3.5.1163 **National Grid's response:** The Project has been designed to take into account and avoid sensitive hydrogeological receptors wherever possible, within the balance of other relevant design factors, to minimise/prevent any significant effects on these receptors. This includes surface water abstractions.

3.5.1164 Data to characterise existing water interests has been collected from the Environment Agency and Local Authorities. Based on the available data, no licensed surface water abstractions or discharges have been identified within the Section 7 Study Area. Additionally, correspondence with King's Lynn and West Norfolk District Council indicates that there are no private water supplies located within the Section 7 Study Area.

3.5.1165 One surface water abstraction was however identified within the Section 6 Study Area, outside the draft Order Limits. The surface water abstraction (NGR TF423153) is located on the North Level Main Drain downstream of the Section 6 draft Order Limits and is used for direct spray irrigation. Correspondence with South Holland District Council indicates that there are no private water supplies located within its reaches of the Section 6 Study Area.

- 3.5.1166 National Grid will continue to engage with the Environment Agency and other relevant authorities regarding baseline conditions and receptors relevant to the assessment of effects upon water quality, any subsequent information provided will be taken into account in the assessment presented in the Environmental Statement (ES).

Minerals and Waste

- 3.5.1167 Norfolk County Council's feedback noted there are no substantive comments on the search area for the new Walpole B substation at this stage ahead of any detailed Environmental Statement. This is largely because the proposed infrastructure in Norfolk would consist of overhead powerlines, pylons and a substation and the emerging preferred corridor does not contain any safeguarded mineral resource.
- 3.5.1168 **National Grid's response:** National Grid notes the comments. A Minerals Safeguarding Report has been prepared in support of the **PEI Report** for this Project. This report identifies the safeguarded minerals and mineral safeguarding areas in line with local and regional planning policy and any potential effects would be taken forward for assessment within **PEI Report Volume 2 Part B Section 7 Chapter 7 Geology and Hydrogeology**. There are no safeguarded minerals or mineral safeguarding areas within the Study Area (draft Order Limits and a 500 m buffer) for the Walpole B Substation, therefore there are no effects to assess within the **PEI Report**.

Section 11: B1165 to Walpole – Question 3r and other feedback relevant to this Section of the route

- 3.5.1169 Question 3r of the feedback form asked:
- ‘Do you have any comments about this Section of the route?’***
- 3.5.1170 Comments on Section 11: B1165 to Walpole covered themes including construction; historic environment; planning and design; ecology, biodiversity and environment; socio-economics; agricultural land; health and wellbeing; landscape and visual; walkers, cyclists and horse riders; flood risk and drainage; groundwater; and minerals and waste.
- 3.5.1171 The following sections provide a summary of the comments made in relation to these themes and National Grid's response to those. When narrating feedback, we refer to the Sections of the route as they were described at the time of the Stage 1 consultation. National Grid's responses refer to the revised Sections of the route as presented as part of the Stage 2 consultation. For further detail on the changes in sectioning please see Approach to route Sections.

Construction

- 3.5.1172 Several community members' responses raised concerns that local access roads and existing infrastructure is unsuitable for construction traffic. It was also noted that Mill Road is narrow and should not be used for access. Concerns were raised about the potential damage to bridleways and byways during construction works, requesting that further information is provided on mitigation measures and restoration plans once the work is completed. Furthermore, some community members' responses noted concerns about the impact of construction on local businesses due to the loss of land and construction traffic. More broadly, it was also noted that general disturbance would be caused to the local area through construction.

- 3.5.1173 Norfolk County Council's feedback noted that the Norfolk Fire & Rescue Service (NFRS) response to emergency incidents should, wherever possible, not be compromised by ongoing construction works, site or road closures.
- 3.5.1174 **National Grid's response:** We recognise that construction of the Project would result in potential impacts to local areas. The Corridor and Preliminary Routeing and Siting Study (CPRSS), published at the Stage 1 consultation, explains that our approach to the appraisal of design options considers a range of topics with various technical considerations including construction.
- 3.5.1175 The **PEI Report** appraises the suitability of local roads to accommodate the forecast volume of construction traffic movements. This includes consideration of road geometry, congestion, accidents and sensitive receptors that include local amenities, schools and non-motorised user activity. Sensitive routes will be avoided where practicable, and construction haul roads used where appropriate along with maximising the use of suitable major and strategic roads. **PEI Report Volume 2 Part B Section 6 Chapter 9 Traffic and Movement** and **PEI Report Volume 3 Part B Sections 1 to 7 Appendix 9B Preliminary Construction information** and **Appendix 9C Future Baseline and Impact Analysis** identify Primary Access Routes to construction access points (bellmouths), compounds and substations, along with an estimate of average daily flow and if significant environmental effects are expected based on the existing information available at the time of writing. Our initial appraisal included in **PEI Report Volume 2 Part B Section 6 Figure 9.5 Preliminary Impact Analysis** shows impacts on the roads that result in potential significant effects. These routes are identified as part of the Primary Access Route network to Section 6 and will require discussion with the local highway authority and possibly further assessment to determine the effect, if any, on users of the highway. Construction traffic routeing will be agreed with the appropriate highway authorities during the full Transport Assessment, which will be reported in the Environmental Statement (ES).
- 3.5.1176 We note that there appear to be two Mill Roads in the vicinity of the Walpole Substation; one running between Walpole St Andrew and West Walton and one running over the A47 to Walpole St Peter. The majority of construction HGVs would access Walpole Substation from the A47 and Lynn Road, however our assessment identifies a few vehicles that may use Mill Road to the south of Walpole St Andrew to access construction bellmouths. The suitability of this road and routing of HGVs, alongside mitigation, if required, will be discussed with the local highway authority during the full Transport Assessment, which will be reported in the ES.
- 3.5.1177 A Code of Construction Practice (CoCP) and Construction Traffic Management Plan will be prepared and submitted with the Development Consent Order (DCO) application. These documents will include commitments to reduce construction impacts together with a framework for detailed management plans to be prepared at detailed design stage to reduce and mitigate potential impacts and/or disruptions that may arise during the construction phase. Road conditions will be monitored and remediated, as required, to safely accommodate construction traffic. A Preliminary CoCP is available as part of the Stage 2 consultation.
- 3.5.1178 Access for emergency vehicles will not be compromised by ongoing construction works, site or road closures.
- 3.5.1179 A CoCP and a Construction Traffic Management Plan will be prepared and submitted with the DCO application. These documents will include commitments to reduce construction impacts together with a framework for detailed management plans to be prepared at the detailed design stage to reduce and mitigate potential impacts and/or

disruptions that may arise during the construction phase. A Preliminary CoCP is available as part of the Stage 2 consultation.

- 3.5.1180 From a socioeconomic perspective, the likely effects of National Grid's proposals on local businesses are considered in **PEI Report Volume 2 Part B Section 6 Chapter 11 Socio-economics, Recreation and Tourism**. At this stage no likely significant effects have been identified on local businesses in Section 6.

Historic Environment

- 3.5.1181 Several community members' responses, alongside technical stakeholders' feedback identified the importance of considering and avoiding impacts on local heritage assets and features in this Section of the route including: Ingleborough mill and local churches. Some community members' responses noted general concerns around the impact of the Project on historic farmland and listed buildings.
- 3.5.1182 Fenland District Council's feedback noted the impacts of the Project on undesignated heritage assets in Fenland, including an area of fen crossed by a number of roddons and areas of raised ground which were historically exploited. Tydd St Giles was specifically noted with medieval salt workings, medieval artefacts and major roddons crossing the area. Furthermore, it was requested that an assessment of the impact on designated and undesignated heritage assets be provided as part of the Stage 2 consultation.
- 3.5.1183 **National Grid's response:** The Project and draft Order Limits have been designed to avoid sensitive receptors as far as practicable. This is in accordance with the Holford Rules applicable to routing of new overhead lines and the Horlock Rules which apply to design and siting of substations. These approaches are explained in further detail within the Corridor and Preliminary Routeing and Siting Study (CPRSS), Design Development Report (DDR) and **PEI Report Volume 2 Part A Chapter 3 Main Alternatives Considered**. Principles include, but are not limited to, seeking to avoid areas of highest amenity, cultural or scientific value, taking advantage of natural screening provided by existing landform and features (e.g. woodland) and keeping visual, noise and other environmental effects to a minimum. For historic environment, such measures include the avoidance of physical impacts to designated heritage assets and where practicable non-designated heritage assets, and where possible reducing potential impacts to the setting of designated heritage assets and non-designated heritage assets.
- 3.5.1184 National Grid has carried out a preliminary assessment of likely effects on the historic environment arising from the from the proposals in this Section of the route, which is reported in **PEI Report Volume 2 Part B Section 6 Chapter 5 Historic Environment**. In summary:
- i. Ingleborough Mill (NHLE 1077675) is a grade II listed building within close proximity to the temporary works and permanent infrastructure that will be introduced into the landscape. These will alter the setting of the mill resulting in significant effects. This will be assessed further, in consultation with the relevant heritage stakeholders, and will be reported in the Environmental Statement (ES).
 - ii. Designated churches have been assessed taking into account their wider settings including the parishes they serve and historic associations. The design of the Project has avoided direct physical impacts to these assets, including listed buildings and historic farmsteads, although there will be setting changes to

some heritage assets due to the temporary construction activities and/or the introduction of the permanent infrastructure in the landscape.

- 3.5.1185 Research undertaken to inform the **PEI Report** has identified a number of medieval and post-medieval artefact scatters and records of several possible medieval salt working sites in the area surrounding Tydd St Giles. One of these possible medieval salterns is located close to the proposed route of the Project. The results of a programme of archaeological surveys will confirm the presence or absence of buried archaeological remains within the draft Order Limits and will inform further assessment of the potential impacts of the Project on non-designated heritage assets.
- 3.5.1186 National Grid will continue to engage with Historic England and relevant local planning authorities, on aspects relating to the historic environment and heritage assets, including appropriate mitigation measures and techniques and will take their views into account as the Project continues to develop.

Planning and Design

- 3.5.1187 A large proportion of the community members' responses made design suggestions in relation to this Section of the route, which are summarised as follows:
- i. Suggestion to place a pylon at the immediate end of the field's track that runs from the Sutton St James road to the north, into the middle of the field, for the farm property immediately north of Leedsgate Bridge.

National Grid's response: The proposed design currently sites a pylon approximately 320m south west of the end of field track at this location to maintain a Holford Rules compliant alignment, that maintains as short and straight a route as possible, and minimising the overall number of angle pylons required which are more visually intrusive in the landscape.

- 3.5.1188 Several alignment options were suggested near one another across Sutton St Edmund and Tydd St Giles, as detailed below:
- i. Suggestion to route overhead line further south in swathe to avoid residential properties south of Tydd St Giles.
 - ii. Suggestion to route overhead line as far south of Goochgate as possible, and as near to Sutton St Edmunds as possible.
 - iii. Preference suggested for the lighter routing to the west (/south) of Broad Drove West in Tydd St Giles, to route further from the residential property and equestrian stables, and to avoid the impacts on nesting birds and fallow deer that would result from the current preferred (darker) routing.
 - iv. Suggestion to route overhead line along the western edge of the corridor near the nature reserve/wood at Inley Drove and the ancient hedgerows and uncultivated wildlife haven at Thistlewood Farm, Old Fendike.
 - v. Suggestion to route the overhead line away from the existing pylon tract at Tydd Fen and Newton Fen.
 - vi. Suggestion to route overhead line to the west of the cut-out at New Fen Dike to avoid the Fen Dyke Project.

National Grid's response: The proposed alignment routes towards the south east to take the eastern path where the corridor presented at Stage 1 consultation splits around the large cut-out from the corridor at New Fen Dike. Consideration of the two routes found little to choose between them environmentally, and National Grid has therefore opted to route the proposed alignment to the east of New Fen Dike as this results in a shorter overhead line alignment than routeing to the west of New Fen Dike (in accordance with Holford Rule 3).

There are several large cut-outs from the corridor presented at Stage 1 consultation in the vicinity of Tydd St Giles Fen, along Cross Drove, Broad Drove West and Middle Broad Drove. Consideration of routeing options around these cut-outs concluded with a preference to route to the north of the corridor presented at Stage 1 consultation for a number of reasons as presented in section 7.7 of the Design Development Report (DDR).

Overall, the proposed alignment is considered to balance considerations of routeing in compliance with the Holford Rules, avoiding additional technical complexity, avoiding the potential for introducing a wirescape with the existing UKPN 132 kV overhead line, and minimising the impacts on residential properties as far as practicable.

For more information on alignment development considerations please refer to section 7.7 of the DDR and section 3.8 of **PEI Report Volume 2 Part A Chapter 3 Main Alternatives Considered**.

3.5.1189 Several suggestions were made regarding undergrounding this Section of the route:

- i. Suggestion to underground the overhead line near the Walpoles to reduce impacts to the historical significance of the area.
- ii. Norfolk County Council has requested that the any new 400kV overhead line within the Norfolk County Council area be undergrounded to avoid additional cumulative landscape and visual impacts in the area.
- iii. Suggestion to underground the overhead line where it passes in proximity to properties at Mill Road near West Walton.

National Grid's response: National Policy Statement (NPS) EN-5 makes it clear that the Government expects overhead lines to be appropriate in most instances, although it recognises that there may be, at particularly sensitive locations such as Areas of Outstanding Natural Beauty (AONB), potential adverse landscape and visual impacts of an overhead line which may make it unacceptable in planning terms, taking account of the specific local environment and context. As part of the routing and siting study and ongoing design development we have sought to route the proposed Project infrastructure away from residential property and environmental features. Undergrounding of overhead lines also needs to be considered in the context of a higher cost to bill-paying consumers, potential environmental implications of installation (due to the wider construction corridor required) and potential maintenance implications, as well as a requirement for sealing end compounds at the start and end point of the underground sections. Within the Norfolk boundary there are not considered to be any particularly sensitive locations from a landscape and visual perspective where overhead lines would be considered inappropriate. Therefore, there are no proposals to underground within the Norfolk boundary.

The Walpoles lie to the north of the proposed alignment. Within both settlements are a number of listed buildings, including grade I and II* listed structures, and beyond the settlements are a number of isolated grade II listed buildings. There are no scheduled monuments or conservation areas within the vicinity. In addition, the local Historic Environment Record identifies sporadic evidence of medieval activity, but nothing that would indicate a significant historic landscape.

The settlements are well contained and, while they do have a relationship with the landscape beyond, this is not considered to be a key factor in their significance, particularly over the distances involved. Added to this, there are already a number of existing overhead lines and associated infrastructure within this landscape all of which are closer than the proposed.

- iv. Suggestion to route overhead line to the east side of Rookery Farm, located on Joy's Bank in Holbeach St Johns, as the western routing is close to a residential dwelling and route overhead line 400m to the south of their property at Neal's Gate to support neurodivergent requirements.

National Grid's response: National Grid has considered the suggested routeing option to the east at Joy's Bank and concluded that routeing either east or west at this location introduces new visual impacts to different receptors and that, on balance, a central alignment is furthest from any single property with open views. Routeing east or west is also likely to increase the number of angle pylons required in the alignment, which would be more visually intrusive in the landscape and ultimately deviate from the Holford Rules. Following a robust Design Change Control (DCC) process, the suggested routeing is not preferred.

- v. Suggestion to route overhead line to the north of Whaplode St Catherine and Sutton St James, so it is further away from residential properties.

National Grid's response: As part of the early routeing and siting study work that identified potential suitable overhead line corridors, the Project team identified a northern corridor between Weston Marsh and Walpole that routes to the north of Whaplode St Catherine and Sutton St James. During this phase of project development, we identified several notable constraints that include the 4ZM 400 kV overhead line, residential properties, priority habitats, designated heritage assets such as listed buildings and scheduled monuments, Tydd St Giles Golf and Country Club, areas of Flood Zones 2 and 3 and watercourses. The northern corridor was not preferred by the Project team and so it was discounted from further design development. For more information on routeing and siting considerations at this location, please refer to Chapter 8 of the Corridor and Preliminary Routeing and Siting Study (CPRSS).

- vi. Suggestion to route overhead line further south near West Walton, to pass close to the sewage works adjacent to the River Nene.

National Grid's response: As part of the Design Change Control (DCC) process, the suggested alternative alignment which routes further south, closer to the sewage works and east over the River Nene was considered. Outcomes of the appraisal work identified that this proposal increases the overall technical complexity of the alignment because it would increase the number of angle pylons required, increase the number

of high-pressure pipeline crossings, require over sail of a reservoir (that cannot be avoided completely) and would introduce challenges with conductor stringing during construction. Following the DCC process, this suggestion was not preferred.

- vii. Suggestion to route to the south of Dixon Drove where the corridor crosses Mill Road, to increase distance from residential properties.

National Grid's response: National Grid has investigated the possibility of routeing based on this suggestion and concluded that, regardless of where an alignment is routed at this location, potential visual impacts to properties cannot be completely avoided. In this circumstance, the preference is to keep the proposed alignment as straight and direct as possible to maintain compliance with the Holford Rules. Additionally, there are several pipelines located south which we would seek to avoid interaction with. Following the Design Change Control (DCC) process, this potential suggestion was not preferred.

- viii. Request for an extension to the cut-out adjacent to Broad Gate near Sutton St James to cover the full extent of the residential curtilage.

National Grid's response: National Grid has investigated the residential property referenced in the response and as part of design development (and in line with Corridor and Preliminary Routeing and Siting Study (CPRSS) methodology) have trimmed the cut-out to exclude the full extent of residential curtilage from land that may be required for the Project.

- ix. Concerns that the darkest shading of the swathe is 'directly over' a bungalow (located on Joy's Bank). There may be need to trim the swathe to the residential curtilage.

National Grid's response: National Grid has investigated the location referenced in the feedback and can confirm that no residential properties were included in the emerging preferred corridor along Joy's Bank. Additionally, the proposed alignment does not directly over sail the property in question.

- x. Suggestion to route overhead line more southerly from Whaplode St Catherine across Whaplode Fen due SSE, crossing the B1168 where it crosses South Holland Main Drain, then turning more SE to rejoin the proposed route near Tydd St Giles Fen, as this would avoid more residential properties than the currently proposed route.

National Grid's response: During initial routeing and siting of potential corridors, a potential southern corridor option was appraised that largely follows the routeing suggested in this feedback. This comprised a more southerly corridor from Whaplode St Catherine across Whaplode Fen due south by south east, crossing the South Holland Main Drain followed by the B1168, then routeing south east near to Tydd St Giles. Ultimately, this corridor option was discounted in favour of the emerging preferred corridor presented at Stage 1 consultation because it is a less direct and overall longer alignment. This option is referred to as 'S12' and more information on our findings can be found in the Corridor and Preliminary Routeing and Siting Study (CPRSS).

- xi. Part of the garden at Stoton's Gate, Holbeach St Johns, falls within the graduated swathe and should be removed.

National Grid's response: National Grid has investigated the residential property referenced in the response and as part of design development (and in line with CRPSS methodology) have trimmed the cut-out to exclude the full extent of residential curtilage from land that may be required for the Project.

- xii. Suggestion to shift overhead line further north near Whaplode St Catherine, away from properties on Cranesgate North, by routing to the north of the crossroads of Hurdletree Bank and Cranesgate North.

National Grid's response: During initial routeing and siting of potential corridors, a potential northern corridor option was appraised that largely follows the routeing under this suggestion. This option is referred to as covered under 'C23-N16', a corridor link connecting the central and northern corridor options. More information on the routeing considerations for 'C23-N16' are set out in Chapter 8 of the Corridor and Preliminary Routeing and Siting Study (CPRSS). This corridor option was discounted in favour of the emerging preferred corridor presented at Stage 1 consultation because it adds ~600m of additional overhead line and routes in proximity to an existing 400 kV overhead line, which is likely to encircle properties with potentially significant adverse visual impacts that may be unavoidable.

- xiii. Concerns that the proposed corridor is too close to Fenland Aero Club and will impact aircraft movements, and the overhead line encroaches into the 2 nautical mile aerodrome traffic zone to the north and to the east.

National Grid's response: National Grid is aware of several airfields in the region that are within varying proximities to the proposed Project. Where possible, we have been engaging with airfield operators (including Fenland Aero Club) to better understand their activities, aircraft types and annual movements to inform our design development. For more information on our approach to airfields, please refer to Chapters 7 and 8 of the Design Development Report (DDR). With regard to users of airfields, aviation will be considered in the Environmental Statement (ES). **PEI Report Volume 2 Part B Section 6 Chapter 11 Socio-economics, Recreation and Tourism** sets out the relevant baseline and explains how aviation will be assessed with a specialist standalone report in support of the ES.

- xiv. Suggestion about a farm that lies in Newton-in-the-Isle on two frontages - Fen Road and High Road that pylons are not located in a small field on the farm as it would be difficult to farm, thereby reducing the value of the land.

National Grid's response: National Grid has investigated the location referenced in the feedback and can confirm most of this land was excluded from the emerging preferred corridor consulted on during Stage 1 consultation (the northeastern edge was included). The proposed design routes further north within the corridor and as such there are no direct impacts anticipated at this location.

- 3.5.1190 A few community members' responses also raised feedback that overhead lines will interfere with local developments, notably a proposed development of 49 homes and one in Newton-in-the-Isle.
- 3.5.1191 **National Grid's response:** National Grid undertake regular monitoring of emerging development proposals, and changes in status of current applications and consented but not yet implemented development to keep informed of other developments in the local area/region to enable collaboration and coordination with other projects designed to minimise impacts on local communities.
- 3.5.1192 National Grid are aware of various projects and is currently working closely with a number of these projects to provide a co-ordinated approach to project development, where possible, as the design of the Project evolves. All emerging and committed developments identified in the course of regular monitoring will be considered as part of the inter-project cumulative effects in the **PEI Report** prepared for the Stage 2 consultation and subsequently in the Environmental Statement (ES) accompanying the Development Consent Order (DCO) application.
- 3.5.1193 In response to the concern that the development will have a negative impact on a housing development near Newton-in-the-Isle in relation land at land registry number CB338385, National Grid notes that the Graduated Swathe consulted on as part of the Stage 1 consultation overlaps with this plot of land at the northern edge of the plot close to the boundary with High Road. National Grid will take this matter into consideration when refining the design of the proposals and, if possible, will avoid locating infrastructure in this location. In response to the concern about a proposed development of 49 homes, due to lack of detail we were unable to identify this. We will keep monitoring emerging development proposals.

Ecology, Biodiversity and Environment

- 3.5.1194 A few community members' responses expressed concerns about the potential impact of pylons on wildlife, particularly migrating birds residing in this Section of the route. Species mentioned include geese, swans, cranes, eagles, barn owls, woodpeckers, red kites, snow buntings, redshanks and lapwings. It was also noted that more information is needed on how the Project will mitigate collision risks for these species.
- 3.5.1195 A few community members' responses also raised concerns on the impact of the Project on wildlife and habitats, such as nature reserves. It was also suggested that the impact on wildlife is being overlooked, mentioning bat, bees, deer, and newts.
- 3.5.1196 Norfolk County Council's feedback provided general comments regarding ecology due to the graduated swathe being imprecise. The preferred route should be carefully refined, taking account of all relevant ecological impacts, including locally designated wildlife sites. All relevant habitat and species data from the Norfolk Biodiversity Information Service (NBIS), including all Local Wildlife Site information should be included in desk studies and all surveys will need to be no older than 18 months.
- 3.5.1197 **National Grid's response:** The Project has been designed to avoid direct impacts upon European Designated Sites (Special Areas of Conservation, Special Protection Areas and Ramsar sites) and Sites of Special Scientific Interest. The Wash and North Norfolk Coast SAC and the Wash SPA and Ramsar site falls within 10 km of the draft Order Limits. In addition, Nene Washes SPA and Ramsar site and Ouse Washes SPA and Ramsar site, where bird species with large foraging ranges are noted as, or one of the qualifying features, fall within approximately 11.7 km and 17.2 km of the draft Order Limits respectively. The potential for Likely Significant Effects upon these sites

will be assessed within the Environmental Statement (ES) and a Report to inform Habitats regulations assessments. No impacts upon the Gibraltar Point NNR are anticipated. The River Nene watercourse is crossed by the Project and is a County Wildlife Site. Standard pollution control measures will be implemented to avoid adverse effects on habitats. Further survey work will establish the nature and importance of any receptors that may be affected by the works and any site-specific working methods or buffer zones necessary to avoid or minimise impacts.

- 3.5.1198 Through routeing and siting National Grid has sought and will continue to reduce as far as practicable potential impacts on biodiversity including habitats and protected species. The process of routeing takes account of existing biodiversity, the natural environment and, where practicable, seeks to avoid wildlife, and where not feasible, reduce potential impacts on areas of ecological sensitivity including protected and notable species and their associated habitats through mitigation. A suite of habitat and species surveys will inform the ecological baseline, this data is still being collected and will be provided at ES stage per Chartered Institute of Ecology and Environmental Management guidance. The surveys include bats, badgers, great crested newts, otter, fish, aquatic macroinvertebrates, aquatic macrophytes, water vole, reptiles, and breeding and non-breeding birds. The Environmental Impact Assessment (EIA) for the Project will assess the effects on important ecological features using this baseline information. Some species are not protected or notable such as bees (kept by beekeepers), and therefore will not be assessed. However, the overall impact on ecology is taken into account as part of the EIA process for the Project.
- 3.5.1199 The initial assessment including the surveys undertaken are reported in **PEI Report Volume 2 Part B Section 6 Chapter 4 Ecology and Biodiversity**. The initial assessment identifies that at this stage significant effects cannot be excluded, and further survey work (ongoing) will be used to confirm the status of these species, inform the design of appropriate mitigation and a full assessment of effects that will be reported in the ES.
- 3.5.1200 With regard to electric and magnetic fields impacts on bees please refer to The graduated swathe – Question 3a and other relevant feedback , under Impacts on bees and ability to pollinate.
- 3.5.1201 National Grid welcomes Norfolk County Council’s feedback on ecology and with regard to using data from NBIS, the desk study data collected for the **PEI Report** included LERCs as data sources.

Socio-economics

- 3.5.1202 A few community members’ responses noted the impact of tourism and businesses in the area due to the Project, including equestrian establishments, especially around Wisbech and Alvingham.
- 3.5.1203 A few community members’ responses also raised concerns about impacts on airspaces for local airfields, such as Fenland Airfield, which use the airspace daily.
- 3.5.1204 **National Grid’s response:** Through the routeing and siting exercise National Grid has sought to reduce impacts to businesses and the local economy, as evidenced in the Strategic Options Report (SOR) and the Corridor and Preliminary Routeing and Siting Study (CPRSS) published at the Stage 1 consultation. To reduce potential impacts, we have identified businesses, including equestrian centres and enterprises and their primary function, and those that are likely to generate tourism. These have been and will continue to be considered during the iterative design process.

- 3.5.1205 From a socioeconomic perspective, the likely effects of National Grid's proposals on local businesses including those operating in connection with tourism and equestrian centres are considered in **PEI Report Volume 2 Part B Section 6 Chapter 11 Socio-economics, Recreation and Tourism**. In summary, no significant effects are anticipated for socioeconomic, recreation and tourism receptors, noting this excludes above ground renewable energy generation infrastructure, within Section 6, as a result of the construction, operation and maintenance phases of the Project. An assessment of the direct effects of the Project on above ground renewable energy generation infrastructure (solar and onshore wind farms) as socio-economics receptors will be presented in the Environmental Statement (ES).
- 3.5.1206 It should be noted that this is an ongoing assessment and is subject to changes due to the ongoing development of the Project. A full detailed assessment will be included within the ES submitted with the Development Consent Order (DCO) application.
- 3.5.1207 National Grid is aware of several airfields in the region that are within varying proximities to the proposed Project. Where possible, we have been engaging with airfield operators to better understand their activities, aircraft types and annual movements to inform our design development. National Grid has considered potential impacts to aviation receptors as outlined in Chapter 6 of the Design Development Report (DDR) with support from specialist aviation consultants.
- 3.5.1208 With regard to users of airfields, aviation will be considered in the ES. **PEI Report Volume 2 Part B Section 6 Chapter 11 Socio-economics, Recreation and Tourism** sets out the relevant baseline and explains how aviation will be assessed with a specialist standalone report in support of the ES.

Agricultural Land

- 3.5.1209 Several community members' responses identified challenges for farming due to the presence of pylons and that this would lead to a loss of good quality agricultural land.
- 3.5.1210 **National Grid's response:** National Grid recognises that there is the potential for impacts on agricultural land. We look to limit the impact on agricultural land through careful and considered routeing and siting of infrastructure and through consultation with affected landowners. We are and will continue to work with all landowners who may be affected by the proposals to understand the impacts and potential mitigations as the Project is developed.
- 3.5.1211 The draft Order Limits shown include areas of land required for temporary construction activities including temporary construction compounds, and access etc, as well as permanent infrastructure including pylons and overhead line.
- 3.5.1212 Attempts have been made to avoid Best and Most Versatile (BMV) as part of the design evolution. Where BMV agricultural land is to be developed, if possible, this will be directed at land of the lowest possible grade.
- 3.5.1213 Direct permanent loss of agricultural land per pylon is restricted to the area of the foundation plinths. Where pylons are located within pasture land, the area beneath the pylon can still be grazed. It is acknowledged that where pylons are located within arable rotations or land used for hay and silage cropping, the area beneath the pylon is excluded from agricultural use during the operational phase, as agricultural machinery cannot be used in these areas.
- 3.5.1214 **PEI Report Volume 2 Part B Section 6 Chapter 8 Agriculture and Soils** provides a preliminary assessment on the impact of the Project on agricultural land, soil resources

and agricultural landholdings using publicly available and purchased data related to land grades (according to the Agricultural Land Classification (ALC) system) soil profiles and land use. The preliminary assessment has used publicly available Provisional ALC data, however, a detailed ALC survey will be conducted prior to submission the Environmental Statement (ES) to provide a full assessment of the extent of land grades and soil types affected.

- 3.5.1215 The agricultural land within the draft Order Limits for Section 6 is provisionally mapped as ALC Grade 1 and Grade 2, and as such is considered likely to comprise Best and Most Versatile land. **PEI Report Volume 2 Part B Section 6 Chapter 8 Agriculture and Soils** reports a likely significant effect due to the temporary and permanent loss of agricultural land and soil function. National Grid are committed to the implementation of effective soil handling, storage and reinstatement measures, which will be detailed in an Outline Soil Management Plan ('Outline SMP', submitted as part of the Development Consent Order (DCO) application), and would be critical in ensuring minimisation of effects and ensuring successful reinstatement of soils and agricultural land grade, where practicable.

Health and Wellbeing

- 3.5.1216 Several community members' responses raised concerns about the potential health impacts to nearby residents and villages encircled or close to overhead lines in this Section of the route. These concerns were linked to suggestions that health risks with pylons have been published, including increased risks of cancer, miscarriages, and other diseases associated with electric and magnetic fields (EMF) exposure.
- 3.5.1217 Several community members' responses raised concerns about the impact of the Project on the quality of life of residents in areas such as Four Gotes and due to the isolation of properties, particularly vulnerable individuals and those with disabilities. Tydd St Giles was also mentioned. Concerns included the exacerbation of existing health conditions such as anxiety, stress, and depression due to noise and visual impacts. A few members of the community stated that additional health impacts will be caused due to the impact on business and loss of income, notably around Wisbech.
- 3.5.1218 **National Grid's response:** National Grid recognises people may have concerns about the potential impacts of living close to an overhead line and associated infrastructure and that the uncertainty whilst the proposals are developed may cause anxiety. Through the routeing and siting exercise, National Grid has sought and will continue to reduce as far as practicable impacts on sensitive receptors, such as residential areas, education facilities and areas for recreation. A considerable amount of assessment work has been undertaken to allow preliminary judgements to be made about the design and routeing of the Project. This has been set out in various publications, including the Corridor and Preliminary Routeing and Siting Study (CPRSS) and Strategic Options Report (SOR), published as part of the Stage 1 consultation.
- 3.5.1219 Further detailed assessment work has been undertaken since the Stage 1 consultation as reported in **PEI Report Volume 2 Part C Route-wide Chapter 8 Health and Wellbeing**. A health and wellbeing baseline has been established for each Section to understand how the Project may specifically impact the health and wellbeing of different communities. This includes the following communities:
- Weston
 - Whaplode Fen
 - Tydd St Giles

- Spalding
- Low Fulney
- Moulton
- Whaplode
- Whaplode St Catherine
- Holbeach St Johns
- Newton-in-the-Isle
- Tydd Gote
- Four Gotes
- Ingleborough

- 3.5.1220 Policies and procedures are in place to make sure all equipment will comply with public EMF exposure limits. As such, physical health effects associated with the generation of EMFs is scoped out of the health and wellbeing assessment on the basis that EMF levels would be low such that significant adverse effects are not expected. An EMF report, separate to the Environmental Impact Assessment (EIA) process, will be prepared as part of the Project.
- 3.5.1221 No mental health impacts as a result of EMFs are expected as a result of the Project as described within **PEI Report Volume 2 Part C Route-wide Chapter 8 Health and Wellbeing**. Furthermore, no significant impact on health and wellbeing as a result of changes in access to promoted recreational routes and open space; or changes to employment were identified.
- 3.5.1222 The health and wellbeing assessment recognises that concerns about the health impacts of EMF may adversely impact some people's mental health by heightening anxiety. However, it is anticipated that this group is likely to be very small, and that this impact will be effectively mitigated by National Grid's engagement with the community.
- 3.5.1223 For further information on EMFs please refer to The graduated swathe – Question 3a and other relevant feedback under Health and Wellbeing.
- 3.5.1224 The Health and Wellbeing assessment assesses the impact of changes to landscape and visual on health and wellbeing in conjunction with air quality, noise, and traffic and transport. This combination effect is assessed as 'Neighbourhood Quality'. For a neighbourhood quality effect to be identified, at least two significant residual effects must combine at the same location. There is evidence to suggest links between neighbourhood quality and health and wellbeing, as health and wellbeing can be adversely impacted by changes to air quality, noise, visual amenity, increased traffic. This will be assessed within the Environmental Statement (ES) and if required, mitigation put in place to address these impacts.
- 3.5.1225 The health and wellbeing assessment will continue to be updated to ensure health and wellbeing concerns and impacts of local communities are taken into account.
- 3.5.1226 It should be noted that Wisbech has not been identified within the Study Area, which is 500m beyond the draft Order Limits and therefore is not predicted to experience any significant effects as a result of construction, operation or maintenance of the Project.

Landscape and Visual

- 3.5.1227 Several community members' responses raised concerns about the impact on the landscape in the area, suggesting that the Project should be either offshore or underground to reduce visual impacts. There were specific concerns about the cumulative visual impact of the pylons along the B1165 to Tydd St Giles and around Four Gotes.
- 3.5.1228 The potential visual impact on Natural England's National Area Profile 46 was raised in a few community members' responses, particularly due to the reference to 'huge

skies' in the area, which would be impacted by pylons. Impacts to 360-degree views around Fleet and Nealsgate road were also noted, with impacts to National Landscapes and scenery also a concern. Furthermore, it was noted that the area around Cranesgate North is narrow, which would result in greater visual impacts.

- 3.5.1229 Norfolk County Council's feedback suggested that an LVIA should be undertaken, including a Townscape assessment where necessary and should consider all potential impacts, both during construction and operation, and cumulative impacts. Impacts on the Landscape Character and Visual Amenity should be avoided where possible, minimised through the use of lower pylons or pylons of an alternative design, and mitigation measures need identifying where impacts cannot be avoided.
- 3.5.1230 **National Grid's response:** National Grid develops its Projects in line with national policy and our statutory duties to develop an efficient, economic and co-ordinated network, and have regard to preserving amenity and mitigating impacts. We recognise that overhead lines can give rise to adverse landscape and visual effects, and we carefully consider these along with other environmental and socio-economics considerations, technical requirements and cost when developing our Projects.
- 3.5.1231 National Grid has carefully considered the potential impacts of the Project at an early stage, and the findings and justifications for the selection of the emerging preferred corridor in which the new overhead line is proposed to be routed, can be found in the Corridor and Preliminary Routeing and Siting Study (CPRSS), which is available on our Project website. Through the routeing and siting exercise we have sought to reduce the impact on landscape character and visual amenity. We will continue to consider both landscape character and amenity value as we develop our proposals and seek to reduce effects.
- 3.5.1232 The likely effects of National Grid's proposals in this area on landscape character and visual receptors are set out in **PEI Report Volume 2 Part B Section 6 Chapter 2 Landscape** and **Chapter 3 Visual**. A preliminary visual assessment has been undertaken for each community, or parish, within the Study Area which includes the areas between the B1165 to Walpole. A number of viewpoints have been selected to represent the views from local communities. These are presented in **PEI Report Volume 3 Part B Sections 1 to 7 Appendix 3A Proposed Viewpoints** and will form the basis for the Landscape and Visual Impact Assessment (LVIA).
- 3.5.1233 Significant visual effects have been predicted for a number of communities with views that would be directly affected by a new overhead line, but also communities which have longer distance views of the Project. This includes Holbeach, Fleet, Sutton St Edmund, Sutton St James, Tydd St Giles which include Four Gotes, Newton in the Isle and West Walton, where there would be close proximity views of the Project as it routes through these community areas. It is noted that pylons are a feature of views within this Section and although the Project would add additional pylons, these would not be uncharacteristic, particularly in more distant views towards the Project.
- 3.5.1234 National Grid acknowledge that the Project will introduce overhead line infrastructure into the landscape and more pylons into views including from the B1165 where the Project will be seen with a number of existing overhead lines. The Project considered paralleling existing 400 kV overhead lines through this Section to potentially reduce the cumulative effects with existing overhead lines. However, the route for the overhead line between Weston Marsh and Walpole needed to avoid constraints such as settlements and individual residential properties and there was not sufficient space alongside the existing overhead lines to route parallel to them. The Project is located over 2.3 km to the south of the existing 400 kV overhead line ensuring enough

separation between the overhead lines so residential properties would not become closely encircled by infrastructure, routeing to the south of Moulton, Whaplode, Cranesgate North and Holbeach Fen.

- 3.5.1235 National Grid also notes that there may be potential impacts to the National Character Area 46: The Fens which includes expansive views of the area. This will be assessed at the Environmental Statement (ES) stage once the landscape assessment of the regional and local character areas has been completed and can inform the assessment on the National Character Areas.
- 3.5.1236 Routeing is the main form of mitigation for landscape and visual, ensuring the proposed overhead line is routed to reduce landscape and visual effects, including routeing close to existing overhead lines where possible. The use of low height pylons was considered, but due to the presence of existing full height pylons in this Section, introducing a different type of pylon was not considered to be of any benefit visually. It is appreciated that other mitigation measures for landscape and visual effects would be limited, the landscape having relatively vegetation.
- 3.5.1237 National Grid will be producing a LVIA that will, in addition to other topic specific assessments, form the latter part of the Environmental Impact Assessment (EIA) for the Project. This will include a write-up of an assessment of the effects on the landscape character of the area and visual effects from communities. Where likely significant effects are anticipated, the LVIA will consider and identify areas where it may be necessary and appropriate to put forward potential mitigation as part of an iterative design and assessment process

Walkers, Cyclists and Horse Riders

- 3.5.1238 A few community members' responses expressed concerns about the impact of the Project on the network of footpaths and bridleways in the area and around Wisbech.
- 3.5.1239 **National Grid's response:** Through routeing and siting, National Grid has sought and will continue to reduce, as far as practicable, impacts and disruption to Public Rights of Way (PRoW). The iterative design process has identified the existing PRoW network and wider connectivity and has sought where practicable to reduce and where possible, remove impacts to PRoW. In the event that any significant impacts on PRoW are identified that cannot be avoided and mitigation is required, mitigation measures may include, the temporary closure of PRoW during the construction phase, and where possible a diversion to allow for the continued use and movement through the wider PRoW network. We will work closely with the relevant highway authorities to understand and gain information on PRoW and the local road network.
- 3.5.1240 Effects on PRoW will be mitigated where possible, maintaining access where practicable, with closures as a last resort. We will continue to engage with the interested parties and stakeholders on the PRoW network to enable feedback and input to be considered as the Project develops.
- 3.5.1241 The **PEI Report** outlines our early assessment findings on traffic and transport, and this includes equestrian routes (i.e. bridleways). Our assessments look at all potentially impacted areas within the proposed corridor, including Wisbech, and where possible these will seek to be retained or diverted locally if applicable.
- 3.5.1242 The impact of horse-riding within private land, such as equestrian establishments has not been assessed, however engagement with impacted businesses and landowners will be undertaken as part of land access discussions. Generally, the way to mitigate

an impact of the overhead line on equestrian features, where leisure activities may be elevated due to a horse jumping (for example), is to increase the clearance of the overhead line (i.e. the height of the conductors from the ground). Due to the rural nature of the Study Area, encountering equestrian activity is highly likely. Where such uses are identified through landowner discussions and site surveys, mitigations in the form of increased clearances may need to be applied.

- 3.5.1243 From a socioeconomic perspective, the likely effects of National Grid's proposals on users of Public Rights of Way and promoted recreational routes are considered in **PEI Report Volume 2 Part B Section 6 Chapter 11 Socio-economics, Recreation and Tourism**. An assessment of the direct effects of the Project on users of PRoW and promoted recreational routes in relation to diversions, closures and management measures will be presented at Environmental Statement (ES) stage.

Flood Risk and Drainage

- 3.5.1244 Some community members' responses noted that there could be an impact on biodiversity and flood drainage for this Section of the route, as the area is in a flood zone.
- 3.5.1245 Norfolk County Council's feedback noted that currently the location of the proposed pylons is not clear and no consideration of flood risk and surface water management was available. There is an expectation that appropriate details will be provided as the Project develops. Furthermore, it was noted that consideration of other ongoing NSIP schemes and major developments from outside of the energy sector and the cumulative impact on the flood risk need to be considered.
- 3.5.1246 **National Grid's response:** The Project and draft Order Limits have been designed to avoid sensitive receptors as far as practicable. The Project seeks to avoid flood risk and potentially significant effects via the sequential approach to routeing and siting, minimising significant effects where possible.
- 3.5.1247 National Grid has sought to and will continue to seek to reduce the impact on areas prone to flooding through the routeing and siting exercise. No statutory nature conservation sites that are dependent on surface water have been identified within the Section 6 Study Area. The River Nene itself is designated as a County Wildlife Site (CWS) where crossed by the draft Order Limits, with a section of North Level Main Drain at Tydd Gote also designated as a CWS at Tydd St Giles. There are also a number of surface water dependent Local Wildlife Sites (LWS) present in the Section 6 Study Area as illustrated on **PEI Report Volume 2 Part B Section 6 Figure 4.3 Sites Non-Statutorily Designated for their County Biodiversity Importance**.
- 3.5.1248 According to the EA Flood Map for Planning the Section 6 Study Area is located almost entirely in Flood Zones 2 and 3 (high risk), equivalent to an annual chance of flooding from rivers of 1 in 100 (1%). Pockets of the Study Area located in the South Holland IDB District are in Flood Zone 1 (low risk).
- 3.5.1249 The Section 6 Study Area benefits from extensive flood defence embankments associated with the River Nene and the River Welland. Lattice pylons, used in the Project, minimally obstruct water flow and do not significantly affect floodplain storage or conveyance. Furthermore, pylons are resilient to water damage from occasional flooding, and the conductors are located sufficiently above the highest flood level conceivable over the lifetime of the Project, ensuring that they will remain operational during a flood event and will not pose a safety risk. Due to the robust nature of their construction, it is considered highly unlikely that debris carried by floodwater could

cause significant damage to a pylon to the extent that the structural integrity of the pylons could not be repaired through standard maintenance activities.

- 3.5.1250 In addition, the operation of IDB-maintained infrastructure is likely to be influential in controlling water levels within ditch networks crossed by the draft Order Limits. Engagement with South Holland IDB, North Level District IDB and King's Lynn IDB will be carried out to determine the degree to which this infrastructure provides mitigation of fluvial flood risk within IDB Districts and will be evaluated further in the final Environmental Statement (ES) and Flood Risk Assessment (FRA).
- 3.5.1251 Currently, no detailed design has been undertaken for any aspect of the proposed mitigation measures identified rather, the Preliminary Flood Risk Assessment (PFRA) identifies the design standards that will be adopted by the Project. The sequential approach is to continue to be utilised throughout the design process to minimise risk posed to the Project from all potential sources of flooding in both the construction and operation phases. At this preliminary stage, a precautionary approach has been taken to inform the PFRA, and ground investigation works have been undertaken to determine potential impacts to drainage for the pylon locations. The full Flood Risk Assessment will be submitted as an appendix to the ES in support of the Development Consent Order (DCO) application will set out the mitigation measures required to ensure that the Project is designed to remain safe and operational, without increasing flood risk elsewhere, during the construction phase in accordance with the requirements of NPS EN-1.
- 3.5.1252 A Preliminary Code of Construction Practice (CoCP) is provided in **PEI Report Volume 3 Part A Appendix 5A Preliminary Code of Construction Practice**. The Preliminary CoCP will be updated as the Project evolves to include additional measures identified through the engineering design, the Environmental Impact Assessment (EIA) process and from engagement with stakeholders to form the CoCP submitted as an appendix to the ES in support of the DCO application.
- 3.5.1253 An outline Surface Water Drainage Strategy (SWDS) for temporary construction activities proposed as part of the Project will be presented in the FRA submitted in support of the DCO application for the Project to demonstrate how surface water runoff will be managed in a sustainable manner commensurate with the relevant policies and best practice guidance. The principles established as part of the outline SWDS will be fed into a Drainage Management Plan (DrMP) for the construction phase which will form part of the Environmental Control Plans.
- 3.5.1254 Ongoing NSIPs from outside the energy sector will be considered along with the cumulative impact on the flood risk divided into intra-project cumulative effects - i.e. a receptor is impacted by two or more topics within the assessment and inter-project cumulative effects - i.e. cumulative effects where a receptor is affected by the Grimsby to Walpole Project as well as one or more other projects.

Groundwater

- 3.5.1255 The Environment Agency's feedback noted that there are no SPZs present in this Section.
- 3.5.1256 **National Grid's response:** The Project has been designed to take into account and avoid sensitive hydrogeological receptors where practicable, within the balance of other relevant design factors, to minimise/prevent any significant effects on these receptors. This includes groundwater abstractions and SPZs. There are no SPZs

within this Section of the Project, therefore no action to avoid such features through the design process was required.

Minerals and Waste

- 3.5.1257 Norfolk County Council's feedback noted no substantive comments on the search area for the proposed pylon locations at this stage ahead of any detailed Environmental Statement. This is largely because the proposed infrastructure in Norfolk would consist of overhead powerlines, pylons and a substation and the emerging preferred corridor does not contain any safeguarded mineral resource.
- 3.5.1258 **National Grid's response:** A Minerals Safeguarding Report has been prepared in support of the **PEI Report** for this Project. This report identifies the safeguarded minerals and mineral safeguarding areas in line with local and regional planning policy and any potential effects would be taken forward for assessment within **PEI Report Volume 2 Part B Section 6 Chapter 7 Geology and Hydrogeology**. There are no safeguarded minerals or mineral safeguarding areas within the Study Area (draft Order Limits and a 500 m buffer) for Section 6, therefore there are no effects to assess within the **PEI Report**.

Other requirements – Question 4a and other relevant feedback

- 3.5.1259 Question 4a of the feedback form asked:

'Do you have any general comments about these aspects (temporary land for construction activities and land required for mitigation, compensation and enhancement of the environment) at this stage that you would like us to consider?'

- 3.5.1260 The following sections provide a summary of the comments made in relation to the associated works and National Grid's response to these. These are presented under the headings of construction traffic, public rights of way, construction impacts on the environment, air quality, land restoration, impacts on landowners and assets, and location of associated works.

Construction traffic

- 3.5.1261 A considerable proportion of the community members' responses, alongside technical stakeholder's feedback (Bilsby and Farlesthorne Parish Council and Sutton St Edmund Parish Council) raised concerns about negative impacts on infrastructure in the local area during the construction period and that the local roads cannot handle construction, agricultural and commuter traffic all at once and are not suitable for large vehicles. It was noted that the construction will be disruptive and cause access issues for local communities including road closures and significant diversion routes. Consideration needs to be given to farming operations, with suggestions that harvest months when agricultural vehicles need to access local roads and field without obstruction should be avoided.
- 3.5.1262 A few community members' responses also raised concerns regarding the increase in construction traffic potentially making areas unsafe, particularly for children and horse riders, or increasing the risk of accidents, if the construction traffic is required to pass through some of the nearby villages.
- 3.5.1263 Fenland District Council's feedback noted initial concerns regarding the potential impacts of the highway network, particularly given the condition and classification of

the some of the highways that would be used. Such concerns include, construction traffic impacts, damage to highways, diversions necessary and potential congestion.

- 3.5.1264 **National Grid's response:** We recognise that construction of the Project would result in potential impacts to local areas. The Corridor Preliminary Routeing and Siting Study (CPRSS), published at the Stage 1 consultation, explains that our approach to the appraisal of design options considers a range of topics with various technical considerations including construction.
- 3.5.1265 The **PEI Report** appraises the suitability of local roads to accommodate the forecast volume of construction traffic movements. This includes consideration of road geometry, congestion, accidents and sensitive receptors that include local amenities, schools and non-motorised user activity. Sensitive routes will be avoided where practicable, and construction haul roads used where appropriate along with maximising the use of suitable major and strategic roads. For each Section **PEI Report Volume 2 Part B Sections 1 to 7 Chapter 9 Traffic and Movement, PEI Report Volume 3 Part B Sections 1 to 7 Appendix 9B Preliminary Construction information and Appendix 9C Future Baseline and Impact Analysis** identify Primary Access Routes to construction bellmouths, compounds and substations, along with an estimate of average daily flows based on the existing information available at the time of writing. Our initial appraisal included in **PEI Report Volume 2 Part B Sections 1 to 7 Figure 9.5 Preliminary Impact Analysis** shows impacts on the roads that result in potential significant effects. These routes will require discussion with the local highway authority and possibly further assessment to determine the effect, if any, on users of the highway. Construction traffic routeing will be agreed with the appropriate highway authorities during the full Transport Assessment, which will be reported in the Environmental Statement (ES).
- 3.5.1266 Where construction sites and temporary haul roads are required, these will be carried out in consultation with the landowners and the local highway authority, to reduce impacts to local road users. National Grid is committed to engaging with residents and stakeholders throughout the lifecycle of the Project and during the Stage 2 consultation, we are presenting more detail around potential construction activity.
- 3.5.1267 A Code of Construction Practice (CoCP) and Construction Traffic Management Plan (CTMP) will be prepared and submitted with the Development Consent Order (DCO) application. The CTMP will define the local road network which could be used for construction traffic movements, highlight any restrictions to such movement and if required, control working patterns and timings to ensure any potential impacts to other road users from construction traffic related to the Project is reduced as far as practicable. These documents will include commitments to reduce construction impacts together with a framework for detailed management plans to be prepared at detailed design stage to reduce and mitigate potential impacts and/or disruptions that may arise during the construction phase. A Preliminary CoCP is available as part of the Stage 2 consultation.

Public Rights of Way

- 3.5.1268 A considerable proportion of the community members' responses, alongside technical stakeholders' responses (North Cotes Parish Council, North Somercotes Parish Council and West Walton Parish Council) raised concerns about public footpaths and permissive rights of way that are used extensively by local communities and tourists, suffering long term disruption, or being removed by the Project. North Somercotes

Parish Council requested details of the assessments completed on the duration and impact of the Project on Public Rights of Way (PRoW).

- 3.5.1269 A few community members' responses also questioned whether any footpaths would be closed either temporarily or permanently and how the current public footpaths and bridleways are going to be protected.
- 3.5.1270 Natural England's feedback noted its encouragement of any proposal to incorporate measures to help improve people's access to the natural environment, including reinstating existing footpaths, together with the creation of new footpaths and bridleways and links to urban fringe. Furthermore, Natural England noted that the Project should consider potential impacts on access land, common land, rights of way and coastal access routes in the vicinity of the development, as well as any potential impacts on nearby National Trails. Appropriate mitigation measures should be incorporated to address any adverse impacts.
- 3.5.1271 **National Grid's response:** Through routeing and siting, National Grid has sought and will continue to reduce, as far as practicable, impacts and disruption to PRoW and promoted recreational routes, including users of such routes. The iterative design process has identified the existing PRoW network and their wider connectivity, and sought where practicable to reduce and where possible remove impacts to PRoW, promoted recreational routes, and their users. If mitigation is required, measures may include the temporary closure of PRoW during the construction phase, and where possible a diversion to allow for the continued use and movement of the wider PRoW network. We are undertaking an Environmental Impact Assessment (EIA), to ensure that matters relating to the environment are considered when developing the proposals for the Project. This will include a Traffic and Movement assessment which will include an assessment of the Project's impacts on PRoW. Discussions will be undertaken with local authorities to agree proposals and mitigation measures and a PRoW Management Plan developed to set out how access will be managed. More detail will be set out within the Environmental Statement (ES). In addition to this, impacts on the local PRoW network will feed into the assessment of the visual effects on communities. Should any significant impacts be identified, that cannot be avoided, National Grid will seek to minimise these impacts where possible, through the implementation of mitigation strategies.
- 3.5.1272 Where impacts on users of PRoW and promoted recreational routes are identified, these will be presented within a socio-economics, recreation and tourism assessment, which is undertaken as part of the EIA. Any effects will be considered in terms of size of the impact (magnitude) and the vulnerability of PRoW and promoted recreational route users (sensitivity) to PRoW impacts in the construction and operational phase. Should any impacts be identified, that cannot be avoided, mitigation measures will be included to minimise these impacts where possible, maintaining access where practicable, with closures as a last resort. We will continue to engage with the interested parties and stakeholders on the PRoW network to enable feedback and input to be considered as the Project develops. The results of our initial assessments are presented in **PEI Report Volume 2 Part B Sections 1 to 7 Chapter 11 Socio-economics, Recreation and Tourism** during our Stage 2 consultation before being further refined and presented in an ES which will form part of the eventual Development Consent Order (DCO) application.
- 3.5.1273 National Grid is carrying out an exercise to identify common land that might be affected by the Project and this will be taken into account as part of our ongoing design process. Further information in relation to this will be available at DCO submission.

Construction impacts on the environment

- 3.5.1274 A considerable proportion of the community members' responses, alongside technical stakeholders' feedback (Alvingham Parish Council, Bilsby and Farlesthorne Parish Council and Halton Hologate with Halton Fenside Parish Council), raised concerns about construction impacts on the local ecology and biodiversity, including risk of pollution into water courses. It was suggested that construction activities should be scheduled to avoid critical periods for local wildlife alongside using ecofriendly construction practices.
- 3.5.1275 A few community members' responses welcome any schemes that improve biodiversity and increase the spread of woodland and green corridors. However, it was noted that biodiversity net gain should be achieved as near as possible to where the loss of biodiversity has taken place and with the intention to go beyond statutory requirements.
- 3.5.1276 **National Grid's response:** As part of the routeing and siting design process for the Project, National Grid has sought and will continue to seek to reduce potential impacts on biodiversity including habitats and protected species. The process of routeing takes account of existing biodiversity, the natural environment and, where practicable, seeks to avoid wildlife, and where not feasible, reduce potential impacts on areas of ecological sensitivity including protected species and their associated habitats through mitigation. A Preliminary Code of Construction Practice (CoCP) outlines the measures which are proposed to avoid and minimise effects on biodiversity and the environment during construction. Measures B02, B05 and B10 within the Preliminary CoCP include timings to avoid or mitigate impacts on nesting birds, reptiles and fish, and measures W01 to W11 are proposed to control and manage impacts upon the water environment.
- 3.5.1277 The Project is committed to delivering biodiversity net gain (BNG) and the baseline ecology surveys and BNG unit calculations will be used to inform the Project design. It is anticipated that BNG delivery will become mandatory under the Environment Act 2021 (which requires a 10% increase from the baseline) for Development Consent Order (DCO) applications from November 2025. UKHab surveys and BNG unit calculations are ongoing following a staged approach to assessment in order to inform the design and discussions on ecological compensation in line with the Biodiversity Gain Hierarchy. However, it is acknowledged that the government's consultation on this element has not yet commenced and therefore the approach to BNG assessment and delivery will be kept under review and the final BNG approach for the Project will be revised in line with the latest guidance. When designing habitat creation and enhancement measures as part of the environmental mitigation requirements for the Project, these will be designed with appropriate planting and management strategies to maximise their contribution to BNG along the route of the Project. Engagement will also be undertaken with landowners and stakeholders to identify local opportunities for habitat enhancement and creation that could contribute to the Project's BNG commitments. Through engagement with local nature conservation stakeholders opportunities will also be sought to collaborate with existing landscape-scale conservation projects and habitat banking projects that are located within the same Local Planning Authority areas or Natural England National Character Areas as the Project. This follows the geographic preference within the BNG guidance, to ensure that gains are relatively local to the impacts where possible.

Air quality

- 3.5.1278 A large proportion of the community members' responses raised concerns with impacts on air quality due to construction.
- 3.5.1279 **National Grid's response:** National Grid is undertaking an air quality assessment as part of the Environmental Impact Assessment (EIA) for the Project. The assessment will consider the impact of construction vehicle emissions and construction dust (including particulate matter) on sensitive receptors, including residential properties and ecological receptors. The **PEI Report** includes an initial assessment of construction dust due to the Project on the risk of dust soiling and impacts on human health. Based on the potential dust risk, proportionate dust mitigation measures consistent with current guidance have been identified and are provided in the Preliminary CoCP. Following the implementation of these measures the impact of construction dust due to the Project is judged to be not significant. The results of the initial assessment, based on screening of current estimates of construction vehicle numbers and routes against published criteria, are presented in the **PEI Report** as part of our Stage 2 consultation. The screening exercise has identified road links where there is the likelihood for significant effects on sensitive receptors (human and ecological) within 200 m. The traffic data will be further refined and estimates of the number and type of plant and non-road mobile machinery, which have not been assessed in the **PEI Report**, will be developed before being screened at the Environmental Statement (ES) stage. Where the need for detailed assessment is determined, this will be undertaken and the results presented in the ES which will form part of the Development Consent Order (DCO) application. Maintenance and operational traffic movements are not expected to generate substantial vehicle movements that would require detailed assessment although the predicted number of vehicle movements generated will also be screened against the relevant criteria to confirm that they are unlikely to lead to a significant effect on local air quality and/or designated ecological sites.

Land restoration

- 3.5.1280 A large proportion of the community members' responses requested that all land, property and infrastructure should be restored to the same state it was in prior to the construction phase.
- 3.5.1281 Several community members' responses requested that the reinstatement of field drainage systems, matched to the existing drainage network, and that soil is prioritised for agricultural land, including rectifying any compaction caused by plant equipment, so the productivity of the land is not reduced.
- 3.5.1282 A few community members' responses requested that once any land purchased by National Grid for temporary works is no longer needed, public access to this land to be considered to potentially provide off-road links especially for horse riders.
- 3.5.1283 **National Grid's response:** Wherever land is temporarily required to undertake construction of the Project, this will be reinstated on completion of such works.
- 3.5.1284 We also recognise the importance of effective drainage for local farmers and propose the following measures for land affected by our proposals:
- i. A specialist contractor will be employed to carry out a pre-works assessment of the existing drainage systems in consultation with relevant landowners and other stakeholders;

- ii. A pre-construction drainage management plan would then be prepared for review by stakeholders. This plan will set out and record the condition of the existing drainage network; and
- iii. A post-construction drainage management plan would also be prepared when the overhead line is installed.

3.5.1285 Land in relation to which National Grid obtains powers of temporary possession will be reinstated and returned to the original landowner, once it is no longer required for the Project. Therefore, such land would not be available for public access such as provision of off-road links.

Impacts on landowners and assets (due to construction activities)

3.5.1286 A few community members' responses raised concerns about impacts on their properties/access to their properties due to construction activities, including noise and vibration.

3.5.1287 The Environment Agency's feedback noted that pre-works and post-works condition of the assets that the Project is interacting with will need to be surveyed and vibrations should be monitored to ensure assets are not adversely impacted.

3.5.1288 **National Grid's response:** National Grid will continue to work with all landowners, including farmers, who may be affected by the proposals to understand the impacts on their access and ensure ongoing access to their properties.

3.5.1289 Where construction sites and temporary haul roads are required, these will be carried out in consultation with the landowners and the local highway authority, to reduce impacts to local road users. National Grid is committed to engaging with residents and stakeholders throughout the lifecycle of the Project and during the Stage 2 consultation, we are presenting more detail around potential construction activity.

3.5.1290 National Grid will be undertaking a noise and vibration assessment that will form part of the Environmental Impact Assessment (EIA) for the Project. The assessment includes consideration of construction vibration impacts on people within buildings, as well as on buildings and structures. The early findings are presented in the **PEI Report**, as part of the Stage 2 consultation before being refined and submitted in an Environmental Statement (ES) which will form part of the eventual Development Consent Order (DCO) application.

3.5.1291 **PEI Report Volume 2 Part B Sections 1 to 7 Chapter 10 Noise and Vibration** initial assessment of construction vibration impacts has not identified any locations where potential damage to buildings and structures is expected. However, further assessments will be undertaken as the design progresses, including during the EIA phase, and, more pertinently, by the contractor prior to undertaking works based on their specific work methodologies and locations. The contractor will be required to employ best practicable means (BPM) to reduce potential effects of both noise and vibration, including potential vibration effects on buildings and structures. With regards to construction vibration, this may include measures such as reducing energy input of equipment (to reduce the vibration level), or the use of alternative methods (which may remove the generation of material levels of vibration entirely). BPM may also include the monitoring of vibration levels to ensure certain thresholds aren't exceeded. The specific BPM methods will be determined by the contractor following their own detailed assessments prior to commencing works.

Location of associated works

- 3.5.1292 Several community members' responses raised that the land for construction activities should be located away from residential areas, working farmland, areas of cultural and community value and environmentally sensitive areas. It was also noted land near airfields should also be avoided.
- 3.5.1293 A few community members' responses noted that efforts should be made to limit the amount of temporary land required for construction activities, using existing access routes and previously disturbed land wherever possible.
- 3.5.1294 **National Grid's response:** The land required for the construction of the Project will generally be located in close proximity to the proposed permanent infrastructure and will be minimised as far as possible. Due to the linear nature of the Project, generally an off-highway haul road will be used to facilitate construction of the overhead line infrastructure. For the purpose of the preliminary assessment a two-way haul road along the length of the Project has been assumed as a worst case. National Grid will continue to work with landowners, including farmers, to consider the optimal construction access arrangements, including potential use of existing access routes. The proposed construction compounds for the overhead line works have been strategically placed close to the main road network. Environmental and socio-economics considerations, including airfields, have influenced the proposed alignment of the haul road and the location of temporary construction compounds. Given the length and linear nature of the Project, it would not be feasible to locate all new infrastructure on brownfield land. However, as identified in section 4.5 of the Corridor and Preliminary Routeing and Siting Study (CPRSS), National Grid acknowledges that using available brownfield land will generally be of benefit/advantage compared with utilising greenfield land and considered the availability of brownfield land in the site selection process. In line with that approach, National Grid has investigated potentially suitable land in the region, designated as brownfield sites, for placement of compounds required for the construction phase and for the siting of substations. While siting zones LCS11 and LCS12 would utilise existing and /or available brownfield land in the form of former RAF Manby and Strubby Airfield and Glider Field, these siting zones were not preferred for the reasons detailed in section 13.3 of the CPRSS. No suitable brownfield sites were identified.

Refining our proposals – Question 5a and other relevant feedback

- 3.5.1295 Question 5a of the feedback form asked:
- 'Is there anything we could do to reduce the effects of a new overhead line?'***
- 3.5.1296 The following sections provide a summary of the comments made in relation to suggestions to reduce the effects of a new overhead line and National Grid's response to those.

Considerations for overhead lines

- 3.5.1297 A considerable proportion of the community members' responses suggested that instead of building overhead lines, the infrastructure should instead be delivered offshore or installed underground, particularly in close proximity to residential and populated areas and the Lincolnshire Wolds National Landscape (AONB).

- 3.5.1298 Several community members' responses suggested that existing pylons should be used by upgrading or reinforcing the existing infrastructure to take extra overhead lines or by combining multiple circuits, rather than new pylons and overhead lines being built.

National Grid's response: National Grid's general response to comments on alternative options for the Project can be seen under Alternative options. However, there are several reasons why upgrading existing infrastructure would not achieve the requirements of the Project. As detailed in the Strategic Options Report (SOR), the increase in power flow capacity which is required across the B8 and B9 transmission boundaries in the coming years is significant (>12 GW and >6 GW, respectively) and cannot be achieved through upgrades to existing infrastructure alone. Many of the existing transmission circuits across these boundaries are already installed with the highest rated conductors currently available, so have limited potential to be upgraded. Installing extra conductors or combining multiple additional circuits onto existing overhead lines would also not be feasible because the existing infrastructure is not designed to accommodate this additional level of loading. Installing additional conductors onto this existing infrastructure would increase loading beyond safe limits, requiring extensive strengthening works or a complete rebuild. Overhead line pylons in the UK are also typically designed to accommodate two three-phase electrical circuits ('overhead line double circuit'), the vast majority of which are already installed with two circuits as standard. For overhead lines to carry three or more circuits, existing lines would need to be completely redesigned and rebuilt to maintain appropriate clearances between circuits whilst maintaining structural integrity. Additional circuits on existing lines are therefore also not considered to be a feasible solution, and new transmission routes are required.

Part of the Project needs case is also to provide connection capacity for the East Coast generation group. This is a key driver for the routing and siting of the proposed infrastructure in Lincolnshire, in close proximity to the coast, to enable optimised connection of offshore generation and interconnection projects from this group, as well as other generation projects in the region, into the main onshore interconnected transmission system. This is an area which does not currently have any electricity transmission infrastructure at the voltages which are required for the capacity of the connections and reinforcements proposed at part of this Project. This also contributes to the limited opportunity to make any use of existing transmission infrastructure.

- 3.5.1299 A few community members' responses suggested the use of bird friendly power lines to reduce bird collisions, deter perching and nesting using insulated components and/or large air gaps.

National Grid's response: National Grid can confirm that mitigation measures will be considered as part of the Environmental Impact Assessment (EIA) process and included in the Environmental Statement (ES).

- 3.5.1300 Rigsby with Ailby Parish Council's feedback noted that to ensure uniform treatment of the population, the policy (not specified) adopted for East Anglia should be applied to the installation of overhead lines in Lincolnshire.

National Grid's response: National Grid's Approach to Consenting outlines the Project development process, divided into six stages, and is applied across the portfolio of major infrastructure projects promoted by National Grid, including both the Project and the Norwich to Tilbury project, which it is assumed the feedback refers to.

Similarly, National Grid develops major infrastructure projects in accordance with the requirements of legislation and national policy. As such, while feedback from stakeholders and the public and environmental, socio-economics and technical considerations may differ between geographic locations, a uniform approach is taken by National Grid to the Project development process, including in respect of the installation of overhead lines.

3.5.1301 Several community members' responses made suggestions in relation to the routing of overhead lines, which are summarised as follows:

- i. Suggestion to select route ECS2 (offshore route) in preference to EC05.

National Grid's response: National Grid considered the ECSS2 strategic route during strategic optioneering. Overall, technical, environmental and socio-economics factors were not considered to differentiate between onshore and offshore options for the purposes of option selection. However, ECSS2 was substantially more expensive than either of the onshore options. This meant that onshore options were preferred.

- ii. Suggestion to route the overhead line west from Grimsby to the Trent Valley.

National Grid's response: Routing the Project from Grimsby West to the Trent Valley would not enable the Project to meet its needs case, which is to reinforce the network and increase network boundary capability across the B8 and B9 boundaries (by connecting into the existing network at Walpole, south of the B9 boundary) and to carry clean green energy from the north of England to the Midlands and East Anglia by facilitating the connection of both onshore and offshore generation. Another main driver for the Project is the East Coast generation group which require connections as close as possible to the East Coast. We are proposing other projects which do in part make use of the Trent Valley to provide additional reinforcement across the same boundaries but these alone do not provide the reinforcement needed and would not provide connection infrastructure near the East Coast.

- iii. Suggestion to route the overhead line along railway lines or major roads (such as the A16) as much as possible A16 to reduce impact on the rural villages.

National Grid's response: National Grid is not proposing to route the proposed alignment along major roads or existing railway lines because of significant adverse (and direct) impacts to environmental and residential receptors. The A16 runs adjacent to the boundary of the National Landscape (AONB) (and routes within the National Landscape itself between Louth to north of Spilsby) and would have significant impacts on the setting, which the proposed alignment seeks to avoid as much as possible.

- iv. Suggestion to route the overhead line west of Welton, to continue south-west and reconnect into the proposed overhead line west of New Leake, to reduce impacts on residential properties.

National Grid's response: During the routing and siting stage of Project development, two potential route corridors were considered in this area but both options were located to the east of Welton. An alternative west of Welton was not

considered during routeing and siting because it would directly impact the National Landscape (AONB).

- v. Suggestion to route overhead line further east by adopting the eastern corridor from E8 to E14 and suggestion to route the overhead line alignment to follow the E-O route, as described in Chapter 14 of the Corridor and Preliminary Routeing and Siting Study (CPRSS).

National Grid's response: National Grid has undertaken a review of parts of the emerging preferred corridor adjacent to the Lincolnshire Wolds National Landscape (AONB) following the original appraisal reported in the CPRSS. The review has considered additional information obtained by National Grid following the publication of the CPRSS to confirm the appropriateness of selecting the preferred (western) corridor compared to the alternative (eastern) corridor. The review has focussed on those Sections commencing just south of North Thoresby and Tetney and ending just north of Burgh le Marsh, broadly covering route Sections E6-E14. The comparative analysis highlights that distinguishing factors in the selection of the preferred option remain finely balanced and largely relate to the increased potential for impacts on the National Landscape (AONB) associated with the western corridor and the increased potential for potential impacts on the coastal ecological designations and flood risk issues associated with the eastern corridor. The review concludes that consideration of the new information does not significantly alter the previous conclusions reported in the Corridor Preliminary Routeing and Siting Study (CPRSS) and the preference for the western corridor. The findings of the reappraisal are not considered significant enough to require a change of route corridor.

- vi. Suggestion to adopt corridors EC01 or EC02 as this has the shortest construction routes.

National Grid's response: EC01 and EC02 refer to potential strategic solutions to reinforce the network and are set out in more detail in the Strategic Options Report (SOR) (including comparative appraisals). However, these relate to the Creyke Beck generation group options that have been considered by the proposed North Humber to High Marnham Development Consent Order (DCO) Project and therefore are not considered for the Grimsby to Walpole.

- vii. Several suggestions to parallel the overhead lines were received:

- Parallel the existing 132 kV overhead line between Burgh le Marsh and Boston to avoid residential properties.
- Parallel the overhead line in the South Holland District Council Area.
- Feedback presented contrasting views as to whether the overhead lines should or should not be parallel/in proximity to existing lines.

National Grid's response: National Grid has considered an alignment that parallels the existing 132 kV overhead line between Burgh le Marsh and Boston but it is not preferred because a clean close parallel alignment (where the pylon types, spans and conductors form a coherent appearance) would not be possible (additional infrastructure would be required to shift the proposed alignment to either side of the existing one) and this would also site the alignment near to environmental designations associated with the coast. East of Boston, the route is

likely to be more constrained (comparative to the west) due to presence of existing 132 kV overhead line crossings, two crossings of a non-electrified railway, multiple drain crossings and technical complexities associated with routeing in proximity to and crossing the proposed Outer Dowsing underground cables. The difference in pylon size and span length between pylons on an existing 132 kV alignment compared with a 400 kV alignment limit a clean close parallel. With regard to paralleling in the South Holland district, the Corridor and Preliminary Routeing and Siting Study (CPRSS) covers the paralleling of the existing line in this area, which was not taken forward due to the potential need to undertake compulsory acquisition of a number of residential properties to maintain a parallel alignment. More broadly, paralleling of existing overhead line infrastructure has been considered and we are proposing to parallel 400 kV overhead line infrastructure (4ZM) for approximately 2.3 km on the approach to the Refined Weston Marsh Substation Siting Zone. Further detail regarding the options identification and selection process can be found in Chapter 4 of the CPRSS. **PEI Report Volume 2 Part A Chapter 3 Main Alternatives Considered** section 3.4 discusses the key considerations in the identification and assessment of alternatives and how the preferred option was selected.

- viii. The overhead lines should follow the straightest and most direct route, which would shorten the length and reduce impacts.

National Grid's response: The Holford Rules were first set out in 1959 and subsequently reviewed by National Grid in 1992. Paragraph 2.8.5 of National Policy Statement for Electricity Networks Infrastructure (EN-5) EN-5 states that the Holford Rules 'should be used by developers when designing their proposals'. They have become accepted within the electricity transmission industry as the basis for overhead line routeing. National Grid employs the Holford Rules to inform the design and routeing of all new overhead line projects, including this Project. The Holford Rules set out, at a general level, and in the absence of any other overriding constraints, the design principles that should be applied in developing permanent overhead line infrastructure, which include selecting the shortest and straightest route where possible. How the Project complies with the Holford Rules is set out in detail in section 7.1 of the Design Development Report (DDR).

- ix. Suggestion that the route could be moved closer to the Wash, to avoid properties and not affect wildlife.

National Grid's response: Routeing further east, toward the coast, would have greater potential impacts on environmental designations and it is not considered that this would be less impactful to local wildlife.

- x. Suggestion that a route closer to the Wolds would reduce visual impacts from the flood plains.

National Grid's response: The proposed alignment seeks to strike the best balance between minimising potential impacts to setting of the National Landscape (AONB) to the west and minimising potential impacts to environmental designations to the east (associated with the coast). Routeing further west and closer to the boundary of the National Landscape (AONB) would significantly increase potential impacts to the setting and is not preferred.

Considerations for pylons

- 3.5.1302 A large proportion of the community members' responses suggested a number of alterations are made to the design of the pylons including using smaller/shorter pylons, using T-pylons, a single style column pylon, using an aesthetic design, and colouring pylons to blend in with the surrounding landscape.
- 3.5.1303 Lincolnshire County Council's feedback queried why the shorter T-pylon design was not proposed for the Project as a whole and requested an explanation for this decision. T-pylons have a precedent in being used in other projects.

National Grid's response: National Grid has considered alternative pylon technologies for the Project and is proposing to use low height pylons between north of Barnoldby le Beck and Waithe to reduce potential visual impacts to the National Landscape (AONB). Beyond this location, standard height lattice pylons are proposed. T-Pylons have been considered across the Project, however, due to numerous technical and landscape and visual related reasons, they are not currently being proposed for any Sections of the new overhead line. Please refer to Chapter 7 of the Design Development Report (DDR) for more information on the preferred pylon technology and design. At this stage, National Grid has not considered alternative colouring of pylons beyond the colouring of paint currently approved for use on steel lattice pylons (light stone and grey-green). This will be kept under review as the design progresses following Stage 2 Consultation, however any paint used on the new overhead line will still need to comply with National Grid Technical Specifications.

- 3.5.1304 A few community member's responses suggested that the overhead lines in close proximity to active airfields should have hi-visibility marker balls installed on the overhead lines, so they are clearly visible.

National Grid's response: At the current design stage, visual aids for aircraft in the vicinity of active airfields have not been considered as part of the design as this is typically a mitigation which would be implemented at a later stage of detailed design following further engagement with the airfields. The inclusion of visual aid mitigation for airfields, including hi-visibility marker balls, will continue to be considered as the design progresses following Stage 2 Consultation.

- 3.5.1305 A few community members' responses raised that pylons should be sited so that their impact on agricultural productivity is minimised ensuring parts of fields are not sterilised or become difficult shapes to manage/work.

National Grid's response: National Grid's response can be seen under **Agricultural land and farming operations** - A considerable proportion of the community members' responses, alongside technical stakeholders' feedback (Anderby Parish Council, Bilsby and Farlethorpe Parish Council, Burgh le Marsh Town Council, Fotherby Parish Council, Great and Little Carlton Parish Council, Halton Holegate with Halton Fenside Parish Council, Lincolnshire County Council, Legbourne Parish Council, Marshchapel Parish Council, North Cotes Parish Council, North Somercotes Parish Council, Orby Parish Council, Rigsby with Ailby Parish Council, Skidbrooke with Saltfleet Haven Parish Council, Sutton St Edmund Parish Council, Tetney Parish Council, West Walton Parish Council, Weston Parish Council, Willoughby and District Parish Council and Withern with Stain Parish Council) raised concerns about the impact on and/or loss of agricultural land and farming operations, with associated food security, employment and economic impacts due to the Project.

- 3.5.1306 Lindsey Marsh Drainage Board's feedback noted that a minimum standoff of 9m between pylons and the top bank of any Board maintained watercourse would be needed and also a clearance of minimum 10m+SWD (safe working distance) above these watercourses and this distance should take into account any sag or sway on the overhead lines. Furthermore, the overhead line need to be arranged in such a way that there are no working restrictions placed upon the Board when carrying out its statutory duties.

National Grid's response: ENA TS 43-8 is a technical specification from the Energy Networks Association and defines the statutory minimum clearances of overhead lines. Statutory clearance for an overhead line refers to the legally required minimum distance that must be maintained between the conductors and other structures, objects, or the ground. This clearance is put in place to prevent faults from occurring and to ensure safety of people and structures around and underneath the overhead line. Minimum clearances can vary depending on factors such as the operating voltage of the overhead line and any constraints within the vicinity of that overhead line. The required height of the pylon is, therefore, influenced by the sag profile of the conductor and the span distance between adjacent pylons. Pylons need to be sufficiently tall to ensure that statutory clearances from the bottom conductors are achieved in all weather conditions and for the maximum permissible operating temperature. National Grid design and build overhead lines to standard ENA TS 43-8 over the IDB watercourses. This may not be the same clearances as requested by the IDB and National Grid will engage with the IDB on the necessity of increased clearances, but this will need to be balanced against the additional technical complexities involved and the visual impacts of increased pylon heights.

Infrastructure screening

- 3.5.1307 Several community members' responses suggested that visual screening measures could be used to integrate the overhead line and associated substations into the landscape more effectively, such as by using vegetation and trees, landscaping around the substations or other visual barriers to help to minimise the visual impact of the infrastructure.
- 3.5.1308 **National Grid's response:** Visual screening through planting will be implemented by National Grid to reduce the landscape and visual effects of the Project. This includes areas for reinstatement for vegetation lost during construction, woodland planting around substations to provide visual screening and landscape integration and tree and hedgerow planting along field boundaries and roads to filter views towards the Project for visual receptors. Areas initially identified as mitigation areas are shown on the Consultation plans provided as part of the Stage 2 consultation. As further assessment is undertaken, additional areas may be identified and National Grid would welcome feedback on locations for additional planting.

Section specific considerations

- 3.5.1309 Where a response referenced specific locations or route Sections, the narrative of feedback and National Grid's response can be seen under:
- Grimsby West Substation – Question 3b and other feedback relevant to this Section of the route.
 - Section 1: Grimsby West to Barnoldby le Beck – Question 3c and other feedback relevant to this Section of the route.

- Section 2: Barnoldby le Beck to North Thoresby – Question 3e and other feedback relevant to this Section of the route.
- Section 3: North Thoresby to Alvingham and Keddington – Question 3f and other feedback relevant to this Section of the route.
- Section 4: Alvingham and Keddington to Tothill – Question 3g and other feedback relevant to this section of the route.
- Lincolnshire Connection substation A – Question 3h and other feedback relevant to this Section of the route.
- Lincolnshire Connection substation B – Question 3i and other feedback relevant to this Section of the route.
- Section 5: Tothill to Cumberworth – Question 3j and other feedback relevant to this Section of the route.
- Section 6 Cumberworth to Burgh le Marsh – Question 3k and other feedback relevant to this Section of the route.
- Section 7 Burgh le Marsh to Midville – Question 3l and other feedback relevant to this Section of the route.
- Section 8 Midville to River Witham – Question 3m and other feedback relevant to this Section of the route.
- Section 9 River Witham to River Welland – Question 3n and other feedback relevant to this Section of the route.
- Weston Marsh substation – Question 3o and other feedback relevant to this Section of the route.
- Section 10 River Welland to B1165 – Question 3p and other feedback relevant to this Section of the route.
- New Walpole substation – Question 3q and other feedback relevant to this Section of the route.
- Section 11: B1165 to Walpole – Question 3r and other feedback relevant to this Section of the route.

Refining our proposals – Question 5b and other relevant feedback

3.5.1310 Question 5b of the feedback form asked:

‘Are there any other considerations we should take into account when developing our proposals?’

3.5.1311 The following sections of the report also discuss relevant feedback:

- Strategic options – Question 1a and other relevant feedback
- The graduated swathe – Question 3a
- Refining our proposals – Question 5

- 3.5.1312 To avoid repetition, the following sections provide a summary of the comments made in relation to any considerations that should be taken into account that have not been covered in other sections of this report and National Grid's response to those.
- 3.5.1313 Several community members' responses suggested that consideration should be given to coastal flooding due to climate change and impacts this could have on the Project.

National Grid's response: National Grid has considered the possibility of coastal flooding due to climate change from the EA guidance 'Flood Risk Assessment: Climate Change Allowances'. The guidance will be used for coastal allowance in accordance with the River Basin District and to capture any increase in sea level rise. National Grid is currently in the process of obtaining data demonstrating tidal flood risk across the route and will be undertaking updates to models if required to ensure they are aligned with the latest data. Coastal/tidal flood risk will be considered as part of the Flood Risk Assessment that will be included in the Environmental Statement (ES) submitted with the Development Consent Order (DCO) application.

- 3.5.1314 A large proportion of the community members' responses, alongside technical stakeholder's feedback (Withern with Stain Parish Council) suggested that consideration should be given to relocating substations along the coastline or brownfield sites.

National Grid's response: National Grid considered several potential siting locations during the routeing and siting phase of project development before presenting the preferred siting locations during Stage 1 consultation. The siting considerations for each proposed substation can be found in the Options Appraisals chapters in the Corridor and Preliminary Routeing and Siting Study (CPRSS). Siting closer to the coast was not considered due to the potentially significant adverse impacts on environmental designations associated with the coast as well flood risk considerations.

Given the length and linear nature of the Project, it would not be feasible to locate all new infrastructure on brownfield land. However, as identified in section 4.5 of the CPRSS, National Grid acknowledges that using available brownfield land will generally be of benefit/advantage compared with utilising greenfield land, and considered the availability of brownfield land in the site selection process. In line with that approach, National Grid has investigated potentially suitable land in the region, designated as brownfield sites, for placement of compounds required for the construction phase and for the siting of substations. While siting zones LCS11 and LCS12 would utilise existing and /or available brownfield land in the form of former RAF Manby and Strubby Airfield and Glider Field, these siting zones were not preferred for the reasons detailed in section 13.3 of the CPRSS. No suitable brownfield sites were identified.

- 3.5.1315 The Environment Agency's feedback noted that if Gas Insulated Switchgear is selected for any of the substation locations, then there may be additional operational requirements due to the presence of sulphur hexafluoride (SF6) which is regulated under the F Gas Regulations. The Agency's feedback also provided further information on the F Gas Regulations.

National Grid's response: National Grid can confirm that the current design intent is to primarily use Air Insulated Substations and equipment, and to minimise or eliminate the use of SF6 wherever possible.

Refining our proposals – Question 5c and other relevant feedback

3.5.1316 Question 5c of the feedback form asked:

‘In addition to our Community Grant Fund, are there other ways in which you would wish to see local communities benefit from hosting new electricity transmission infrastructure?’

3.5.1317 The following sections provide a summary of the comments made in relation to the Community Grant Fund and benefits to the local communities, and National Grid’s response to those.

Community Grant Fund

3.5.1318 Several community members’ responses raised concerns about the perceived impacts of the scheme on their community and mentioned that not enough information has been provided about the Community Grant Fund.

3.5.1319 A considerable proportion of the community members’ responses raised concerns that the community fund has the perception of a bribe.

3.5.1320 Technical stakeholders’ feedback (Anderby Parish Council, Lincolnshire Police and Crime Commissioner and Orby Parish Council) requested information on the Community Grant Fund, in relation to how it will be divided amongst the communities impacted and how that Fund compares with the projected financial benefits to National Grid’s shareholders.

3.5.1321 West Walton Parish Council’s feedback suggested investments should be made for affected communities and direct grants should be awarded.

3.5.1322 Norfolk County Council’s feedback mentioned the preparation of an Employment and Skills Plan (ESP) to accompany this Project.

3.5.1323 **National Grid’s response:** We know that our responsibility as a business goes beyond safely building new energy infrastructure to enable a cleaner, fairer, and affordable future. We want to leave a lasting positive impact where we build our Projects, to help those areas and communities thrive and to support a sustainable future. Our Responsible Business Charter 2023³ sets out our commitments and ensures that responsibility is woven through everything we do. It focuses on five key areas where we believe we can really make a difference: the environment, our communities, our people, the economy, and our governance.

- i. We are working with stakeholders and communities to understand what is important to them and will endeavour to deliver initiatives in the region to support those priorities. There are four areas where we believe we can bring benefit to those who are hosting the infrastructure that supports the green energy transition:
- ii. Natural Environment – we will build partnerships with environmental groups and NGOs where we can support initiatives that enhance the landscape, biodiversity, and availability of green space within the areas we are constructing our Projects.

³ [National Grid Responsible Business Charter 2023](#)

- iii. Net Zero – we will help to support the region in achieving its own net zero priorities.
- iv. Skills and employment – we are extending our Grid for Good programme, and building other partnerships, to deliver training and skills development in the region, to encourage the next generation of green energy workers
- v. Community Grant Programme – when projects are in construction, through our Community Grant Programme, charities and not-for-profit organisations can apply for a grant towards community-based initiatives that deliver social, economic, and environmental benefits. In addition, the Government recently conducted a consultation seeking views on how community benefits should be delivered for communities that host onshore electricity transmission infrastructure. We continue to engage with Government on this topic and will work with communities and stakeholders to implement the outcome of this consultation.

3.5.1324 We are working with stakeholders and communities to understand what is important to them and will endeavour to deliver initiatives in the region to support those priorities. National Grid is aware that the Government recently ran a consultation seeking views on how community benefits should be delivered for communities that host onshore electricity transmission infrastructure and published guidance on this. We will continue to work with the Government and regulator to understand what this means for our projects.

Community benefits

3.5.1325 Several community members' responses identified ways in which the local community could benefit from hosting new electricity transmission infrastructure, which are summarised as follows:

- i. Bill reductions for hosting communities, as well as compensation for reduction in house value, loss of trade from tourism and support for farms;
- ii. Improved community facilities, such as community centres, village halls, play areas, and public transport;
- iii. Education programmes around STEM activities, local history and archaeology discovery;
- iv. Support for local employment opportunities;
- v. Potential for free green energy including solar panels, storage batteries and car chargers for residents within the region; and
- vi. Improved flood defences and roads.

3.5.1326 Louth Town Council's feedback suggested that wherever possible, local contractors and employment should be used for the benefit of communities.

3.5.1327 **National Grid's response:** Following the publication of the Planning and Infrastructure Bill the UK Government has committed to hosting communities directly benefiting from new infrastructure being developed near to those communities. *"Under powers in the government's upcoming Planning and Infrastructure Bill, households within 500 metres of new or upgraded electricity transmission infrastructure will get electricity bill discounts of up to £2,500 over 10 years. This will see rural communities receiving*

hundreds of pounds in their pockets for hosting vital infrastructure.”⁴ National Grid supports the approach set out in the Planning and Infrastructure Bill and supports the progression of this Bill through the legislative process.

- 3.5.1328 National Grid welcomes the suggestions about potential community benefits noted in the feedback. We will continue working with stakeholders and communities to understand what is important to them and will endeavour to deliver initiatives in the region to support those priorities including through the Community Grant Fund (see above) for community facilities and programmes.

Lack of community benefits

- 3.5.1329 A considerable proportion of the community members’ responses, alongside technical stakeholders’ feedback (Anderby Parish Council, Lincolnshire Police and Crime Commissioner, Orby Parish Council and West Walton Parish Council) suggested there would be no benefits for the communities hosting new electricity transmission infrastructure. Some of the feedback also requested details of the projected FTE jobs that would be created for Lincolnshire residents.
- 3.5.1330 Norfolk County Council’s feedback suggested that information should be clearly set out about:
- i. How impacts to local communities impacted by the onshore construction (e.g. overhead line and substation) can be mitigated; and
 - ii. The need for a “local community fund” to assist the wider community affected by the proposal.
- 3.5.1331 Norfolk County Council’s feedback also mentioned significant housing and employment growth is planned and consideration should be made by as to how Norfolk could potentially benefit from any new electricity infrastructure in terms of clean energy supplies. The feedback also mentioned that National Grid should engage with Norfolk County Council and other key stakeholders, including UKPN, to explore how benefits for the County could be realised.
- 3.5.1332 **National Grid’s Response:** National Grid has carefully considered the feedback received during the Stage 1 consultation, the alternatives available, and other factors including our duties and obligations. These duties include balancing the need to be economic and efficient, which includes keeping costs down in the interests of the bill-paying consumers, with a duty to have regard to preserving amenity, which includes the natural environment, cultural heritage, landscape and visual quality.
- 3.5.1333 We are undertaking an Environmental Impact Assessment (EIA) to assess the potential impact of the Project, and this will identify the need for any additional mitigation. However, we know that our responsibility as a business goes beyond safely building new energy infrastructure to enable a cleaner, fairer, and affordable future. We want to leave a lasting positive impact where we build our Projects, to help those areas and communities thrive and to support a sustainable future. Our Responsible Business Charter sets out our commitments and ensures that responsibility is woven through every we do. It focusses on five key areas where we believe we can really make a difference: the environment, our communities, our people, the economy, and our governance.

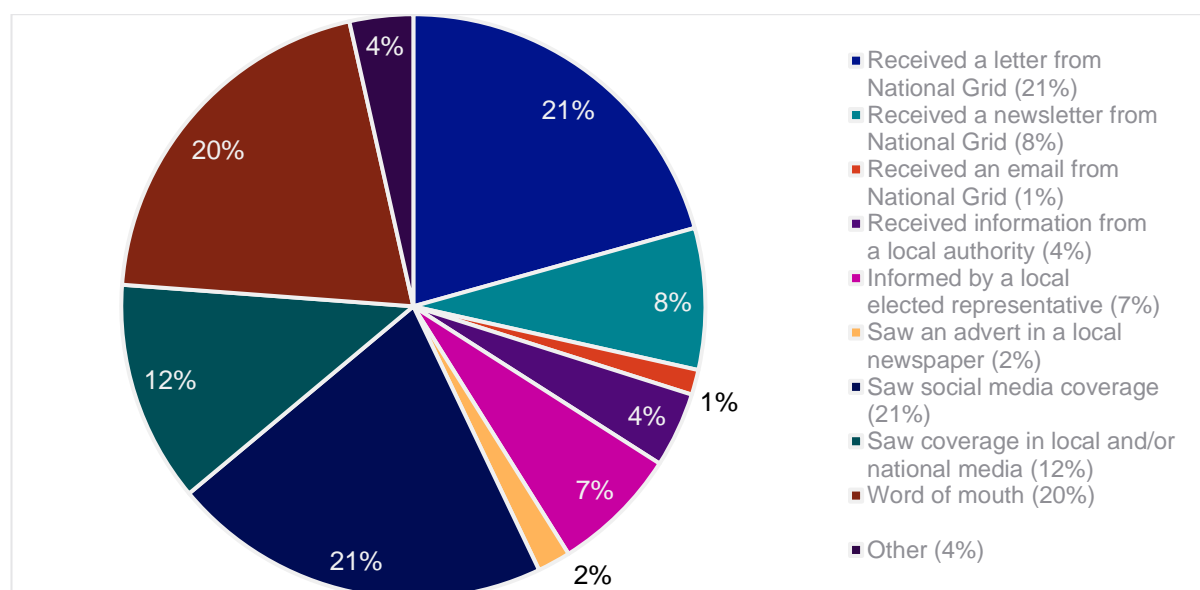
⁴ [Households near new pylons to save hundreds on energy bills - GOV.UK](#)

- 3.5.1334 We are working with stakeholders and communities to understand what is important to them and will endeavour to deliver initiatives in the region to support those priorities. National Grid is aware that the Government recently ran a consultation seeking views on how community benefits should be delivered for communities that host onshore electricity transmission infrastructure and published guidance on this. We will continue to work with the Government and regulator to understand what this means for our projects.
- 3.5.1335 More information on our Community Grant Programme can be found here [Community Grant Programme | National Grid Group](#).
- 3.5.1336 Regarding FTE jobs, Table 7-14 in **PEI Report Part C Route-wide Assessment Chapter 7 Socio-economics, Recreation and Tourism**, sets out FTE employment estimates in terms of jobs supported for each year of construction for the Project nationally and regionally.

Our consultation – Question 6a

- 3.5.1337 This section summarises the consultation feedback received in relation to the Stage 1 consultation and National Grid's responses to this feedback. Question 6 contained closed questions, supplemented by open questions for respondents to provide additional information or comments.
- 3.5.1338 Question 6a asked respondents to indicate how they heard about the Stage 1 consultation. A total of 1,438 respondents answered this question, resulting in 2,623 responses, as more than one option could be selected. Full details are presented in Figure 3.3. The most popular method was '*Received a letter from National Grid*' and '*Saw social media coverage*' with 21% of responses for both options. '*Word of mouth*' was the next most popular method with 20% of total responses.
- 3.5.1339 The least popular method of publicity was '*Received an email from National Grid*' with 1% of responses.
- 3.5.1340 Respondents who selected '*Other*' were asked to provide further detail. These responses included:
- i. Poster or leaflet in the area;
 - ii. Saw on interest group pages on social media;
 - iii. Local information events or meetings;
 - iv. Campaign activities;
 - v. Information on the internet;
 - vi. Received a letter from land agents; and
 - vii. Signs on the road.

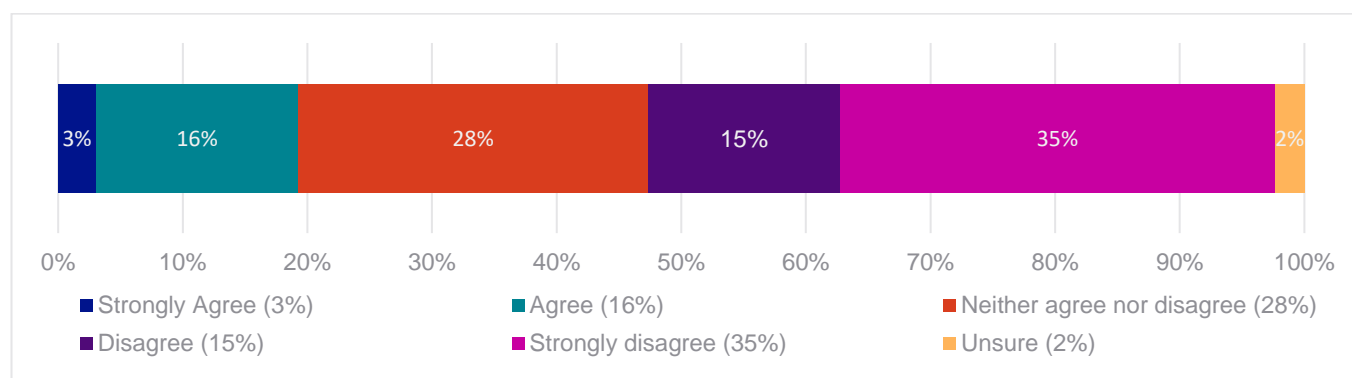
Figure 3.3 Please let us know how you heard about this consultation by ticking one or more of the following boxes.



Our consultation – Question 6b

3.5.1341 Question 6b, asked respondents to rate the information included as part of the Stage 1 consultation in terms of how clearly it was presented, and how easy it was to understand. A total of 1,396 respondents provided an answer, with full details presented in Figure 3.4. As illustrated below 19% of respondents agreed to some extent that the information was clearly presented and easy to understand (3% selected '*Strongly agree*' and 16% selected '*Agree*'). Half (50%) of respondents disagreed to some extent that the information was clearly presented and easy to understand (15% selected '*Disagree*' and 35% selected '*Strongly disagree*'). More than a quarter (28%) of respondents stated that they '*Neither agree nor disagree*' and only a small number (2%) of respondents were '*Unsure*'.

Figure 3.4 Please rate the information included as part of this consultation in terms of how clearly it was presented and how easy it was to understand.



3.5.1342 Question 6b of the feedback form also gave respondents the opportunity to expand on their answer regarding their rating of the information included as part of the Stage 1 consultation. A summary of comments made in relation to reasons for respondents' selection, as well as the consultation is set out below, alongside National Grid's responses.

3.5.1343 Reasons for '*Strongly agree*' and '*Agree*' are summarised as follows:

- i. The information presented was clearly written and easy to understand;
 - ii. The information presented was detailed, but conceived and presented well; and
 - iii. The maps provided detail and clarity.
- 3.5.1344 **National Grid's response:** National Grid welcome the respondents' views and are pleased that they feel the consultation materials have been clear, easy to understand and well presented.
- 3.5.1345 Respondents also took the opportunity to provide comments on the promotion of the consultation process and the consultation events and these have been summarised as follows:
- i. The consultation was well promoted; and
 - ii. The staff attending the events were very knowledgeable and able to answer questions.
- 3.5.1346 **National Grid's response:** National Grid welcome the respondents' views and are pleased that they feel the consultation was well promoted and staff were knowledgeable.
- 3.5.1347 Although selecting '*Strongly agree*' or '*Agree*' when asked to expand on their answer regarding how clearly the information was presented and how easy it was to understand, some respondents also raised concerns. These included concerns about the materials being biased, lacking clarity and not presenting information on any other options, as well as concerns about the timings of the events and the members of staff attending not being able to answer questions.
- 3.5.1348 Reasons provided for '*Neither agree nor disagree*', '*Disagree*', '*Strongly disagree*' and '*Unsure*' were similar in nature and therefore have not been reported on separately. A summary of these comments is set out as follows:
- i. The information presented was biased and misleading;
 - ii. The information presented lacked clarity and was too long and technical; and
 - iii. The information presented did not include details on other options.
- 3.5.1349 **National Grid's response:** For National Grid's response please refer to Our consultation - Question 6f and other relevant feedback, under Consultation materials.
- 3.5.1350 Respondents also took the opportunity to provide comments on the consultation, promotion of the consultation and the events and these have been summarised as follows:
- i. The feedback received during the consultation will not have a material impact on the design of the Project and a decision has already been made;
 - ii. The consultation zone was too small and should have been extended;
 - iii. The consultation events and staff present at these were not helpful;
 - iv. The consultation period should have been longer to allow for feedback to be submitted and further engagement with communities; and
 - v. The consultation was not well promoted.
- 3.5.1351 **National Grid's response:** For National Grid's response please refer to Our consultation - Question 6f and other relevant feedback, under Consultation feedback,

Consultation promotion and information sharing, Consultation period, Consultation events, Engagement.

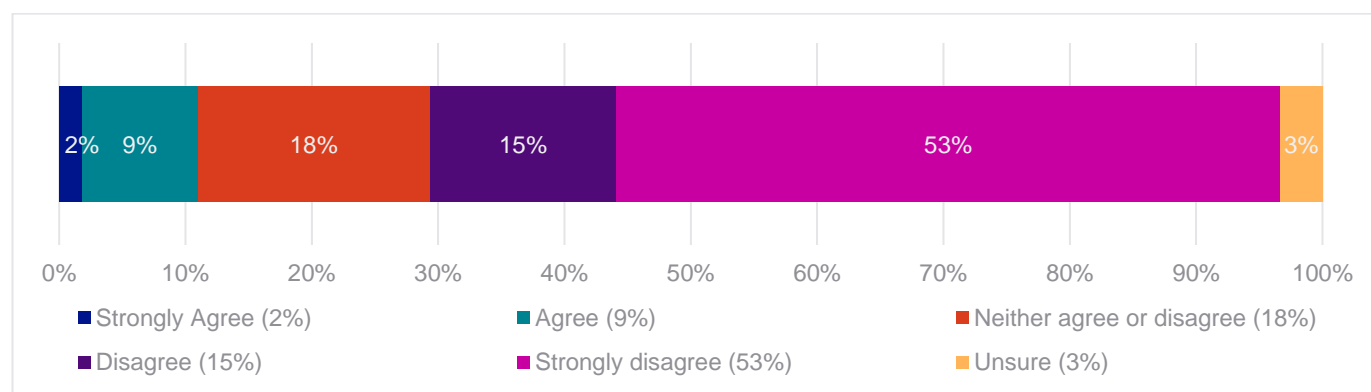
3.5.1352 Although selecting '*Neither agree nor disagree*', '*Disagree*', '*Strongly disagree*' or '*Unsure*' when asked to expand on their answer regarding how clearly the information was presented and how easy it was to understand, some respondents also stated that the materials were informative and easy to follow, as well as that the consultation was well promoted.

3.5.1353 **National Grid's response:** National Grid welcome the respondents' views and are pleased that they feel the consultation materials have been informative, and that the consultation was well promoted.

Our consultation – Question 6c

3.5.1354 Question 6c asked respondents to rate how well the Stage 1 consultation was promoted and advertised to the public. A total of 1,373 respondents provided an answer with full details presented in Figure 3.5. Less than a fifth (11%) of respondents agreed to some extent that the consultation was well promoted and advertised (2% selected '*Strongly agree*' and 9% selected '*Agree*'). More than two thirds (68%) of respondents disagreed to some extent that the consultation was well promoted and advertised (15% selected '*Disagree*' and 53% selected '*Strongly disagree*'). Almost a fifth (18%) of respondents stated that they '*Neither agree nor disagree*' and only a small number (3%) of respondents were '*Unsure*'.

Figure 3.5 Please rate how well this consultation was promoted and advertised to the public



3.5.1355 Question 6c of the feedback form also gave respondents the opportunity to expand on their answer regarding their rating of the consultation promotion. A summary of comments made in relation to reasons for respondents' selection, as well as the consultation process is set out below, alongside National Grid's responses.

3.5.1356 Reasons for '*Strongly agree*' and '*Agree*' are summarised as follows:

- i. The consultation was well promoted via:
 - Letters, including maps and information about the Project and consultation events;
 - Local media;
 - Social media; and

— Information received from Parish Councils.

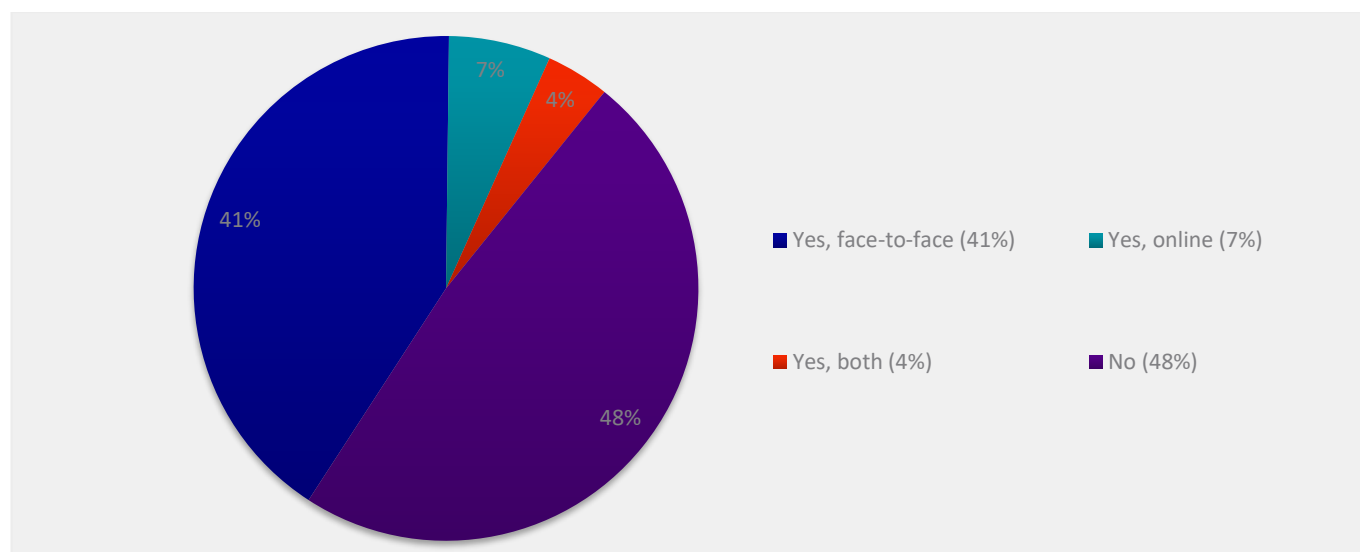
- 3.5.1357 **National Grid's response:** National Grid welcome the respondents' views and are pleased that they feel the consultation was well promoted.
- 3.5.1358 Respondents also took the opportunity to provide comments on the consultation materials and these have been summarised as follows:
- i. The consultation materials were clear, well presented and useful.
- 3.5.1359 **National Grid's response:** National Grid welcome the respondents' views and are pleased that they feel the consultation materials have been clear, well presented and useful.
- 3.5.1360 Although selecting '*Strongly agree*' or '*Agree*' when asked to expand on their answer regarding how well the consultation was promoted and advertised, some respondents raised concerns about the consultation not being promoted at all, not enough or not to a wide enough area.
- 3.5.1361 Reasons provided for '*Neither agree nor disagree*', '*Disagree*', '*Strongly disagree*' and '*Unsure*' were similar in nature and therefore have not been reported on separately. A summary of the comments made on the promotion of the consultation is set out below:
- i. The consultation was only promoted to those directly affected; the wider communities, such as Boston or Alford, should have been informed;
 - ii. The locations for posters should have been more thoroughly considered;
 - iii. More was heard about the consultation through word of mouth rather than promotional and advertising activities;
 - iv. The information on promotional materials was incorrect (for example the email address); and
 - v. Too much reliance on the internet and social media, which could hinder local communities from finding out about the consultation.
- 3.5.1362 **National Grid's response:** National Grid notes that the phone number for Dalcour Maclaren, the Project Lands team, was incorrectly printed on the feedback form. This error was identified and updated copies of the feedback form were printed. During the Stage 1 consultation, various means for contacting the Project team were made available and contact details were included in consultation materials. For National Grid's response please refer to Our consultation - Question 6f and other relevant feedback, under Consultation promotion and information sharing.
- 3.5.1363 Respondents also took the opportunity to provide comments on the consultation, materials and events and these have been summarised as follows:
- i. The feedback received during the consultation will not have a material impact on the design of the Project and a decision has already been made;
 - ii. The consultation materials were biased, misleading, lacked clarity and were too long and technical;
 - iii. The consultation materials did not include information on other options;
 - iv. The consultation events and staff present at these were not helpful; and
 - v. The consultation period should have been longer to allow for feedback to be submitted and further engagement with communities.

- 3.5.1364 National Grid's response: For National Grid's response please refer to Our consultation - Question 6f and other relevant feedback, under Consultation feedback, Consultation materials Consultation promotion and information sharing, Consultation period, Consultation events, Engagement.
- 3.5.1365 Although selecting '*Neither agree nor disagree*', '*Disagree*', '*Strongly disagree*' or '*Unsure*' when asked to expand on their answer regarding how well the consultation was promoted and advertised, some respondents stated that the promotional materials were informative and that the consultation was well promoted.
- 3.5.1366 **National Grid's response:** National Grid welcome the respondents' views and are pleased that they feel the consultation materials have been clear, well presented and useful.

Our consultation – Question 6d

- 3.5.1367 Question 6d asked respondents if they attended any of the Stage 1 consultation events. A total of 1,375 respondents provided an answer with full details presented in Figure 3.6. More than half (52%) of respondents attended a consultation event, with 41% attending a face-to-face event, 7% attending an online event, and 4% attending both face-to-face and online events. Almost half (48%) of respondents did not attend a face-to-face or online consultation event.

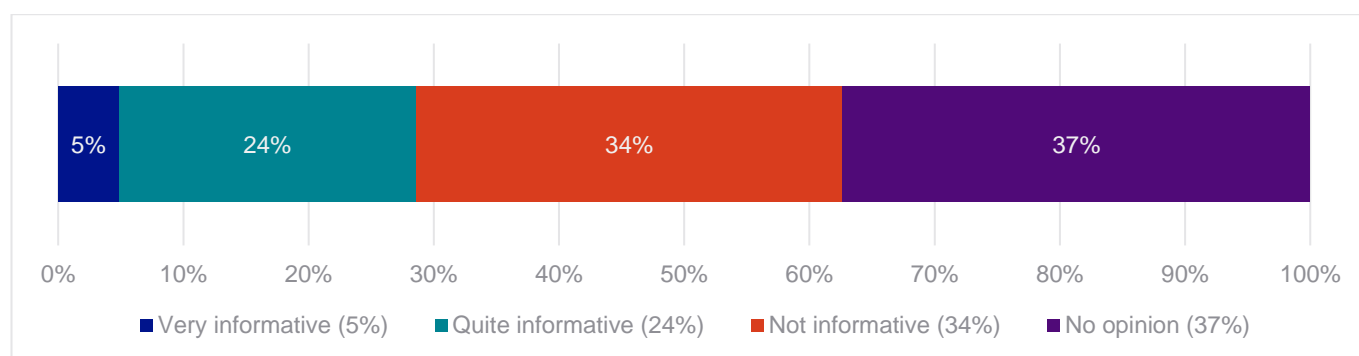
Figure 3.6 Did you attend one of our face-to-face or online consultation events?



Our consultation – Question 6e

- 3.5.1368 Question 6e asked respondents how informative they found the Stage 1 consultation events and / or materials. A total of 1,253 respondents provided an answer with full details presented in Figure 3.7. More than a quarter (29%) of respondents indicated that they found the events and / or materials informative (5% selected '*Very informative*' and 24% selected '*Quite informative*'). More than a third (34%) of respondents described the consultation events and / or materials as '*Not informative*', whilst the remaining 37% had '*No opinion*'.

Figure 3.7 How informative did you find our consultation events and/or our consultation materials?



Our consultation - Question 6f and other relevant feedback

3.5.1369 Question 6f of the feedback form asked:

‘Do you have further comments about our consultation process or anything we can improve about our consultation?’

3.5.1370 The following sections provide a summary of the comments made in relation to the Stage 1 consultation, and National Grid’s response to those.

Consultation events

3.5.1371 A considerable proportion of the community members’ responses made comments criticising the face-to-face events, particularly regarding staff being unprepared and unable to answer questions or providing contradictory information. Furthermore, concerns were raised about the online events, with some being cancelled due to technical issues and not all questions submitted via the Q&A function being answered. Some of the responses suggested holding panel discussions with experts to answer questions.

3.5.1372 **National Grid’s response:** National Grid is confident in our consultation team to answer questions. The National Grid Project team has been and continues to be available to engage with both the public and stakeholders about the Project. The Project team have developed the proposals and therefore are well placed to answer any questions that may arise. We acknowledge that the level of detail our consultation team was able to give during the Stage 1 consultation was more limited than some consultees would have preferred. However, this was due to the Project being at an early stage of design, meaning that this detail was not available at that time. Further detail will be available at our Stage 2 consultation.

3.5.1373 National Grid is not aware of any online events being cancelled due to technical difficulties. A full list of all the events held during the Stage 1 consultation can be seen in our Consultation Strategy which is included in Appendix B of this report.

3.5.1374 Online events were organised and held during specific timeframes, which could have sometimes limited the number of questions that could be answered. The National Grid Project team endeavoured to answer all questions received during events, and where this was not possible, there were alternative ways for contacting the team available throughout the consultation period. Before the Stage 1 consultation commenced, we prepared a Consultation Strategy. This document sets out how we consulted on the Project and is included in Appendix B of this report. We shared this in draft with the

relevant local authorities who provided us with comments based on their knowledge and experience of consultation in the area. We amended the Strategy based on feedback, where practicable, and information on this is available in this report (Appendix A). It is considered that our Stage 1 consultation events provided a better opportunity for consultees to talk to the Project team, ask questions and engage with our proposals, than a panel discussion would. Therefore, for our Stage 2 consultation we will provide the same opportunities through face-to-face and online events.

Numbers and timings of events

- 3.5.1375 Several community members' responses raised concerns around the number of consultation events held and suggested more face-to-face meetings should have been arranged, including timing events to enable those working to attend.
- 3.5.1376 **National Grid's response:** National Grid understands that consultees work to different timetables and are not always available to attend our events. Before the Stage 1 consultation commenced, we prepared a Consultation Strategy. This document sets out how we consulted on the Project and is included in Appendix B of this report. We shared this in draft with the relevant local authorities who provided us with comments based on their knowledge and experience of consultation in the area. We amended the Strategy based on feedback where practicable and information. During the consultation, National Grid held eleven face-to-face consultation events and eight online events which covered a variety of days and times in order to be as accessible as possible. Out of these, nine were open until 7pm and two face-to-face events and one online webinar were held on a Saturday to accommodate those working in the week. Outside of the events, all project documents could be accessed through the Project website and some documents were available to inspect at twelve publicly accessible locations along the route corridor. National Grid considers that the timing of events were sufficiently varied to reasonably accommodate the availability of consultees.
- 3.5.1377 Before undertaking the Stage 2 consultation, National Grid engaged extensively with relevant local authorities on the development of the Statement of Community Consultation (SoCC), in accordance with Section 47 of the Planning Act 2008 (PA 2008). The SoCC sets out how National Grid proposes to consult local communities and our Stage 2 consultation is undertaken in accordance with it. Our Stage 2 consultation has also been informed by the feedback received to our Stage 1 consultation, which has been taken into account.

Engagement (community)

- 3.5.1378 Several community members' responses, alongside technical stakeholder's feedback (North Somercotes Parish Council) suggested that the community would benefit from further, clearer and more inclusive engagement, as well as being kept informed. A few members of the community requested clarity on the process for engaging with landowners and tenants.
- 3.5.1379 **National Grid's response:** National Grid has maintained communication channels open to enable communities and stakeholders to contact us. We have also provided updates to the local community and those who have asked to be kept updated on our proposals via a community newsletter. Following the Stage 1 consultation we have continued to refine our proposals in response to the feedback received and are presenting our updated plans for the Project at our Stage 2 consultation. Anyone can get involved by:

- i. Completing the feedback form online via the Project website nationalgrid.com/g-w;
- ii. Providing feedback by email (contact@g-w.nationalgrid.com); and
- iii. Completing a paper feedback form available at our face-to-face consultation events, information points or online. The feedback form can be returned free of charge using the Freepost address FREEPOST G TO W (no stamp required).

3.5.1380 The Landowner and Surveys page on the Project website (www.nationalgrid.com/g-w) provides details for landowners and occupiers, including contact details for the Project Lands team. National Grid's land agents continue to identify those with an interest in land that the Project may require for surveys, construction and/or operation. Relevant land parcels are identified through the process of land referencing, which uses the Land Registry and other methods to verify the ownership and all relevant land interests. All those identified with an interest in land (as per Section 44 of the Planning Act 2008) are consulted as part of the Stage 2 consultation process by letter and further engagement may also take place.

Engagement (technical stakeholders)

3.5.1381 Technical stakeholders (Addlethorpe Parish Council, Boston Borough Council, Halton Holegate with Halton Fenside Parish Council and Lincolnshire County Council) suggested they would like to be kept informed and involved and would work with National Grid in developing the proposals.

3.5.1382 **National Grid's response:** National Grid will continue to engage with stakeholders including Addlethorpe Parish Council, Boston Borough Council, Halton Holegate with Halton Fenside Parish Council and Lincolnshire County Council, as the Project progresses and welcome their engagement to date.

Consultation and engagement process

3.5.1383 Several community members' responses expressed support for the consultation and engagement process and stated that the staff present at consultation events were helpful and knowledgeable.

3.5.1384 **National Grid's response:** National Grid welcome the respondents' views and are pleased that they feel the consultation activities have been helpful and informative.

Consultation period

3.5.1385 A large proportion of the community members' responses, alongside technical stakeholder's feedback (North Somercotes Parish Council) considered that the consultation period should have been longer and provide more time for submitting feedback, especially noting the length of the feedback form.

3.5.1386 **National Grid's response:** The consultation ran for a period of eight weeks, from 18 January to 13 March 2024 and this is considered a sufficient and reasonable period of time for consultees to provide an informed response. The consultation period was also discussed with local authorities as part of the development of the Consultation Strategy available in Appendix B. In addition to the feedback form, National Grid provided alternative means of communication to submit feedback, including by letter and email, plus the option to append further sheets to the feedback form, to suit different preferences. Paper copies or alternative formats of the consultation materials were available on request.

- 3.5.1387 Before undertaking the Stage 2 consultation, National Grid engaged extensively with relevant local authorities on the development of the Statement of Community Consultation (SoCC), in accordance with Section 47 of the Planning Act 2008 (PA 2008). The SoCC sets out how National Grid proposes to consult local communities and our Stage 2 consultation is undertaken in accordance with it. Our Stage 2 consultation has also been informed by the feedback received to our Stage 1 consultation, which has been taken into account.

Consultation promotion and information sharing

- 3.5.1388 A considerable proportion of the community members' responses, alongside technical stakeholders' feedback (North Cotes Parish Council, North Somercotes Parish Council and Sutton St Edmund Parish Council), criticised the activities undertaken to promote the consultation and share information, suggesting more should have been done such as contacting those directly affected and using social media and local media, as well as other means of promotion, including leaflet drops and notice boards. Furthermore, suggestions were made that the consultation zone should have been wider. A few community members' responses also noted that the consultation events should have been advertised earlier to provide enough notice for those who wish to attend.
- 3.5.1389 **National Grid's response:** Before the start of the Stage 1 consultation, we prepared a Consultation Strategy document, which set out how we would consult on our proposals, including defining the Primary Consultation Zone (PCZ) and Secondary Consultation Zone (SCZ) and this was developed in collaboration with relevant local authorities. The Consultation Strategy is included in Appendix B of this report and remains available on the Project website.
- 3.5.1390 The PCZ included the emerging preferred corridor and substation siting zones and an area of a minimum of 1 km from the edge of these, while the SCZ extended this area to a minimum of 5 km. Where appropriate, both zones were extended, to avoid the boundary dissecting hamlets or neighbourhoods.
- 3.5.1391 At the start of consultation, an introductory newsletter was sent to all households, businesses and community organisations with property postcodes within the PCZ (approximately 21,000 addresses). The newsletter included information about the consultation events, methods of engagement and how to respond to the consultation including the deadline for responses. Full details about the contents of the newsletter can be found in Chapter 2 of this report.
- 3.5.1392 We also provided briefings and information to Parish Councils, local elected representatives, community organisations and seldom heard groups within the PCZ, SCZ and, where appropriate, the wider area. As part of the information shared with Parish Councils, posters were included, allowing them to decide if they would like to place these locally, and if so, the most suitable location to do so.
- 3.5.1393 We also published a series of newspaper advertisements setting out information about the consultation in print and online, with most of these outlets having wider coverage than the PCZ and SCZ. Social media adverts were also used and were targeted to include the vicinity of both the PCZ and SCZ, by using data generated as part of the production of these zones and the inclusion of geographical areas of population within both zones.
- 3.5.1394 The approach taken to promoting the consultation included the use of leaflet drops (newsletters), posters, newspaper advertisements, press releases, as well as social media, as evidenced above, which blends both online and offline methods to maximise

reach even outside the PCZ and SCZ. Furthermore, the consultation ran for eight weeks, and this gave reasonable time for people to review the information provided and respond by the deadline.

Consultation materials

3.5.1395 Regarding the materials and information provided as part of the Stage 1 consultation:

- i. A considerable proportion of the community members' responses, alongside technical stakeholders' feedback (Addlethorpe Parish Council, Anderby Parish Council, Alvingham Parish Council, Elkington Parish Council, Fenland District Council, Great and Little Carlton Parish Council, Halton Holegate with Halton Fenside Parish Council, Langrville Parish Council, Legbourne Parish Council, Lincolnshire County Council, North Cotes Parish Council, Orby Parish Council, Tydd St Giles Parish Council and Withern with Stain Parish Council) considered these to be biased or misleading, without presenting all options and only focussing on the benefits of the scheme, as well as lacking critical information such as environmental and social impact assessments.

National Grid's response: National Grid considers that the consultation and its content have not been misleading or biased, and we believe we have been clear about the Project, the rationale behind it and how we have developed the design. National Grid sought views about the emerging preferred corridor within which the overhead line may be routed, potential locations for the proposed new substations and our work to date to identify where the proposed reinforcement might be located, during the Stage 1 consultation. For our response in relation to alternative options for the Project please refer to Strategic options – Question 1a and other relevant feedback, under Alternative options.

- ii. Several community members' responses noted the information was too complicated, too technical and inaccessible and should be written in plain English.

National Grid's response: National Grid is committed to making consultation as accessible as possible and created a range of materials to achieve this. This included non-technical documents which presented the identified emerging preferred corridor and graduated swathe along with a high-level, easy to understand explanation of the work done to date and information about the consultation - such as the Project Background Document and Project website - with signposts to the technical documents, which in turn set out in detail the environmental and technical work done to identify the emerging preferred corridor and graduated swathe.

- iii. Several community members' responses commented that the website was hard to navigate and the online feedback form was hard to find.

National Grid's response: National Grid continues to look into optimising the user experience and make the website easy to navigate. Wherever possible we look to signpost how to submit feedback and find information. Where people have difficulties with finding information, we encourage them to contact us directly using the contact details available on our website ([Contact us](#) | [National Grid ET](#)).

- iv. Several community members' responses commented that the maps presented lacked clarity or were too small to be able to identify the areas affected.

National Grid's response: National Grid notes the concerns about the mapping and presentation of our proposals. The Stage 1 consultation presented information available at an early stage of the Project. An interactive map was and continues to be available on the Project website so that people can look at our proposals in more detail. Large scale maps were available at all the consultation events and copies were posted to members of the public who requested them.

For the Stage 2 consultation, National Grid has sought to strengthen the consultation and engagement tools available at the face-to-face consultation events to support stronger communication around the Project by using an interactive 3D visualisation tool.

- v. Several community members' responses noted that the feedback form was too long and complex, and that the online version was not working correctly and was populating text from first row into all rows.

National Grid's response: National Grid recognises the feedback form was considered lengthy and provided alternative means of communication to submit comments, via letter and email. We note there was an error with the interactive PDF, which was one of the means for providing feedback. This occurred during the first week of the consultation period with the error promptly resolved once identified. Feedback has been taken into account and informed our approach to the feedback form published for the Stage 2 consultation.

- vi. A considerable proportion of the community members' responses, alongside technical stakeholders' feedback (Addlethorpe Parish Council, Alvingham Parish Council, Anderby Parish Council, Grainthorpe Parish Council, Great and Little Carlton Parish Council, Halton Hologate with Halton Fenside Parish Council, Huferton Parish Council, Langrville Parish Council, Legbourne Parish Council, Lincolnshire County Council, Lincolnshire Wolds Countryside Service, North Cotes Parish Council, North Somercotes Parish Council, Orby Parish Council, Tetney Parish Council, Tydd St Giles Parish Council and Withern with Stain Parish Council) suggested that more information on the alternatives and/ or discounted options, especially around offshore and underground, including detailed assessments of all factors and mitigations should have been presented and consulted on.

National Grid's response: For our response in relation to alternative options for the Project please refer to Strategic options – Question 1a and other relevant feedback , under Alternative options.

- vii. Several community members' responses expressed support for the consultation materials and stated these were well presented and easy to follow.

National Grid's response: National Grid welcomes the respondents' views and are pleased that they feel the consultation materials have been well presented.

Consultation feedback

- 3.5.1396 A considerable proportion of the community members' responses, alongside technical stakeholders' feedback (Burgh le Marsh Town Council and Great and Little Carlton Parish Council) raised concerns that feedback received during the Stage 1 consultation will not have an impact on the design of the Project and a decision has already been

made. Furthermore, it was emphasised that feedback should be taken on board in order for local concerns to be addressed.

- 3.5.1397 **National Grid's response:** National Grid has and will continue to have regard to all feedback received. We have reviewed feedback from the Stage 1 consultation and this report documents how it has been taken into account. Furthermore, we are required to carry out a Stage 2 consultation as per Sections 42, 47 and 48 of the Planning Act 2008. During the consultation, we sought views about the emerging preferred corridor within which the overhead line may be routed, potential locations for the proposed new substations and our work to date to identify where the proposed infrastructure might be located. The feedback received through this consultation has informed the development of our proposals and how feedback has had an influence on the Project is set out in section 3.5 and Chapter 4 of this report. Further detail in regard to the evolution of the design can be found in the Design Development Report (DDR), published as part of the Stage 2 consultation.

Information requested as part of the feedback form

- 3.5.1398 A few community members' responses raised concerns regarding providing their personal information.
- 3.5.1399 **National Grid's response:** National Grid gives the option to provide further details relating to their background, gender, and age when they submit feedback. This information enables us to understand how different groups of people interact with the Project. The Project's data privacy notice can be found on the final page of our feedback form (Appendix F). This outlines how National Grid protects personal information and explains that National Grid is legally obliged to handle the data in line with all applicable laws concerning the protection of personal data, including the UK General Data Protection Regulation (GDPR). Further information can be found at: nationalgrid.com/privacy-policy.

Feedback responses

- 3.5.1400 Several community members' responses requested a response to the feedback they have submitted as part of the Stage 1 consultation.
- 3.5.1401 **National Grid's response:** National Grid has and will continue to have regard to all feedback received. The feedback received has been summarised and can be seen alongside National Grid's responses within section 3.5 of this report. We will not be providing direct responses to individual comments. In addition to the consultation processes National Grid undertakes ongoing engagement with a range of stakeholders, organisations and those with an interest in the land.

Gunning Principles

- 3.5.1402 Several community members' responses, alongside technical stakeholders' feedback (North Somercotes Parish Council and Withern with Stain Parish Council) raised concerns about the consultation process not adhering to the Gunning Principles.
- 3.5.1403 **National Grid's response:** Before the Stage 1 consultation commenced, we prepared a Consultation Strategy. This document set out how we consulted on the Project. We shared this in draft with the relevant local authorities who provided us with comments based on their knowledge and experience of consultation in the area. We amended the Strategy based on feedback where practicable and information on this is available

in this report (Appendix A). The Consultation Strategy is included in Appendix B of this report.

- 3.5.1404 National Grid has and will continue to have regard to all feedback received. The feedback received has been summarised and can be seen alongside National Grid's responses within section 3.5 of this report. Further detail in regard to the evolution of the design can be found in the Design Development Report (DDR), published as part of the Stage 2 consultation. We consider that we have developed our proposals in accordance with the Gunning Principles. The Gunning Principles set out four principles for consultation as follows:

Consultation must be at a point when proposals are still at a formative stage. A final decision has not yet been made, or predetermined, by the decision makers

- 3.5.1405 The Project is still at a formative stage with our emerging preferred corridor and graduated swathe (presented at the Stage 1 consultation) being indicative to help shape and inform feedback we receive. This was our first stage of consultation, with the second stage of consultation providing further opportunities for feedback. Feedback from the Stage 2 consultation will inform any further work on our proposals prior to submission of the application for a Development Consent Order (DCO).

There is sufficient information to give 'intelligent consideration'. The information provided must relate to the consultation and must be available, accessible, and easily interpretable for consultees to provide an informed response

- 3.5.1406 For National Grid's response please refer to Our consultation - Question 6f and other relevant feedback, under Consultation materials.

There is adequate time for consideration and response. There must be sufficient opportunity for consultees to participate in the consultation. There is no set timeframe for consultation

- 3.5.1407 For National Grid's response please refer to Our consultation - Question 6f and other relevant feedback, under Consultation period.

Consideration must be given to the consultation responses before a decision is made. Decision makers should be able to provide evidence that they took consultation responses into account

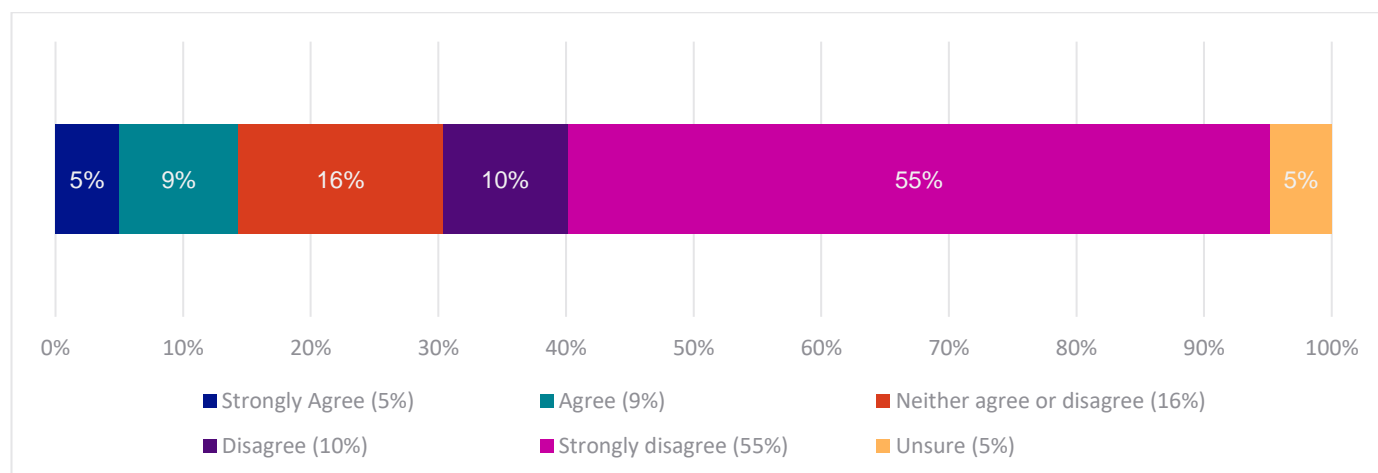
- 3.5.1408 For National Grid's response please refer to Our consultation - Question 6f and other relevant feedback, under Consultation feedback.

Additional questions – net zero – Question 7a

- 3.5.1409 Question 7a asked respondents to what extent they agreed with the identified need for Grimsby to Walpole given the goal to deliver net zero carbon emissions in the UK by 2050 and the need to facilitate the connection of new renewable generation in the region.
- 3.5.1410 A total of 1,338 respondents provided a response. Figure 3.8. As illustrated below, 14% of respondents agreed to some extent with the identified need for Grimsby to Walpole (5% selected 'Strongly agree' and 9% selected 'Agree'). More than half (65%) of respondents disagreed to some extent with the identified need for Grimsby to Walpole (10% selected 'Disagree' and 55% selected 'Strongly disagree'). Less than a

fifth (16%) of respondents stated that they '*Neither agree nor disagree*' and only a small number (5%) of respondents were '*Unsure*'.

Figure 3.8 Given the goal to deliver net zero carbon emissions in the UK by 2050 and the need to facilitate the connection of new renewable generation in the region, to what extent do you agree with the identified need for Grimsby to Walpole (as described on pages 20-27 in the Project Background Document, and also in the Strategic Options Report and the Addendum to the Strategic Options Report)?



Additional questions – net zero – Question 7b

- 3.5.1411 Question 7b of the feedback form gave respondents the opportunity to expand on their answer regarding their rating of the identified need for Grimsby to Walpole (as described on pages 20-27 in the Project Background Document, and also in the Strategic Options Report and the Addendum to the Strategic Options Report). A summary of comments made in relation to reasons for respondents' selection, as well as net zero and energy generation is set out below, alongside National Grid's responses.
- 3.5.1412 Regardless of selection made ('*Strongly agree*', '*Agree*', '*Neither agree nor disagree*', '*Disagree*', '*Strongly disagree*' or '*Unsure*') most respondents recognised the need for delivering net zero carbon emissions in the UK by 2050, for facilitating the connection of new renewable generation in the region and the Project. However, the following points were made. National Grid's responses to these points are provided under Questions 1a and 3a of this report:
- Disagreement was expressed with the technology (overland pylons) and route chosen. Suggestions were made that the Project should be offshore or underground, as well as the need to consider options modern options (not specified).

National Grid's response: For National Grid's response please refer to Strategic options – Question 1a and other relevant feedback , under Alternative options.

- Disagreement was expressed with choosing the cheapest solution.

National Grid's response: For National Grid's response please refer to Strategic options – Question 1a and other relevant feedback , under Costs.

- iii. Concerns were expressed about pylons being outdated technology and being vulnerable visible targets.

National Grid's response: For National Grid's response please refer to The graduated swathe – Question 3a and other relevant feedback , under Safety. Overhead transmission remains one of the most effective solutions for high capacity power transmission and requires substantially less infrastructure to be built to achieve the same capacity as underground cables and offshore solutions.

- iv. Concerns were raised about the Project not having any benefits for local communities.

National Grid's response: For National Grid's response please refer to Refining our proposals – Question 5c and other relevant feedback , under Community benefits.

- v. Suggestions were made that the upgrade to the grid needs to be done in a more responsible manner and it needs to be future proof.

National Grid's response: National Grid is considering the need for future proofing as part of the design development process. For example one of the factors that was taken into account during the routeing and siting stage of the Project development was the space required to accommodate future connecting infrastructure.

- vi. Suggestions were made that substations should be sited carefully to minimise impacts on local communities.

National Grid's response: National Grid's response can be seen under Refining our proposals – Question 5b and other relevant feedback .

- 3.5.1413 Respondents who selected '*Neither agree nor disagree*', '*Disagree*', '*Strongly disagree*' and '*Unsure*' questioned the need for the Project and suggested that the alternative solutions such as offshore or underground would be better solutions.

National Grid's response: For National Grid's response please refer to Strategic options – Question 1a and other relevant feedback , under Alternative options.

- 3.5.1414 Respondents' comments on net zero are summarised as follows:

- i. Concerns were raised about achieving net zero only through offshore wind and solar generation;
- ii. Suggestions that the target date of 2050 should be brought forward;
- iii. Lack of trust in the net zero target, with suggestions that there are a lot of other, bigger polluters in the world;
- iv. Energy produced through renewable sources should be used in the UK;
- v. Energy demand should be reduced to become sustainable;
- vi. Extra capacity is not needed for the United Kingdom;
- vii. Provide energy solutions that can be used locally;
- viii. Locate major power users to where the power is generated not vice versa; and

- ix. Concerns with carbon emissions generated by producing the metal for the Project.

National Grid's response: Wider energy policy, including the net zero target (and the date by which it is to be achieved) and energy demands are matters for the UK Government and not National Grid. The Government, in its Energy White Paper (EWP), states its ambition to achieve net zero emissions by 2050 whilst meeting a large increase in future demand (potentially doubling by 2050). To achieve this the EWP has outlined a plan to increase energy from offshore wind to 40GW by 2030 (target increased to 50GW in April 2022) although it is recognised that whilst a low cost, net zero consistent energy system is likely to be predominantly by wind and solar it also likely to require complementing intermittent renewables with technologies including nuclear and gas with carbon capture and storage. Under its transmission licence, National Grid has a statutory duty to respond to generation customers wanting to connect to the transmission network, whether this be for wind, solar, nuclear, tidal or from other forms of generation.

Additional electricity transmission capacity is required in the UK. As set out in the Strategic Options Report (SOR), the Project is needed to reinforce the B8 and B9 transmission boundaries due to increased generation seeking connection to the network and increases in power flows expected across the country. This is supported by the independent studies carried out by the National Energy System Operator including those undertaken as part of the Network Options Assessment, the Holistic Network Design and the Electricity Ten Year Statement.

The detailed design process for the Project will be iterative and shall seek to minimise GHG emissions associated with the design, construction and operation/maintenance of the Project. At Development Consent Order (DCO) submission, there will be a full assessment of carbon emissions associated with the Project including the embedded carbon in the materials procured for its construction.

- 3.5.1415 Some respondents used this opportunity to state they had no further comments or they were unable to expand on their answer.

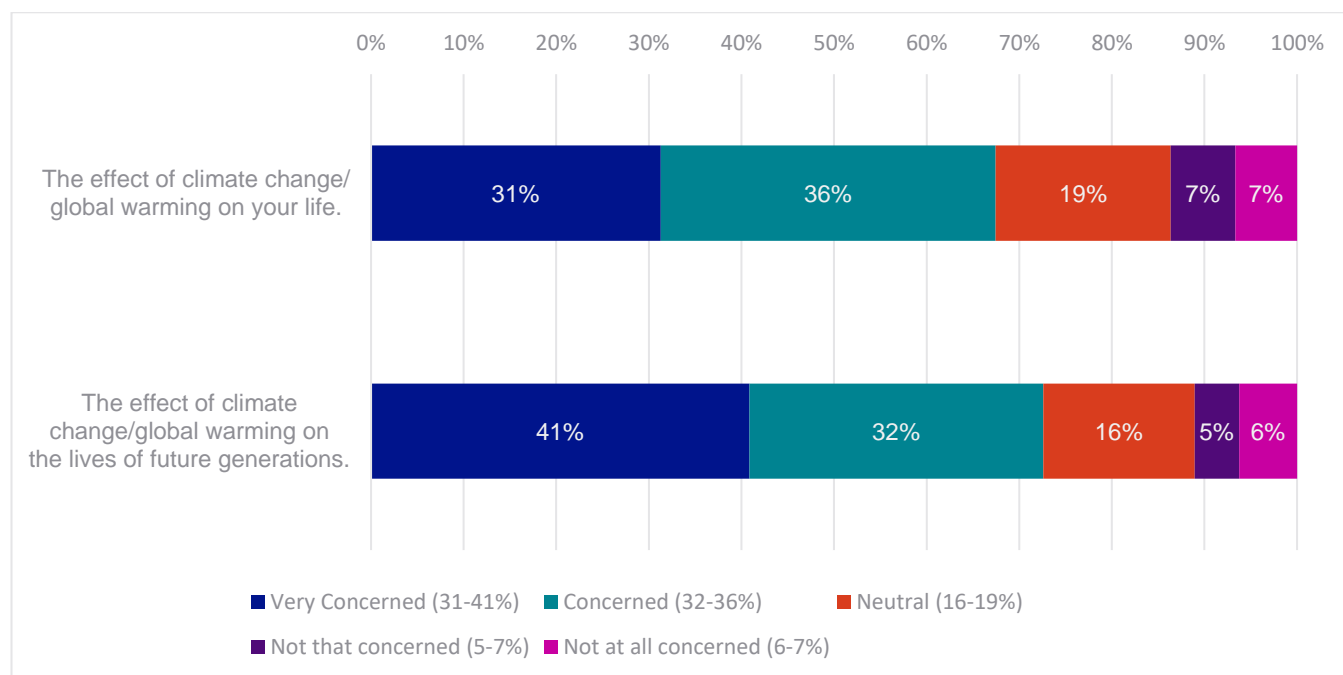
National Grid's response: National Grid notes the respondents' views.

Additional questions – net zero – Question 7c

- 3.5.1416 Question 7c asked respondents to state their level of concern about the effect of climate change/global warming on their life and the effect of climate change/global warming on the lives of future generations.
- 3.5.1417 Regarding the level of concern about the effect of climate change/global warming on their life, there were a total of 1,349 responses. More than half (67%) of respondents were concerned to some extent about the effect of climate change/global warming on their life (31% selected '*Very concerned*' and 36% selected '*Concerned*'). Less than a fifth (14%) of respondents were not concerned to some extent about the effect of climate change/global warming on their life (7% selected '*Not that concerned*' and 7% selected '*Not at all concerned*'). Almost a fifth (19%) of respondents stated that they were '*Unsure*'.
- 3.5.1418 Regarding the level of concern about the effect of climate change/global warming on the lives of future generations, there were a total of 1,346 responses. Almost three quarters (73%) of respondents were concerned to some extent about the effect of

climate change/global warming on the lives of future generations (41% selected 'Very concerned' and 32% selected 'Concerned'). Less than a fifth (11%) of respondents were not concerned to some extent about the effect of climate change/global warming on the lives of future generations (5% selected 'Not that concerned' and 6% selected 'Not at all concerned'). Almost a fifth (16%) of respondents stated that they were 'Unsure'.

Figure 3.9 How concerned are you about the following? Please tick as relevant.

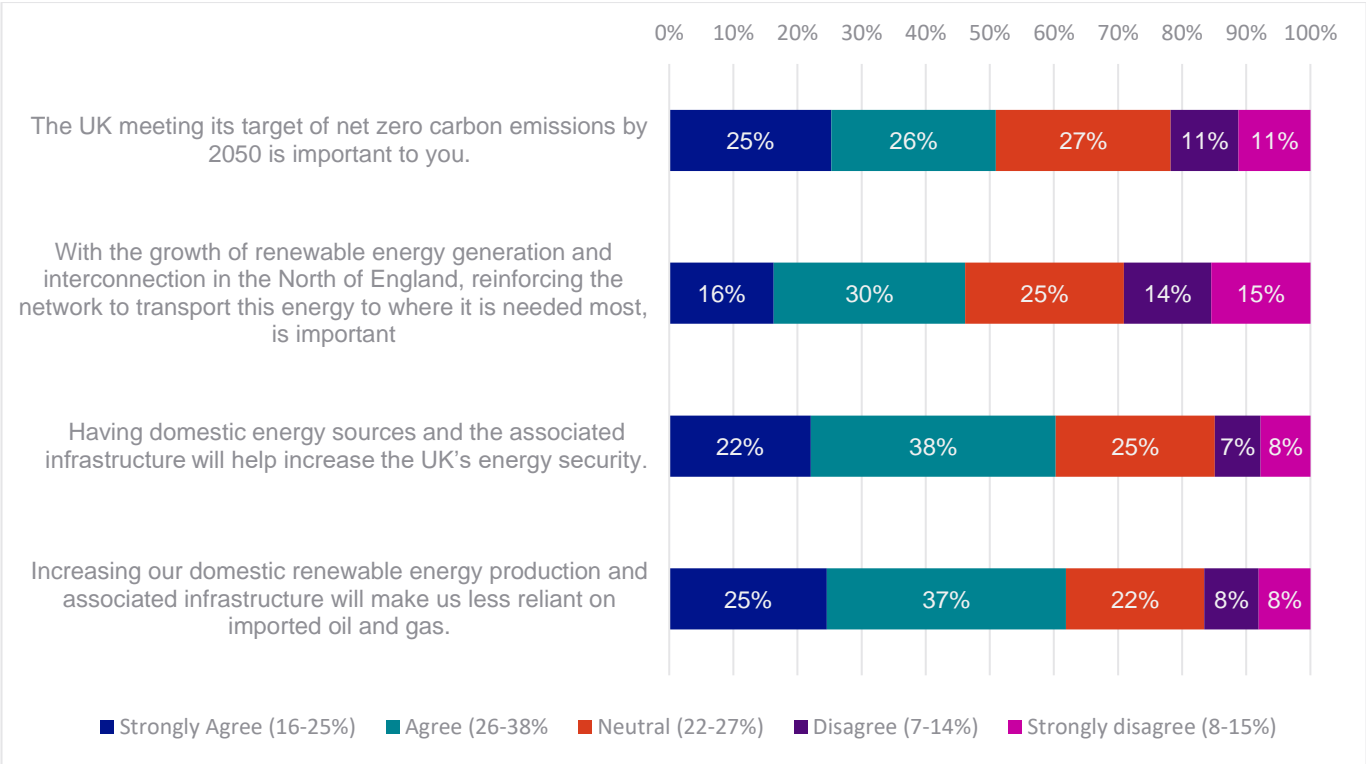


Additional questions – net zero – Question 7d

- 3.5.1419 Question 7d asked respondents the extent of agreement or disagreement with four statements, as shown in the visualisation below. Each statement had a different, but similar number of responses with 1,345 for the first, 1,324 for the second, 1,314 for the third and 1,311 for the last.
- 3.5.1420 The statement with the highest proportion of support (62%) was 'Increasing our domestic renewable energy production and associated infrastructure will make us less reliant on imported oil and gas' (25% selected 'Strongly agree' and 37% selected 'Agree'), closely followed by 60% of respondents agreeing to some extent with 'Having domestic energy sources and the associated infrastructure will help increase the UK's energy security' (22% selected 'Strongly agree' and 38% selected 'Agree').
- 3.5.1421 51% of the respondents showed support for the statement 'The UK meetings its target of net zero carbon emissions is important to you' (26% selected 'Strongly Agree' while 25% selected 'Agree'). A significant proportion of the respondents expressed neutrality to this (27%). Less than a quarter of the respondents expressed disagreement with the statement (11% selected 'Disagree' and 11% selected 'Strongly disagree').
- 3.5.1422 46% of respondents believe that 'With the growth of renewable energy generation and interconnection in the North of England, reinforcing the network to transport this energy to where it is needed most, is important' (with 16 % selecting 'Strongly Agree' and 30% selecting 'Agree'). A neutral stance was taken by 25% of the respondents while 29% expressed disagreement (14% selected 'Disagree' and 15% 'Strongly disagree'). This

statement received the highest level of disagreement in the section, suggesting differing views on the urgency or feasibility of such infrastructure improvements.

Figure 3.10 To what extent do you agree or disagree with each of the following statements?



Additional questions – net zero – Question 7e

- 3.5.1423 Question 7e of the feedback form provided respondents with the opportunity to expand on their answer regarding their selections for question 7d. A summary of the feedback received is set out below, alongside National Grid’s responses, some of which are provided under Questions 1a and 3a of this report.
- 3.5.1424 Respondents who selected ‘*Strongly agree*’ and ‘*Agree*’ emphasised the importance of sustainability, energy security, and self-sufficiency, with reasons summarised as follows:
- i. There is a lot of support for the UK’s net zero targets. The UK must strive for energy independence from other countries, highlighting the importance of such projects. This will ensure a stable and secure energy supply.

National Grid’s response: National Grid notes the comments.

- ii. While achieving net zero carbon emissions is vital, it should not come at the expense of other areas of the economy. A balanced approach is necessary to ensure economic stability alongside environmental goals.

National Grid’s response: When appraising potential strategic options for the Project (as set out in the Strategic Options Report (SOR) and Addendum to the SOR), our preferred option was determined based on the best balance of several considerations, including cost (capital and lifetime), technical performance and environmental and socio-economics effects. As such, we consider our approach to have accounted for factors including economic stability and the environment as referred to in this comment.

A preliminary assessment of the socio-economics impacts is presented in **PEI Report Volume 2 Part B Sections 1 to 7 Chapter 11 Socio-economics, Recreation and Tourism**.

- iii. Clean energy sources are essential to combat climate change, but they should not harm the countryside. Alternative solutions that preserve natural beauty while providing clean energy must be considered.

National Grid's response: For National Grid's response please refer to Strategic options – Question 1a and other relevant feedback , under Alternative options.

- iv. Power transmission infrastructure is necessary, but it doesn't have to be land-based. It can be placed under the sea off the coast to minimize the impact on land and preserve the environment.

National Grid's response: For National Grid's response please refer to Strategic options – Question 1a and other relevant feedback , under Alternative options.

3.5.1425 Respondents who selected '*Neither agree nor disagree*', '*Disagree*', '*Strongly disagree*' and '*Unsure*' expressed concerns about the feasibility, cost, and prioritisation of these initiatives, with reasons summarised as follows:

- i. The prioritisation of net zero through this Project will lead to a number of adverse effects on the community (due to overland route), such as the devaluation of property, impact on the rural and tourist economy, potential health and safety risks, impact on the environment.

National Grid's response: For National Grid's response please refer to The graduated swathe – Question 3a and other relevant feedback , under Land and property, Tourism, Health and Wellbeing and Ecology and Biodiversity.

- ii. Energy should be produced near to where it is needed, allowing the infrastructure to be reduced, energy security to be improved, agricultural land safeguarded, and the environment more protected.

National Grid's response: The transmission network must ensure that the electricity being generated reaches the places where the demand is arising in real time.

Historically, the transmission system was powered by coal-powered generating stations located in the vicinity of coal fields. However, more low carbon generation such as nuclear and wind is connecting to the system. This low carbon generation is generally located away from the coal powered generating stations, including large sources such as offshore wind. As such, the transmission system must be updated to reflect the location of the generating stations.

In the case of the Project, and consistent with the Government's Net Zero target of connecting up to 50 gigawatts (GW) of offshore wind by 2030, there has been, and continues to be, growth in the volume of renewable and zero carbon generation that is seeking to connect to the electricity transmission system in the Lincolnshire regions. The Project will both increase the capability of the network to carry clean green energy from the north of England to the Midlands and East Anglia and connect and carry power from offshore windfarms, interconnectors, solar/ battery storage proposals and high voltage direct current links that are planned to connect to the network.

A PEI Report has been prepared as part of the Stage 2 consultation. It presents the preliminary findings of the environmental assessments done to date, including in respect of agricultural land. The findings of the full Environmental Impact Assessment (EIA) will then be presented in a document called an Environmental Statement (ES) which will accompany the Development Consent Order (DCO) application.

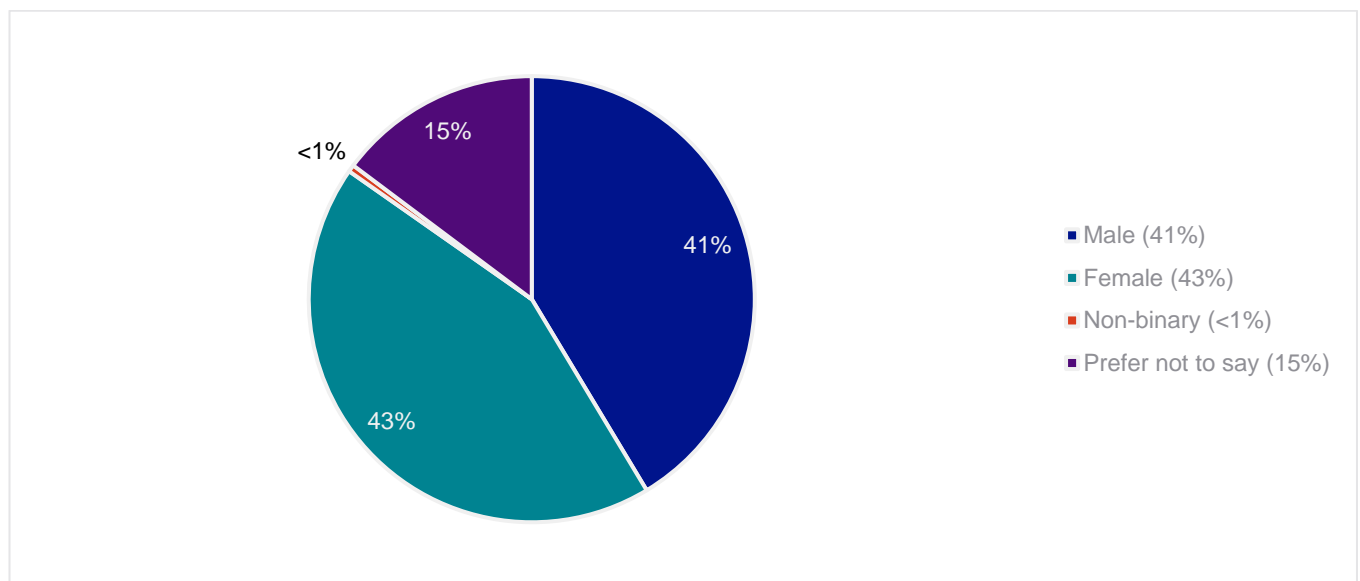
- iii. While net-zero goals are important, there are better ways to deliver them which minimise impacts on the community such as offshore, underground and subsea routes.

National Grid's response: For National Grid's response please refer to Strategic options – Question 1a and other relevant feedback , under Alternative options.

Equality and diversity – Question 8.1

3.5.1426 Question 8.1 asked respondents to indicate their gender. A total of 1,375 respondents provided an answer with full details presented in Figure 3.11. Similar proportions of the respondents identified as male (41%) and female (43%). Less than one percent of respondents identified as 'Non-binary'. The final 15% of respondents preferred not to provide their gender.

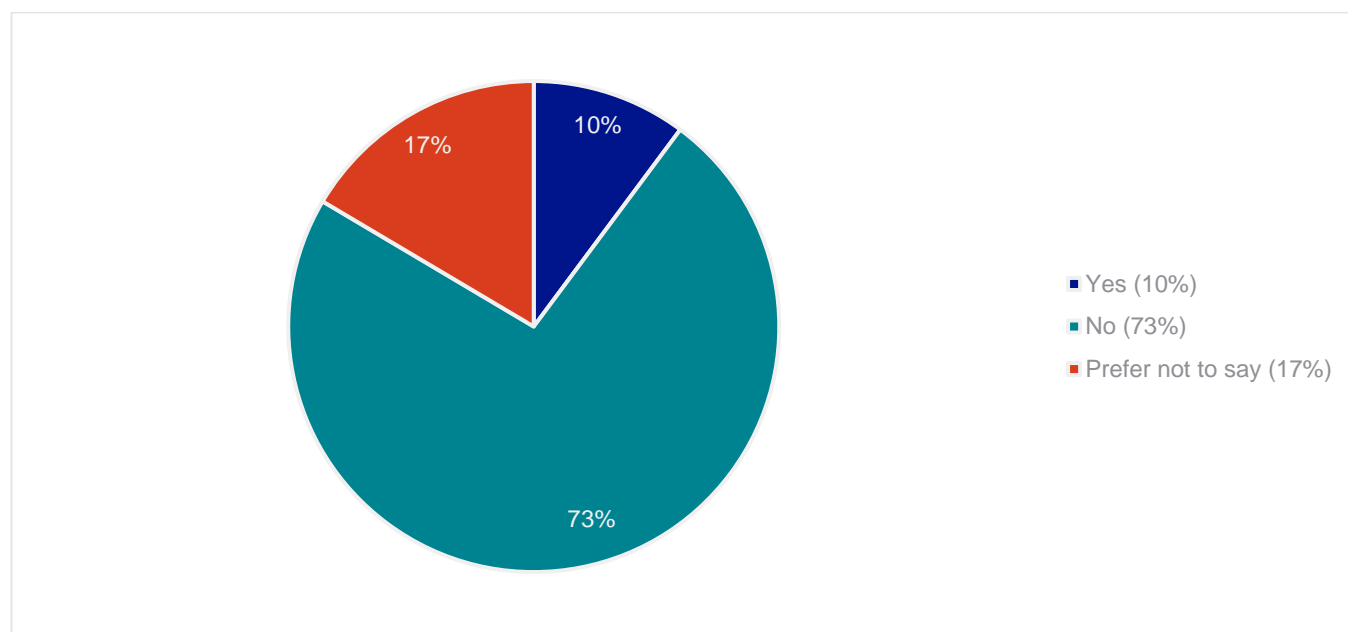
Figure 3.11 What is your gender?



Equality and diversity – Question 8.2

3.5.1427 Question 8.2 asked respondents if they considered themselves to have a disability. A total of 1,365 respondents provided an answer with full details presented in Figure 3.12. The majority of respondents who answered this question (73%) indicated that they did not, whilst a small proportion (10%) of respondents indicated that they did. The remaining 17% of respondents did not wish to answer.

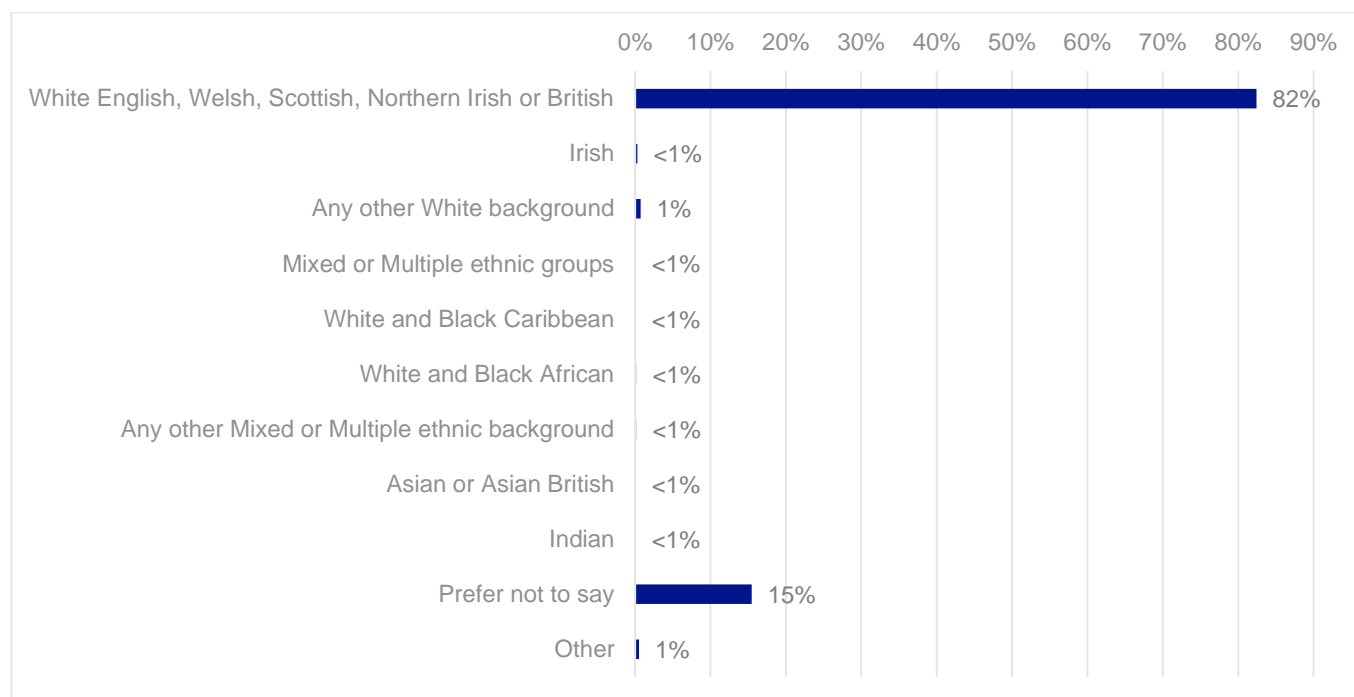
Figure 3.12 Do you consider yourself a person with a disability?



Equality and diversity – Question 8.3

- 3.5.1428 Question 8.3 asked respondents how they would describe their ethnic background. A total of 1,368 respondents provided an answer with full details presented in Figure 3.13. The majority of respondents that answered this question (82%) indicated they were *'White English, Welsh, Scottish, Northern Irish or British'*. This was followed by 15% of respondents who did not wish to provide their ethnic background.
- 3.5.1429 Respondents who selected *'Any other Mixed or Multiple ethnic background'* or *'Other'* were asked to provide more details. Responses included statements around the relevance of the question.
- 3.5.1430 No responses were received for the following ethnic backgrounds *'Gypsy or Irish Traveller'*, *'White and Asian'*, *'Pakistani'*, *'Bangladeshi'*, *'Chinese'*, *'Any other Asian background'*, *'Black, African, Caribbean or Black British'*, *'African'*, *'Caribbean'*, *'Any other Black, African or Caribbean background'* or *'Arab'* and therefore these are not included in Figure 3.13.

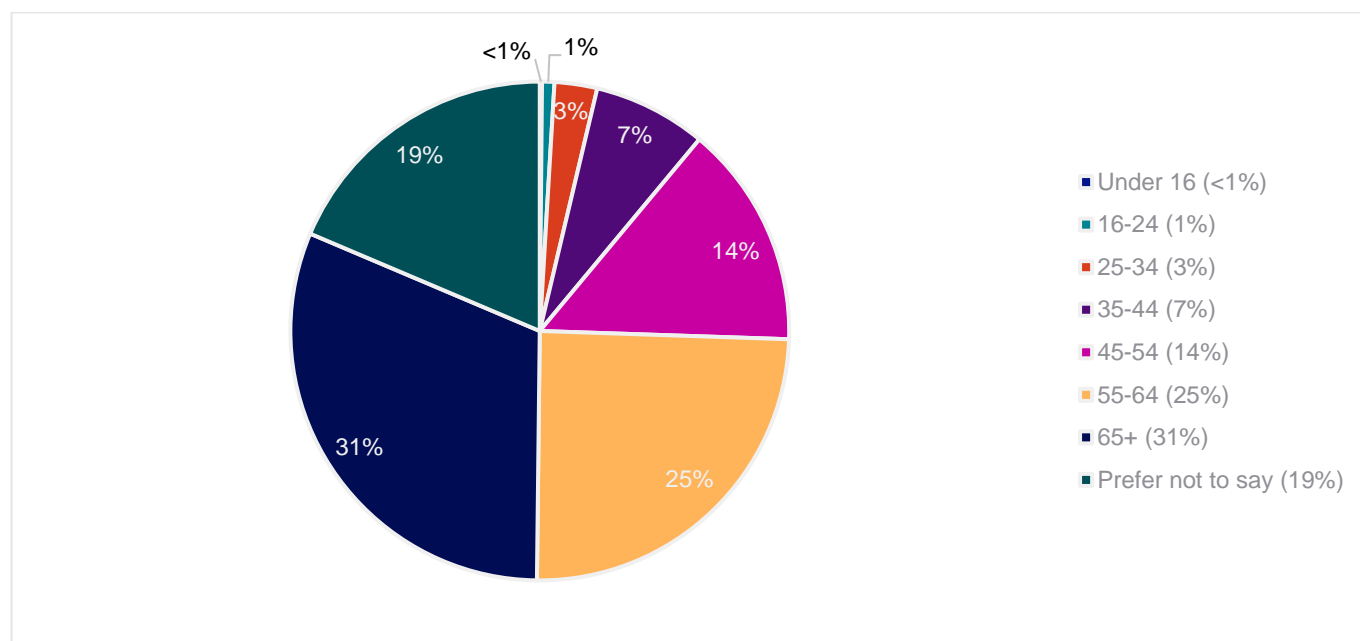
Figure 3.13 How would you describe your ethnic background?



Equality and diversity – Question 8.4

- 3.5.1431 Question 8.4 asked respondents to indicate their age. A total of 1,375 respondents provided an answer with full details presented in Figure 3.14 . Feedback was received from respondents who answered this question ranging from ‘*Under 16*’ to ‘*65+*’ categories.
- 3.5.1432 The highest number of responses were from those in the age group of ‘*65+*’ with over a quarter (31%) of representation in this age bracket. The next most represented age group was ‘*55-64*’ with a quarter (25%) of responses. This is followed by 14% of respondents from the ‘*45-54*’ category, 7% from the ‘*35-44*’ category and 3% from the ‘*25-34*’ category.
- 3.5.1433 The least represented age groups were ‘*Under 16*’ and the ‘*16-24*’ category with <1% of respondents and 1% of respondents respectively. The remaining 19% of respondents preferred not to provide their age.

Figure 3.14 What is your age?



Further comments – Question 9 and other relevant feedback

- 3.5.1434 Question 9 of the feedback gave respondents the opportunity to provide any additional comments. The following section provides a summary of the feedback received along with National Grid's response. Note where feedback is captured in another section of this report it is not duplicated here.
- 3.5.1435 This section is organised under the headings of ecology and biodiversity; independent review; lack of information; flood risk and drainage; water quality; groundwater and contaminated land; environmental permit/approach to licensing; river basin management plans; climate change; and flood modelling.

Ecology and Biodiversity

- 3.5.1436 **Functionally Linked Land** - Natural England's feedback noted that the proposed route, Sections 6 – 11, and the sites of the Western Marsh and Walpole substations are within the vicinity of the The Wash SPA, SAC and Ramsar, and notified on a national level as the The Wash SSSI. The feedback advised that direct impacts from the Project are unlikely, however impacts to land functionally linked to the designated features should be reviewed and the Habitats Regulations Assessment (HRA) should consider wintering and passage bird surveys; proposed mitigation for designated bird species, if necessary; visual disturbance to adjacent land once the cable route is in situ; temporary noise and visual disturbances to adjacent land during construction; otter surveys. Natural England's feedback advised that when considering in combination impacts of loss of functionally linked land, the results of surveys undertaken for those developments should also be taken into account where available. Natural England's feedback also noted that where arable land is affected by the Project and is potentially functionally linked, knowing the previous cropping regime is key to understanding how often it might provide suitable habitat for SPA species. For example, providing 10-years-worth of cropping data will show how often the field is bare or has low growing crops and is suitable for waders.

- 3.5.1437 Natural England's feedback also identified that Sections of the development overlap or are in close proximity to other plans or projects. Natural England advise that when considering in combination impacts of loss of functionally linked land, the results of surveys undertaken for those developments should also be taken into account where available, to understand whether there is a cumulative loss of land which can support wintering or passage birds.
- 3.5.1438 **National Grid's response:** The potential for impacts upon European designated sites, such as the Wash SPA, SAC, Ramsar and SSSI will be assessed within a Report to inform HRA and the Environmental Statement (ES). The HRA will consider all potential pathways of effect between the Project and the designated sites during construction and operation. These will include (but not be limited to), loss of functionally linked habitat, noise and visual disturbance within functionally linked habitats, changes in lighting, changes in air quality and changes in water quality. Further consultation with Natural England is proposed to agree the scope of information to inform the HRA and the in-combination assessment. Impacts on SSSIs will be assessed within the ES.
- 3.5.1439 **Internationally and Nationally Designated Sites** - Natural England's feedback noted that a SSSI impact assessment will be required to provide an assessment of the impacts to features which are only notified as part of the SSSI, as well as the assessment of those which are also designated as European site features.
- 3.5.1440 The Environment Agency's feedback suggested that impacts on non-statutory designated sites should be considered. The Environment Agency's feedback also noted that all of the proposed routes involve the crossing of several watercourses, including main rivers and numerous ordinary watercourses, which poses a risk of polluting designated sites (such as SSSIs) that are hydrologically linked, therefore a pollution prevention plan should be put into place. It was noted that the identification of priority river habitat and priority headwater areas that may be impacted by the Project is positive.
- 3.5.1441 **National Grid's response:** National Grid has sought to avoid direct impacts on designated sites wherever possible through routeing and siting. Impacts upon SSSIs and statutory and non-statutory designated sites will be assessed within the Environmental Statement (ES) that will be submitted with the Development Consent Order (DCO) application. **PEI Report Volume 2 Part B Sections 1 to 7 Chapter 4 Ecology and Biodiversity** and **Volume 2 Part C Route-wide Chapter 3 Ecology and Biodiversity** identify sites statutorily designated for their biodiversity value and sites non-statutorily designated for their biodiversity value. The Water Environment and Flood Risk initial assessment of effects has concluded that embedded mitigation is sufficient to avoid impacts on all aquatic environment receptors, including designated sites. This is included in **PEI Report Volume 2 Part B Sections 1 to 7 Chapter 6 Water Environment and Flood Risk**.
- 3.5.1442 **Surveys and considerations** - Natural England's feedback recommended two years' non-breeding bird surveys, for particularly sensitive locations, to inform the HRA with a recommendation for two surveys a month in areas of higher risk.
- 3.5.1443 Natural England's feedback also noted that nocturnal surveys for lapwing and golden plover are recommended if there is suitable habitat that might be affected by the proposal. Absence of records in the daytime does not necessarily mean they don't use the fields at night (see Gillings et al (2005)). Diurnal studies do not predict nocturnal habitat choice and site selection of European Golden Plovers and Northern Lapwings. Surveys should be focused on areas of highest risk closest to the SPAs, rather than whole project area.

- 3.5.1444 The Environment Agency's feedback noted that impact of new lines on overwintering migratory birds would need to be assessed due to proximity to the Wash (SSSI, SPA, SAC, Ramsar) and inland sites such as the Nene Washes (SSSI, SPA, SAC, Ramsar) and Ouse Washes (SSSI, SPA, SAC, Ramsar). The Environment Agency noted that at Stage 1 consultation the potential impacts to protected species outside of designated sites or proposed baseline ecology surveys were not available, and these should be made available as part of the Stage 2 consultation. The Agency's feedback suggested that waterbodies and terrestrial habitats that may harbour protected amphibians, should be avoided; that INNS and biosecurity measures are considered in the future; protected biodiversity should be considered. The Agency's feedback also provided information on accessing data on fish, invertebrates and macrophytes.
- 3.5.1445 Norfolk County Council's feedback noted that all ecological effects should be considered, both during construction and in-operation (e.g. bird collision risk etc) and that the Project should adhere to the ecological mitigation hierarchy and avoid impacts in the first instance. Where impacts cannot be avoided, mitigation measures will need to be identified, and compensation provided.
- 3.5.1446 **National Grid's response:** Through routeing and siting National Grid has sought and will continue to reduce as far as practicable potential impacts on biodiversity including habitats and protected species. The process of routeing takes account of existing biodiversity, the natural environment and, where practicable, seeks to avoid wildlife, and where not feasible, reduce potential impacts on areas of ecological sensitivity including protected.
- 3.5.1447 Two years of non-breeding bird surveys have been conducted over the winter of 2022-2023 and 2024-2025. Breeding bird surveys have been conducted in spring/summer 2024 and are ongoing for spring/summer 2025. Passage surveys have been incorporated into breeding bird surveys, with dedicated surveys proposed for autumn 2025. Nocturnal surveys have been undertaken for the second year of winter bird surveys, focussing on golden plover and lapwing, where the habitat is suitable and in close proximity to the Project, with regards to relevant Impact Risk Zones. Further habitat and species surveys planned, such as those for aquatic habitats and invertebrates, will include the recording of invasive non-native species. The full results of these surveys along with the Environmental Impact Assessment (EIA) of construction and operational stages of the Project will be presented in the Environmental Statement (ES) submitted as part of the Development Consent Order (DCO) application. The early findings of this process including the surveys undertaken are reported in the **PEI Report**. A Preliminary Code of Construction Practice (CoCP) has also been prepared and outlines the control and management measures proposed to avoid and minimise impacts on the environment, Measure B04 is proposed to control the spread of INNS. At this stage significant route-wide impacts are not anticipated for INNS during the construction or operational phases.
- 3.5.1448 The potential for impacts upon European designated sites will be assessed within a Report to inform HRA and the ES. The HRA will consider all potential pathways of effect between the Project and the designated sites during construction and operation. Further consultation with Natural England is proposed to agree the scope of information to inform the HRA and the in-combination assessment.
- 3.5.1449 **Ancient woodland** - Natural England's feedback noted that the Overarching National Policy Statement for Energy (EN-1) notes ancient woodland is a valuable biodiversity resource for its diversity of species and for its longevity as woodland. Ancient and veteran trees found outside ancient woodland are also particularly valuable. Natural

England's feedback noted that they maintain the Ancient Woodland Inventory which can help identify ancient woodland. Natural England and the Forestry Commission have produced standing advice in relation to ancient woodland and ancient and veteran trees. The feedback advised that this should be taken into account when determining impacts to these habitats and species. Furthermore, Natural England noted they would only provide bespoke advice on ancient woodland, ancient and veteran trees where they form part of a Site of Special Scientific Interest or in exceptional circumstances.

- 3.5.1450 Norfolk County Council's feedback noted that impacts to Irreplaceable Habitats (e.g. Ancient Woodland) should be fully avoided.
- 3.5.1451 **National Grid's response:** Through routeing and siting, National Grid will aim to avoid areas of ancient woodland and ancient and veteran trees. If it is not possible avoid these habitats, mitigation or compensation will be proposed. The potential for preliminary impacts and likely significant effects upon Ancient Woodland is considered at a Section-level in **PEI Report Volume 2 Part B Sections 1 to 7 Chapter 4 Ecology and Biodiversity**, however ancient woodland is either not present within the Study Area of the Section or no potential for direct or indirect effects upon Ancient Woodland is found.
- 3.5.1452 The guidance on bespoke advice is noted.
- 3.5.1453 **Biodiversity net gain** - Natural England's feedback suggested that any commitment to delivering 10% biodiversity net gain (BNG) through the Project would be welcomed and would recommend the use of the latest Biodiversity Metric. Natural England's feedback mentioned they would be pleased to work with National Grid on this topic.
- 3.5.1454 The Environment Agency's feedback noted that the Project had tried to avoid sites of importance for biodiversity (which is the most preferred option under the Biodiversity Net Gain (BNG) mitigation hierarchy), although it would still be very likely that scattered priority habitats will be affected during the works. The Environment Agency advised that the Project should aim to deliver at least 10% BNG, but also recommend that more is provided on major projects and the latest statutory (official) version of the biodiversity metric tool should be used to calculate BNG. The Agency asked for clarification on the approach to the BNG and how it will be delivered, advising opportunities in Local Nature Recovery Strategies (LNRS), any mitigation measures listed for the affected waterbodies under Water Framework Directive (WFD) and contribute to the delivery of the River Basin Management Plans should be considered, as well as providing enhancements around watercourses if possible. The Environment Agency's feedback also noted that the intent is to use land to deliver BNG and suggested considerate planting at the base of pylons, hedgerow enhancement, boundary planting, woodland planting, and species rich grasslands. Furthermore, the biodiversity enhancements should complement the Greater Lincolnshire Local Nature Recovery Strategy, which as at an early stage but should be revisited once ready to inform decisions on where to site BNG delivery and any biodiversity enhancements.
- 3.5.1455 Norfolk County Council's feedback noted that the Project will be expected to deliver the mandatory minimum 10% biodiversity net gain and contribute towards the Local Nature Recovery Network.
- 3.5.1456 **National Grid's response:** The Project is committed to delivering BNG and the baseline ecology surveys and BNG unit calculations will be used to inform the Project design. It is anticipated that BNG delivery will become mandatory under the Environment Act 2021 (which requires a 10% increase from the baseline) for

Development Consent Order (DCO) applications from November 2025. UKHab surveys and BNG unit calculations are ongoing following a staged approach to assessment in order to inform the design and discussions on ecological compensation in line with the Biodiversity Gain Hierarchy. However, it is acknowledged that the government's consultation on this element has not yet commenced and therefore the approach to BNG assessment and delivery will be kept under review and the final BNG approach for the Project will be revised in line with the latest guidance. We will continue to work with Natural England on BNG for the Project.

Independent review

- 3.5.1457 Several community members' responses, alongside technical stakeholders (Great and Little Carlton Parish Council, Legbourne Parish Council, North East Lincolnshire Council and Tydd St Giles Parish Council) called for an independent review of offshore options.
- 3.5.1458 Lincolnshire County Council's feedback mentioned they will be commissioning their own independent review of the strategic options appraisal, and this report when available, will be presented to support the Council's case that alternative options have been dismissed on the basis of cost alone without detailed investigation of technical, environment and socio-economics criteria being undertaken. North East Lincolnshire Council's feedback noted that the Council will work closely with Lincolnshire County Council to ascertain the feasibility of being included in the independent review.
- 3.5.1459 **National Grid's response:** Three strategic options were considered for the Project, including two onshore options and one offshore option. Having considered environmental and socio-economics factors, technical benefits, and capital and lifetime costs, the offshore option was not progressed. Environmental, socio-economics and technical factors were not considered to differentiate between the onshore and offshore options for the Project. However, the offshore option was identified as significantly more expensive to both build and maintain over a 40-year period. As a result, an onshore option was progressed. Further information is presented in the Strategic Options Report (SOR). National Grid will consider any comments received during the Stage 2 consultation in respect of offshore options and other alternatives, including any comments submitted by Lincolnshire County Council following the commissioning of a third-party review of the SOR.

Lack of information

- 3.5.1460 A considerable proportion of the community members' responses, alongside technical stakeholders (Boston Borough Council, Fenland District Council, Halton Holegate with Halton Fenside Parish Council, Lincolnshire County Council and North Cotes Parish Council) noted that the level of information presented at the Stage 1 consultation did not allow for detailed/technical/specific responses in some areas.
- 3.5.1461 Lincolnshire County Council's feedback noted that due to lack of detail presented at the Stage 1 Consultation, specific technical responses could not be provided in the following areas and that further comments will be provided once information becomes available on ecology, economic development, emergency planning/fire and rescue, highways and transport, landscape and visual impact, lead local flood authority and flood advice, public health, public rights of way, soils and agriculture, and waste and minerals.

- 3.5.1462 Fenland District Council's feedback noted that if the proposal is to proceed with overground lines, it is not possible to comment on these impacts until such time that as a minimum, a Landscape Visual Impact Assessment (LVIA), including any consideration of statutory designated sites, is produced for consideration.
- 3.5.1463 North Cotes Parish Council's feedback mentioned that for the Stage 2 consultation it is expected that a transport assessment, phasing plan and construction transport management plan is produced for consideration. North Cotes Parish Council also note the need for studies into wildlife movements and environmental reports.
- 3.5.1464 **National Grid's response:** The Stage 1 consultation was undertaken during the early stages of the Project's development and information on the work done to date was included in the Project consultation documents, including the Corridor Preliminary Routeing and Siting Study (CPRSS). It was important to us to consult during the early stages of the Project to ensure that people were aware of the Project and had the opportunity to provide feedback in the early stages before further work was carried out. The level of detail of the information presented at the early stages of the Project was proportionate to the Project's current status and stage through the iterative design process (National Grid's Approach to Consenting).
- 3.5.1465 As part of the Stage 2 consultation, we are providing considerable information on the Project including a **PEI Report** which sets the initial environmental impact assessment findings and a Preliminary Code of Construction Practice (CoCP) as part of the **PEI Report**. A CoCP and a Construction Traffic Management Plan will be prepared and submitted with the Development Consent Order (DCO) application. These documents will include commitments to reduce construction impacts together with a framework for detailed management plans to be prepared at the detailed design stage to reduce and mitigate potential impacts and/or disruptions that may arise during the construction phase.
- 3.5.1466 National Grid will be producing a Landscape and Visual Impact Assessment (LVIA) that will, in addition to other topic specific assessments, form the latter part of the Environmental Impact Assessment (EIA) for the Project. This will include a write-up of an assessment of the effects on the landscape character of the area and visual effects from communities. Where likely significant effects are anticipated, the LVIA will consider and identify areas where it may be necessary and appropriate to put forward potential mitigation as part of an iterative design and assessment process.

Flood risk and drainage

- 3.5.1467 A considerable proportion the community members' responses, alongside technical stakeholders' feedback (Anderby Parish Council, Bilsby and Farlethorpe Parish Council, North Somercotes Parish Council, Orby Parish Council and Willoughby and District Parish Council) raised concerns about flooding and drainage.
- 3.5.1468 The Environment Agency noted that large parts of the proposals are located within Flood Zone 2 and 3 and other parts are located within Flood Zone 1 and therefore a sequential, risk-based approach to the location of development, taking into account all sources of flood risk and the current and future impact of climate change, to avoid (where possible) flood risk to people and property should be implemented. Where there is an opportunity for parts of the Project to be located outside of Flood Zones 2 and 3 and into Flood Zone 1, this should be prioritised. Furthermore, the Agency provided advice on the design for essential infrastructure located in Flood Zone 3b that has passed the Exception Test, and water-compatible uses and the flood risk should be scoped when reviewing operation to ensure the proposed development is functional in

times of a flood and remains safe. If there is any above ground construction that is in an undefended area, any increases in the footprint of the buildings will require floodplain compensation; the Flood Risk Assessment (FRA) needs to consider floodplain compensation on a level for level, volume for volume basis.

- 3.5.1469 **National Grid's response:** The Project and draft Order Limits have been designed to avoid sensitive receptors as far as practicable. The Project seeks to avoid flood risk and potentially significant effects via the sequential approach to routeing and siting, minimising significant effects where possible.
- 3.5.1470 The **PEI Report** identifies the initial assessment of impact on the water environment and flood risk using desk-based assessment of existing data. The potential for loss of the floodplain and changes in floodplain flow conveyance will be managed through embedded control measures.
- 3.5.1471 The location of Flood Zones 2 and 3 was one of the environmental constraints considered when developing the preferred overhead line route corridor and substation siting zones as part of the Corridor and Preliminary Routeing and Siting Study (CPRSS). Areas of Flood Zones 2 and 3 were avoided wherever possible, although the need to minimise flood risk needed to be considered against the fundamental objectives of the Project, as well as other environmental and engineering constraints. Therefore, it is considered that an appropriate sequential approach has been taken in the development of overall project design. However, due to the very extensive areas of Flood Zone 3 in some parts of the route, it has not proved possible to located project infrastructure in a lower flood risk zone. Flood risk impacts on external receptors are scoped into the Environmental Impact Assessment (EIA) for the Project for both construction and operational phases. Furthermore, the FRA will demonstrate how the design incorporates appropriate flood mitigation to ensure that project infrastructure will be protected from, or resilient to flooding over the proposed lifetime of the Project, including appropriate allowances for climate change. The EA's requirements regarding provision of floodplain compensation for ground raising in undefended areas of Flood Zone 3 are noted.

Water quality

- 3.5.1472 The Environment Agency's feedback noted that overall risks to water quality can be reduced, if appropriate mitigation and best practice is followed. The risk of pollution inherent with construction sites and drainage from substation areas during operation remain following mitigation. The Environment Agency's feedback suggested that an understanding regarding the movement of any polluting discharge once it enters is needed; WFD catchments should be considered to allow investigation of the specific water quality; risks to water quality are higher during the construction of underground cables when compared to overhead lines; the risk of drainage from substations should be considered; the risks from sewage during both construction and operation should be considered, as most of the emerging preferred corridor and siting locations are within SSSI discharge impact zones.
- 3.5.1473 With regard to the overhead line, the Environment Agency's feedback noted that risks to water quality will occur largely during the construction phase. Considerations should be given to the large number of abstractions licences in the Northern and Central Sections; the Eastern overhead line options for the Grimsby West to Burgh le Marsh Section may avoid running through as much of the Drinking Water Surface Water Safeguard Zone as the Western and Central options; the Western and Central cable options along the Grimsby to Burgh le Marsh Section could avoid the Trusthorpe Pump

Drain WFD catchment which struggles with dissolved oxygen concentrations; the Central and Southern cable options for the Weston Marsh to Walpole Section could avoid the Whaplode River WFD catchment which has issues with phosphate and dissolved oxygen.

- 3.5.1474 **National Grid's response:** The Project and draft Order Limits have been designed to avoid sensitive receptors as far as practicable. The Project seeks to avoid flood risk and potentially significant effects via the sequential approach to routeing and siting, and minimising significant effects where possible.
- 3.5.1475 A range of construction good practice measures to minimise the impacts of Project construction on water quality in nearby watercourses will be identified as control measures in the Water Environment Environmental Impact Assessment (EIA). It is envisaged that implementation of these measures during construction will be secured via the Construction Environmental Management Plan (CEMP) and subsidiary plans, including a Pollution Prevention Plan, Drainage Management Plan and Emergency Action Plan (which will make provision for dealing with any pollution incidents), as detailed in the Code of Construction Practice (CoCP) which is provided as part of the **PEI Report** at Stage 2 consultation. It will be a requirement of the Development Consent Order (DCO) to ensure that these plans are prepared and approved by the Local Planning Authority in consultation with the appropriate drainage authority prior to commencement of works.
- 3.5.1476 The scope for water quality impacts arising from the Project will be much reduced once construction is completed. Indirect effects on the quantity and quality of water available for abstraction downstream of the draft Order Limits would be controlled by measures secured via the CEMP. Appropriate design mitigation to control effects on water quality arising from surface runoff and sewage arisings from Weston Marsh substation will be incorporated into the outline scheme design to be developed for the DCO application. This will include the provision of appropriate treatment in Sustainable Urban Drainage Systems (SuDS) for surface water, and identifying an appropriate route for treatment and disposal of sewage. It is envisaged that final detailed surface water and foul drainage design will be developed post-grant of the DCO and secured via an appropriate DCO Requirement.
- 3.5.1477 National Grid are preparing a WFD Compliance Assessment to support the DCO application in accordance with current PINS guidance (www.gov.uk/guidance/nationally-significant-infrastructure-projects-advice-on-the-water-framework-directive).

Groundwater and contaminated land

- 3.5.1478 The Environment Agency's feedback noted that historic landfills are present along parts of the route. There is the potential for contamination to be present in nearby areas, and therefore land contamination will need to be considered and managed. The Agency's feedback also noted that the use of directional drilling techniques should be given consideration as it could pose a risk to controlled waters.
- 3.5.1479 The Environment Agency's feedback also noted that the Source Protection Zones (SPZ), especially SPZ1s that are present along the emerging preferred route should be included in future assessments. The approach of mitigation where SPZ1 and 2 areas cannot be avoided was welcomed, but private water supplies should be considered and avoided where possible due to rural nature of the area. The Agency advised that avoidance of SPZ1 and 2 areas would be preferable, but where not

possible consideration of groundwater protection must be included in the Environmental Statement (ES).

- 3.5.1480 North Somercotes Parish Council's feedback raised concerns about potential impacts to groundwater from civil engineering works, along with the need for accurate baseline information and ongoing monitoring programmes
- 3.5.1481 **National Grid's response:** The Project has been designed to take into account the locations of historical and current landfill sites and these have been avoided wherever possible during the design process, to prevent ground disturbance within proximity to these features and reduce mobilisation of contamination. A review of potentially contaminative previous and current land uses has been undertaken within the **PEI Report**, to establish whether contamination is expected in areas of ground disturbance for the Project and allow incorporation of suitable control measures to prevent disturbance/migration of such contamination. This includes control measures for directional drilling techniques if these are utilised during construction of the Project.
- 3.5.1482 The Project has also been designed to take into account and avoid sensitive hydrogeological receptors where possible, within the balance of other relevant design factors, to minimise/prevent any significant effects on these receptors. This includes groundwater abstractions and SPZs. Where construction and permanent infrastructure associated with the Project are required in areas near to abstractions, these have been assessed within the **PEI Report** for an initial assessment of potentially significant effects, within **PEI Report Volume 2 Part B Sections 1 to 7 Chapter 7 Geology and Hydrogeology**. This references the control measures that would be applied during construction, as set out in the Preliminary Code of Construction Practice (CoCP). With these measures the Project's exposure pathways would be reduced/prevented such that the effects would not be significant. Details of private water supplies have also been obtained from the Local Authorities and, where provided, effects on these have been assessed within the **PEI Report**. Further details on groundwater abstractions will be obtained from the EA and utilised to further inform the assessment within the subsequent ES.

Permits/Environmental permit/Approach to licensing

- 3.5.1483 Lindsey Marsh Drainage Board's feedback noted that any culvert installations affecting water courses within the Board's district or extended area will be subject to Board consent, with the only likely impact being for any access culverts that ultimately became a permanent feature. The feedback also provided information on the Board's Planning and Byelaw Policy for reference.
- 3.5.1484 The Environment Agency's feedback advised early consideration regarding the need for Flood Risk Activity Permit (FRAP) under the Environmental Permitting Regulations and provided information on where this is applicable, noting that the permit will not be automatically forthcoming once planning permission has been granted. The Agency also advised to consult with them on this topic.
- 3.5.1485 Natural England's feedback noted that they offer a protected species Pre-Submission Screening service, whereby a draft licence application can be assessed and a LoNI (Letter of No Impediment) can be provided where no reason was identified that a licence would not be granted post Development Consent Order (DCO) consent.
- 3.5.1486 Natural England's feedback also noted the District Level Licencing (DLL) approach for Great Crested Newts, which was discussed during a meeting. The date for the Lincolnshire District Level Licencing Scheme going live cannot be confirmed at this

time. However, if the DCO submission is not due until 2027, then National Grid can simply wait for the scheme to be launched and submit a formal enquiry through the normal route and guidance was provided on this.

- 3.5.1487 **National Grid's response:** National Grid acknowledges the feedback from Lindsey Marsh Drainage Board and thanks them for the information supplied.
- 3.5.1488 National Grid acknowledge that FRAP may be required for a variety of Project interactions with Main Rivers and associated flood defences, particularly with regard to crossing protection scaffolds and temporary access crossings for construction. Detailed temporary works designs will be required to submit applications for FRAP for these features, and these will only be available post-grant of the DCO. National Grid note that FRAPs will not be automatically forthcoming once planning permission has been granted. However, National Grid will engage with the Environment Agency prior to submitting the DCO application to agree a set of design principles that, if adhered to, would allow the Agency to permit final detailed designs in due course. It is envisaged that these principles would be agreed via a Statement of Common Ground.
- 3.5.1489 National Grid are currently undertaking protected species surveys to inform the Environmental Impact Assessment (EIA). In the first instance, the Project will seek to avoid impacts on protected species, however where this is not possible, protected species licensing options for the Project will be sought to permit derogation. Although it has been confirmed that the Lincolnshire District Level Licencing Scheme for great crested newt is not currently live, National Grid would welcome the opportunity to discuss any alternative strategic approaches to protected species licensing that be become available in the future. National Grid will consider the most appropriate licensing approaches available for the Project at the time of submission.

River Basin Management Plans

- 3.5.1490 The Environment Agency's feedback recommended the completion of a WFD assessment to determine any impacts on the WFD status of the waterbodies. The assessment should also look for potential enhancement opportunities. Most of the works pass through the Anglian River Basin District, which includes the Witham Catchment Partnership and the Welland Valley Partnership. The Environment Agency advise that any biodiversity enhancements around waterbodies compliment the local environmental objectives and programmes of measures within the RBMP.
- 3.5.1491 **National Grid's response:** National Grid are preparing a WFD Compliance Assessment to support the Development Consent Order (DCO) application in accordance with current PINS guidance (www.gov.uk/guidance/nationally-significant-infrastructure-projects-advice-on-the-water-framework-directive). The Witham Catchment Partnership (WCP) was formed to develop a regularly updated action plan identifying the issues the Witham catchment faces and how best to tackle the issues. The WCP is hosted by East Mercia Rivers Trust, whereby the WCP is based on the 2013 DEFRA principles of the Catchment Based Approach (CaBA). The catchment partnerships are formed to take forward the WFD programmes of measures for water body status improvements.
- 3.5.1492 Where enhancements are proposed within watercourses, waterbodies and adjacent land as part of the BNG strategy for the Project these will be developed through engagement with local stakeholders and consider the local objectives and river basin management plan as appropriate.

Climate change

- 3.5.1493 Several community members' responses raised concerns with climate change.
- 3.5.1494 The Environment Agency's feedback noted that the guidance on how climate change could affect flood risk to new developments was updated and when determining the climate change allowance which must be assessed and be made safe the updated guidance places increased emphasis on flood risk vulnerability classification. The climate change allowance which must be used when assessing floodplain compensation has also changed. The appropriate allowance to assess off-site impacts and calculate floodplain storage compensation depends on the land uses in affected areas.
- 3.5.1495 **National Grid's response:** The Environmental Impact Assessment (EIA) will include consideration for potential impacts of flood risk from rivers, surface water and groundwater sources, considering for the potential for both temporary and permanent impacts, taking account of the effects of climate change over the Project's design life. The results of the initial assessments are being consulted on in a **PEI Report** during our Stage 2 consultation before being refined and submitted in an Environmental Statement (ES) which will form part of the eventual Development Consent Order (DCO) application.
- 3.5.1496 The updated Environment Agency guidance on climate change allowances and flood risk has been acknowledged, particularly in relation to vulnerability classifications and floodplain compensation requirements. It is understood that any relevant assessments should reflect the appropriate allowance based on land use and site-specific considerations, as per current best practice.

Flood modelling

- 3.5.1497 The Environment Agency's feedback noted that all rivers the corridor interacts with have been modelled by the Environment Agency to understand the fluvial flood risk. Additionally, where the corridor is at risk of tidal flooding, breach and overtopping modelling has been undertaken. The Environment Agency acknowledges some of the model data has limitations which should be taken into account by the Project in line with the guidance on Using Modelling for Flood Risk Assessments (December 2023) available online (www.gov.uk/guidance/using-modelling-for-flood-risk-assessments). Early engagement with the Environment Agency is recommended to review any hydrological assessment or hydraulic model development, and fluvial and tidal hazard mapping to gain an understanding of the possible risks of a flood event and assess the necessary mitigation and protection needed.
- 3.5.1498 **National Grid Response:** National Grid are currently engaging with the Environment Agency to obtain all the relevant flood modelling information they hold for the Project Area. National Grid acknowledges that these models are, in some cases, quite dated, will not incorporate current requirements for climate change allowances, and may not offer a sufficient level of site-specific detail to support the Flood Risk Assessment (FRA) for the Project. National Grid acknowledges that further model development will therefore be required to support the Project, in terms of updating flow estimates, incorporating climate change allowances relevant to the lifetime of the Project and vulnerability class of the infrastructure, and incorporating sufficient site-specific detail. National Grid will consult the Environment Agency on its proposals for additional flood modelling work in due course. This work will be carried out in accordance with relevant Environment Agency guidance on high flow estimation, estimation of coastal boundary conditions, use of modelling for FRA, and climate change allowances for FRA.

Other comments

- 3.5.1499 North East Lincolnshire Council's feedback suggested that the Police and Crime Commissioner for Humberside should review the response submitted by the Lincolnshire Police and Crime Commissioner.
- 3.5.1500 **National Grid's response:** National Grid notes North East Lincolnshire Council's feedback.
- 3.5.1501 North Cotes Parish Council suggested that more information should be supplied about the intent for the energy supply generated by the Project.
- 3.5.1502 **National Grid's response:** The documents provided as part of the Stage 1 consultation explained the need for the Project, part of which is to provide additional power flow capacity between the North of England and the Midlands boundary, and between the Midlands and the South of England boundary. Further information on this is also available as part of the Stage 2 consultation. The proposed Project will reinforce the network by providing additional boundary capacity and resilience across the B8 and B9 transmission boundaries and transport energy from where it is generated to where it is needed.

4. How Feedback has Influenced the Project

4.1.1 This section of the report summarises in one place how consultation feedback has influenced the Project. This is reported against the following three headings:

- i. Consultation
- ii. Receptors and assessments
- iii. Design

4.6 Consultation

4.6.1 National Grid has made some changes or additions as part of the Stage 2 consultation. Several of these address points raised within feedback provided at the Stage 1 consultation,

4.6.2 Feedback: the feedback form was too long and complex.

- i. The feedback form provided as part of the Stage 2 consultation is considerably shorter and designed in an intuitive way to enable feedback to be provided on the Sections of the Project that are of interest and/or on the Project as a whole.

4.6.3 Feedback: the consultation materials were too complicated, too technical and inaccessible and should be written in plain English.

- i. For the Stage 2 consultation National Grid has provided several resources to make the process inclusive and encourage informed feedback from everyone. These include a 'Guide to interacting with our consultation plans,' a Non-technical Summary for the **PEI Report** and a Stage 2 Consultation document which provides the background of the Project.
 - The Guide to Interacting with Our Consultation Plans has been created to help stakeholders understand and navigate the consultation materials easily. It provides clear instructions and explanations in plain English, making the technical aspects accessible.
 - The Non-technical Summary of the Preliminary Environmental Information (PEI) Report explains the complex information in straightforward language, ensuring that all stakeholders can comprehend the key points and findings without needing specialised knowledge.
 - The Stage 2 Consultation Document offers an overview of the Project in a simple and accessible way. This document aims to provide clear and concise information about the Project's objectives, scope, and benefits.
- ii. To further support understanding of the proposals, we have introduced an Interactive 3D Visualisation Tool at face-to-face consultation events. This allows stakeholders to explore scalable plans and visual representations of the proposed infrastructure, offering an additional way to engage with the Project.

- 4.6.4 Feedback: the consultation promotion activities could have been better in reaching those interested in the proposals.
- i. For the Stage 2 consultation we have expanded the list of media outlets, including radio, as well as proposed advertisements in locally circulated newspapers and online to ensure a wide coverage, beyond the Primary and Secondary Consultation Zones. Furthermore, statutory notices are being published in locally circulating newspapers.

4.7 Receptors and Assessments

- 4.7.1 Following review of feedback received at the Stage 1 consultation, some receptors not identified in the CPRSS were raised by respondents and are now included in the assessments provided at the Stage 2 consultation, as detailed below:
- i. The Thomas Centre, at Covenham St Bartholomew, was not specifically referenced as part of the Stage 1 consultation material. The Thomas Centre has now been taken into account and has been considered as part of design development of the proposed overhead line and as a sensitive receptor for noise and vibration and socio-economics. **PEI Report Volume 2 Part B Section 2 Chapter 11 Socio-economics, Recreation and Tourism**, and **Chapter 10 Noise and Vibration** set out the findings of preliminary assessments.
 - ii. The Sungrove Club caravan site in Brigsley, was not specifically referenced as part of the Stage 1 consultation material. This site has now been taken into account and the findings of the preliminary assessment is set out in **PEI Report Volume 2 Part B Section 2 Chapter 11 Socio-economics, Recreation and Tourism**.
- 4.7.2 Feedback received at the Stage 1 consultation identified a need for more detailed assessments for the Project. Although not as a direct result of feedback received, we are undertaking an EIA to ensure that matters relating to the environment are considered when developing the proposals for the Project. An EIA is a legal requirement for this development and is strictly regulated, and a wide range of environmental subjects will be taken into consideration as part of this process. The results of our initial assessments are presented in the **PEI Report** as part of our Stage 2 consultation and will be further refined and presented in an ES which will form part of the eventual DCO application.

4.8 Design

- 4.8.1 Following Stage 1 consultation, National Grid has undertaken a design change control process which has taken into consideration the findings of the feedback received. Additionally, ongoing technical and environmental, factors, as well as new information obtained by National Grid, such as environmental surveys and input from stakeholders have informed development of the Project. The following changes have been introduced as a result, and are available as part of the Stage 2 consultation:

Residential Curtilage

- 4.8.2 Through the Stage 1 consultation, National Grid received feedback identifying instances where residential curtilage had been included in the emerging preferred

corridor presented at the Stage 1 consultation. Each of these instances resulted in a separate design change request.

4.8.3 Each design change request was appraised by National Grid and the corresponding areas of residential curtilage were removed from the corridor prior to further design development. Based on the design presented at Stage 2 consultation:

- there are no instances of permanent overhead line or substation infrastructure being sited within residential curtilages; and
- wherever practicable, associated temporary works and access routes for construction and maintenance have been developed to avoid residential curtilages.

Overhead Line Routeing

4.8.4 For some Sections of the route, the overhead line alignment has been refined compared to the preferences indicated by the darker shading of the graduated swathe, presented at Stage 1 consultation, along with considerations for pylon design, resulting in the deviations itemised below. Further detail is available in section 5.3 of the DDR.

4.8.5 **Section 2 – New Grimsby West Substation to new Lincolnshire Connection Substation A:**

- i. The overhead line alignment is proposed to be routed further west within the corridor presented at Stage 1 consultation than the most likely routeing indicated by the darkest shading of the graduated swathe adjacent to Covenham Saint Bartholomew. This is in response to feedback raised regarding The Thomas Centre at Covenham Saint Bartholomew. Routeing the overhead line further west in this location is considered to reduce the potential amenity impacts to users of this facility, which is balanced against landscape and visual impacts to the Lincolnshire Wolds National Landscape (Area of Outstanding Natural Beauty). This more westerly routing has no greater effects on the AONB and is therefore considered acceptable.
- ii. The overhead line alignment is proposed to be routed further west within the corridor presented at Stage 1 consultation than the most likely routeing indicated by the darkest shading of the graduated swathe, just east of Claythorpe near Mother Wood, in response to feedback regarding potential impacts to the operations of Strubby Airfield. This increases the separation between the airfield and the proposed overhead line.

4.8.6 **Section 4 New Lincolnshire Connection Substations B to Refined Weston Marsh Substation Siting Zone:**

- i. The overhead line has been routed more centrally through the graduated swathe than was indicated by the darkest shading in Burgh le Marsh, in response to feedback received indicating that routeing within the darkest shading would necessitate the removal of solar panels and wind turbines at The Hollies Solar Park and The Hollies Wind Farm. Routeing the overhead line more centrally at this location avoids potential impacts to both the wind turbines and solar park at this location.
- ii. The overhead line has been routed closer to the northern and western boundary of the graduated swathe than was indicated by the darkest shading near Wigtoft, in response to feedback regarding potential impacts to residents of Wigtoft and heritage assets, including listed buildings, in the area. The route chosen at this

location is considered to manage the potential for setting impacts to grade II listed buildings at Casterton House and its associated non-designated former parkland, and the Wigtoft conservation area including the grade I listed Church of St Peter and St Paul and several other grade II listed buildings, as well as reducing impact on properties in Wigtoft.

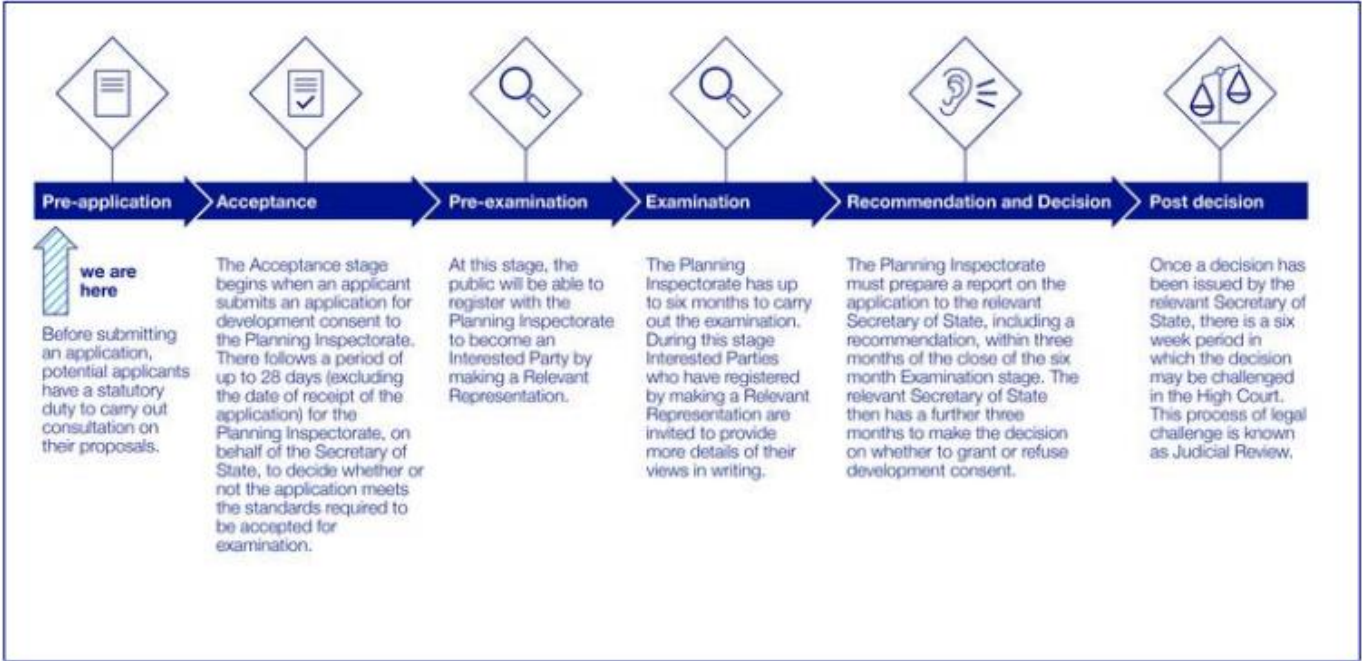
4.8.7 Section 6 Refined Weston Marsh Substation Siting Zone to New Walpole B Substation:

- i. The overhead line alignment has been routed further south within the corridor presented at Stage 1 consultation than the darkest shading of the graduated swathe near Weston Hills in response to feedback received during Stage 1 consultation requesting the overhead line alignment avoids the narrow gap between properties on Delgate Bank. This routeing avoids this identified narrow gap between the two properties and is considered to reduce impacts to these residential receptors.

5. Next Steps

- 5.1.1 The information presented at the Stage 1 consultation is published on the Project's website and is available in the online document library.
- 5.1.2 This report shows feedback received from the Stage 1 consultation and how this has been taken into account to inform the preferred option that is presented at the Stage 2 Consultation.
- 5.1.3 The Project is classified as a Nationally Significant Infrastructure Project (NSIP) under the Planning Act 2008 (PA2008) and requires a Development Consent Order (DCO). A Stage 2 (statutory) consultation is required under the PA2008, which requires that the applicant consults on the proposed application and that feedback received to the consultation is taken into account.
- 5.1.4 National Grid has adopted a structured approach to project development and consenting and consultation and engagement are a key part of this approach. To date National Grid has identified a Strategic Proposal and has undertaken 'Options Identification and Selection' as reported and published in the Corridor Preliminary Routing Siting Study, the Strategic Options Report (SOR), as well as the Addendum to Strategic Options Report and the Design Development Report. An Environmental Impact Assessment (EIA) of the Project is underway, in accordance with the Scoping Opinion published in September 2024. The initial findings of the EIA are presented in the **PEI Report** available at the Stage 2 consultation. A list of all the documents produced for the Stage 2 consultation, including this report, is available on the Project website.
- 5.1.5 National Grid will continue to undertake ongoing stakeholder engagement in addition to the formal periods of consultation and will take all feedback received into account.
- 5.1.6 The DCO process is shown in Figure 5.1. Following the Stage 2 consultation we will prepare the DCO application, which we intend to submit to the Planning Inspectorate in 2027. The Secretary of State for Energy Security and Net Zero will make a decision on whether to grant or refuse the DCO application. This will follow an examination managed by the Planning Inspectorate and a recommendation made by an appointed examining authority. This process typically takes around 18 months. For more information, visit the Planning Inspectorate's website.

Figure 5.1 Development Consent Order process



Glossary

Abbreviation	Description
AC	Alternating current
ALC	Agricultural Land Classification
ALS	Abstraction Licence Strategy
AONB	Area of Outstanding Natural Beauty (now known as National Landscape)
ATZ	Aerodrome Traffic Zone
Bellmouths	Access points for construction traffic
BMV	Best and Most Versatile
BNG	Biodiversity Net Gain
BPM	Best Practical Means
CCGT	Combined Cycle Gas Turbine
CCS	Carbon Capture and Storage
CEMP	Construction Environmental Management Plan
CIEEM	Chartered Institute of Ecology and Environmental Management
CPO	Compulsory Purchase Order
CPRSS	Corridor Preliminary Routeing and Sitting Study
CoCP	Code of Construction Practice
CSE	Cable Sealing End
CTMP	Construction Traffic Management Plan
CWS	County Wildlife Site
DC	Direct Current
DCO	Development Consent Order
DCC	Design Change Control
DCR	Design Change Request
DDR	Design Development Report
DEFRA	Department for Environment, Food and Rural Affairs
DLUHC	Department for Levelling Up, Housing and Communities
DLL	District Level Licensing

Abbreviation	Description
DrMP	Drainage Management Plan
EA	Environment Agency
ECP	Environmental Control Plans
EFATO	Engine Failure After Take Off
EIA	Environmental Impact Assessment
EIP	Environmental Improvement Plan
EMF	Electric and Magnetic Fields
EMR	Electromagnetic radiation
EPUK	Environment Protection UK
ES	Environmental Statement
ESO	Electricity System Operator
EqIA	Equality Impact Assessment
FRAP	Flood Risk Activity Permit
FRA	Flood Risk Assessment
FTE	Full-Time Equivalent
FWRA	Foundation Work Risk Assessment
GIL	Gas Insulated Line
GDPR	General Data Protection Regulation
Graduated swathe	Coloured shading of varying intensity to indicate areas more likely (darker colour) and less likely (lighter colour) to be the location of the proposed infrastructure
GW	Gigawatt
Haul roads	Separate roads to the public highway which allow construction traffic to rely on the public roads less
HER	Historic Environment Records
HGV	Heavy Good Vehicles
HIA	Health Impact Assessment
HPI	Habitat of Principal Importance
HRA	Habitat Regulations Assessment
HVDC	High Voltage Direct Current
IAQM	Institute of Air Quality Management

Abbreviation	Description
IDB	Internal Drainage Board
ICNIRP	International Commission on Non-Ionizing Radiation Protection
INNS	Invasive Non-Native Species
kV	Kilovolt
LCS	Lincolnshire Connection Substation
LGV	Large Goods Vehicles
Listed Building	Grade I, II or II* Listed building. A structure that has been placed on a statutory list for protection.
LWNL	Lincolnshire Wolds National Landscape
LNRS	Local Nature Recovery Strategies
LPA	Local Planning Authority
LSE	Likely Significant Effects
LWAONB	Lincolnshire Wolds Area of Outstanding Natural Beauty
LWS	Local Wildlife Site
LVIA	Landscape Visual Impact Assessment
MW	Megawatt
MHA	Mental Health Assessment
NBIS	Norfolk Biodiversity Information Service
NESO	National Energy System Operator
NETS	National Electricity Transmission System
NFRS	Norfolk Fire & Rescue Service
NGET	National Grid Electricity Transmission
NHLE	National Heritage List for England
NNR	National Nature Reserve
NOA	Network Options Assessment
NOx	Mixture of Nitric Oxide and Nitrogen Dioxide
NPPF	National Planning Policy Framework
NPS	National Policy Statement
NPS EN-5	National Policy Statement for Electricity Networks Infrastructure
NSIP	Nationally Significant Infrastructure Project

Abbreviation	Description
NSR	Noise and Vibration Sensitive Receptor
Ofgem	Office of Gas and Electricity Markets
OHL	Overhead Transmission Line
PA 2008	Planning Act 2008
PCZ	Primary Consultation Zone
PEI	Preliminary Environmental Information
PFRA	Preliminary Flood Risk Assessment
PINS	Planning Inspectorate
PRoW	Public Right of Way
RAF	Royal Air Force
RF	Radio Frequency
RSPB	Royal Society for the Protection of Birds
SAC	Special Area of Conservation
SCZ	Secondary Consultation Zone
SMP	Soil Management Plan
SoCC	Statement of Community Consultation
SOR	Strategic Options Report
SoS	Secretary of State
SPA	Special Protection Areas
SPZ	Source Protection Zone
SSSI	Site of Special Scientific Interest
Stage 1 consultation	Non-statutory consultation
Stage 2 consultation	Statutory consultation
STEM	Science, Technology, Engineering and Mathematics
Substation Siting Areas	Term used for areas where new substations would be located
SuDS	Sustainable Urban Drainage System
SQSS	Security and Quality Supply Standards
SWDS	Surface Water Drainage Strategy

Abbreviation	Description
TA	Transport Assessment
Technical stakeholders	Prescribed consultees under section 42(1)(a) and local authorities under section 42(1)(b) of the Planning Act 2008 and listed within Schedule 1 of the Infrastructure Planning (Applications: Prescribed Forms and Procedures) Regulations 2009 (as amended).
The community or members of the community	Includes organisations that would not be classified as prescribed consultees under section 42, land interests, interest/ campaign groups and members of the public.
UNESCO	United Nations Educational, Scientific and Cultural Organisation
VIP	Visual Impact Provision
WCP	Witham Catchment Partnership
WFD	Water Framework Directive

Appendix A: Local Planning Authority Response to Consultation Strategy

Local Authority	Comments	Response
Lincolnshire County Council	<ul style="list-style-type: none"> The scope of document deposit locations and number of consultation events looks substantial. Suggestion that dates and times of meetings (once confirmed) should be spread across the 8-week period of consultation and times of day varied so that some events are held outside of normal working hours to allow more people to attend Suggested the list of seldom heard group shouldn't be limited to just those listed on page 14 as many factors can contribute to people being seldom heard, including disability, ethnicity, sexuality, communication impairments, mental health problems, homelessness and geographical isolation. Consideration should be made to publishing the "seldom heard groups" as this demonstrates that these stakeholders are fully included. Suggestion to circulate copies of the newsletter to local members and to the relevant Planning Authorities for awareness would be useful. 	<p>Many thanks for confirming these comments on the draft Non-Stat Consultation Strategy. The dates have been spread out over the 8 weeks and we will have around a two week gap between the start of the consultation and the first event taking place which we feel will allow people an appropriate period of time to review what's online. The events during the week will go on into the evening apart from two Saturday events which will run during the course of the day and finish early evening. These will be interspersed with a number of geographically focused online webinars and our online consultation room will give the public a similar experience to attending in person. A finalised list of events with you in the New Year as we are just doing some final health and safety checks of one or two venues although at this stage we don't expect any changes.</p> <p>We'll consider further how to approach seldom heard groups and our comms team have requested whether there is anyone at the County who we might be able to take advice from on this so we can ensure we try and target any groups appropriately.</p> <p>We will also ensure all relevant Members geographic to the proposed route corridor receive a copy of the newsletter as part of the initial mail out of materials.</p>
North East Lincolnshire Council	No comments	N/A

Local Authority	Comments	Response
South East Lincolnshire Councils Partnership (Boston Borough Council, East Lindsey District Council and South Holland District Council)	No comments	N/A
Cambridgeshire County Council	<ul style="list-style-type: none"> • Question regarding the term 'Seldom heard' and a suggestion to adopt 'under-represented groups' as a better, more accessible term. • Supportive of the approach to make hard copies of documents available in local libraries and contact information for the District Library Manager for Fenland and East Cambridgeshire were provided. • Suggestion to adopt 'Grimsby to Walpoles' to avoid confusion with the village of Walpole located in Suffolk. 	<p>We have considered your suggestion to amend 'Seldom heard groups' to 'Under-represented groups' and I can confirm this change will be reflected in the strategy published as part of project launch. Additionally, we would welcome any suggestions from the Council regarding community groups we should be engaging with to meet the commitments we have set out in the strategy.</p> <p>Thank you for confirming the appropriate library contact covering the Fenland and East Cambridgeshire districts. We will contact to arrange for Wisbech Library to be utilised as a deposit location for consultation materials as per our strategy, and take your suggestion to use other libraries within Fenland as deposit points into consideration.</p> <p>As we will be proposing a substation at Grimsby West and Walpole, the project title 'Grimsby to Walpole' sufficiently describes our proposals to upgrade the electrical transmission network between these two points and we feel our materials will make this clear quickly this is the Walpole in Norfolk, not Suffolk.</p>

Local Authority	Comments	Response
		Once we have reviewed and considered all responses to the draft, we will be publishing a final version, which will be made available when Grimsby to Walpole goes live in January 2024.
Norfolk County Council	<ul style="list-style-type: none"> The County Council welcomes the preparation of the Consultation Strategy and supports much of its content. Support for the proposed materials and use of digital media such as interactive Map; Webinars; project videos; online documents (Project website); and use of social media. Support for us of traditional media e.g. Adverts in the local press; telephone helplines and print material including newsletters, exhibition boards and posters. Support for engaging with seldom heard groups. Suggestion to extend the consultation period to between 10 – 12 weeks, giving the maximum opportunity for Local Authorities; Community Groups; and members of the public time to respond. Any documentation produced needs to be in Plain English; and where technical reports are produced these should be supported with Non-Technical Summaries (NTSs). Suggestion to consider other information deposit locations for exhibitions / displays in the nearby settlements of Terrington St Clements, Clenchwarton, and King's Lynn. Stakeholder briefings should include elected County Councillors within the Secondary 	<p>Thank you very much for reviewing our draft Non-Statutory Consultation strategy and providing your feedback - please find below our responses to each of your comments in turn.</p> <p>An 8-week consultation period is considered best practice for a non-statutory consultation period for an application of this size. During this period, we will be holding 11 in-person exhibition events and 7 webinar events to present our proposals and provide opportunities for local residents to engage with the consultation. We recognise you may require additional time as an authority to provide response to our consultation should you be proposing to take a draft through internal approval first before providing your feedback. In those circumstances we would be happy to discuss and agree that with you as an individual authority.</p> <p>Our consultation materials have been designed to be easy to read and understand, and accompanying technical reports include executive summaries to ensure the outcomes of our work can be quickly identified and understood. A Project Background Document summarising proposals will also be included as part of our materials and will be made available when the project goes live. Furthermore, stakeholders can contact the</p>

Local Authority	Comments	Response
	<p>Catchment Zone (not just the Primary Catchment Zone).</p> <ul style="list-style-type: none"> Request to see Appendix A relating to the Primary and Secondary consultation zones. Recommendation that environmental Non-Government Organisations (e.g. Norfolk Wildlife Trust, RSPB, National Trust, Norfolk Rivers Trust etc.) and other local environmental interest groups are specifically identified within the strategy. 	<p>consultation team via freepost letter, email and phone if should there be any questions.</p> <p>Thank you for suggesting additional venues for exhibitions/displays. Exhibition venues have been selected based on proximity to the proposed corridor and we have strived for geographic consistency where feasible - with an event broadly every 10km on average. We will be raising awareness about the consultation and how to get involved in villages and parishes within the Primary and Secondary Consultation Zones, including via social media advertising. During the consultation period we will be hosting 11 in-person events and 7 online webinars, which we feel is a proportionate balance.</p> <p>We are in the process of finalising the primary and secondary non-statutory consultation zones and will provide this as an appendix when we publish the final version of the Consultation Strategy prior to the launch of the non-statutory consultation in mid-January. As part of our commitment to meet and engage with stakeholders impacted by our proposals, I can confirm we will contact the relevant authorities within the secondary consultation zone.</p> <p>Thank you for your suggestion to contact the environmental groups and we have included them as listed NGOs as interest group in the consultation strategy.</p>

Local Authority	Comments	Response
		Thank you again for your feedback to our draft strategy. We will take your comments into consideration and publish a final version of the strategy as part of project launch in mid-January 2024.
Fenland District Council	<ul style="list-style-type: none"> Refer to seldom heard groups to as difficult to reach. Suggestion to add Tydd St Giles Community Centre to the list of event venues. 	Thank you for your response to our consultation strategy. We have taken your comments on board and have amended the consultation strategy, referring to seldom heard groups as 'hard to reach', and added Tydd St Giles as a venue for one of our exhibition events. We are considering the comments received and will publish the final consultation strategy prior to the launch of the non-statutory consultation.
King's Lynn and West Norfolk District Council	<ul style="list-style-type: none"> The strategy is comprehensive. Suggestion to publish material in the Walpole Community Centre if possible (as well as just the Wisbech library), Suggestion to consult the neighbouring parishes as well. 	Thank you for your suggestion of depositing the project information at Walpole Community Centre and Wisbech Library - the deposit points were identified based on their location within the corridor between Grimsby to Walpole - we will review your suggestion to hold the consultation materials in Walpole Community Centre and Wisbech Library.
North Kesteven	No comments	N/A
West Lindsey District Council	No comments	N/A

Appendix B: Consultation Strategy

The Great Grid Upgrade

Grimsby to Walpole

Public consultation strategy

January 2024



national**grid**

Contents

- 3 Introduction
- 4 National Grid Electricity Transmission – what we do in the UK
- 6 Grimsby to Walpole
- 9 Project scope
- 10 Purpose of the 2024 stage 1 consultation
- 12 Consultation area and timing
- 14 Materials
- 16 Stakeholder briefings and meetings
- 18 Public consultation
- 20 Public information events and webinars
- 21 Providing feedback on our proposals
- 22 Advertising
- 24 Accessibility, under-represented and local interest groups

1. Introduction

The way we generate electricity in the UK is changing rapidly, and we are transitioning to cheaper, cleaner and more secure forms of renewable energy such as new offshore windfarms.

This document outlines how National Grid Electricity Transmission intends to carry out a pre-application non-statutory consultation in January 2024 on proposals to upgrade the network between new substations at Grimsby West in North East Lincolnshire and the Walpole/Wisbech area on the Cambridgeshire/Norfolk border. These proposals are part of **The Great Grid Upgrade**¹, the largest overhaul of the grid in generations.

The UK already has 13.6 gigawatts (GW) of connected offshore wind energy in operation. The Government’s recent **British Energy Security Strategy**² outlines the ambition to increase energy from offshore wind to 50 GW by 2030 – more than enough to power every home in the UK.

Our proposals – referred to as ‘Grimsby to Walpole’ – will support the UK’s net zero target by reinforcing the electricity network in the region to facilitate the connection of planned offshore wind, interconnectors and solar/battery storage, connecting on the East Coast, in addition to increasing power flows from Scotland and north east England.

A new 400,000 volt (kV) electricity transmission line is needed along with new 400 kV substations at Grimsby West in North East Lincolnshire, two new substations near the Lincolnshire coast in East Lindsey District, and two new substations at Weston Marsh in South Holland District, and in the Walpole area close to the Norfolk/Cambridgeshire/Lincolnshire border.

Representatives of Lincolnshire County Council, North East Lincolnshire Council, East Lindsey District Council, West Lindsey District Council, Boston Borough Council, South Holland District Council, Cambridgeshire County Council, Fenland District Council, Norfolk County Council and King’s Lynn & West Norfolk District Council have been consulted about our proposed approach to consultation.

A Statement of Community Consultation (SoCC) will be prepared ahead of statutory consultation, which is proposed to take place in 2025. The content of the SoCC will build on this strategy and will be discussed with representatives of the relevant local planning authorities and finalised ahead of the formal stage of consultation on the SoCC as per Section 47 of the Planning Act 2008 (as amended).

¹ National Grid – nationalgrid.com/the-great-grid-upgrade?gadsource=1&gclid=EAlaIQobChMI8tqQnPedgwMVwUpHAR33BQZREAAYASAAEgLUJfD_BwE
² Government UK 2023 - British Energy Security Strategy: <https://assets.publishing.service.gov.uk/media/626112c0e90e07168e3fdb3/british-energy-security-strategy-web-accessible.pdf>

2. National Grid Electricity Transmission – what we do in the UK

National Grid Electricity Transmission (NGET) sits at the heart of Britain’s energy system, connecting millions of people and businesses to the energy they use every day.

We bring energy to life – in the heat, light and power we bring to our customer’s homes and businesses; in the way that we support our communities and help them to grow; and in the way we show up in the world.

It is our vision to be at the heart of a clean, fair and affordable energy future. We believe that by acting now, the UK can become the world’s first major clean economy, with net zero carbon emissions by 2050, creating growth and jobs for communities across Britain.

National Grid Electricity Transmission owns, builds and maintains the transmission network in England and Wales. It is National Grid Electricity Transmission that is developing the proposals for Grimsby to Walpole.

The Electricity System Operator (ESO), operates the transmission network across Great Britain, which includes the networks in Scotland that are owned by Scottish Power Transmission and Scottish and Southern Electricity Networks. ESO manage the network, ensuring the right amount of energy gets to where it is needed. It is entirely separate from National Grid Electricity Transmission.

National Grid Ventures sits outside the above businesses, investing in technologies and partnerships that help accelerate our move to a clean energy future. That includes interconnectors – connecting the UK with countries across the North Sea, allowing trade between energy markets and efficient use of renewable energy resources. The authorities in the South East Lincolnshire Partnership will be familiar with their work to develop the Viking Link Interconnector.

In South East Lincolnshire, along with the Midlands, South Wales and the South West, another National Grid Group company, National Grid Electricity Distribution, is the local distribution network operator, connecting 8 million customers and delivering electricity to 18 million people.

Our world is changing fast. Upgrading to cleaner, greener and more affordable energy will create exciting new opportunities for growth across the UK and speed up our efforts to tackle the global climate challenge. The time for action is now.

The [Energy White Paper](#)³ set a target to quadruple offshore wind capacity in the UK over the next 10 years – enough to power every home in the UK. Everyone will benefit from clean energy and cleaner air, and a nationwide rollout of charging points will support the move away from fossil fuel for transport to more electric vehicles on our roads by 2030.

The [British Energy Security Strategy](#)⁴ saw the UK make new commitments to develop cleaner, more secure and affordable energy, including increasing the target for offshore wind to 50 GW by 2030. Its aim is to accelerate the deployment of a range of energy sources, which could see up to 95 per cent of our electricity being low carbon by 2030.



[In Powering Up Britain](#)⁵ the Government explains that the grid needs to be expanded at an unprecedented scale and pace to deliver more clean power and increase our energy security.

Britain is leading the way and can become the world’s first clean economy, with net zero carbon emissions by 2050.

But we cannot stand still. A healthier, greener future for Britain requires significant upgrades to our energy infrastructure to reliably meet increased demand.

At National Grid Electricity Transmission, we are working to make this future possible, combining the best of British engineering and ingenuity with smart technology to power our homes, travel and work.

When developing transmission network proposals, we must, under the Electricity Act 1989, do that in an efficient, coordinated and economical way, and have regard to the desirability of preserving amenity. Options to deliver additional network capability and the options we take forward are evaluated against these statutory duties. National Grid only develops new infrastructure where the existing transmission system cannot be further upgraded, system changes cannot be satisfied by other means or where customer connections are required. The Grimsby to Walpole project meets all those requirements for new infrastructure to be developed.

We have explained how we set out to meet these responsibilities and our commitments relating to engagement and consultation about our proposals in our [Stakeholder, Community and Amenity Policy](#)⁶.

³ Energy White Paper: Powering our Net Zero Future, HM Government, December 2020, [assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/945899/201216_BEIS_EWP_Command_Paper_Accessible.pdf](#)

⁴ British Energy Security Strategy, HM Government, April 2022, [assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1069969/british-energy-security-strategy-web-accessible.pdf](#)

⁵ Powering up Britain, Department for Energy Security and Net Zero, March 2023, [assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1147340/powering-up-britain-joint-overview.pdf](#)

⁶ National Grid’s commitments when undertaking work in the UK: Our stakeholder, community and amenity policy, December 2016, [nationalgrid.com/electricity-transmission/sites/et/files/documents/8589938109-National%20Grid_s%20commitments%20when%20undertaking%20works%20in%20the%20UK,%20December%202016.pdf](#)

3. Grimsby to Walpole

Lincolnshire is an important and developing region for renewable and low carbon energy.

Like much of the high voltage electricity transmission network across the country, the network between the North and the Midlands was largely built in the 1960s, carrying electricity from Scotland and the North, connecting coal-fired generation in the Aire and Trent valleys with the main centres of population.

Gas-fired power stations and some offshore wind generation is currently connected in North Lincolnshire and North East Lincolnshire. Two 400 kV overhead electricity lines carry power west from there, to Keadby on the River Trent.

In the south of the county, gas-fired generation is connected at Spalding, and Triton Knoll offshore wind farm and Viking Link interconnector with Denmark are connected at Bicker Fen. Large parts of south and east Lincolnshire are otherwise currently connected only by lower voltage electricity distribution network lines and substations (132 kV and below).

Forecast growth in offshore wind and interconnectors in Scotland and north east England, over the next decade and beyond is going to increase current north to south power flows. That will put additional pressure on the existing electricity transmission network. This will drive the need for boundary reinforcement between different parts of the network.

While the existing network has been sufficient until today, it is not sufficient to meet the power carrying capability that is required by the end of this decade and beyond. The proposed new Grimsby to Walpole line is therefore needed to help increase the capability of the electricity transmission network to carry clean, green energy.

The new line is also needed to connect proposed offshore wind, interconnectors, high voltage direct current (HVDC) links and other customer connections that are set to come ashore along the Lincolnshire coast or be located in the wider Lincolnshire area, supporting the Government’s ambitions for offshore wind and net zero targets. Should all of these be built, this would amount to just over 7.6 GW of new generation and interconnector capacity that is contracted to connect to the proposed new line by the early 2030s.



4. Project scope

The Grimsby to Walpole network upgrade is a proposed new 400 kV electricity transmission reinforcement.

Proposed new overhead line

At this early stage of consultation, we anticipate it is likely to comprise approximately 140 km of new 400 kV overhead line, from the south west of Grimsby in North East Lincolnshire to the Walpole area, on the Norfolk/ Cambridgeshire/ Lincolnshire border.

We are aiming to bring the new overhead line into operation as close as possible to 2030.

New pylons and conductors (electrical wires) would be located along the overhead line route. As a starting position, we are considering the use of traditional 400 kV lattice steel pylons. These are typically around 50 metres in height, with approximately three per kilometre on a straight section of the route, slightly more on occasions.

In some locations, specific constraints such as navigable river crossings, can require considerably taller pylons to ensure safe electrical clearance from the electrical conductors (wires). At this early stage of consultation, we have not decided on exactly what type of pylon we will use. This will be considered in more detail as we develop our proposals further.

Proposed new substations

To connect the proposed overhead line to the existing network and to connect proposed new sources of electricity, new 400 kV substations are also required:

- a proposed substation at Grimsby West and a proposed new substation in the Walpole area, which will facilitate connections to existing transmission network in North East Lincolnshire and in the Norfolk/ Cambridgeshire/ Lincolnshire border area
- two Lincolnshire Connection substations in East Lindsey District, to connect proposed offshore wind, interconnectors, HVDC links and other customers that are contracted to connect on the Lincolnshire coast
- one at Weston Marsh in South Holland District, to connect proposed offshore wind and solar/ battery storage as well as providing further system reinforcement opportunities for Grimsby to Walpole.

5. Purpose of the 2024 stage 1 consultation

We want to introduce the project to communities and ensure that all stakeholders can provide feedback on our proposals from an early stage.

At this early stage, we will be presenting an emerging preferred route corridor in which the overhead line could be located and siting areas within which the proposed new substations could be located. The route corridor and siting areas will be shown as a ‘graduated swathe’ within the wider corridor, which will indicate those areas where at this stage we think infrastructure is more likely to be located, subject to consultation feedback received.

The aims of our stage 1 non-statutory consultation between January and March 2024 are to:

- introduce and provide an overview of the project to the public and wider consultees
- explain why we need to build the reinforcement and the work undertaken to date
- set out options that have been considered, how the decision was made on the emerging preferred corridor and graduated swathe being proposed
- present and explain our emerging preferred corridor and graduated swathe
- present and explain our potential siting areas for the new substations
- ensure all stakeholders have the opportunity to provide feedback on our work to date
- gather feedback on our proposals
- outline next steps, our programme and how we intend to further develop our proposals.



6. Consultation area and timing

Our first stage of public consultation is a non-statutory stage. It will be held over an eight-week period, between 18 January and 13 March 2024.

Consultation zones

We have defined a Primary Consultation Zone (PCZ) and a Secondary Consultation Zone (SCZ), to inform our engagement activities. These are shown in Appendix A.

Primary Consultation Zone

The PCZ will include communities and stakeholders whose properties' postcodes (residential and businesses) lie within 1 km of the edge of the preferred route corridor. Where appropriate, the PCZ has been extended to include whole streets rather than the 1 km boundary dissecting hamlets or neighbourhoods.

The PCZ includes stakeholders who may be most directly affected by the proposals. We want to ensure they are kept fully informed about the project and will seek to actively engage them.

At the start of our consultation, we will send a newsletter to all properties within the PCZ. The newsletter will include:

- an introduction to the project and overview of the proposals
- details of the non-statutory consultation, its purpose and how to get involved, including face-to-face engagement (local information events) and online engagement (webinars)
- information on how people can provide feedback online or request printed materials including feedback forms and maps
- information on how to contact the project team and ask questions.

We will include details on how people without access to the internet can view paper copies of materials and project contact details to find out more information.

Secondary Consultation Zone

The SCZ will extend to 5 km from the edge of the preferred route corridor. The SCZ will include stakeholders who are less likely to be directly affected by the project but may have impacts such as construction traffic and long-distance views. Anyone in the SCZ will have the same opportunities to engage with us and provide feedback during the consultation, including receiving hard copy materials on request.

We will seek to raise awareness of the project and public consultation with stakeholders within the SCZ through the broad dissemination of information. This will include:

- placing advertisements in local and regional newspapers with information about the consultation, engagement events and where to find out more information
- requesting placement of advertisements in prominent locations in the local community, including parish council/community notice boards and magazines
- providing project documents in deposit locations ('public information points') around the area for stakeholders to examine and take away
- placing advertisements on social media to target different demographics and to include those who might not otherwise engage with the consultation
- publishing full details of consultation and engagement events on the project website, and asking wider consultees to publish information on websites, where possible
- providing contact details for queries or to request paper copies of project documents.



7. Materials

All project documents will be made available on the consultation website.

We will also place paper copies of some documents at suitable, publicly accessible locations along the route of the new connection. Documents that will be made available during the consultation include:

- Project Background Document: to provide an overview of the project
- Corridor Preliminary Routeing and Siting Study (CPRSS): detailed report on how the emerging preferred corridor and potential substation siting areas were identified and the graduated swathe has been developed
- Strategic Options Report (SOR), Grimsby to Walpole and North Humber to High Marnham, May 2023: providing detail on the options considered for the delivery of reinforcements on the East Coast, including North Humber to High Marnham and Grimsby to Walpole

- Addendum to Strategic Options Report, January 2024 (SOR Addendum): providing detail about further considerations in respect of Grimsby to Walpole following the May 2023 Strategic Options Report
- Consultation newsletter: high-level description of proposals and invitation to consultation events
- Maps and plans of the project
- Feedback form: including an online version to provide feedback, a downloadable PDF copy and FREEPOST envelopes at public information events.

We will also place paper copies of some documents at suitable, publicly accessible locations along the emerging preferred corridor. These locations in North East Lincolnshire, East Lindsey, Boston, South Holland, Fenland and King's Lynn & West Norfolk council areas, are as follows:

Public information point	Opening times
Grimsby Central Library Town Hall Square, Grimsby DN31 1HG	Monday – Closed Tuesday–Friday – 8:30am–5pm Saturday – 9am–1pm Sunday – Closed
Waltham Library High Street, Waltham, Grimsby DN37 0LL	Monday – Closed Tuesday–Friday – 8:30am–12:30pm and 1:30pm–5:30pm Saturday – 9am–1pm Sunday – Closed
Louth Library Northgate, Louth LN11 0LY	Monday, Wednesday and Friday – 9am–5pm Tuesday – 9am–6pm Thursday – 9am–2pm Saturday – 9am–4pm Sunday – Closed
Alford Library and Focal Point 6 Market Place, Alford LN13 9AF	Monday, Wednesday, Thursday – Closed Tuesday and Saturday – 10am–1pm Friday – 10am–1pm and 2pm–5pm Sunday – Closed
Burgh le Marsh Library and Community Hub Tinkers Green, Jacksons Lane, Burgh le Marsh, Skegness PE24 5LA	Monday, Wednesday and Friday – Closed Tuesday – 2pm–4:30pm Thursday and Saturday – 10am–1pm Sunday – Closed



Skegness Library 23 Roman Bank, Skegness PE25 2SA	Monday, Tuesday, Wednesday and Friday – 9am–5pm Thursday – 9am–6pm Saturday – 9am–1pm Sunday – Closed
Boston Library County Hall (Bank Street entrance), Boston PE21 6DY	Monday, Tuesday, Wednesday and Friday – 9am–5pm Thursday – 9am–6pm Saturday – 9am–4pm Sunday – Closed
Spalding Library Victoria Street, Spalding PE11 1EA	Monday, Tuesday, Wednesday and Friday – 9am–5pm Thursday – 9am–6pm Saturday – 9am–1pm Sunday – Closed
Holbeach Community Library Co-Op Store, 5 Fleet Street, Holbeach, Spalding PE12 7AX	Monday–Friday – 9am–5pm Saturday – 9am–noon Sunday – Closed
Long Sutton Library Trafalgar Square, Long Sutton, Spalding PE12 9HB	Monday and Thursday – 2pm–6pm Tuesday and Friday – 10am–5pm Wednesday – Closed Saturday – 10am–1pm Sunday – Closed
Wisbech Library Ely Place, Wisbech PE13 1EU	Monday – 9:30am–1pm Tuesday – 9:30am–7pm Wednesday, Thursday and Friday – 9:30am–5pm Saturday – 9:30am–4pm Sunday – Closed
King's Lynn Library London Road, King's Lynn PE30 5EZ	Monday–Saturday – 8am–10pm Sunday – 10am–4pm

8. Stakeholder briefings and meetings

We propose holding meetings with stakeholders, either online or in-person, to provide information about the project and respond to questions.

Before the start of public consultation, we will offer briefing meetings with the following stakeholders:

- Members of Parliament where all or part of their constituencies lie within the SCZ
- elected representatives of District and County Councils that fall within the SCZ
- Parish councils which fall within the SCZ (grouped in sections of the map):
 - Map area 1 - Grimsby West to Alvingham and Keddington
 - Map area 2 - Alvingham and Keddington to Burgh le Marsh
 - Map area 3 - Burgh le Marsh to the River Welland
 - Map area 4 - River Welland to Walpole.

The project team will endeavour to meet with stakeholders who request a meeting. These groups may include:

- third party groups such as Local Enterprise Partnerships and business groups
- community groups or residents’ associations with a close geographical relationship to the project
- parish councils which fall outside of the PCZ
- interest groups in close proximity to the project.

These stakeholders will be sent digital copies of project information (paper copies will be provided upon request, or where digital receivership is not possible) and details on how to respond to the consultation and engage with the project team. We will keep them updated at key project milestones.



9. Public consultation

We are using a blend of in-person and online engagement channels for this public consultation.

This will involve using the project website and other digital tools to present information on the project and gather feedback on our proposals. This approach is widely accepted for consultations on infrastructure proposals.

We are committed to engaging with all stakeholders and we want to ensure that our consultation is inclusive and will reach those who otherwise may not engage with us or do not have access to the most traditional and conventional methods of consultation. Our approach to engaging with under-represented groups is outlined in Section 11.

Project website

The Grimsby to Walpole project website will include all relevant information for the non-statutory consultation, including the aforementioned documents and materials used as part of the local information events. The website will include:

Function	Description
Document library with access to the information	The library will be the ‘go to’ deposit location for all project information. It will ensure that all project information is available in one, easy-to-access location. We will encourage third parties hosting information points (such as local authorities, libraries, etc.) to provide links to this page.
Consultation pages to display all relevant information and material being presented for consultation	Project documents will be laid out in a simple, visual and interactive format, with pointers and instructions throughout to aid easy navigation.
Find out more pages	Details of dates and timings of consultation events, webinars and other ‘ask the experts’ sessions during the consultation period.
FAQs	This will help visitors to find answers to frequently asked questions.
Project videos, infographics and animations	A way of explaining the plans in a way that is accessible and understandable to the general public, ensuring greater levels of inclusion.
Project update section	This section will enable members of the public to stay updated on the project and provides an easily accessible place for all recent updates to be hosted.
Project contact details	We will publish telephone, email and freepost details for the public to get in contact and request further details or ask questions.
Feedback form	To gather comments and feedback from the public consultation.



Team call-back requests	Members of the public will be able to request a call-back to discuss the project over the phone.
Feedback form	The online form will enable members of the public to provide their feedback easily and submit to the project team. A hard copy form can also be downloaded from the website and returned by email, or printed and sent back via freepost.
GDPR (legal statement)	All personal data will be held in accordance with the General Data Protection Regulation (GDPR) (EU) 2016/679 and personal data will not be transferred outside of the European Economic Area or used for purposes other than those outlined. The website will be made accessible for all users through the provision of audio guides, videos, other visual material, and the ability to request translation.

Interactive map

An interactive map provides a visual representation of the proposals presented at the non-statutory consultation. The map shows the emerging preferred corridor, the graduated swathe that sits within the corridor and potential locations for the proposed new substations.

There will be pointers to further information, which may contain images, text or signpost to a different page that expands on the subject.

Public information events and webinars

We have arranged a mix of face-to-face public events and online webinars to provide stakeholders opportunities to find out more about the proposals and to give feedback.

Public information events have been organised to be accessible to as many stakeholders as possible and held at suitable community hubs along the proposed route. In-person events will provide an opportunity to view the latest project information and speak to technical experts within the team. If events need to be cancelled for any reason such as poor/dangerous weather given the time of year, we will publicise the cancellation and hold an online webinar in place of the event.

Online webinars will be organised to enable the project team to present the same information as at the public events to a large number of interested stakeholders. The webinar presentation will be recorded and made available on the project website for playback by those who cannot attend the webinar sessions.

The sessions will also include time for questions and answers. Different webinars may be arranged to focus on specific geographical areas and the programme will be widely advertised. Details of how to sign up for the webinars will be widely publicised and will be available on the project website.

The schedule of events and webinars is shown on page 11 and 12.

Date	Time	Location
Wednesday 31 January 2024	2-7pm	Tydd St Giles Community Centre Broad Drove East, Wisbech PE13 5LN
Friday 2 February 2024	2-7pm	Moulton Seas End Village Hall 21 Seas End Road, Moulton Seas End, Spalding PE12 6LE
Wednesday 7 February 2024	2-7pm	Burgh Le Marsh Village Hall Jacksons Lane, Burgh le Marsh, Skegness PE24 5LA
Saturday 10 February 2024	11am – 5pm	Alford Corn Exchange 9 Market Place, Alford LN13 9EB
Tuesday 13 February 2024	2-7pm	North Thoresby Village Hall The Square, North Thoresby, Grimsby DN36 5QL
Friday 16 February 2024	2-7pm	Eastville, Midville and New Leake Village Hall Station Road, Boston PE22 8LS
Tuesday 20 February 2024	2-7pm	Walpole Community Centre Summer Close, Wisbech PE14 7JW
Thursday 22 February 2024	2-7pm	The Pavilion London Road, Louth LN11 9QP
Saturday 24 February 2024	11am – 5pm	Oaklands Hall Hotel, Barton Street, Laceby, Grimsby DN37 7LF
Tuesday 27 February 2024	2-7pm	Hubberts Bridge Community Centre Langrick Road, Boston PE20 3SG
Thursday 29 February 2024	2-7pm	Alvingham Village Hall 352 Yarburgh Road, Alvingham, Louth LN11 0QG



Webinar session	Date	Start time
Introduction to Grimsby to Walpole project proposals – general overview	Tuesday 23 January 2024	2pm
Our proposals in Sections 1 (Grimsby West to Barnoldby le Beck) and 2 (Barnoldby le Beck to North Thoresby)	Thursday 25 January 2024	10am
Our proposals in Sections 3 (North Thoresby to Alvingham and Keddington) and 4 (Alvingham and Keddington to Tothill)	Monday 29 January 2024	7pm
Our proposals in Sections 5 (Tothill to Cumberworth) and 6 (Cumberworth to Burgh le Marsh)	Monday 5 February 2024	2pm
Our proposals at the Lincolnshire Connection Substations	Thursday 15 February 2024	10am
Our proposals in Sections 7 (Burgh le Marsh to Midville) and 8 (Midville to River Witham)	Saturday 2 March 2024	10am
Our proposals in Sections 9 (River Witham to River Welland), 10 (River Welland to B1165) and 11 (B1165 to Walpole)	Tuesday 5 March 2024	7pm
Introduction to Grimsby to Walpole project proposals – general overview	Thursday 7 March 2024	2pm

Team call-back

Contact information has been published, including a freephone information line and an email address:

Call our community helpline: 0800 0129 153. Lines are open Monday to Friday, 9am to 5:30pm.

Email us: contact@g-w.nationalgrid.com

Write to us: FREEPOST G TO W
(Please write this in capitals, no stamp or further address details are required).

Stakeholders will be able to request a telephone call from a member of the project team if they would prefer to ask questions over the phone during the consultation period. This provides an alternative option for those who may have restricted access to other engagement channels or are less comfortable with online technology.

Providing feedback on our proposals

We want to make providing feedback on our proposals as easy as possible for all stakeholders. Paper copies of the feedback questionnaire will be available at information points along the route and at public information events (as previously listed). Visitors to our project website will be able to fill out a feedback form online and send it back directly or download the PDF form and send it back via email or print and return via our freepost address.

Members of the public will also be able to telephone our freephone contact number and request a paper copy of the feedback questionnaire, and a freepost envelope, enabling them to send their feedback to the project team free of charge.

We will review all returned feedback questionnaires. Comments will be inputted into a specialist stakeholder management system and considered as the project is developed further.

10. Advertising

We will use advertising to raise awareness of the public consultation on the project proposals.

Print media

To raise general awareness of the project within the area and to advertise the consultation programme, we will place advertisements in key local and regional publications. These advertisements will help ensure that stakeholders without access to the internet, or who do not frequently use websites which will receive targeted virtual advertisements, are made aware of the project consultation.

Advertisements will be published at the start of public consultation, and during the consultation period, to remind stakeholders of deadlines for feedback and other important dates, such as consultation events and webinars.

Social media

We will advertise the consultation on Facebook and Instagram. Social media advertisement may draw in stakeholders who may not otherwise engage with the consultation, for example young people. We will also ask local authorities to use their own social media channels to advertise the consultation.



11. Accessibility, under-represented and local interest groups

We recognise that some people and groups may prefer non-digital methods of engagement.

We want to ensure that our consultation and engagement is inclusive and that we engage equally with all stakeholders, irrespective of access to and familiarity with digital communications.

To ensure our consultation is accessible to all, we will:

- directly mail a newsletter with project information to all stakeholders within the PCZ and emerging preferred corridor; and provide details of how to access paper copies of other project documents and provide feedback by post
- make important information available in both digital and non-digital formats and provide alternate formats for those who need them, as set out in under-represented strategy described further below
- make paper copies of the information available at local information points, along with contact details for the project team who will be able to provide further assistance and send consultation packs to those who are unable to access the material online
- make information available in alternative languages and formats (e.g. large-print, braille), on request
- advertise the consultation and project contact details through a variety of traditional and social media methods
- advertise the availability of telephone call-backs for stakeholders with further questions or who would like to discuss the project further with the project team.

Under-represented strategy

The key objective of the Non-Statutory Consultation Strategy is to undertake a meaningful, purposeful and informative consultation, with a wide range of stakeholders.

The contributions of under-represented groups are a valuable and essential part of our effective and inclusive consultation. The wider objectives of this strategy are to:

- ensure under-represented groups are more represented in the non-statutory consultation for the project
- ensure the proposals are presented in non-technical plain English including a clear understanding of the consultation process
- ensure the wider benefits and improvements from the project are communicated, and how these are relevant for under-represented groups.

Under-represented groups are defined as being inaccessible to most traditional and conventional methods for any reason. They could include the following:

- ethnic minority groups and people for whom English is a second language
- the traveller community
- the elderly
- people with visual and hearing impairments
- people with limited mobility/disability
- the 15–19 and 20–39 age groups
- carers and families with young children
- economically inactive and disadvantaged individuals
- geographically isolated communities or individuals.

Wider interest groups will also be engaged to help reach under-represented audiences. These interest groups include:

- business groups, such as Local Enterprise Partnerships and Chambers of Commerce
- community groups, such as residents’ associations with a close geographical relationship to the project
- educational establishments, including universities, colleges and schools in the local area/Lincolnshire region.

Consultation and engagement channels

Leading up to and during the consultation period, we will carry out the following:

Activity	Objective(s)	Result
Direct engagement with representative groups and organisations	To build up links to groups and organisations we identify as representing interest groups in local communities. These could include community groups, youth groups, business groups, activity centres, ethnic minority groups etc.	National Grid can make use of existing communications channels that these community groups have in place to communicate with a wider audience of harder to reach groups and individuals.
Engagement with Ambassadors/champions (for example, parish councils which have their own communications channels)	To facilitate wider consultation beyond traditional channels. To assist the project team in identifying likely issues and concerns from under-represented groups and ways to overcome them	Feedback is received from under-represented groups and individuals.
Online events and webinars, dates and times will be advertised through the following channels: <ul style="list-style-type: none">• printed materials• press releases• e-letters/e-shot• paid advertising• social media advertising	To engage with a wide range of audiences and spread awareness of the proposals and consultation to those who may not otherwise hear about them or have the opportunity to participate. These may be integrated with other consultation activities, such as the programme of digital consultation events.	To enable participation in the consultation process.

Under-represented interest groups contact database

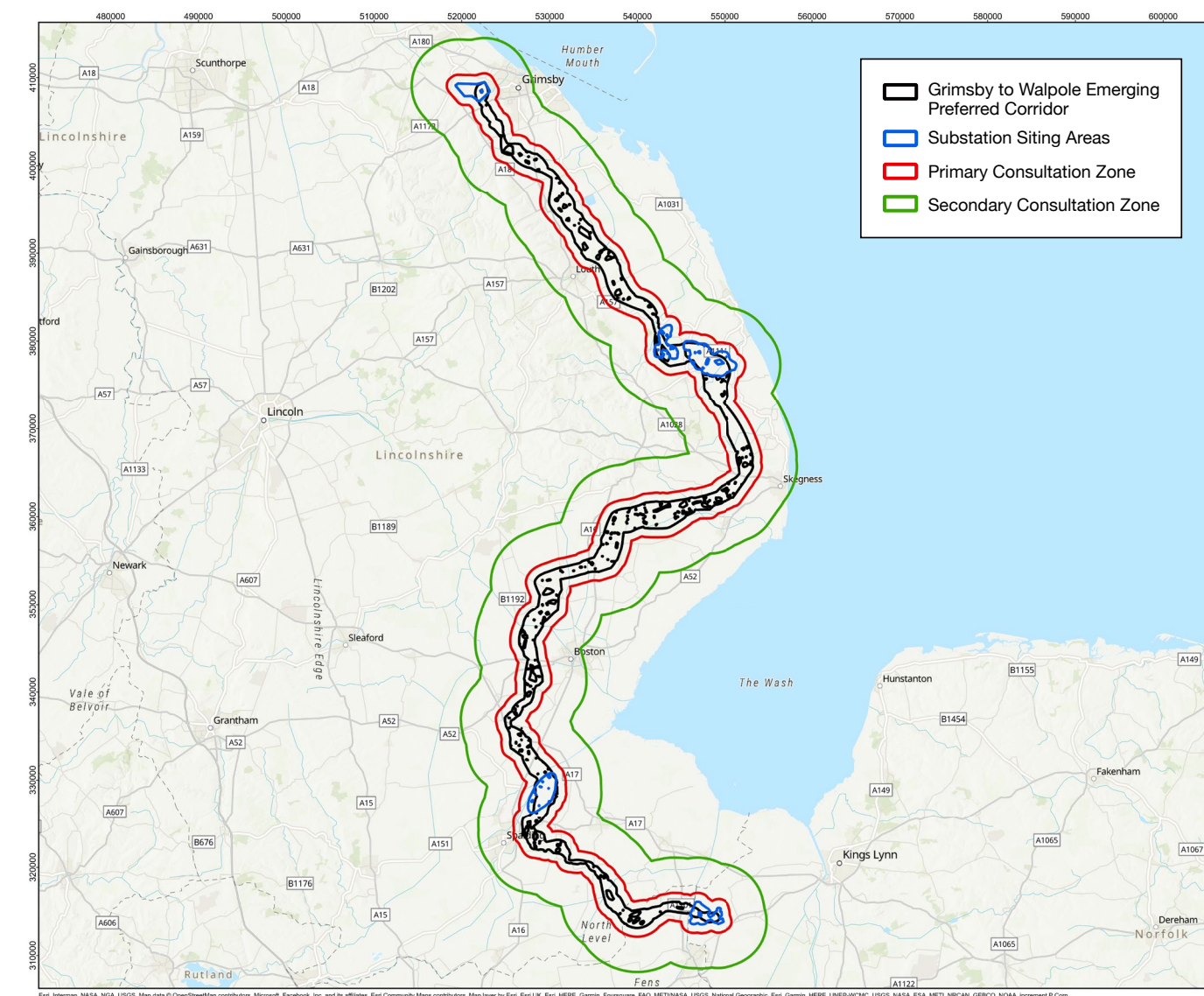
We have created a database of identified relevant contacts at under-represented community groups and other interest groups and organisations.

We will use this contact database to ensure these groups and organisations are kept up to date with the development of the scheme through regular mailing, telephone, digital and face-to-face contact.

We will also monitor the success of our communications tools to test the suitability of our approach to engagement.

Depending on the reception of our early communications with these interest groups, we will adjust our approach to engagement accordingly.

Appendix A – Primary Consultation Zone and Secondary Consultation Zone



National Grid plc
1-3 Strand
Charing Cross
London
WC2N 5EH
United Kingdom

nationalgrid.com

Appendix C: Posters

Grimsby to Walpole

January 2023

National Grid is consulting on proposals to reinforce the high-voltage electricity transmission network to carry clean green energy between the north of England and the Midlands and between the Midlands and the South.

The proposed reinforcement is approximately 140km and would comprise overhead lines (including pylons and conductors), a new substation at our existing Grimsby West substation in North East Lincolnshire, and a new substation near our existing Walpole substation in Norfolk. We are also proposing two new connection substations near the Lincolnshire coast and a new substation at Weston Marsh in Lincolnshire.

It will play a vital role in delivering cheaper, cleaner and more secure forms of energy and will support the UK's net zero targets.

Have your say

We want to hear your thoughts on our proposals. You can find out more by visiting one of our consultation events, attending an online webinar or visiting our virtual exhibition room on our project website. Please provide your feedback using our online form on the website or by requesting a paper feedback form.

If you would like to receive paper or alternative format versions of our materials, please get in touch.

The deadline for consultation responses is Wednesday 13 March 2024.

Public information events

Attend one of our information events to find out more about the proposals and speak to our experts.

Date	Time	Location
Wednesday 31 January 2024	2-7pm	Tydd St Giles Community Centre Broad Drove East, Wisbech PE13 5LN
Friday 2 February 2024	2-7pm	Moulton Seas End Village Hall 21 Seas End Rd, Moulton Seas End, Spalding PE12 6LE
Wednesday 7 February 2024	2-7pm	Burgh Le Marsh Village Hall Jacksons Lane, Burgh le Marsh, Skegness PE24 5LA
Saturday 10 February 2024	11am-5pm	Alford Corn Exchange 9 Market Place, Alford LN13 9EB
Tuesday 13 February 2024	2-7pm	North Thoresby Village Hall The Square, North Thoresby, Grimsby DN36 5QL
Friday 16 February 2024	2-7pm	Eastville, Midville and New Leake Village Hall Station Road, Boston PE22 8LS
Tuesday 20 February 2024	2-7pm	Walpole Community Centre Summer Close, Wisbech PE14 7JW
Thursday 22 February 2024	2-7pm	The Pavilion London Road, Louth LN11 9QP
Saturday 24 February 2024	11am-5pm	Oaklands Hall Hotel Barton Street, Laceby, Grimsby DN37 7LF
Tuesday 27 February 2024	2-7pm	Hubberts Bridge Community Centre Langrick Road, Boston PE20 3SG
Thursday 29 February 2024	2-7pm	Alvingham Village Hall 352 Yarburgh Road, Alvingham, Louth LN11 0QG

Online webinars

Our webinars will present details of the proposals followed by an open Q&A. You can register on our website or call or email us.

Date	Time	Topic
Tuesday 23 January 2024	2pm	Introduction to Grimsby to Walpole project proposals – general overview
Thursday 25 January 2024	10am	Our proposals in Sections 1 (Grimsby West to Barnoldby le Beck) and 2 (Barnoldby le Beck to North Thoresby)
Monday 29 January 2024	7pm	Our proposals in Sections 3 (North Thoresby to Alvingham and Keddington) and 4 (Alvingham and Keddington to Tothill)
Monday 5 February 2024	2pm	Our proposals in Sections 5 (Tothill to Cumberworth) and 6 (Cumberworth to Burgh le Marsh)
Thursday 15 February 2024	10am	Our proposals at the Lincolnshire connection substations
Saturday 2 March 2024	10am	Our proposals in Sections 7 (Burgh le Marsh to Midville) and 8 (Midville to River Witham)
Tuesday 5 March 2024	7pm	Our proposals in Sections 9 (River Witham to River Welland), 10 (River Welland to B1165) and 11 (B1165 to Walpole)
Thursday 7 March 2024	2pm	Introduction to Grimsby to Walpole project proposals – general overview

Get in touch

To find out more about our proposals, our public information events, online webinars, and how to provide feedback you can:

View our project website: nationalgrid.com/g-w (scan the QR code to be taken directly there)

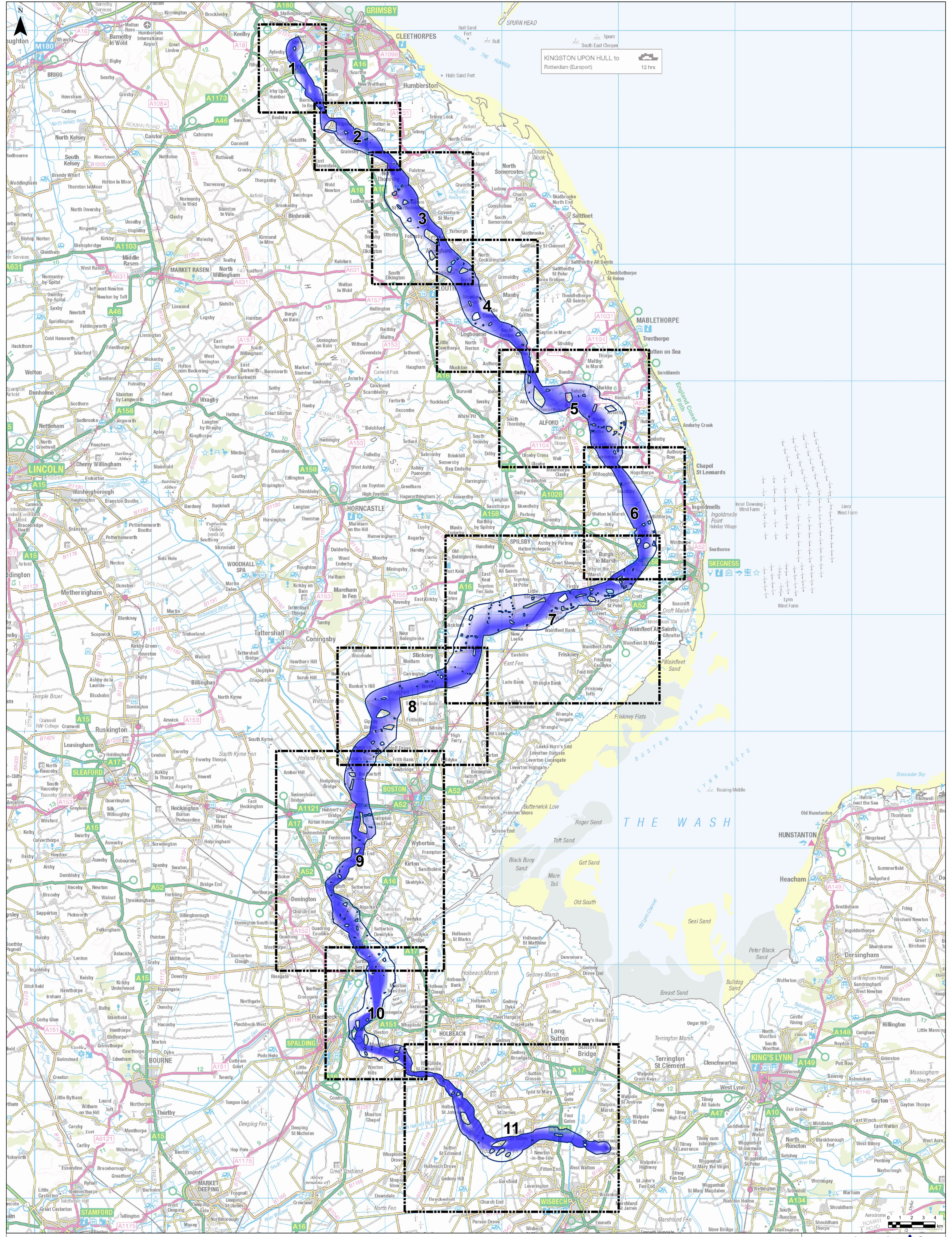
Call us: **0800 0129 153** (lines open Monday to Friday, 9am-5:30am)

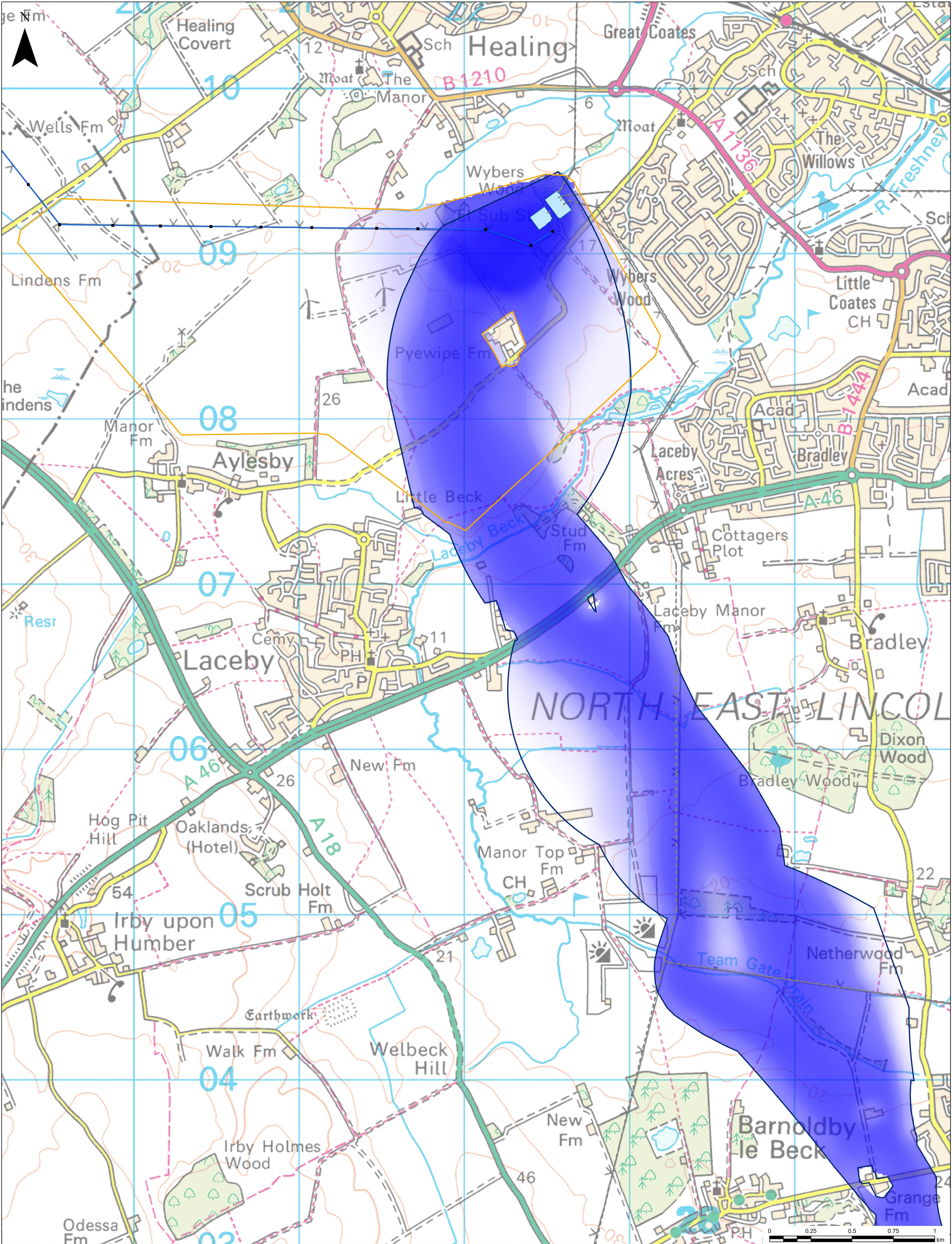
Email us: contact@g-w.nationalgrid.com

Write to us: **Freepost G to W** (no stamp or further address details required)



Appendix D: Maps of the Proposals





LEGEND

- Emerging Preferred Corridor
- Grimsby Substation Search Area
- 400kV Towers
- 400kV Overhead Line
- 132kV Overhead Line

© Crown copyright and database rights 2023. Ordnance Survey 0100059731
© National Grid 2023. © Historic England 2023
© Natural England material is reproduced with the permission of Natural England 2023

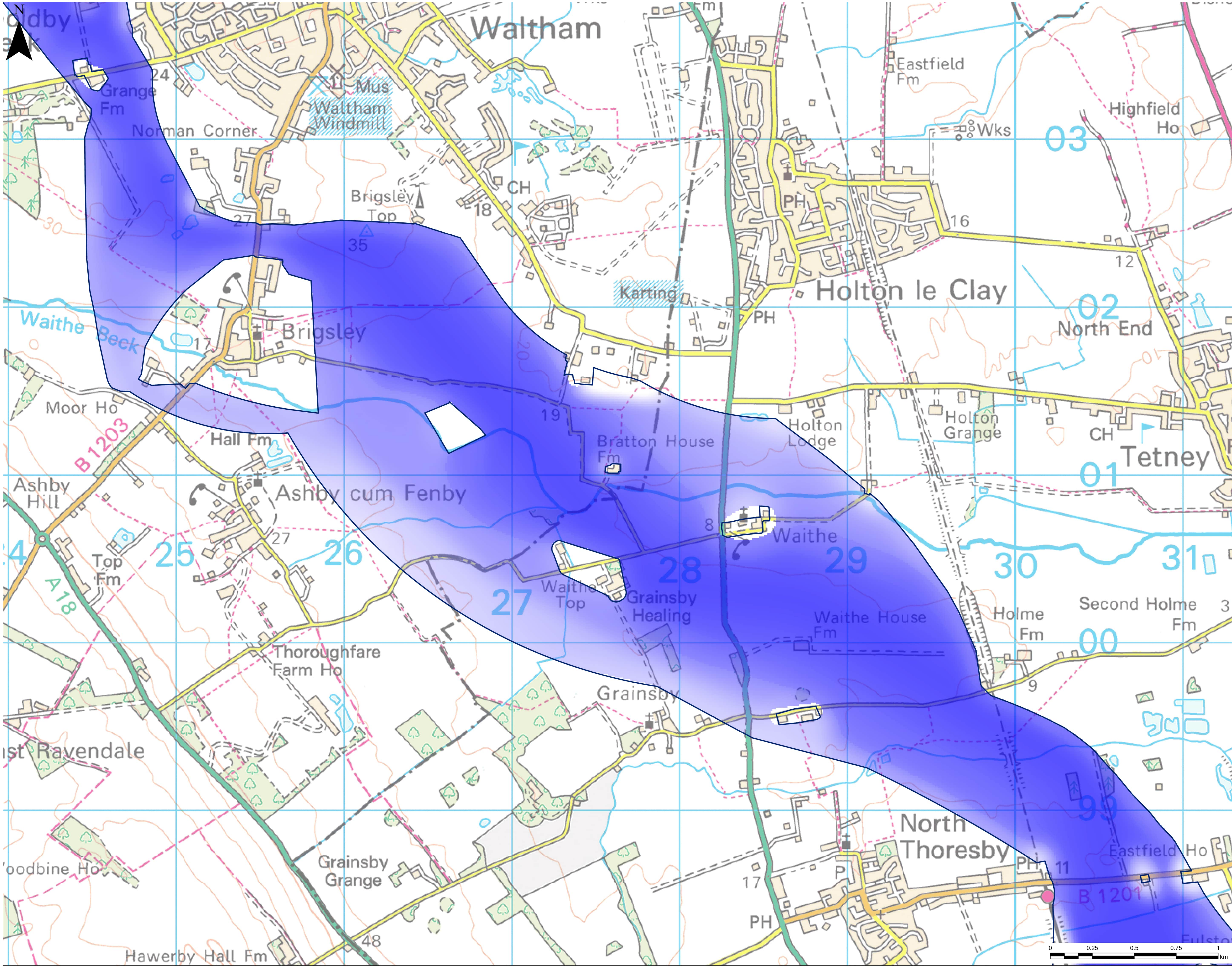
national grid
wsp

PROJECT: GRIMSBY WEST TO WALPOLE
TITLE: EMERGING PREFERRED CORRIDOR
SECTION 1 (GRIMSBY WEST TO BARNOLDBY LE BECK)
SHEET 1

SCALE 1:110,000
PROJECT NO: 70080423

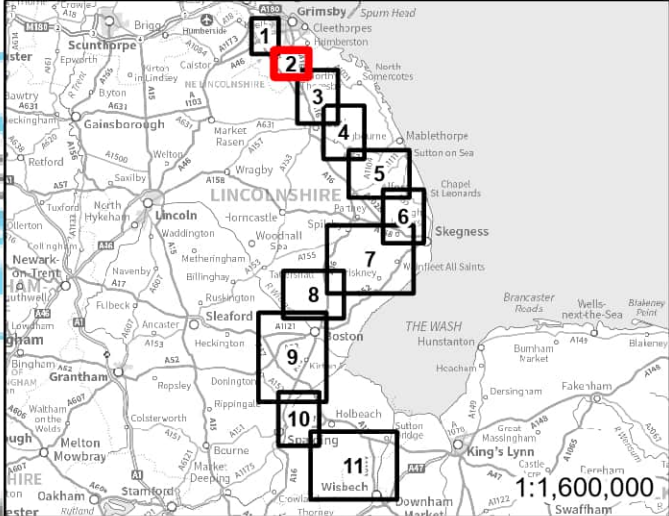
CHECKED: JC
DRAWN: BS

APPROVED: JB
DATE: 01/12/2023



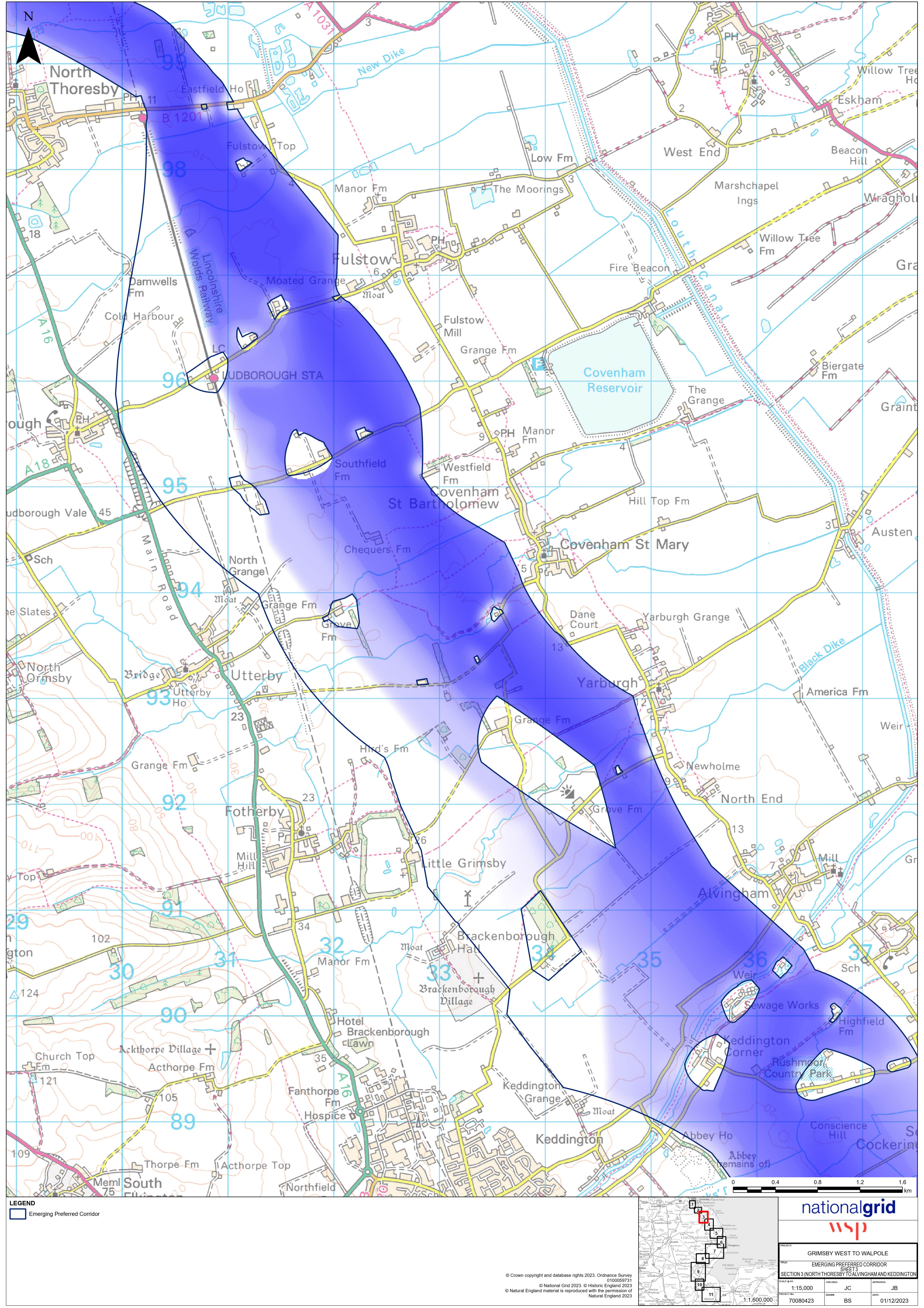
LEGEND
Emerging Preferred Corridor

© Crown copyright and database rights 2023. Ordnance Survey 0100059731
© National Grid 2023. © Historic England 2023
© Natural England material is reproduced with the permission of Natural England 2023



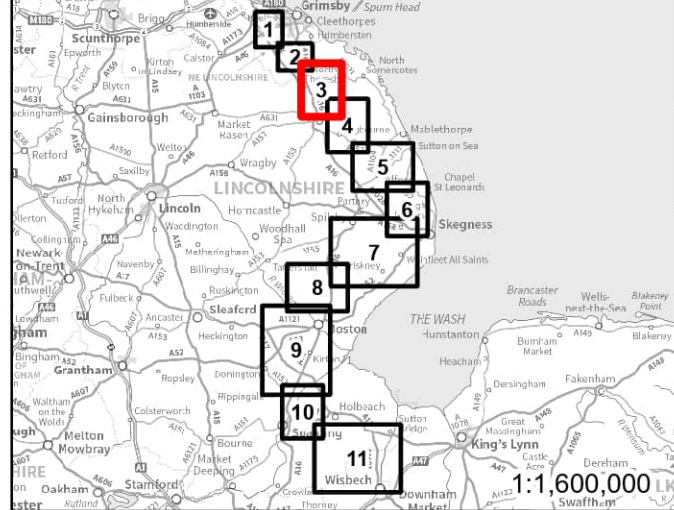
nationalgrid
wsp

PROJECT: GRIMSBY WEST TO WALPOLE			
TITLE: EMERGING PREFERRED CORRIDOR			
SHEET 2 SECTION 2 (BARNOLDBY LE BECK TO NORTH THORESBY)			
SCALE BAR: 1:10,000	CHECKED: JC	APPROVED: JB	
PROJECT NO: 70080423	DRAWN: BS	DATE: 01/12/2023	



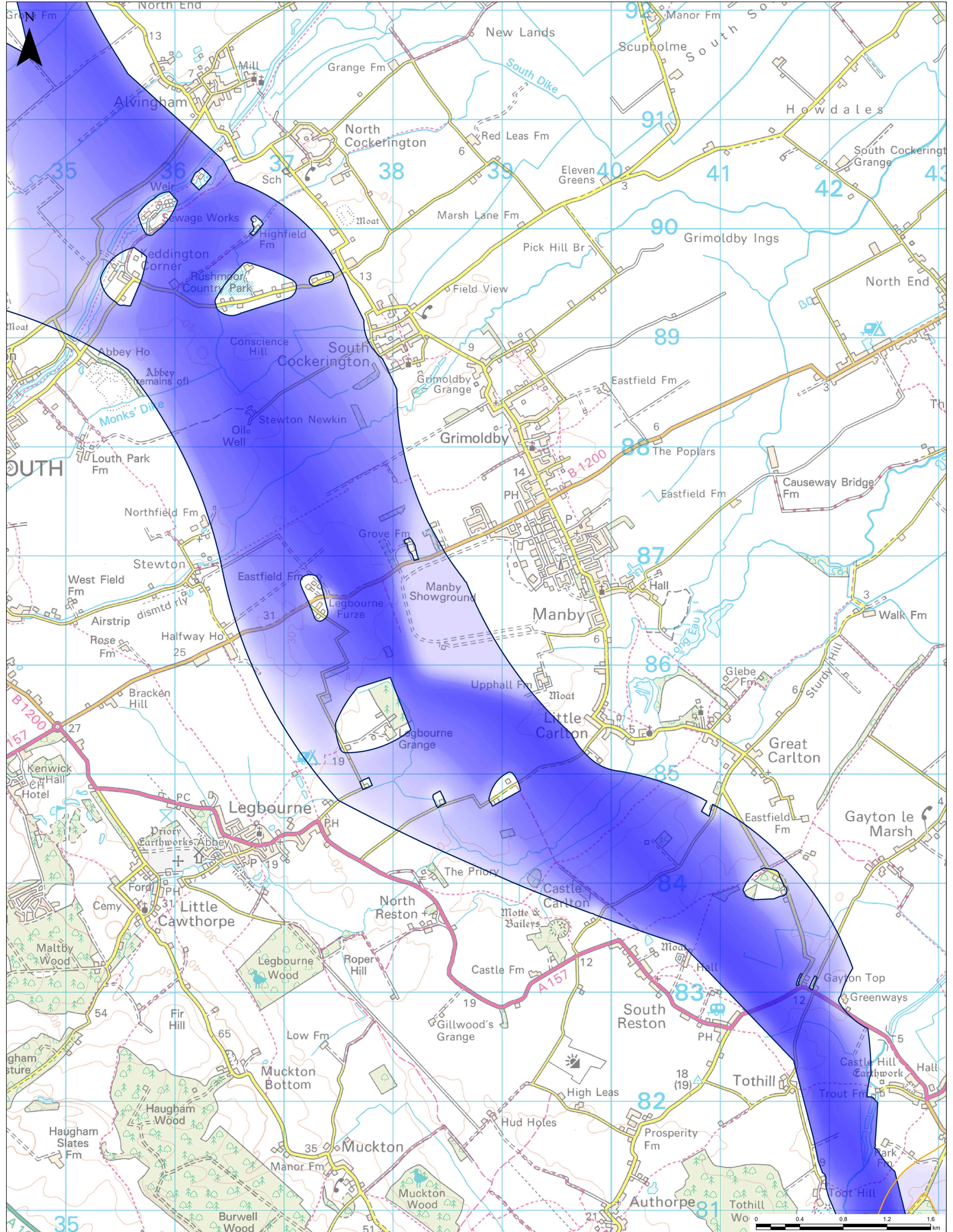
LEGEND
Emerging Preferred Corridor

© Crown copyright and database rights 2023. Ordnance Survey 0100059731
© National Grid 2023. © Historic England 2023
© Natural England material is reproduced with the permission of Natural England 2023



nationalgrid
wsp

PROJECT GRIMSBY WEST TO WALPOLE			
TITLE EMERGING PREFERRED CORRIDOR SHEET 3 SECTION 3 (NORTH THORESBY TO ALVINGHAM AND KEDDINGTON)			
SCALE @ A1: 1:15,000	CHECKED: JC	APPROVED: JB	
PROJECT NO: 70080423	DRAWN: BS	DATE: 01/12/2023	



LEGEND

- Emerging Preferred Corridor
- LCS 5 Substation Search Area

nationalgrid

wsp

PROJECT: GRIMSBY WEST TO WALPOLE

TITLE: EMERGING PREFERRED CORRIDOR SHEET 4 (ALVINGHAM AND KEDDINGTON TO TOTHILL)

SCALE 1:15,000

CHECKED: JC

APPROVED: JB

DATE: 01/12/2023

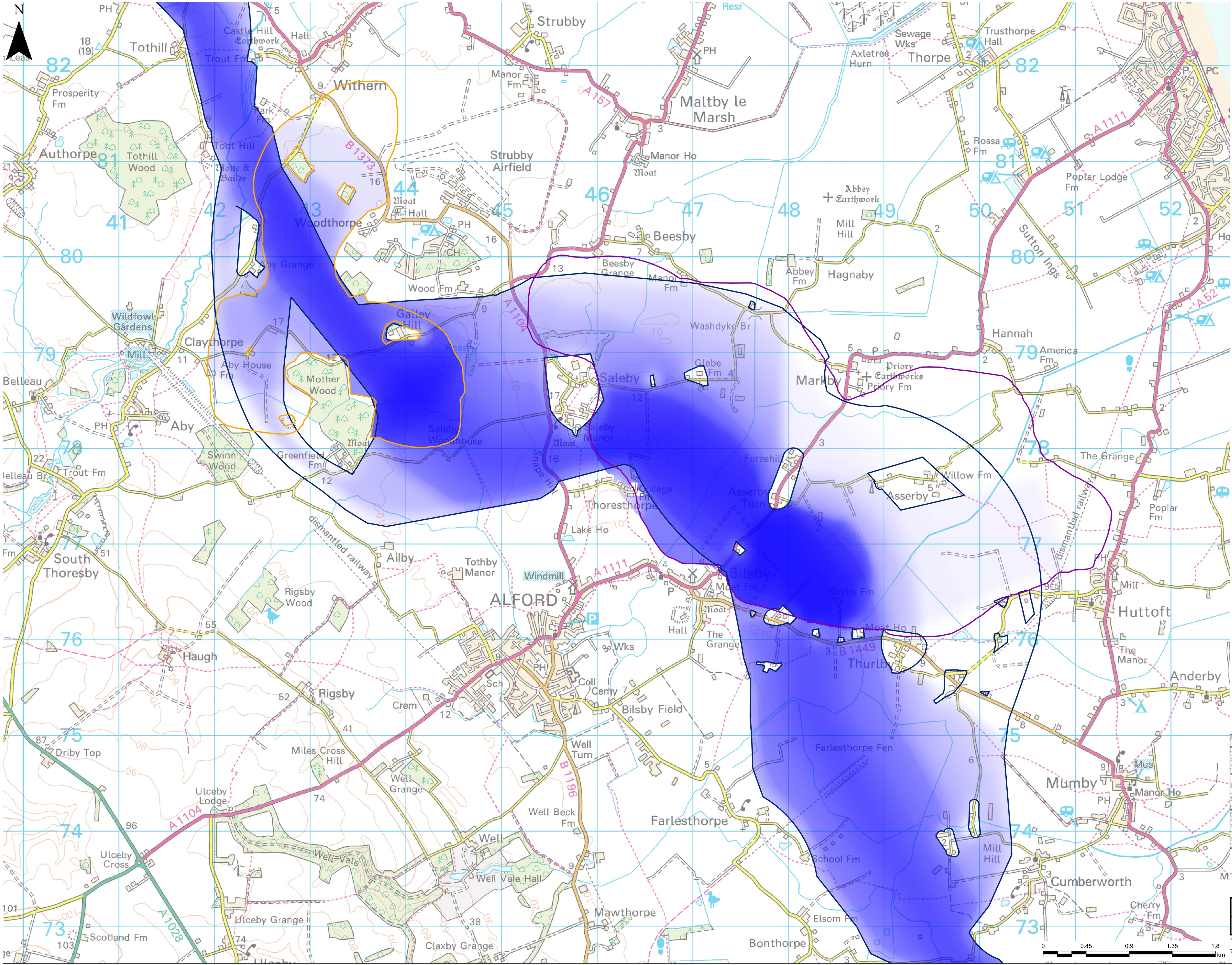
PROJECT NO: 70080423

DRAWN: BS

© Crown copyright and database rights 2023. Ordnance Survey 0100059731

© National Grid 2023. © Historic England 2023

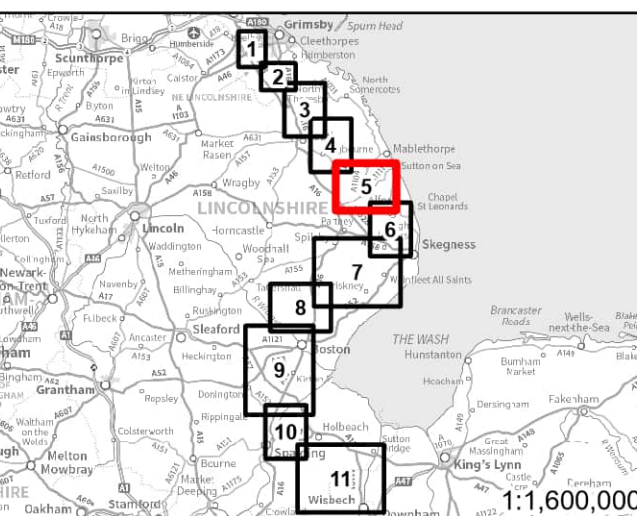
© Natural England material is reproduced with the permission of Natural England 2023



LEGEND

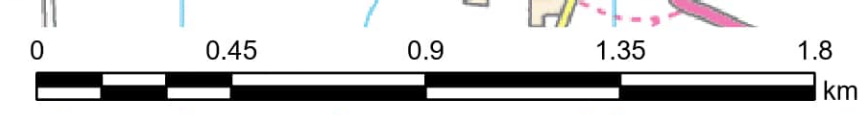
- Emerging Preferred Corridor
- LCS 5 Substation Search Area
- LCS 6/8 Substation Search Area

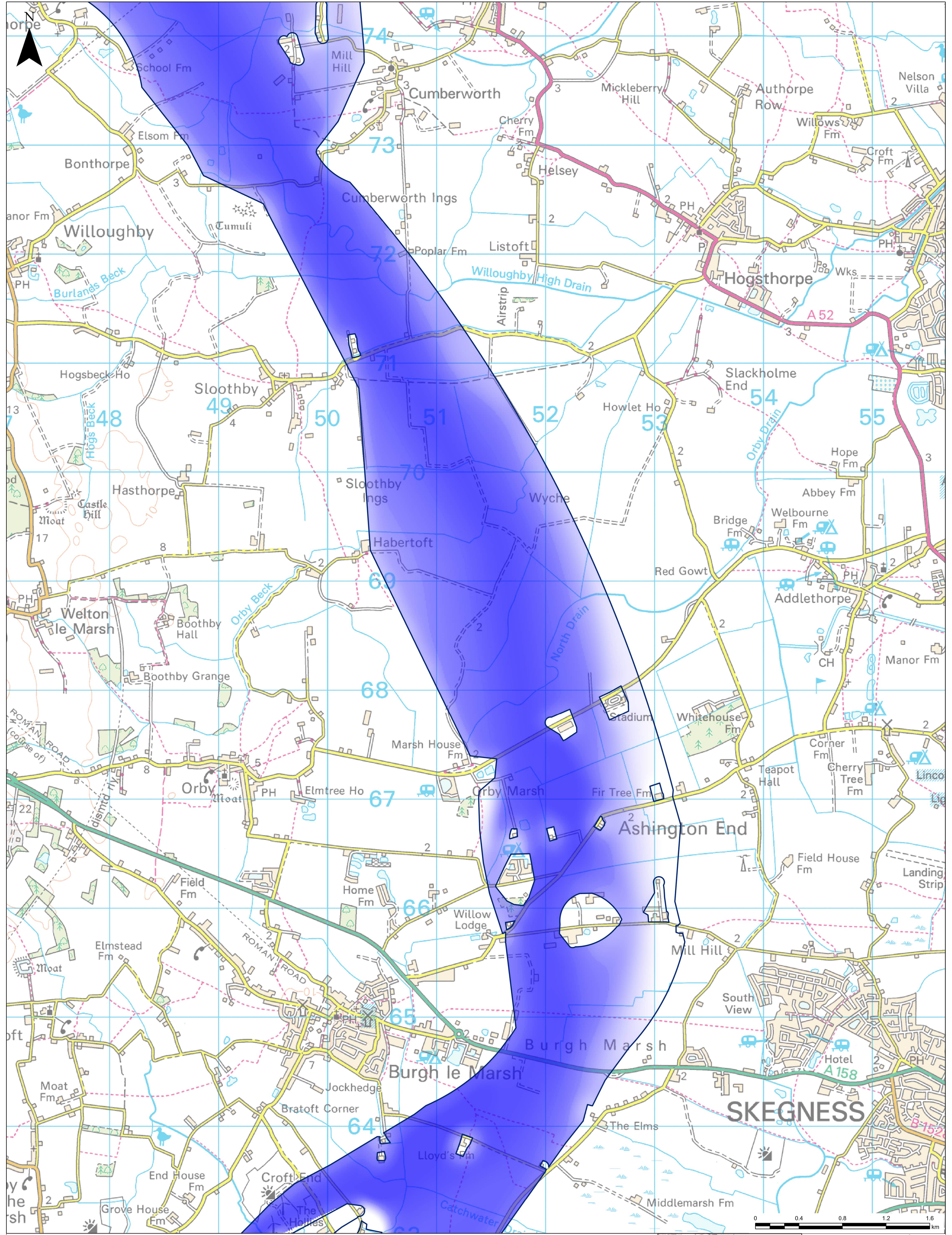
© Crown copyright and database rights 2023. Ordnance Survey 0100059731
© National Grid 2023. © Historic England 2023
© Natural England material is reproduced with the permission of Natural England 2023



nationalgrid
wsp

PROJECT: GRIMSBY WEST TO WALPOLE			
TITLE: EMERGING PREFERRED CORRIDOR			
SHEET 5			
SECTION 5 (TOTHILL TO CUMBERWORTH)			
SCALE: 1:17,500	CHECKED: JC	APPROVED: JB	
PROJECT NO: 70080423	DRAWN: BS	DATE: 01/12/2023	





LEGEND

Emerging Preferred Corridor

nationalgrid

wsp

PROJECT: GRIMSBY WEST TO WALPOLE

TITLE: EMERGING PREFERRED CORRIDOR

SHEET 6

SECTION 6 (CUMBERWORTH TO BURGH LE MARSH)

SCALE (AS SHOWN): 1:15,000

CHECKED: JC

APPROVED: JB

PROJECT NO: 70080423

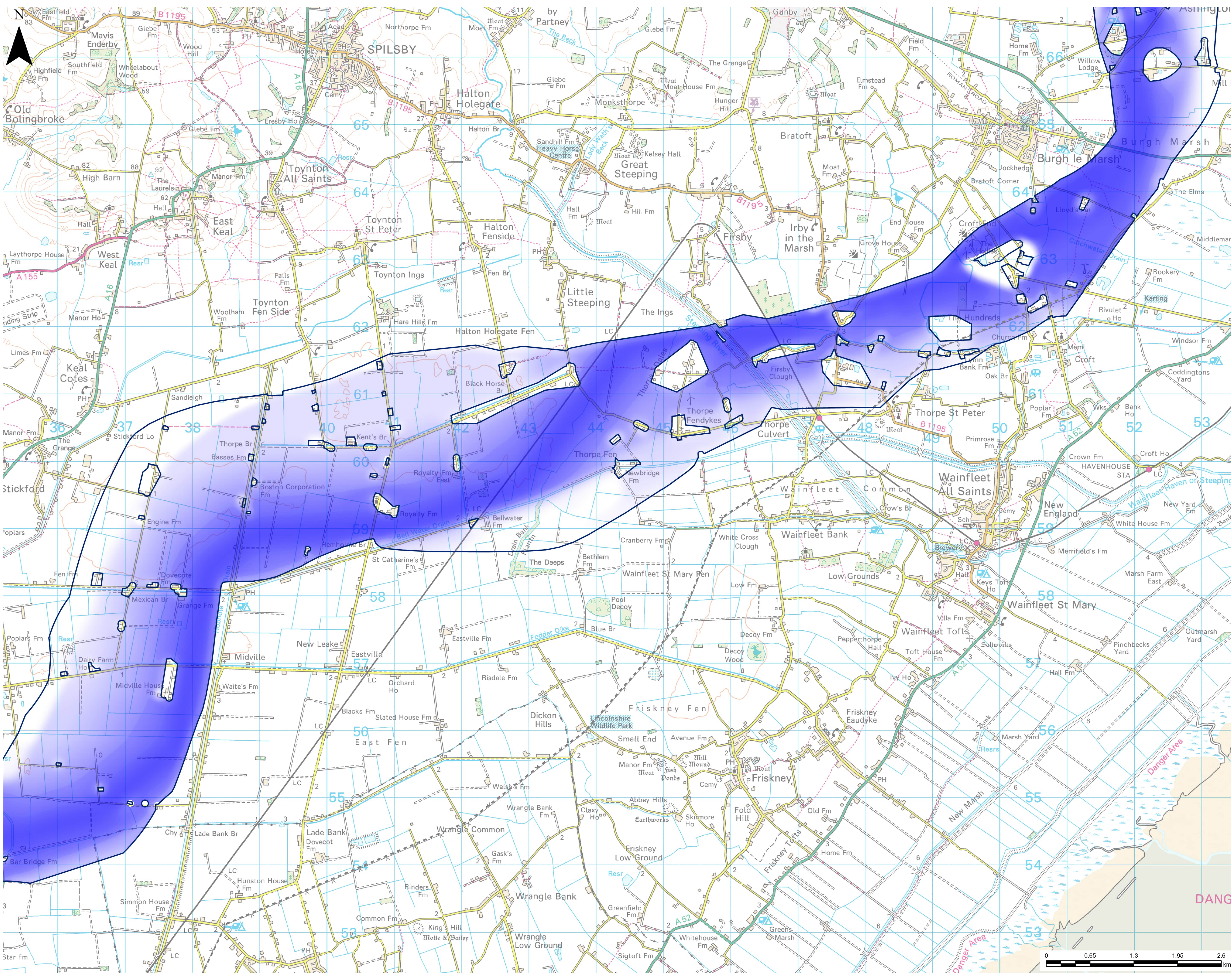
DRAWN: BS

DATE: 01/12/2023

© Crown copyright and database rights 2023. Ordnance Survey 0100059731

© National Grid 2023. © Historic England 2023

© Natural England material is reproduced with the permission of Natural England 2023



LEGEND

- Emerging Preferred Corridor
- 132kV Overhead Line

© Crown copyright and database rights 2023. Ordnance Survey 0100059731
© National Grid 2023. © Historic England 2023
© Natural England material is reproduced with the permission of Natural England 2023

nationalgrid

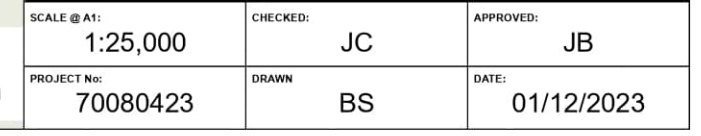
wsp

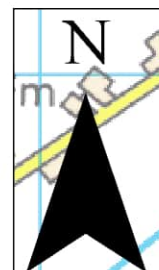
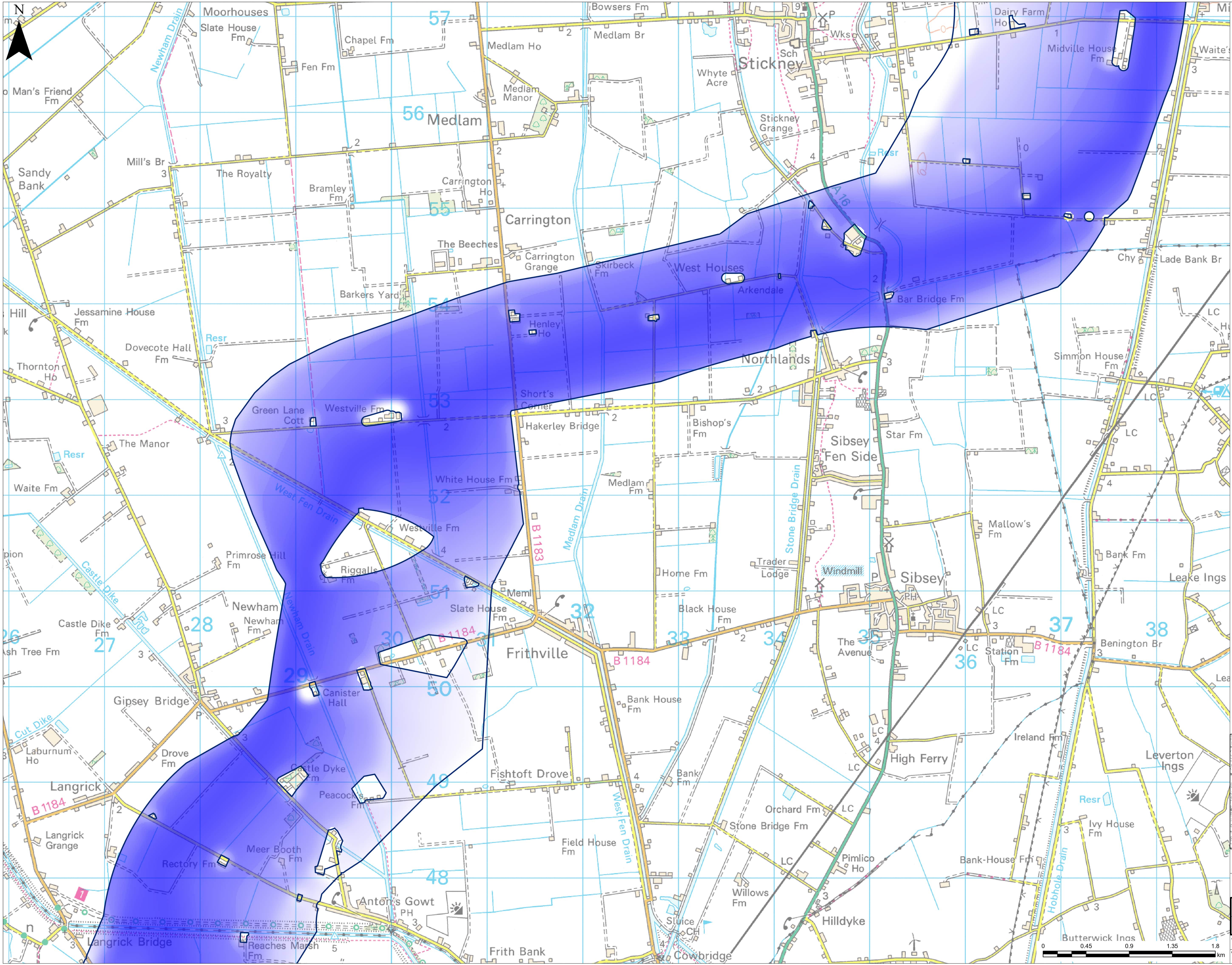
PROJECT: GRIMSBY WEST TO WALPOLE

TITLE: EMERGING PREFERRED CORRIDOR

SHEET: SECTION 7 (BURGH LE MARSH TO MIDVILLE)

SCALE BAR: 1:25,000	CHECKED: JC	APPROVED: JB
PROJECT NO: 70080423	DRAWN: BS	DATE: 01/12/2023





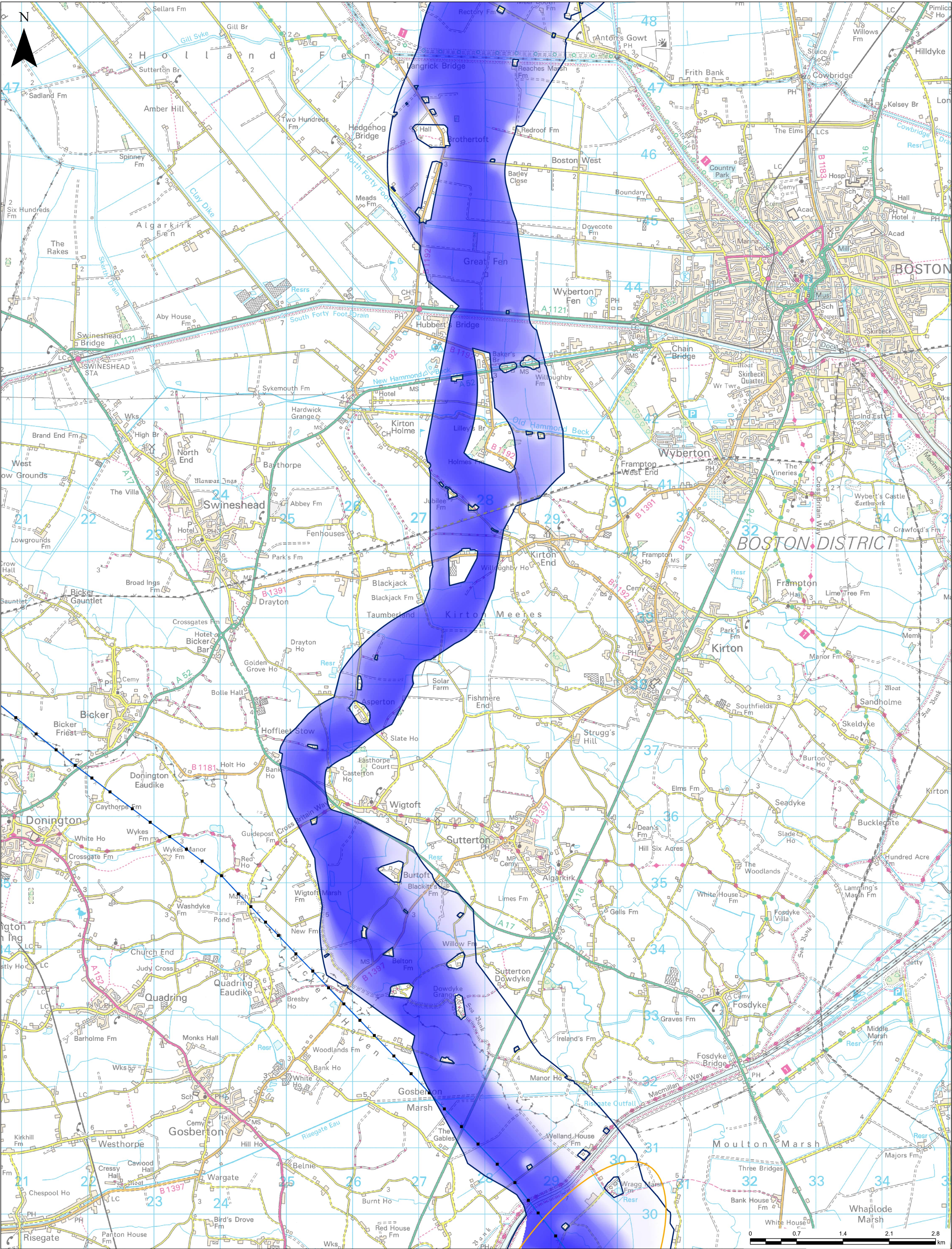
LEGEND

- Emerging Preferred Corridor
- 132kV Overhead Line

© Crown copyright and database rights 2023. Ordnance Survey 0100059731
© National Grid 2023. © Historic England 2023
© Natural England material is reproduced with the permission of Natural England 2023

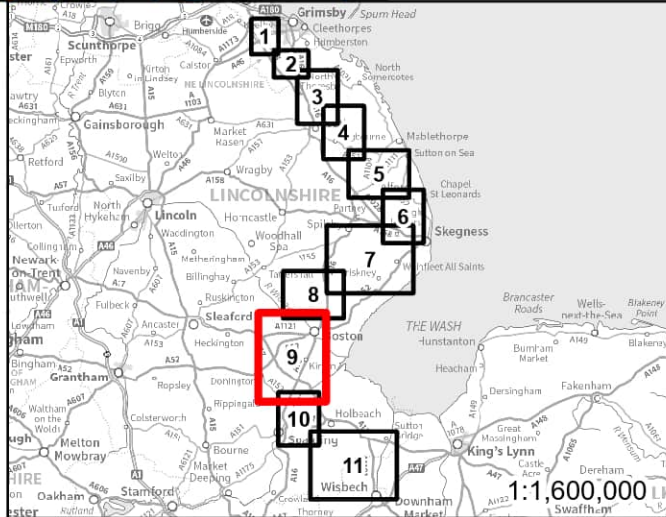
nationalgrid
wsp

PROJECT: GRIMSBY WEST TO WALPOLE		
TITLE: EMERGING PREFERRED CORRIDOR		
SHEET 8		
SECTION 8 (MIDVILLE TO RIVER WITHAM)		
SCALE BAR: 1:17,500	CHECKED: JC	APPROVED: JB
PROJECT NO: 70080423	DRAWN: BS	DATE: 01/12/2023



LEGEND

- Emerging Preferred Corridor
- Weston Marsh Substation Search Area
- 400kV Towers
- 400kV Overhead Line
- 132kV Overhead Line

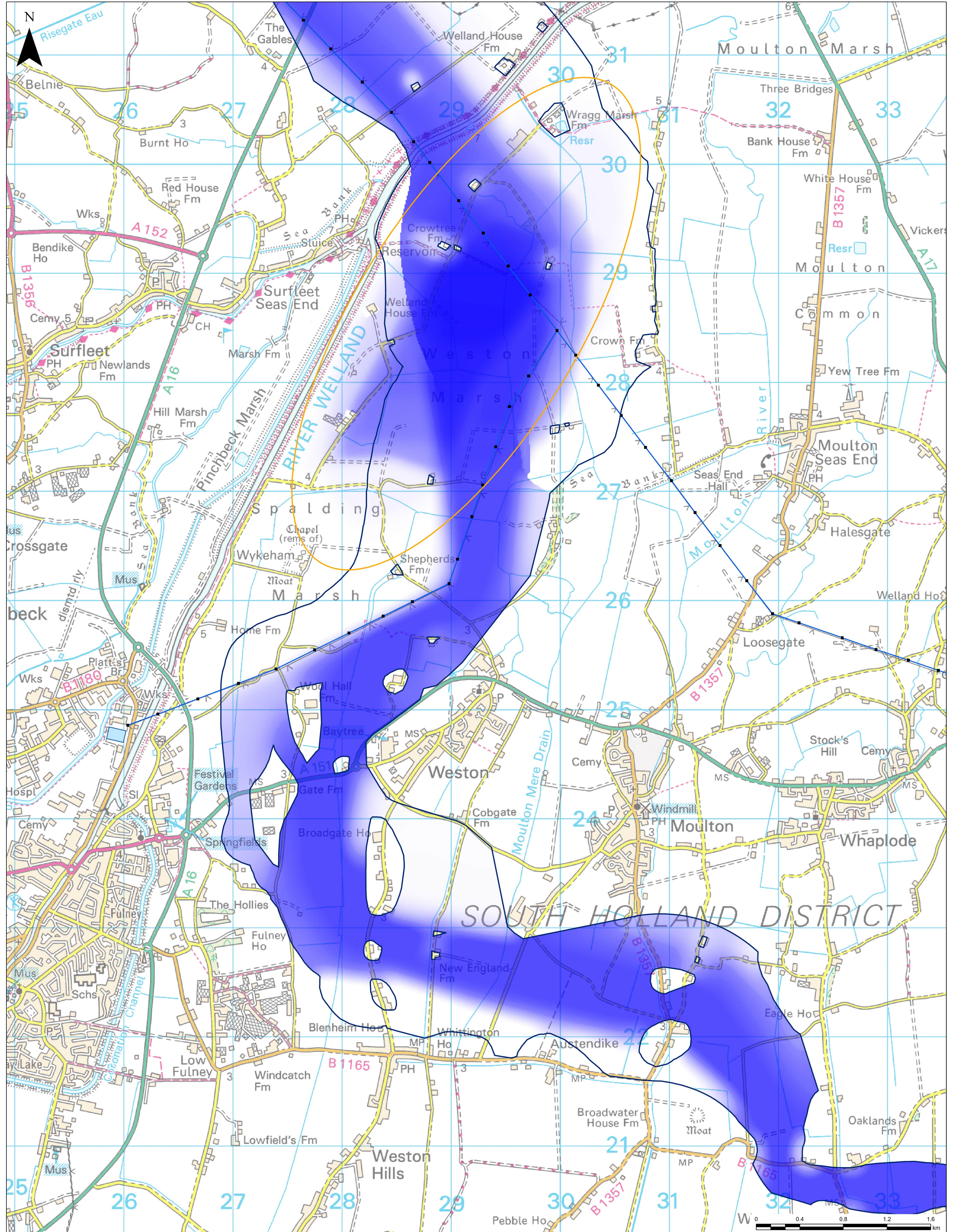


PROJECT: GRIMSBY WEST TO WALPOLE

TITLE: EMERGING PREFERRED CORRIDOR SHEET 9
SECTION 9 (RIVER WITHAM TO RIVER WELAND)

SCALE (AS SHOWN): 1:25,000	CHECKED: JC	APPROVED: JB
PROJECT NO: 70080423	DRAWN: BS	DATE: 01/12/2023

© Crown copyright and database rights 2023. Ordnance Survey 0100059731
© National Grid 2023. © Historic England 2023
© Natural England material is reproduced with the permission of Natural England 2023



LEGEND

- Emerging Preferred Corridor
- Weston Marsh Substation Search Area
- 400kV Towers
- 400kV Overhead Line
- 132kV Overhead Line

nationalgrid

wsp

PROJECT: GRIMSBY WEST TO WALPOLE

TITLE: EMERGING PREFERRED CORRIDOR

SHEET 10 (RIVER WELLAND TO B1165)

SCALE 1:15,000

CHECKED: JC

APPROVED: JB

PROJECT NO: 70080423

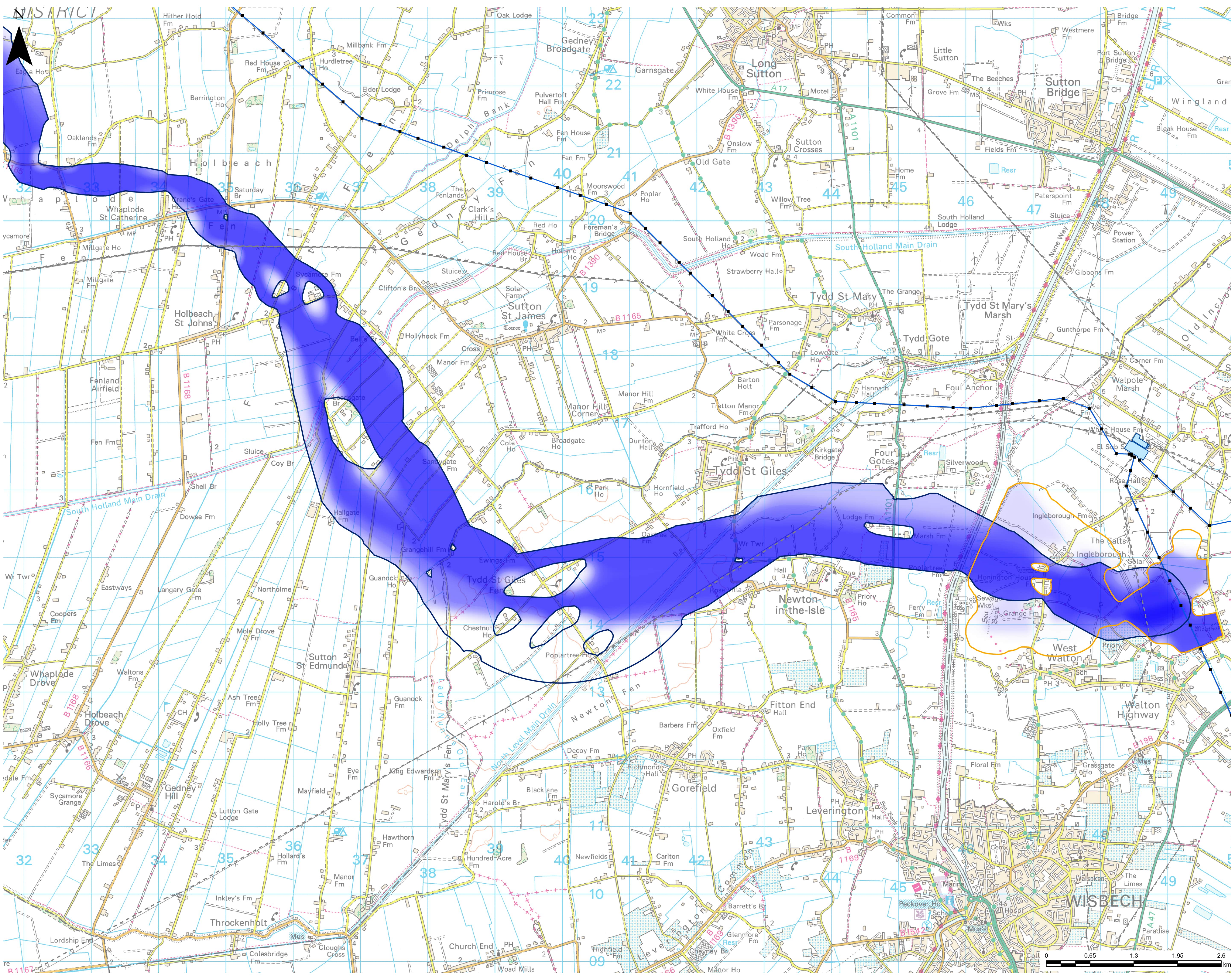
DRAWN: BS

DATE: 01/12/2023

© Crown copyright and database rights 2023. Ordnance Survey 0100059731

© National Grid 2023. © Historic England 2023

© Natural England material is reproduced with the permission of Natural England 2023



LEGEND

- Emerging Preferred Corridor
- Walpole Substation Search Area
- 400kV Towers
- 400kV Overhead Line
- 132kV Overhead Line

© Crown copyright and database rights 2023. Ordnance Survey 0100059731
© National Grid 2023. © Historic England 2023
© Natural England material is reproduced with the permission of Natural England 2023

nationalgrid
wsp

PROJECT: GRIMSBY WEST TO WALPOLE
TITLE: EMERGING PREFERRED CORRIDOR
SHEET 11
SECTION 11 (B1165 TO WALPOLE)

SCALE BAR: 1:25,000	CHECKED: JC	APPROVED: JB
PROJECT NO: 70080423	DRAWN: BS	DATE: 01/12/2023

Appendix E: Technical Stakeholders

Technical Stakeholders	
Addlethorpe Parish Council	Moulton Parish Council
Alford Town Council	National Highways
Alvingham Parish Council	Natural England
Anderby Parish Council	Norfolk County Council
Ashby cum Fenby Parish Council	North Cotes Parish Council
Bilsby and Farlesthorne Parish Council	North East Lincolnshire Council
Boston Borough Council	North Somercotes Parish Council
Burgh le Marsh Town Council	Orby Parish Council
Covenham Parish Council	Rigsby with Ailby Parish Council
East Keal Parish Council	Skegness Town Council
Elkington Parish Council	Skidbrooke cum Saltfleet Haven
Fenland District Council	Stickford Parish Council
Fortherby Parish Council	Sutton St Edmund Parish Council
Friskney Parish Council	Tetney Parish Council
Grainthorpe Parish Council	The Environment Agency
Great and Little Carlton Parish Council	Theddlethorpe Parish Council
Grimoldby and Manby parish council	Tydd St Giles Parish Council
Halton Hologate with Halton Fenside Parish Council	UK Health Security Agency
Huttoft Parish Council	Utterby Parish Council
Legbourne Parish Council	Wainfleet St Mary Parish Council
Lincolnshire County Council	Welton Le Marsh Parish Council
Lincolnshire Police and Crime Commissioner	West Walton Parish Council
Lincolnshire Wolds Countryside Service	Weston Parish Council
Lindsey Marsh Drainage Board	Willoughby and District Parish Council
Louth Town Council	Withern with Stain Parish Council
Marshchapel Parish Council	

Appendix F: Feedback Form

Non-statutory consultation feedback questionnaire

January – March 2024

Overview

National Grid Electricity Transmission is consulting on proposals to build approximately 140 kilometres of new high voltage overhead electricity transmission line between Grimsby West and Walpole, including five new substations.

Grimsby to Walpole will support the UK's net zero target by reinforcing the electricity transmission network between the north of England and the Midlands, and facilitating the connection of planned offshore wind generation and interconnectors with other countries, allowing more energy from renewable and low carbon sources to be carried on the network.

Your feedback

We are seeking your views on our work to date. Your feedback is important in helping us to develop our proposals in more detail before our statutory consultation in 2025.

When we carry out further consultation, we will explain in an interim report how feedback from this first stage of consultation has shaped our plans and we will outline the key themes in the feedback from this first stage. We will report on the feedback from each stage of public consultation, and provide your responses to your comments, in a Consultation Report that will be provided as part of our Development Consent Order application, which we are planning to submit in 2027.

You can provide feedback during this non-statutory consultation by completing this hard copy feedback questionnaire or the online version. You are welcome to answer all or only some of the questions in this feedback form, depending on the issues that are most important to you. There is also an opportunity to comment generally on the project and this consultation.

We have published a set of consultation documents that will provide you with information on the Grimsby to Walpole proposals:

- Project Background Document
- Strategic Options Report (SOR)
- Addendum to the Strategic Options Report
- Corridor Preliminary Routeing and Siting Study (CPRSS)
- New Walpole Substation Location Options Report

These documents are available on our website **nationalgrid.com/g-w**. If you wish to receive paper copies of these documents or need them in another format, please get in touch by freephone on **0800 0129 153** or by email at **contact@g-w.nationalgrid.com** (please note print charges may apply). An online version of this questionnaire can also be submitted via our website.

Please submit your response to this consultation by **11:59pm on 13 March 2024**. We cannot guarantee that responses received after this time will be considered. Please return this feedback form to **Freepost G TO W** (no stamp or further address details are required) on an envelope.

About You

Title: First name:

Surname:

Organisation/group (if responding on behalf of organisation):

Address:

Postcode:

Email address:

☐ Please tick here if you would like us to keep you updated about our proposals via email

How would you describe your interest in Grimsby to Walpole?

- ☐ Local resident
- ☐ Local representative (e.g. Councillor, MP)
- ☐ Landowner or tenant/occupier within the preferred corridor
- ☐ Local business owner
- ☐ Regular visitor
- ☐ Local interest group member (if so, please provide group name)
- ☐ Statutory organisation (please specify in the text box below)
- ☐ Other (please specify)

1. Strategic options

Our preferred strategic option is Grimsby West to Walpole via Weston Marsh. More detail on our work to identify this as our preferred strategic option can be found in the Strategic Options Report (SOR) and SOR Addendum which outlines why the Grimsby to Walpole reinforcement needs to start in the Grimsby West area and the different end points and technologies that have been considered. This report can be accessed at nationalgrid.com/g-w.

1a) Do you have any comments to make on our work to identify our preferred strategic option?

Our proposals for Grimsby to Walpole

This map shows a high-level overview of our emerging preferred corridor for the proposed new overhead line and substation siting areas. Find out more by referring to our **Project Background Document**, visiting our website, or attending one of our public exhibitions or online webinars.



Emerging preferred corridor and graduated swathe

Following the selection of an emerging preferred corridor, we produced a 'graduated swathe' which indicates where the overhead line and substations could be located. This shaded area is darker where infrastructure is more likely to be located, when considering environmental factors and identified constraints. The swathe is lighter or has areas removed where infrastructure is less likely to be located or no infrastructure is currently proposed to be located.

Further information on how to interpret the graduated swathe is included in our Project Background Document and Corridor and Preliminary Routeing and Siting Study.

We will be bringing forward more detailed proposals for further consultation, which we anticipate will be in 2025. For now, we would like to hear your thoughts about our preferred corridor, the graduated swathe and any considerations you would like us to take into account.

To help provide feedback on the area that is most relevant to you, we have divided our preferred corridor into 11 sections, spanning across the local authorities of Lincolnshire County Council, North East Lincolnshire Council, Cambridgeshire County Council, Norfolk County Council, West Lindsey District Council, East Lindsey District Council, Boston Borough Council, South Holland District Council, Fenland District Council and King's Lynn & West Norfolk District Council. These sections are labelled below, with detailed information available in our wider materials on our website:

nationalgrid.com/g-w.

Please review our plans and areas of interest to you, and refer to specific locations in your feedback, where possible.



2. The emerging preferred corridor

2a) We considered and assessed several options to select a preferred corridor. Do you agree with the emerging preferred corridor that has been identified for each section of the proposed route?

(Please refer to pages 32-37 in the Project Background Document, which explains this process and for more information, please see the Corridor Preliminary Routeing and Siting Report.)

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Section 1: Grimsby West to Barnoldby le Beck	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Section 2: Barnoldby le Beck to North Thoresby	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Section 3: North Thoresby to Alvingham and Keddington	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Section 4: Alvingham and Keddington to Tothill	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Section 5: Tothill to Cumberworth	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Section 6: Cumberworth to Burgh le Marsh	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Section 7: Burgh le Marsh to Midville	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Section 8: Midville to River Witham	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Section 9: River Witham to River Welland	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Section 10: River Welland to B1165	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Section 11: B1165 to Walpole	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2b) Please tell us the reason for your answer. Please also use this box to provide any comments you might have about the work we have done to identify our emerging preferred corridor.

If your feedback relates to a specific location, or any features we should look to avoid, please reference this here.

3. The graduated swathe – sections

Our emerging preferred corridor has been split into 11 sections to make it easier for people to give feedback about any particular areas that they may wish to comment on. We are also seeking feedback on our emerging preferences for five substation locations: one at Grimsby West, two where the new connection substations are proposed near Alford one at Weston Marsh near Spalding, and one at Walpole near Wisbech.

(Please refer to the Project Background Document from page 38. For more information, please also see the Corridor Preliminary Routeing and Siting Report.)

3a) Are there any features or considerations that you think we should take into account when developing our plans?

If your feedback relates to a specific location, or any features we should look to avoid, please reference this here.

Options within the swathe

We welcome your comments on all sections. There are a number of instances along our emerging preferred corridor where we are considering different options for the potential routeing of the proposed new overhead line and substations. These locations are listed below. We would appreciate your views to help us with the next stage of development of our plans for Grimsby to Walpole.

Grimsby West Substation

(See pages 40-41 of the Project Background Document, Chapters 9 and 15 of the CPRSS and the emerging preferred corridor and constraints plans.)

Our emerging preference within the substation siting area is to locate the substation within and/or adjacent to the NGET landholding to minimise impacts upon the surrounding environment and make most use of land already in our ownership.

3b) Do you have a preference for the location of the Grimsby West substation within the siting area?

If your feedback relates to a specific location, or any features we should look to avoid, please reference this here.

Section 1: Grimsby West to Barnoldby le Beck

(See pages 40-41 of the Project Background Document and the emerging preferred corridor and constraints plans.)

This section of corridor runs from the new Grimsby West substation to a point immediately east of the village of Barnoldby le Beck (south of Waltham Road). The route taken avoids a large number of receptors and is routed such to retain distance away from the Lincolnshire Wolds Area of Outstanding Natural Beauty (AONB). There is optionality to cross the two Northern Powergrid overhead lines by either crossing a proposed solar farm in the east or to the west over part of the existing solar farm to minimise the interaction with existing overhead lines.

3c) Do you have any comments about this section of the route?

If your feedback relates to a specific location, or any features we should look to avoid, please reference this here.

Section 2: Barnoldby le Beck to North Thoresby

(See pages 42-43 of the Project Background Document and the emerging preferred corridor and constraints plans.)

The emerging preferred corridor runs south towards Brigsley. Due to the narrow nature of the corridor in this area, we are presenting two options for crossing the B1203, both north and south of Brigsley. Our emerging preference is to route to the north of the village to limit the overall length of the line needed and avoid the need for additional angle pylons in this section.

Once through this narrower area, the preferred corridor continues south east to the east of North Thoresby. The swathe shows our preference to route to the east within the corridor south of Brigsley to limit effects on the setting of the AONB.

3d) Do you have a preference for the new line to be located north or south of Brigsley? Please tell us the reason for your answer.

If your feedback relates to a specific location, or any features we should look to avoid, please reference this here.

3e) Please use this box to provide any other comments on this section of the route.

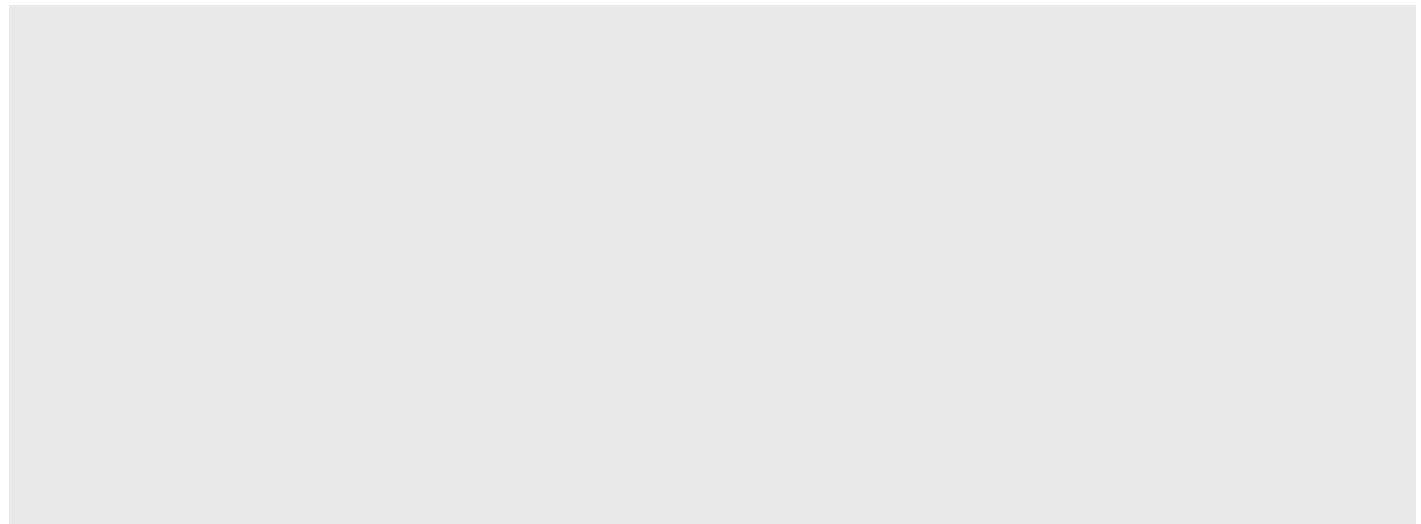
Section 3: North Thoresby to Alvingham and Keddington

(See pages 44-45 of the Project Background Document and the emerging preferred corridor and constraints plans.)

This section of the emerging preferred corridor runs from east of North Thoresby, south of the B1201, to a point north east of Keddington and south west of Alvingham, south of Alvingham Road. Overall, our emerging preference in this section is to stay to the east of the corridor to increase the distance of the new overhead line from the AONB and to avoid crossing the Lincolnshire Wolds Railway.

3f) Do you have any comments about this section of the route?

If your feedback relates to a specific location, or any features we should look to avoid, please reference this here.



Section 4: Alvingham and Keddington to Tothill

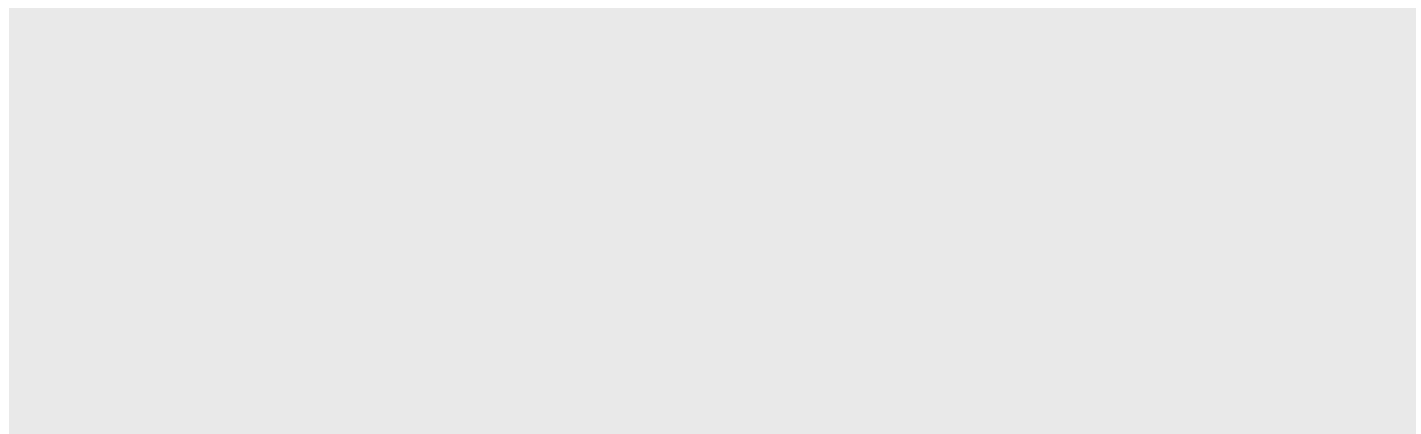
(See page 46-47 of the Project Background Document and the emerging preferred corridor and constraints plans.)

This section runs from a point north east of Keddington and south west of Alvingham, south of Alvingham Road, to a point immediately east of Tothill.

Our emerging preference in the north of this section is to stay to the west of the corridor to avoid properties along Louth Road and a narrow area associated with properties and farms. Once south of here, the swathe takes the shortest, straightest route across the B1200, west of Manby Showground to provide greater separation from the AONB and North Reston Farm Airfield.

3g) Do you have any comments about this section of the route?

If your feedback relates to a specific location, or any features we should look to avoid, please reference this here.



Lincolnshire Connection Substations (LCS) A and B

(See pages 48-49 of the Project Background Document, Chapters 10 and 15 of CPRSS and the emerging preferred corridor and constraints plans.)

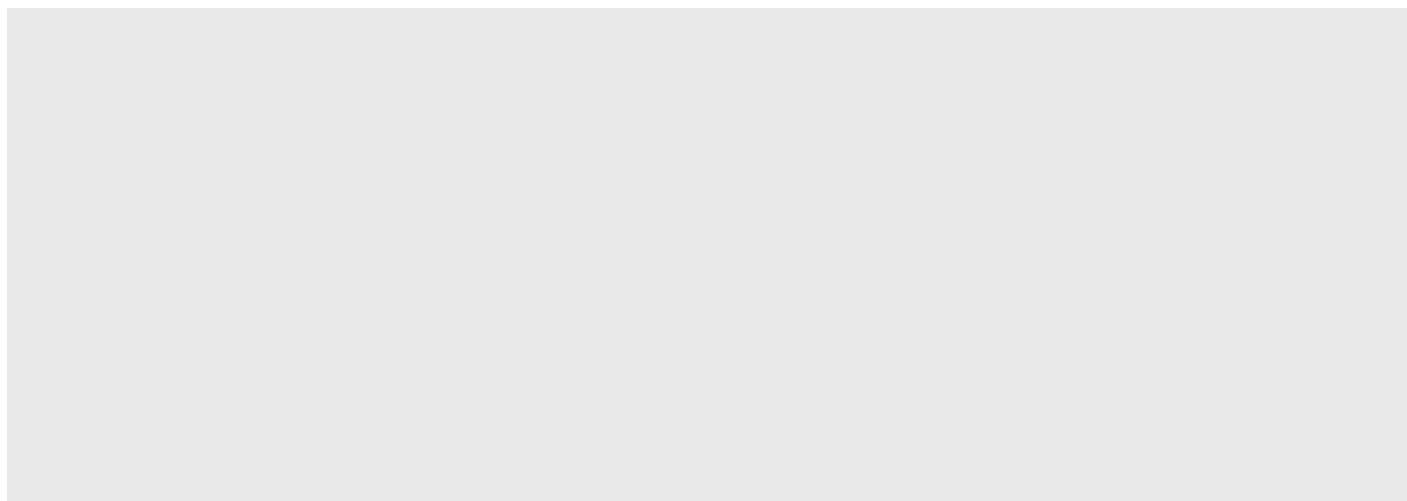
The SOR and SOR Addendum identified that two LCS will be required to ensure necessary system resilience, to manage security risk and to ensure the most efficient solution for both the system and the community to maintain compliance with National Electricity Transmission System Security and Quality of Supply Standards. The northernmost substation is referred to as LCS A and the southernmost is referred to as LCS B.

The siting area for the LCS A substation covers an area north and west of Woodthorpe, east of Claythorpe and east of Greenfield Wood/ Mother Wood.

Our emerging preference within the substation siting area is to locate the LCS A to the south east, adjacent to Mother Wood.

3h) Do you have a preference for the location of the Lincolnshire Connection substation A within the siting area?

If your feedback relates to a specific location, or any features we should look to avoid, please reference this here.

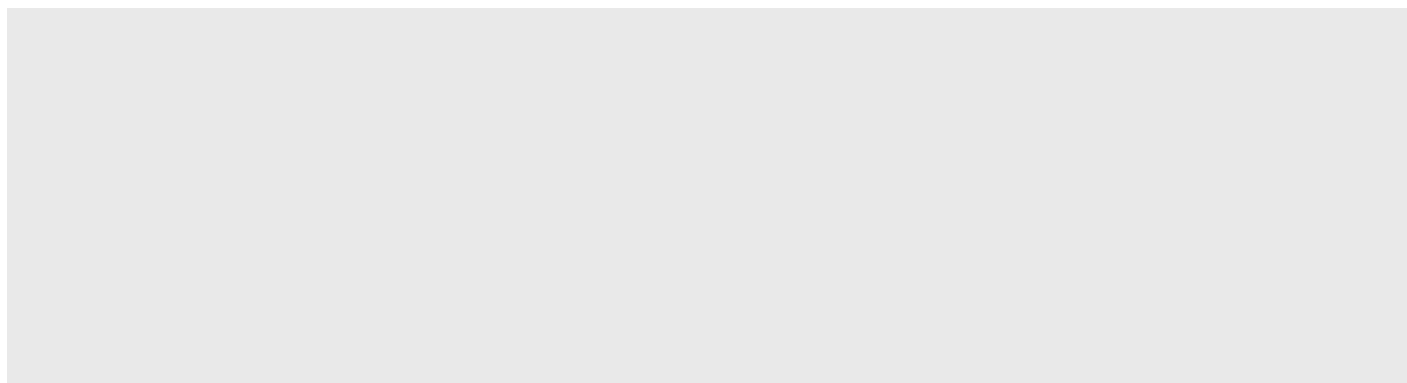


The siting area for the LCS B substation is located to the north of Bilsby, east of Saleby and west of Huttoft. The preferred location for the LCS B substation is north of Bilsby, as shown by the swathe.

Our emerging preference within the substation siting area is to locate LCS B to the east of the A1111, between Bilsby and Asserby.

3i) Do you have a preference for the location of the Lincolnshire Connection substation B within the siting area?

If your feedback relates to a specific location, or any features we should look to avoid, please reference this here.



Section 5: Tothill to Cumberworth

(See pages 48-49 of the Project Background Document and the emerging preferred corridor and constraints plans.)

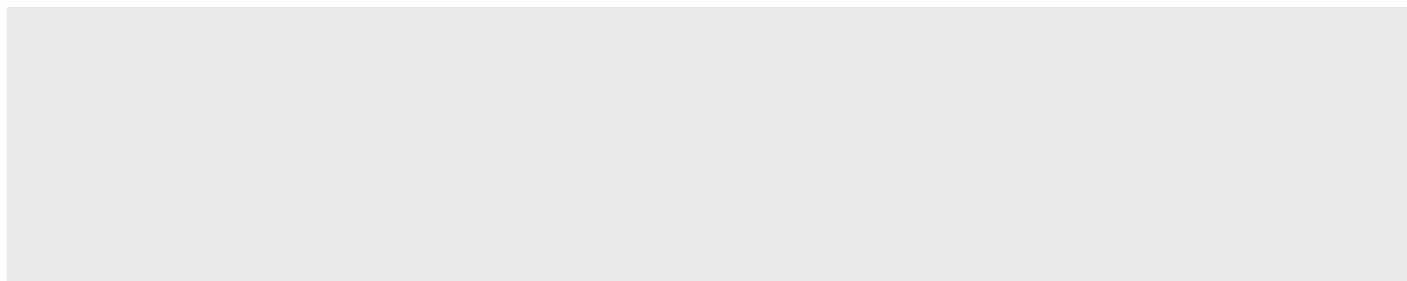
This section of the emerging preferred corridor runs from a point immediately east of Tothill to a point west of Cumberworth. Opting for a route south of Woodthorpe Hall Golf Course reduces the overall length of new overhead line, avoids more angle pylons and maximises use of Mother Wood as a visual screen. In this area the route passes through the two LCS siting areas dealt with separately in questions 3h and 3i.

The corridor for the overhead line splits in two in the northern part of this section, east and west of Greenfield Wood/ Mother Wood. The swathe shows our current preference to route east of the woodland and south of Woodthorpe Hall Golf Course. Opting for a route south of Woodthorpe Hall Golf Course reduces the overall length of the new overhead line, avoids more angle pylons and maximises use of Mother Wood as a visual screen, given our emerging preference for the location of LCS A.

The overhead line would then route directly east, south of Saleby, before heading south east, passing Bilsby to the east.

3j) Do you have any comments about this section of the route?

If your feedback relates to a specific location, or any features we should look to avoid, please reference this here.



Section 6: Cumberworth to Burgh le Marsh

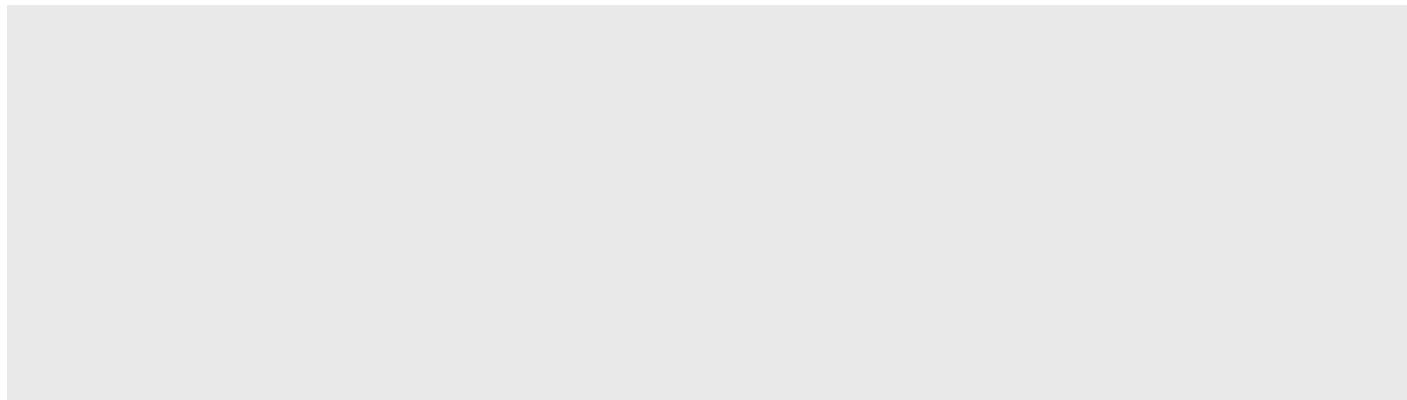
(See pages 50-51 of the Project Background Document and the emerging preferred corridor and constraints plans.)

This section runs from a point west of Cumberworth to a point east of Burgh le Marsh south of the A158.

The route here aims to avoid scattered receptors as much as possible before crossing the A158, staying west within the corridor to avoid other built and proposed energy infrastructure projects. There is some optionality retained to potentially cross the A158 further to the east although this is less preferable.

3k) Do you have any comments about this section of the route?

If your feedback relates to a specific location, or any features we should look to avoid, please reference this here.



Section 7: Burgh le Marsh to Midville

(See pages 52-53 of the [Project Background Document](#) and the [emerging preferred corridor and constraints plans](#).)

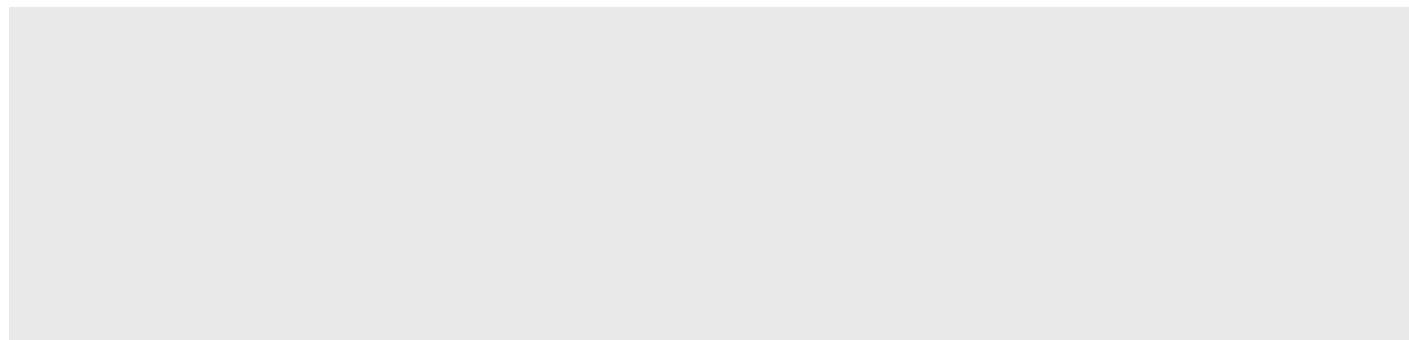
This section runs west from east of Burgh le Marsh, south of the A158, to the west of Midville, south of Fodder Dike.

Given complexity of routeing at High Lane and Croft Lane, south of Burgh le Marsh, our emerging preference is a route in the northern part of the corridor, through the Hollies Solar Park and Wind farm. This is to maintain distance from the existing 132 kV overhead line in this area to reduce impacts on residential properties.

The route then runs parallel to the Poacher railway line, crossing it north east of New Leake, before continuing south west and turning south at Midville. This is the shortest, straightest approach through the corridor in this area of the section.

3l) Do you have any comments about this section of the route?

If your feedback relates to a specific location, or any features we should look to avoid, please reference this [here](#).



Section 8: Midville to River Witham

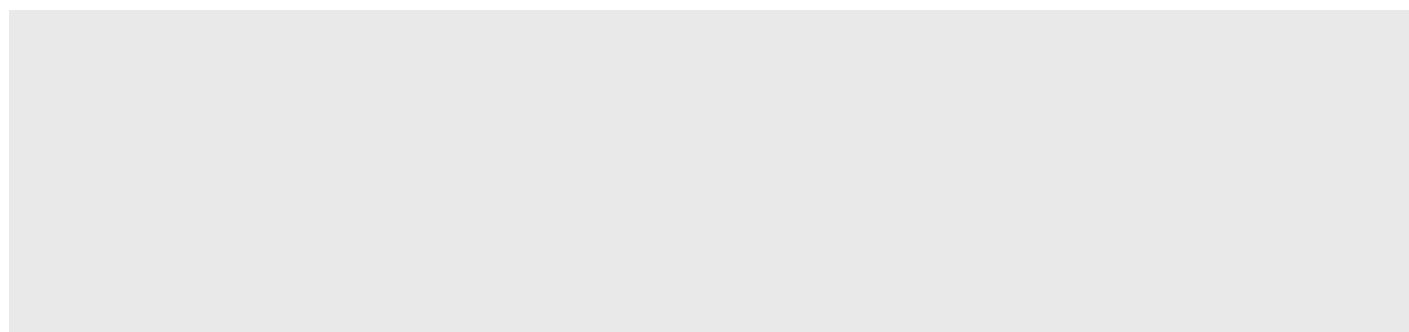
(See pages 54-55 of the [Project Background Document](#) and the [emerging preferred corridor and constraints plans](#).)

This section runs from west of Midville, south of Fodder Dike, to a crossing of the River Witham between Langrick Bridge and Anton's Gowt. In this part of the section, properties, farms and businesses are well spaced, allowing the shortest, straightest route to be taken.

From Midville, the overhead line would continue south, before turning west at Hobhole Bank to Sibsey Northlands, where the route aims to avoid scattered properties. Heading south from here, our preference is to stay west within the corridor to allow for a shorter, straighter route to minimise the number of angle pylons and avoid properties along West Fen Drain.

3m) Do you have any comments about this section of the route?

If your feedback relates to a specific location, or any features we should look to avoid, please reference this [here](#).



Section 9: River Witham to River Welland

(See pages 56-57 of the Project Background Document and the emerging preferred corridor and constraints plans.)

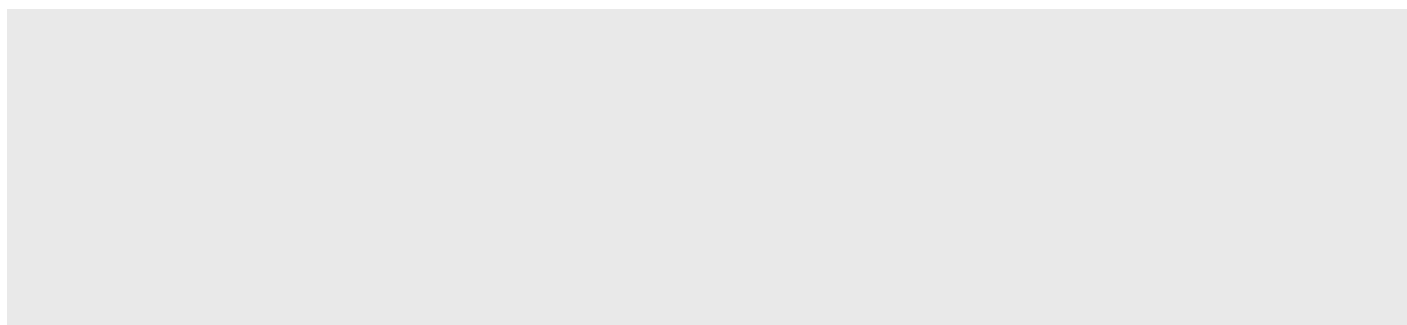
This section runs from a crossing of the River Witham between Langrick Bridge and Anton's Gowt to a crossing of the River Welland between Spalding and The Wash.

From the River Witham, the corridor heads directly south. At New Hammond Beck, the corridor splits in two, running to both the east and west. As shown by the swathe, our emerging preference is to route to the west of the corridor to avoid more properties in the east part of the corridor and reduce potential visual impacts.

From here, the remainder of this section is relatively unconstrained. The corridor continues south, taking a route west of Wigtoft to maximise the distance from environmentally designated sites around The Wash. From here, the route runs south east towards the River Welland, beginning to parallel the existing 400 kV overhead line near Risegate Eau to minimise visual impact.

3n) Do you have any comments about this section of the route?

If your feedback relates to a specific location, or any features we should look to avoid, please reference this here.



Weston Marsh Substation

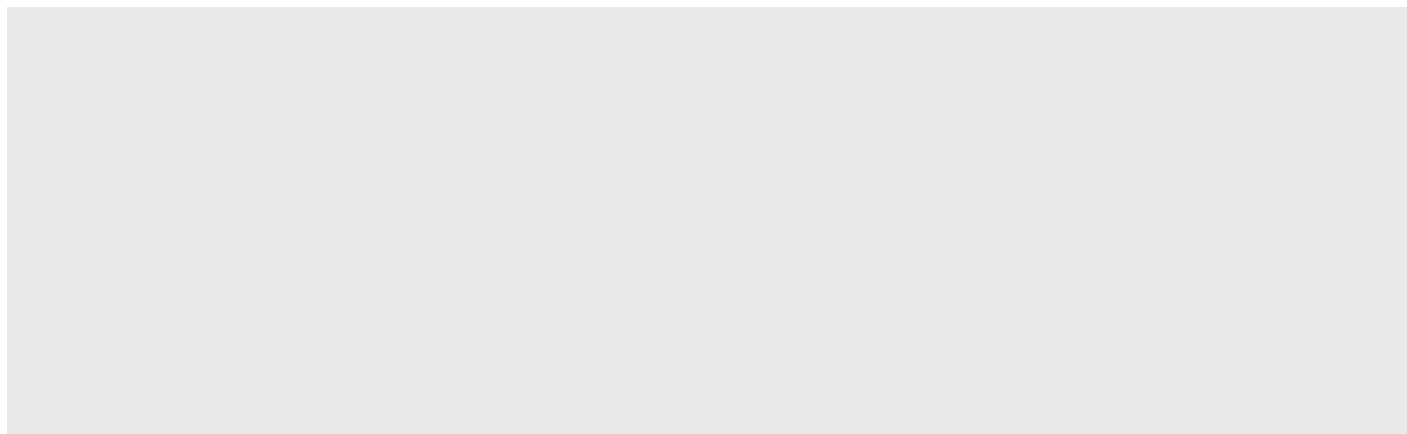
(See pages 58-59 of the Project Background Document , Chapters 11 and 15 of the CPRSS, and the emerging preferred corridor and constraints plans.)

The proposed siting area for the Weston Marsh substation is located at the 'tee' point of the existing overhead line and the overhead line connecting to Spalding power station.

Our emerging preference within the substation siting area is to locate the substation in the centre of the siting area to limit the spread of infrastructure, limit the amount of work required to the existing overhead lines and provide increased operational flexibility.

3o) Do you have a preference for the location of the Weston Marsh substation within the siting area?

If your feedback relates to a specific location, or any features we should look to avoid, please reference this here.



Section 10: River Welland to B1165

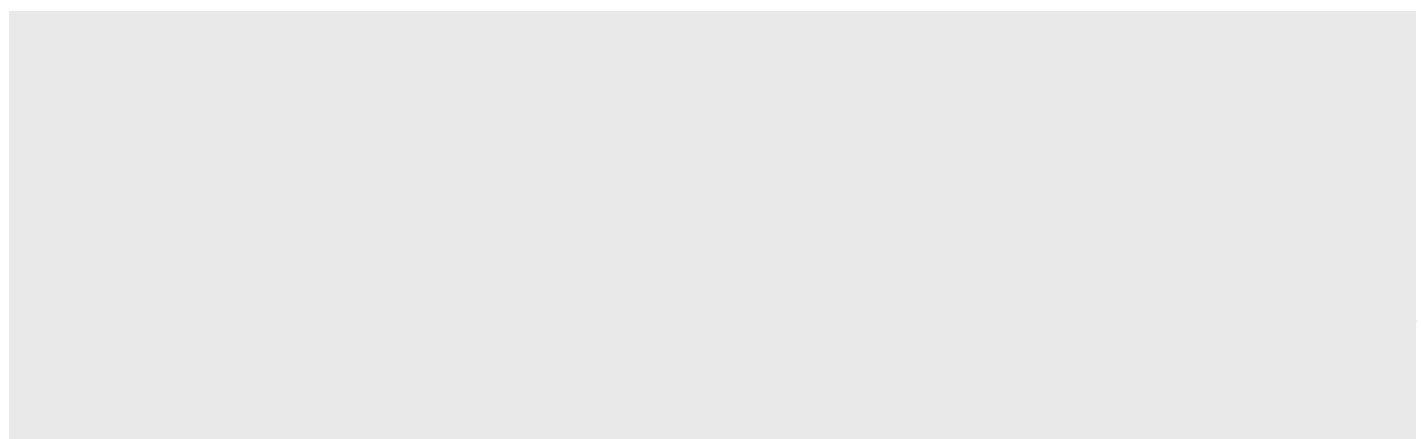
(See pages 58-59 of the Project Background Document and the emerging preferred corridor and constraints plans.)

This section runs from a crossing of the River Welland between Spalding and The Wash, to a crossing of the B1165 north west of Whaplode St Catherine. Our preference through most of this section, as shown by the graduated swathe, is to follow the shortest, straightest route to minimise the number of angle pylons.

Following this, the route continues to head south, west of Weston and east of Spalding, crossing of the A151. From here, the corridor continues east, crossing the B1165 where the corridor narrows to reduce the potential impact to the west and avoid properties to the east.

3p) Do you have any comments about this section of the route?

If your feedback relates to a specific location, or any features we should look to avoid, please reference this here.



New Walpole Substation

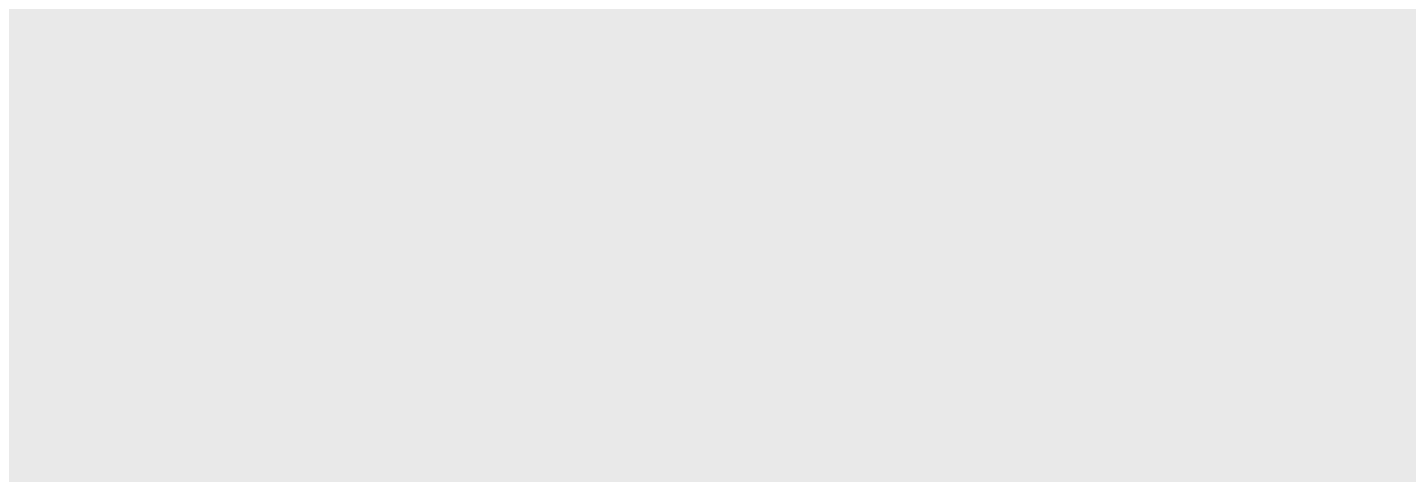
(See pages 60-61 of the Project Background Document, Chapters 12 and 15 of the CPRSS, and the emerging preferred corridor and constraints plans.)

The Walpole substation siting area is located north of West Walton.

Our emerging preference within the substation siting area at Walpole is to locate the substation to the south east of the siting area due to its position on/adjacent to the existing 4ZM 400 kV overhead line, reducing the required deviations of this overhead line and limiting the spread of impacts into the surrounding environment.

3q) Do you have a preference for the location of the New Walpole substation within the siting area?

If your feedback relates to a specific location, or any features we should look to avoid, please reference this here.



Section 11: B1165 to Walpole

(See pages 60-61 of the Project Background Document and the emerging preferred corridor and constraints plans.)

This section runs from a crossing of the B1165 north west of Whaplode St Catherine to the new Walpole substation (which the overhead line would connect into). The new Walpole substation is proposed to be located near to the existing 400 kV overhead line, north of Walton Highway.

From the B1165 the route would continue east, taking the most direct route to limit the amount of infrastructure (and angle pylons) within the landscape.

At South Holland Main Drain, the corridor splits in two. The swathe shows our preference for the eastern route to allow for the most direct route and to minimise the number of angle pylons.

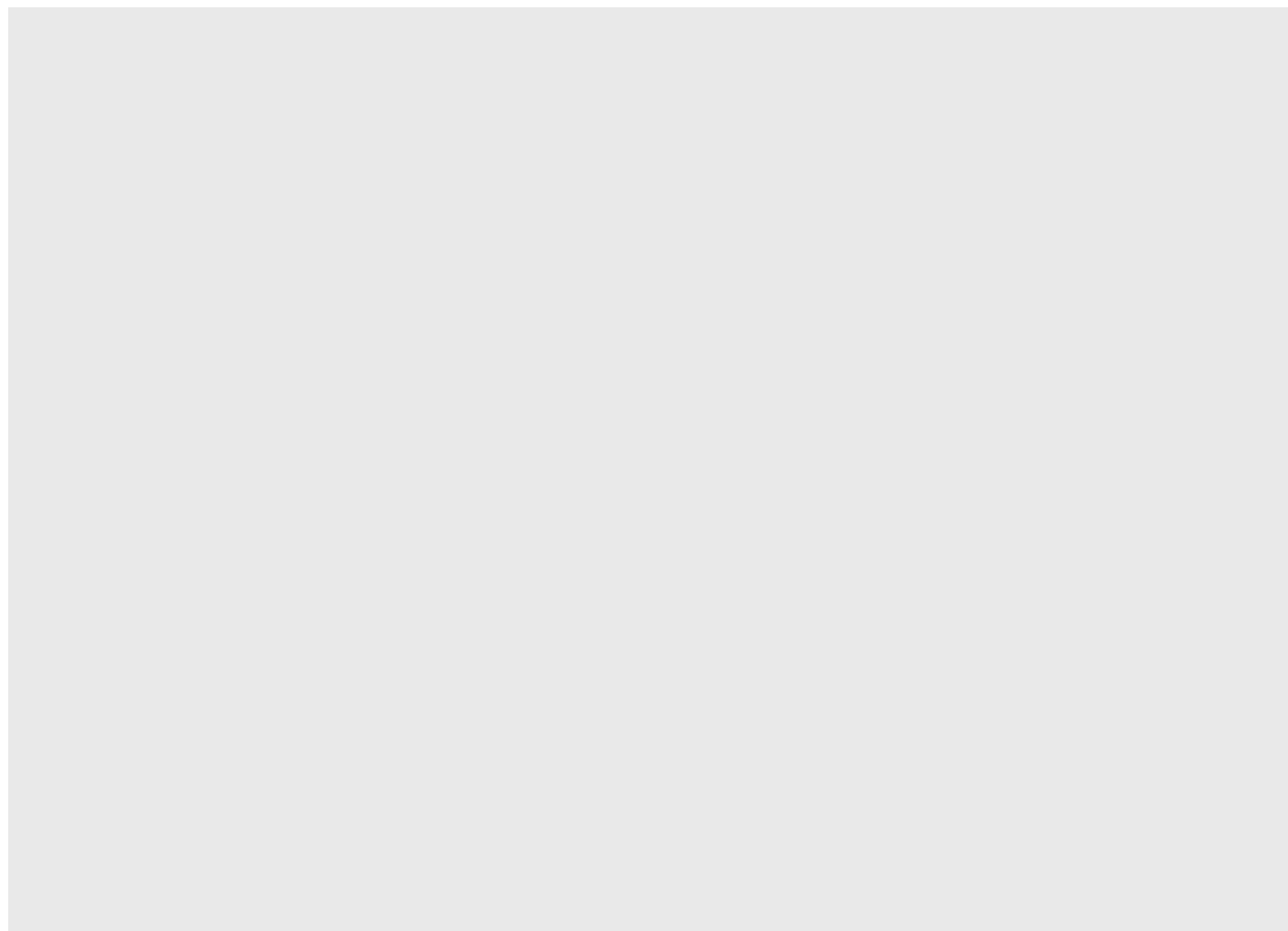
Our preference within the corridor is then to continue east towards the River Nene using the northern of the three routes south west of Tydd St Giles.

At the River Nene, the corridor again splits in two. Our preference is to use the southern route to provide separation from the Wisbech Gas Compressor Station. The corridor then crosses the River Nene, continuing east towards the new Walpole substation (which the overhead line would connect into).

The Walpole substation siting area is located north of West Walton. Our emerging preference is to locate the substation to the south east of the siting area, adjacent to the existing 400 kV overhead line to reduce the required deviations of this overhead line and limit the spread of impacts into the surrounding environment.

3r) Do you have any comments about this section of the route?

If your feedback relates to a specific location, or any features we should look to avoid, please reference this here.



4. Other requirements

Associated works and other aspects

Alongside the proposed new overhead line network reinforcement, additional land will also be required to build and reduce the potential impacts of the proposed reinforcement. These include, but are not limited to, the following:

- temporary land for construction activities including working areas for construction equipment and machinery, site offices, welfare, storage and access; and
- land required for mitigation, compensation and enhancement of the environment as a result of the environmental assessment process and Biodiversity Net Gain.

Details about those aspects are still to be developed. More information will be provided in a further round of consultation, which we expect to hold in 2025.

4a) Do you have any general comments about these aspects at this stage that you would like us to consider?

If your feedback relates to a specific location, or any features we should look to avoid, please reference this here.

5. Refining our proposals

Alongside reviewing and considering consultation feedback, we will carry out further assessments to help us decide where we could locate new infrastructure within the preferred corridor and graduated swathe.

5a) Is there anything we could do to reduce the effects of a new overhead line?

5b) Are there any other considerations we should take into account when developing our proposals?

National Grid Electricity Transmission has a Community Grant Fund available to charitable and not-for-profit organisations to apply for funding for community-based initiatives in locations where our works are taking place. You can read more about that at nationalgrid.com/g-w.

5c) In addition to our Community Grant Fund, are there other ways in which you would wish to see local communities benefit from hosting new electricity transmission infrastructure?

If your feedback relates to a specific location, or any features we should look to avoid, please reference this here.

6. Our consultation

Please let us know your views on the quality of our (printed and online) consultation materials, our face-to-face consultation events, how we have notified people about our proposals, and anything else related to this consultation.

6a) Please let us know how you heard about this consultation by ticking one or more of the following boxes:

- ☐ Received a letter from National Grid
- ☐ Received a newsletter from National Grid
- ☐ Received an email from National Grid
- ☐ Received information from a local authority
- ☐ Informed by a local elected representative
- ☐ Saw an advert in a local newspaper
- ☐ Saw social media coverage
- ☐ Saw coverage in local and/or national media
- ☐ Word of mouth
- ☐ Other (please specify)

6b) Please rate the information included as part of this consultation in terms of how clearly it was presented and how easy it was to understand:

- | | | |
|---|--|---|
| <input type="checkbox"/> Strongly agree | <input type="checkbox"/> Agree | <input type="checkbox"/> Neither agree nor disagree |
| <input type="checkbox"/> Disagree | <input type="checkbox"/> Strongly disagree | <input type="checkbox"/> Unsure |

Reasons for answer.

6c) Please rate how well this consultation was promoted and advertised to the public:

- | | | |
|---|--|---|
| <input type="checkbox"/> Strongly agree | <input type="checkbox"/> Agree | <input type="checkbox"/> Neither agree nor disagree |
| <input type="checkbox"/> Disagree | <input type="checkbox"/> Strongly disagree | <input type="checkbox"/> Unsure |

Reasons for answer.

6d) Did you attend one of our face-to-face or online consultation events?

- | | | | |
|--|--------------------------------------|------------------------------------|-----------------------------|
| <input type="checkbox"/> Yes, face-to-face | <input type="checkbox"/> Yes, online | <input type="checkbox"/> Yes, both | <input type="checkbox"/> No |
|--|--------------------------------------|------------------------------------|-----------------------------|

6e) How informative did you find our consultation events and/or our consultation materials?

- | | | | |
|---|--|--|-------------------------------------|
| <input type="checkbox"/> Very informative | <input type="checkbox"/> Quite informative | <input type="checkbox"/> Not informative | <input type="checkbox"/> No opinion |
|---|--|--|-------------------------------------|

6f) Do you have further comments about our consultation process or anything we can improve about our consultation?

7. Additional questions – net zero

Grimsby to Walpole will support the UK’s net zero target by reinforcing the electricity transmission network between the north of England and the Midlands, and facilitate the connection of planned offshore wind generation and interconnectors with other countries, allowing clean green energy to be carried on the network.

The below question ask for your views on net zero:

7a) Given the goal to deliver net zero carbon emissions in the UK by 2050 and the need to facilitate the connection of new renewable generation in the region, to what extent do you agree with the identified need for Grimsby to Walpole (as described on pages 20-27 in the Project Background Document, and also in the Strategic Options Report and the Addendum to the Strategic Options Report)?

- ☐ Strongly agree
- ☐ Agree
- ☐ Neither agree nor disagree
- ☐ Disagree
- ☐ Strongly disagree
- ☐ Unsure

7b) Please use this space, if you wish, to expand on the reason for your answer.

7c) How concerned are you about the following? Please tick as relevant:

	Very concerned	Concerned	Neutral	Not that concerned	Not at all concerned
The effect of climate change /global warming on your life.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The effect of climate change /global warming on the lives of future generations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7d) To what extent do you agree or disagree with each of the following statements?

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
The UK meeting its target of net zero carbon emissions by 2050 is important to you.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
With the growth of renewable energy generation and interconnection in the North of England, reinforcing the network to transport this energy to where it is needed most is important.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Having domestic energy sources and the associated infrastructure will help increase the UK's energy security.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Increasing our domestic renewable energy production and associated infrastructure will make us less reliant on imported oil and gas.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7e) Please use this space, if you wish, to expand on the reason for your answer.

8. Equality and diversity

National Grid would be grateful if you could answer the following equality and diversity questions. We will use the information we receive to help understand whether our consultation has been useful to people of different backgrounds and requirements.

We may publish a summary of the results, but no information about an individual would be revealed. The answers you provide to this question are defined as 'special category data'. If you agree to provide Equality and Diversity information, you can withdraw

your permission at any time. To withdraw your details, please contact us via email at **contact@g-w.nationalgrid.com**.

If you wish to receive consultation documents in hard copy, or in another format, please send us a request using the details provided within this response form and National Grid will organise for relevant materials to be issued.

1. What is your gender?

- ☐ Male ☐ Female ☐ Non-binary
☐ Prefer not to say

2. Do you consider yourself a person with a disability?

- ☐ Yes ☐ No ☐ Prefer not to say

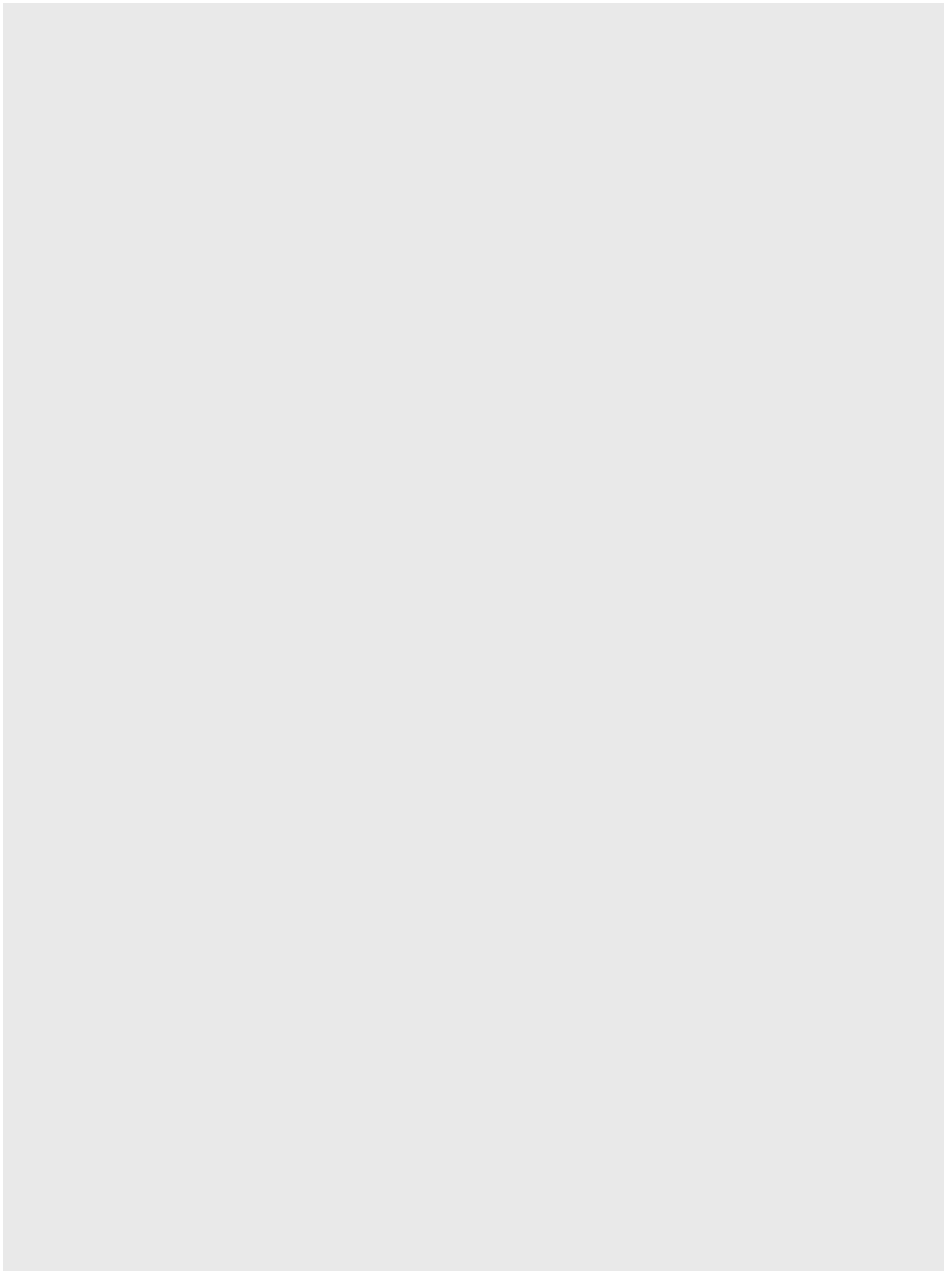
3. How would you describe your ethnic background?

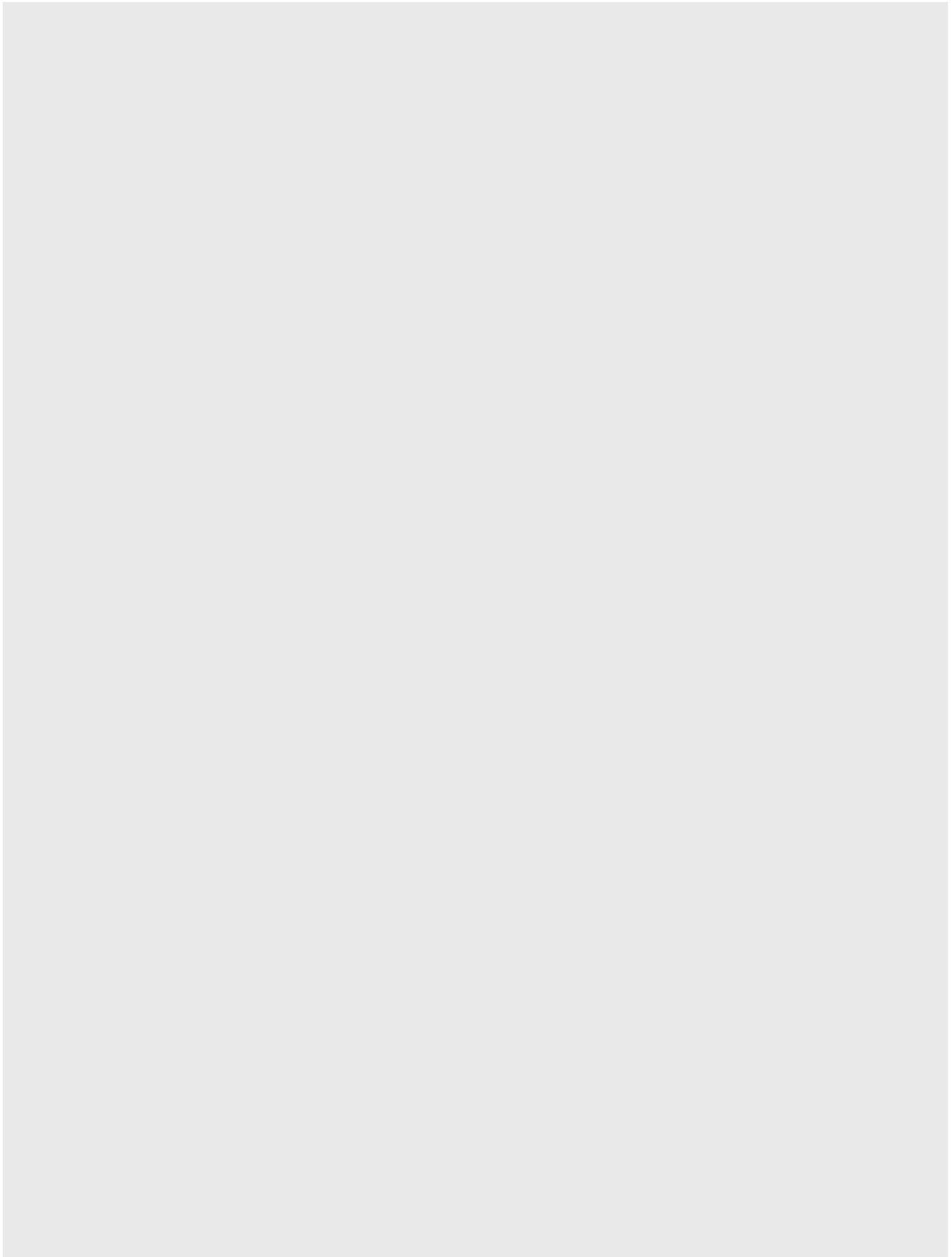
- | | |
|---|--|
| <input type="checkbox"/> White English, Welsh, Scottish, Northern Irish or British | <input type="checkbox"/> Bangladeshi |
| <input type="checkbox"/> Irish | <input type="checkbox"/> Chinese |
| <input type="checkbox"/> Gypsy or Irish Traveller | <input type="checkbox"/> Any other Asian background |
| <input type="checkbox"/> Any other White background | <input type="checkbox"/> Black, African, Caribbean or Black British |
| <input type="checkbox"/> Mixed or Multiple ethnic groups | <input type="checkbox"/> African |
| <input type="checkbox"/> White and Black Caribbean | <input type="checkbox"/> Caribbean |
| <input type="checkbox"/> White and Black African | <input type="checkbox"/> Any other Black, African or Caribbean background (please state) |
| <input type="checkbox"/> White and Asian | |
| <input type="checkbox"/> Any other Mixed or Multiple ethnic background (please state) | |
| | <hr/> |
| <input type="checkbox"/> Asian or Asian British | <input type="checkbox"/> Arab |
| <input type="checkbox"/> Indian | <input type="checkbox"/> Any other ethnic group (please state) |
| <input type="checkbox"/> Pakistani | |
| | <hr/> |
| | <input type="checkbox"/> Prefer not to say |

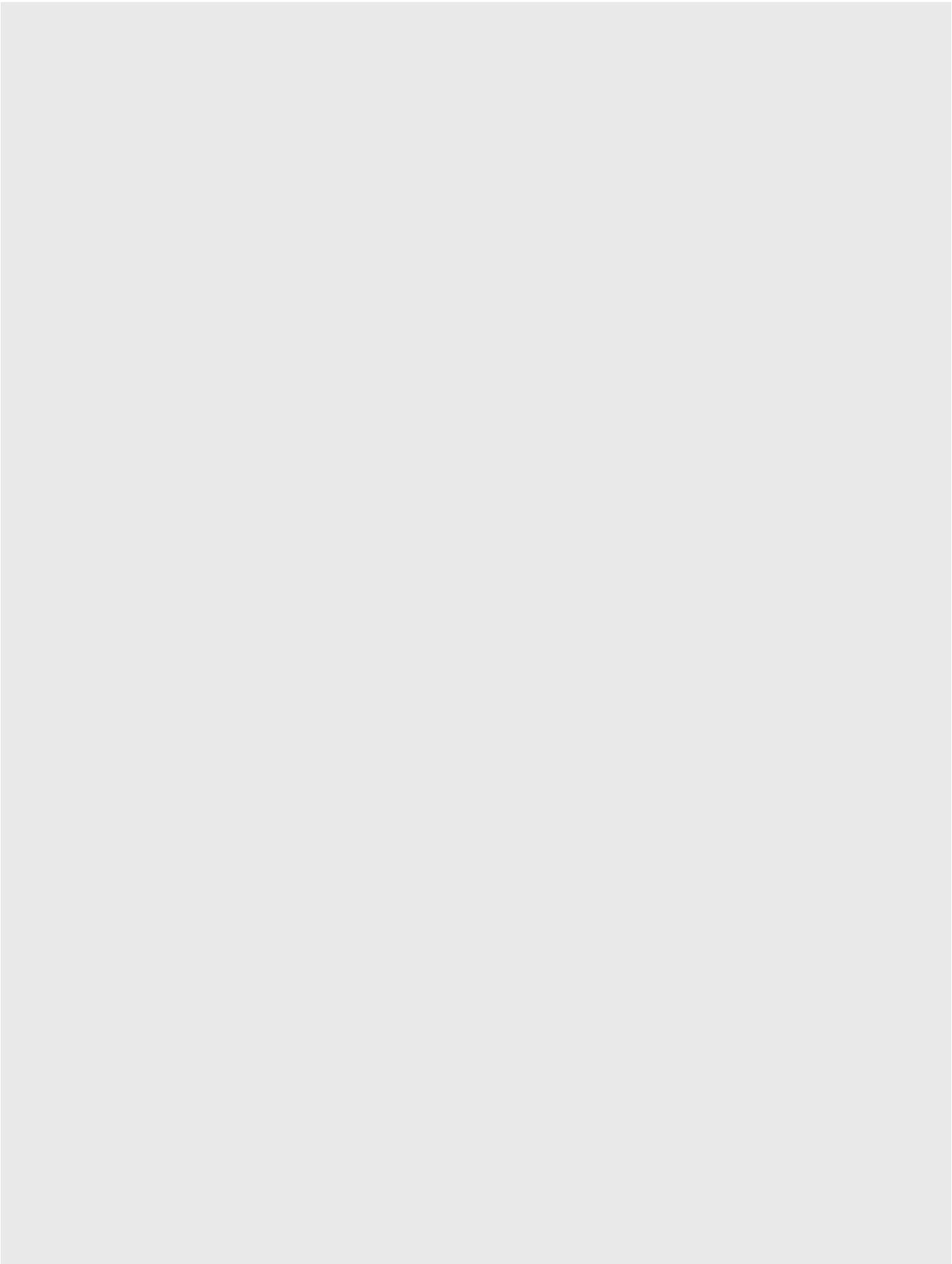
4. What is your age?

- | | | | |
|-----------------------------------|--------------------------------|--------------------------------|--|
| <input type="checkbox"/> Under 16 | <input type="checkbox"/> 16-24 | <input type="checkbox"/> 25-34 | <input type="checkbox"/> 35-44 |
| <input type="checkbox"/> 45-54 | <input type="checkbox"/> 55-64 | <input type="checkbox"/> 65+ | <input type="checkbox"/> Prefer not to say |

9. Further comments







Data privacy notice

National Grid is committed to protecting your personal information. Whenever you provide such information, we are legally obliged to use it in line with all applicable laws concerning the protection of personal data, including the UK General Data Protection Regulation (GDPR).

How will National Grid use the information we collect about you?

We will use your personal data collected via this consultation for a number of purposes, including:

- to analyse your feedback to the consultation
- to produce a *Consultation Report*, based on our analysis of responses (individuals will not be identified in the Report)
- to write to you with updates about the results of the consultation and other developments
- to keep up-to-date records of our communications with individuals and organisations.

Any personal information you include in this form will be handled and used by (or made available to) the following recipients to record, analyse and report on the feedback we receive:

- National Grid
- the Planning Inspectorate (which will consider our application for consent to build the Grimsby to Walpole reinforcement – any details published as part of this process will be anonymised)
- the Secretary of State (who will take the decision on our application)
- our legal advisers
- consultants working on the Grimsby to Walpole.

What rights do I have over my personal data?

Under the terms of the UK GDPR you have certain rights over how your personal data is retained and used by National Grid. For more information, see our full data privacy statement:

nationalgrid.com/privacy-policy

Contact us

Please get in touch if you have any questions about our proposals for Grimsby to Walpole.

0800 0129 153

(lines are open Monday to Friday, 9am–5:30pm).

contact@g-w.nationalgrid.com

Freepost G TO W

(no stamp or further address details are required).

If you feel your land may be affected by these proposals, please contact the Grimsby to Walpole Lands Team by calling **0333 034 7961** or by emailing **g-w@dalcourmaclaren.com**.

Alternatively, you can write to **1 Staplehurst Farm, Weston on the Green, Oxfordshire OX25 3QU.**



National Grid plc
National Grid House,
Warwick Technology Park,
Gallows Hill, Warwick.
CV34 6DA United Kingdom

Registered in England and Wales
No. 4031152
nationalgrid.com