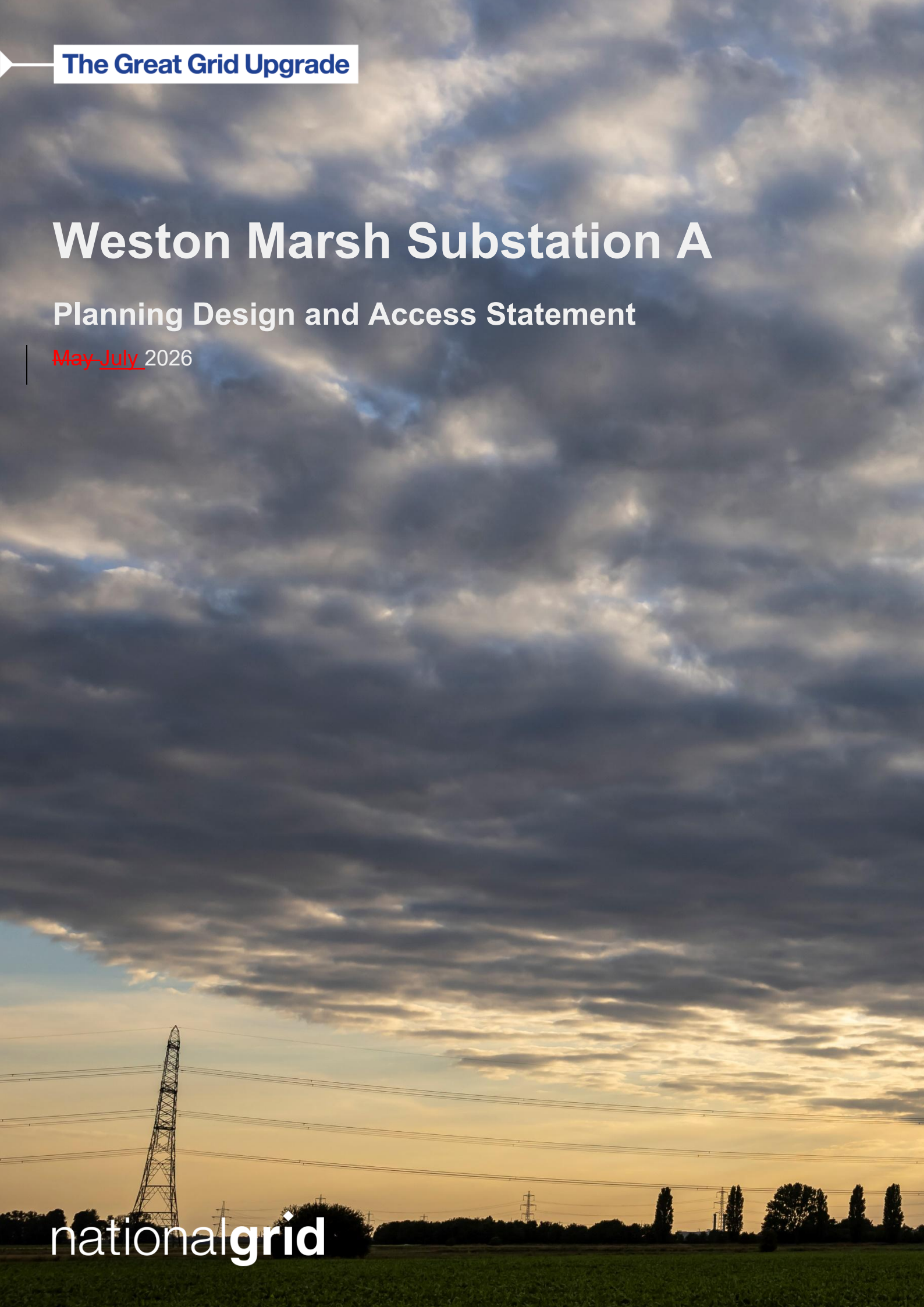
The Great Grid Upgrade

Weston Marsh Substation A

Planning Design and Access Statement

~~May~~ July 2026



nationalgrid

Weston Marsh Substation A
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~~Appendix B Screening Opinion received from SHDC on 30 April 2025~~
~~Appendix C Pre-application advice received from SHDC on 7 May 2025~~

1. Introduction

1.1 Overview

1.1.1 This Planning, Design and Access Statement (PDAS) has been prepared by Arup AECOM on behalf of National Grid Electricity Transmission plc (National Grid) (the Applicant) in support of the planning application submitted for the Weston Marsh Substation A on land in the vicinity of the Spalding Tee-Point, Surfleet Seas End and Moulton Seas End.

1.1.2 This updated version (v1.1) July 2026 includes three~~wo~~ key updates as follows:

- a correction to the site areas attributed to the proposed Weston Marsh Substation A overall footprint and description of the areas within the overall footprint to replace incorrect figures provides in the previous PDAS; and
- corrections to the dates of submitted documents in Table 1.2 to reflect updated versions of documents which have also been updated to replace incorrect area figures referred to above; and

~~1.1.1~~• additional relevant information on the need for and establishment of the principle of consent for the grid connection infrastructure to facilitate the connection of the Outer Dowsing Offshore Windfarm (ODOW) to the national electricity transmission network.

Weston Marsh Substation A Planning Application

~~1.1.2~~1.1.3 The Applicant is seeking planning permission under the Town and Country Planning Act 1990 (TCPA) for the Weston Marsh Substation A, which would comprise the construction of a new 400 kV Air Insulated Substation (AIS) associated landscaping and environmental mitigation works, drainage, highways and other associated works (herein referred to as the 'Substation Works'). The application for the Substation Works is hereafter referred to as the TCPA Application.

~~1.1.3~~1.1.4 The Substation Works fall within the administrative boundary of South Holland District Council (SHDC), and on land within the two parishes of Weston and The Moultons. Accordingly, this TCPA Application is submitted to SHDC.

~~1.1.4~~1.1.5 The TCPA Application is submitted as a standalone development to bring forward the delivery of the Weston Marsh Substation A, in part to facilitate the connection of the ~~Outer Dowsing Offshore Windfarm (~~ODOW~~)~~ by the required connection date of 2030. Additional related consents are required alongside the TCPA Application for works to existing overhead lines. Further details on the context of the Substation Works is provided below.

Related Consents

~~1.1.5~~1.1.6 Planning permission for the Substation Works is being sought in parallel to alterations to the existing 4ZM and 2WS overhead lines outside National Grid's proposed new Weston Marsh Substation A operational area (which comprises the substation including the 5m buffer) which form separate applications under two Section 37

(Section 37 of the Electricity Act 1989) Applications (herein referred to as the 'Overhead Line Works'). The Substation Works under this TCPA application will only come forward with the Overhead Line Works and vice versa; they will not be developed on their own.

~~1.1.6~~1.1.7 Modification works to the existing lines, including reconductoring, and the temporary diversion of two existing overhead lines to facilitate construction do not require separate planning consent because they fall within the permitted development rights provided under the Town and Country Planning (General Permitted Development) (England) Order 2015 / The Overhead Lines (Exemption) (England and Wales) Regulations 2009. In addition, consent for the connection of overhead lines within the new Weston Marsh Substation A operational area once built would fall within the permitted development rights provided under the Town and Country Planning (General Permitted Development) (England) Order 2015.

~~1.1.7~~1.1.8 Combined, the Substation Works and works to Overhead Line Works described in paragraphs **1.1.6** and **1.1.7** are referred to as 'the Scheme', which is described as follows:

> *"a new 400 kV Air Insulated Substation (AIS) (the new Weston Marsh Substation A), and overhead line works on the existing 4ZM and 2WS overhead lines to connect into the new substation. This would include the creation of short sections of new overhead line, the removal of short sections of existing overhead line, and reconductoring works on existing stretches of the 4ZM overhead line and temporary diversions to the existing 4ZM overhead line to facilitate these works."*

~~1.1.8~~1.1.9 Sections of OHL within the 5m buffer and up to the substation's gantries benefit from Permitted Development Rights under Class 15 Part B of the General Permitted Development Order 2015 and are discounted from the total calculated length of new OHL consented via the S37 Applications. The sections of OHL relevant to this matter are illustrated in orange on the **Substation Proposed Elevations Plan** (GWNC-WSP-ZZZZ-ZZZZZZ-PLN-EN-000003).

~~1.1.9~~1.1.10 The consenting routes for each of the components that together are referred to as the Scheme are set out in **Table 1.1** below.

Table 1.1 Components of the Scheme

Works Required	Consenting Regime
Construction of the new Air Insulated Substation (AIS) – 400kV Weston Marsh Substation A, associated landscaping and environmental mitigation works, drainage, highways and other associated works.	Town and Country Planning Act 1990 (TCPA) Component referred to as **'the Substation Works'**
Construction of new sections of overhead line to connect the new substation into the existing 4ZM overhead line. Removal of a section of the existing 4ZM overhead line. Other associated works.	Section 37 of the Electricity Act 1989 and deemed consent pursuant to section 90(2) of the Town and Country Planning Act 1990 Component referred to as '**S37 4ZM Overhead Line Works**'

Construction of a new section of overhead line to connect the existing 2WS overhead line into the new substation. Removal of a section of the existing 2WS overhead line. Other associated works.	Section 37 of the Electricity Act 1989 and deemed consent pursuant to section 90(2) of the Town and Country Planning Act 1990 Component referred to as '**S37 2WS Overhead Line Works**'
Reconductoring works required on the existing 4ZM overhead line. Two spans of temporary overhead lines.	Town and Country Planning (General Permitted Development) (England) Order 2015 / The Overhead Lines (Exemption) (England and Wales) Regulations 2009 Component referred to as '**Exempt Overhead Line Works'**

1.2 Background to the Substation Works Planning Application

1.2.1 The UK's electricity grid was originally built to connect electricity generated in power stations from fossil fuels, such as coal from the North and Midlands of England and South Wales.

1.2.2 As the UK moves away from fossil fuels and increases clean energy generation, the UK will be using more electricity than ever before. Demand for electricity is expected to increase by 50% by 2035 and double by 2050, the energy that's used for things like heating and transport is decarbonised. The UK has committed to connect 40GW of offshore wind to the electricity grid by 2030 to support meeting Government targets.

1.2.3 The existing electricity transmission network does not have the capacity to transport the volume of energy that will be generated offshore. Significant new electricity transmission infrastructure as well as upgrading existing infrastructure is needed to connect clean energy from where it's generated to where it's needed. To meet this need National Grid are undertaking a programme of 17 major infrastructure projects across England and Wales which comprise the Great Grid Upgrade. Together, these will facilitate the largest overhaul of the electricity grid in generations, helping to connect more affordable sources of home-grown and renewable energy to UK homes and businesses.

1.2.4 The proposed Weston Marsh Substation A will serve as a critical connection point for several renewable energy projects. The principle of a transmission connection in this location has already been established through the ODOW Development Consent Order (DCO).

1.2.5 The ~~Outer Dowsing Offshore Wind Farm (~~ODOW~~)~~ is a clean energy project which will provide a 1.5GW wind farm located in the North Sea approximately 54 km off the Lincolnshire Coast. This project was granted consent through a ~~Development Consent Order (~~DCO~~)~~ on 10 February 2026 and has a ~~n anticipated~~ connection date to the national electricity transmission network of 2030. For further information on the ODOW Nationally Significant Infrastructure Project (NSIP), please see the PINS Project Page (Outer Dowsing Offshore Wind (Generating Station) - Project information).

1.2.6 The proposed connection to the national electricity transmission network, as consented in the ODOW DCO, is located in the vicinity of the Spalding Tee-point. The consented Order Limits include land extending to and surrounding the Spalding Tee-Point in order to facilitate a connection to the transmission system. The ODOW Order Limits for the land associated with the connection are outlined in orange in **Image 1.1**. ~~As such, t~~This demonstrates that the suitability of this location for transmission connection infrastructure has ~~already~~ been assessed and accepted through the DCO examination and consenting process.

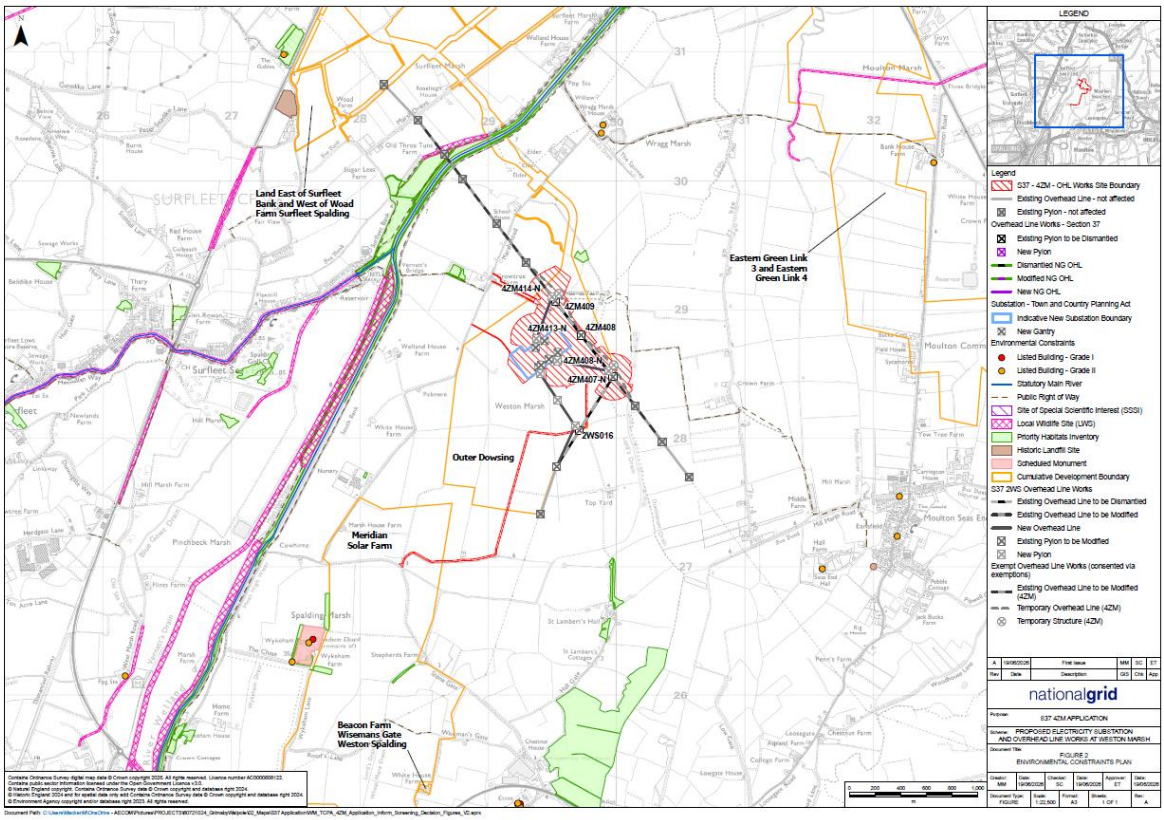
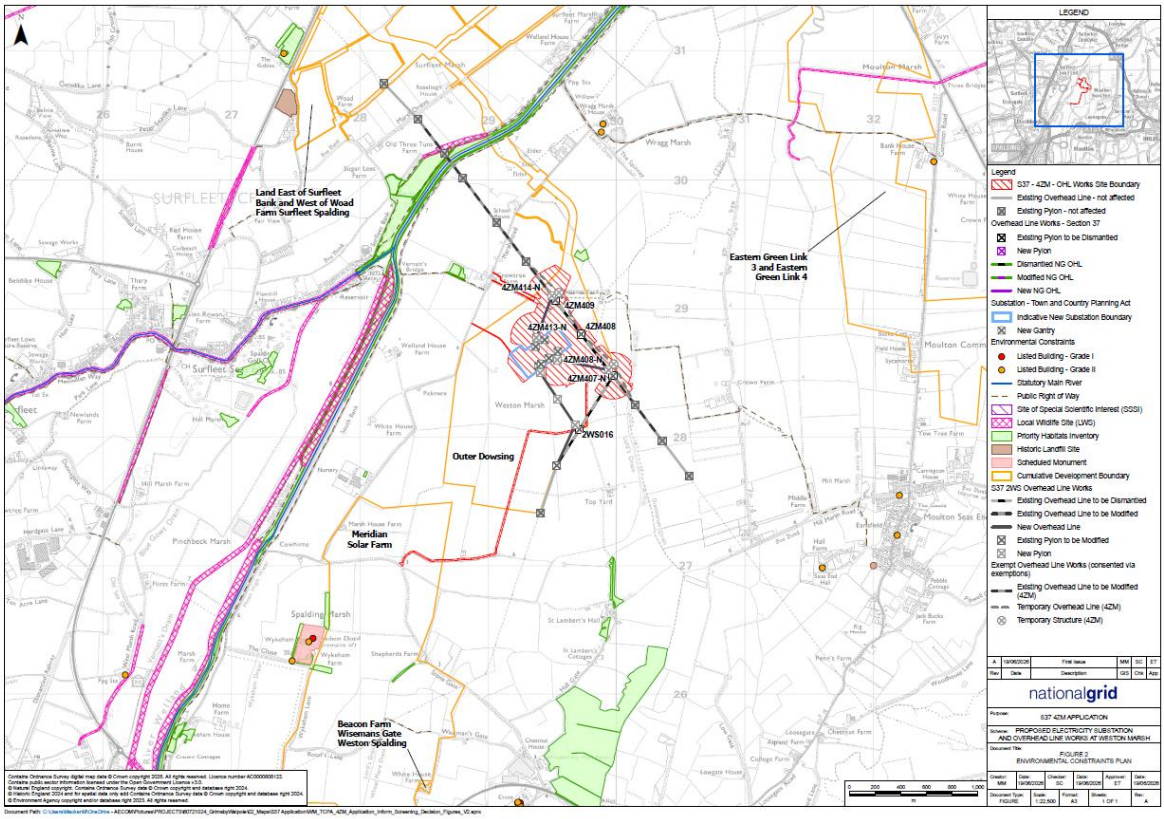


Image 1.1 Environmental Constraints Plan from Environmental Assessment Report for the s37 Application for changes to the 4ZM overhead line showing the extent of ODOW Order Limits in the vicinity of the Spalding Tee Point to accommodate grid connection infrastructure



1.2.7 The proposed connection point provided by the TCPA Application is therefore located within an area where the principle of connection to the transmission system has already been accepted by the Secretary of State through the DCO process. The development proposed in the TCPA Application is ~~therefore~~ consistent with the strategic infrastructure objectives already recognised through the ODOW DCO.

1.2.8 This is a material planning consideration when assessing the application, as it demonstrates that the provision of transmission connection infrastructure at, or in close proximity to, the Spalding Tee-Point has previously been considered acceptable in principle by the Secretary of State, taking account of environmental, technical and land-use matters through the DCO process. This provides further ~~context to~~ support the conclusions set out within the PDAS and reinforces that the proposed connection should be considered within the context of the existing consented transmission infrastructure corridor established by the ODOW DCO.

~~1.2.6 The connection point for ODOW will be a new substation – Weston Marsh A, close to the Spalding Tee Point.~~

~~1.2.7~~1.2.9 As noted in 1.2.5 above, part of the connection agreement between the National Energy System Operator (NESO) and ODOW (and therefore the reciprocal contractual agreement between NESO and NGET), a connection point onto the transmission system must be made available by 2030. Therefore, to accommodate this, an element of the Weston Marsh substation will need to be operational ahead of the Grimsby to Walpole project's programmed completion date of 2033.

~~1.2.8~~1.2.10 It is important to note that the Scheme which includes the TCPA Application is a standalone development separate from ODOW and will facilitate the connection for various energy projects in the future. Additionally, it will fully function as part of the transmission system independently of the outcome of the Grimsby to Walpole DCO application. Consent for expanded Weston Marsh A Substation infrastructure, and the connection of the new 400kv OHL to facilitate connection for other energy projects will be sought via the Grimsby to Walpole DCO.

1.3 Purpose and Structure of this PDAS

1.3.1 This document is a PDAS and the purpose is to: provide a description of the proposed development including relevant matters relating to design and access; provide information on the context of the proposed development, and a consideration of relevant planning policy and material matters to assist the Local Planning Authority (LPA) in the consideration and determination of the planning application; and to justify why the proposed Substation Works should be granted planning permission in line with the adopted Development Plan and other material considerations.

1.3.2 This PDAS is structured as follows:

1) Chapter 1 – Introduction
2) Chapter 2 – Background
3) Chapter 3 – Site and Surroundings: provides a description of the existing site and context
4) Chapter 4 – Need for and benefits of the Substation Works: sets out the need case for the Substation Works and identifies the benefits brought by the Scheme
5) Chapter 5 – Substation Works: provides a summary of the details of the proposed Substation Works
6) Chapter 6 – Planning Policy Context: provides a summary of the planning policy relevant for this application
7) Chapter 7 – Planning Appraisal: provides an assessment of the Substation Works against the planning policy
8) Chapter 8 – Summary and Conclusions

1.4 Environmental Impact Assessment Screening

1.4.1 Environmental Impact Assessment (EIA) is a process required by UK law which brings together information about the likely significant effects (LSE) of a development. The legal basis for EIA stems from European Community Directive 85/337/EEC2 (the 'EIA Directive'). The EIA Directive was transposed into UK law through several pieces of UK domestic legislation.

1.4.2 EIA is required for certain developments under the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (EIA Regulations) (Ref 1). Under the EIA Regulations, EIA is mandatory for development projects defined under Schedule 1. The Substation Works would not result in the type of development that is listed in Schedule 1 of the Regulations. Those development projects defined in

Schedule 2 only require EIA if they are likely to have significant effects on the environment by virtue of their nature, size or location.

1.4.3 Although the Substation Works are not Schedule 1 or Schedule 2 development, where the development area of an NGET project exceeds the thresholds specified in Schedule 2 of the EIA Regulations, NGET voluntarily seeks to screen such developments. In this case, the area of the proposed substation exceeds the 5 ha threshold above which developments described in Schedule 2, Category 10 Infrastructure Projects, require to be screened to determine if significant effects are likely. On this basis, an EIA screening request was prepared.

1.4.4 An EIA screening request was submitted to SHDC on 10 April 2025 in Appendix A, a response to the EIA screening request was received on 30 April 2025. A copy of the EIA screening opinion is provided in Appendix B The EIA screening opinion concluded that the proposed Substation Works would not comprise EIA development and as such an EIA would not be required to be undertaken, nor would an Environmental Statement (ES) be required as part of the planning application. Whilst the EIA screening request was submitted for the proposed Substation Works which now form part of this TCPA Application, the documents submitted in the EIA screening request included consideration of all elements of the Scheme to ensure that potential impacts and likely significant effects resulting from the whole Scheme were included.

1.4.5 Since the screening opinion was sought from SHDC (Appendix A), there have been some changes to the Substation Works design. These include:

1) Refinement to the proposed TCPA Application site boundary to include approximately 89 ha land (The screening request presented a screening boundary of 436 ha.) .
2) The proposed environmental mitigation areas have been defined based on further survey work.
3) The proposed drainage measures have been amended based on the development of the concept drainage design.
4) A dedicated temporary haul road for construction traffic has been included within the design, to reduce the effects of construction traffic on local roads.
5) An additional temporary construction compound has been included within the design located to the north of Stone Gate adjacent to the temporary haul road.

1.4.6 The changes to the proposed Substation Works since EIA screening would not result in the type of development that is listed in Schedule 1 of the Regulations. It remains that this specific type of development is also not listed under Schedule 2 of the EIA Regulations. The changes are not considered to result in any likely effects which would be significant. The Substation Works therefore does not constitute EIA development on the basis of the screening criteria and thresholds.

1.5 Submission Documents

1.5.1 The structure of this document is outlined within the contents page and at section 1.3 of this PDAS. The documents included in the submitted planning application are outlined in Table 1.2 and Table 1.3 below. The updated documents submitted in July 2026 to take account of corrections and updates arising from consultee comments retain the same document references outlined in the Tables below, but the updated

versions are noted on the document control sheets as version 1.1, July 2026. To assist consultees in their reviews of the updated information, we have submitted Tracked and Clean versions of each updated document.

1.5.2 Detailed discussions have taken place with SHDC in relation to the validation requirements for the planning application to inform the list of submission documents below.

Table 1.2 Application Documents

Document title	Document Reference
Covering Letter	GWNC-ARU-SS50-XXXXXX-LET-CP-000001
Application Form including Ownership Certificate	N/A Submitted via Planning Portal
Plans (see list in **Table 1.3** below)	N/A
South Holland District Council Local Information Checklist	N/A
Planning Design and Access Statement	GWNC-ARU-SS50-XXXXXX-RPT-CP-000002
Statement of Community Involvement	GWNC-CAV-ZZZZ-ZZZZZZ-RPT-PM-000001
Landscape and Visual Appraisal	GWNC-GIL-SS50-XXXXXX-RPT-ES-000001
Landscape and Visual Photomontages	GWNC-GIL-SS50-XXXXXX-VIS-ES-000001
Agricultural Land Classification Report	GWNC-ARC-SS50-XXXXXX-RPT-ES-000002
Cumulative Effects Assessment Report	GWNC-ARU-SS50-XXXXXX-RPT-ES-000020
Socio-economic Impact Assessment	GWNC-ARU-SS50-XXXXXX-RPT-ES-000019
Phase 1 Geoenvironmental Desk Study	GWNC-WAA-SS50-XXXXXX-RPT-ES-000001
Historic Environment Desk-based Assessment	GWNC-ARU-SS50-XXXXXX-RPT-ES-000017
Flood Risk Assessment	GWNC-WSP-SS50-XXXXXX-RPT-ES-000002
Water Framework Directive Assessment	GWNC-WSP-SS50-XXXXXX-RPT-ES-000003

Document title	Document Reference
Electric and Magnetic Field Assessment	GWNC-NGD-ZZZZ-XXXXXX-RPT-PM-000003
Lighting Strategy	GWNC-WSP-ZZZZ-ZZZZZZ-STG-PM-000001
Surface Water Strategy	GWNC-WSP-SS50-XXXXXX-RPT-ES-000001
Foul Drainage Assessment Form (FDA1)	N/A
Foul Drainage Strategy Technical Note	GWNC-LST-ZZZZ-ZZZZZZ-TEC-EN-000004
Noise and Vibration Assessment	GWNC-ATG-SS50-XXXXXX-RPT-ES-000001
Air Quality Assessment and Screening Assessment	GWNC-WSP-SS50-XXXXXX-RPT-ES-000004
Biodiversity Net Gain Report	GWNC-ARU-SS50-XXXXXX-RPT-ES-000015
Statutory Biodiversity Metric	GWNC-ARU-SS50-XXXXXX-RPT-ES-000016
Ecological Impact Assessment	GWNC-ARU-SS50-XXXXXX-RPT-ES-000005
Habitats Regulations Assessment Stage 1 Screening Report	GWNC-ARU-SS50-XXXXXX-RPT-ES-000014
Habitat Classification Survey Report	GWNC-ARU-SS50-XXXXXX-RPT-ES-000013
Bat Survey Report	GWNC-ARU-SS50-XXXXXX-RPT-ES-000008
Badger Survey Report	GWNC-ARU-SS50-XXXXXX-RPT-ES-000007
Aquatic Survey Report	GWNC-ARU-SS50-XXXXXX-RPT-ES-000006
Non-Breeding Bird Survey Report	GWNC-ARU-SS50-XXXXXX-RPT-ES-000010
Breeding Bird Survey Report	GWNC-ARU-SS50-XXXXXX-RPT-ES-000009
Otter and Water Vole Survey Report	GWNC-ARU-SS50-XXXXXX-RPT-ES-000012
Great Crested Newt Survey Report	GWNC-ARU-SS50-XXXXXX-RPT-ES-000011

Document title	Document Reference
Arboricultural Impact Assessment	GWNC-WSP-SS50-XXXXXX-RPT-ES-000005
Transport Statement	GWNC-ARU-SS50-XXXXXX-RPT-ES-000018
Outline Construction Traffic Management Plan	GWNC-WSP-ZZZZ-ZZZZZZ-PLN-PM-000002
Outline Construction Environmental Management Plan	GWNC-ARU-SS50-XXXXXX-RPT-ES-000019
Outline Soil Management Plan (appended to the CEMP)	GWNC-ARC-SS50-XXXXXX-RPT-ES-000001

Table 1.3 Schedule of Submitted Plans

Plan Description	National Grid Drawing Number	Plan Specifics
Site Location Plan	GWNC-WSP-ZZZZ-ZZZZZZ-PLN-PM-000001	Provides details of the Application Site Boundary outlined in red to identify the location and extent of the site in its local context
Site Layout Plan	GWNC-WSP-ZZZZ-ZZZZZZ-PLN-EN-000001	Provides the overall proposed site layout for the Substation Works including the location of temporary construction works and permanent infrastructure.
Substation Layout Plan	GWNC-WSP-ZZZZ-ZZZZZZ-PLN-EN-000004	Provides a detailed plan of the proposed new Substation and associated works
Substation Proposed Elevations	GWNC-WSP-ZZZZ-ZZZZZZ-PLN-EN-000003	Provides elevations of the proposed new Substation and associated works and details of existing and proposed ground levels
Indicative Substation Building Elevations	GWNC-WSP-ZZZZ-ZZZZZZ-PLN-EN-000005	Provides indicative plans and elevations of all proposed buildings included within the Substation Works including dimensions and materials

Plan Description	National Grid Drawing Number	Plan Specifics
Indicative Surface Water Drainage Design Plan (Appendix D)	GWNC-WSP-SS50-XXXXXX-RPT-ES-000001	Provides details of the indicative surface water drainage strategy
Indicative Foul Water Drainage Design (Appendix C)	GWNC-LST-ZZZZ-ZZZZZZ-TEC-EN-000004	Provides details of the indicative foul water drainage strategy Foul Drainage Strategy Technical Note
Illustrative Watercourse Outfall Basins	GWNC-LST-OH70-ZZZZZZ-DRW-RN-000029	Provides illustrative plans and sections of watercourse outfall basins
Illustrative Construction Compound	GWNC-LST-OH70-ZZZZZZ-DRW-EN-000032	Provides an illustrative layout for a typical temporary construction compound
Illustrative Bridge Details for Watercourse Crossings	GWNC-LST-OH70-ZZZZZZ-DRW-EN-000030	Provides proposed bridge details for the temporary haul road watercourse crossings
Illustrative Culvert Details for Watercourse Crossing	GWNC-LST-OH70-ZZZZZZ-DRW-EN-000031	Provides illustrative culvert details for the temporary haul road watercourse crossings
Indicative Landscape and Ecological Mitigation Proposals	GWNC-GIL-SS50-XXXXXX-PLN-ES-000001	Provides indicative landscape and ecological mitigation proposals
Lighting Plan	GWNC-WSP-ZZZZ-ZZZZZZ-STG-PM-000001	Provides proposed lighting layout within the Weston Marsh Substation A
Typical Fence Plan	GWNC-WSP-ZZZZ-ZZZZZZ-PLN-PM-000004	Provides details of proposed palisade and electrical security fencing
Topographical Plan	GWNC-WSP-ZZZZ-ZZZZZZ-PLN-PM-000003	Provides details of the topography and existing structures and vegetation within the TCPA Application site boundary
Public Rights of Way Diversion Plan	Figure 6 in Transport Statement (GWNC-ARU-SS50-XXXXXX-RPT-ES-000018)	Provides details of two options for a temporary diversion route for public right of way Wstn/7/1 during construction works

Plan Description	National Grid Drawing Number	Plan Specifics

1.6 Biodiversity Net Gain

1.6.1 The Environment Act (2021) (Ref 2) mandates that most developments in England must deliver a minimum 10% net increase in biodiversity value compared to the pre-development baseline. Under the Act, Biodiversity Net Gain (BNG) must be secured, maintained, and monitored for a minimum of 30 years.

1.6.2 In accordance with this requirement, a full **BNG Report** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000015) and **Statutory Biodiversity Metric** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000016) have been submitted alongside the planning application, setting out the baseline habitats, the proposed biodiversity enhancements, and the mechanism for securing and delivering at least 10% net gain over a minimum 30-year period.

1.7 Community Infrastructure Levy

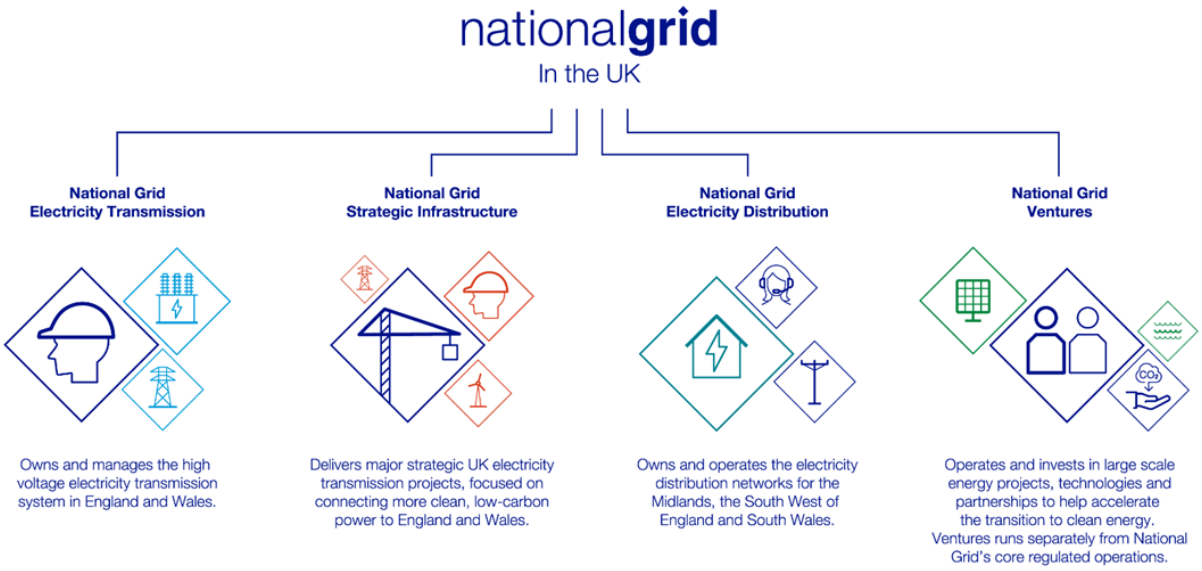
1.7.1 The proposed Substation Works are not considered liable for the Community Infrastructure Levy (CIL) because SHDC has not adopted a CIL. Alternatively, SHDC seeks developer contributions through planning obligations secured via Section 106 agreements. The proposed buildings within the Substation Works primarily comprise standalone constructions for operational uses which will be visited on an intermittent basis for the purpose of inspecting or maintaining fixed plant or machinery.

2. Background

2.1 Role of National Grid

2.1.1 The National Grid Group is an energy company operating in the UK and the US which plays a vital role in connecting millions of people to the energy they use. Its projects and work enable the innovation that's transforming the energy system. The Group includes separate companies with distinct roles and responsibilities, as illustrated in **Image 2.1**. Further details about each company relevant to this application in the context of the National Grid Group is provided below.

Image 2.12 ~~2.12.1~~ National Grid Group



National Grid Electricity Transmission (NGET)

2.1.2 National Grid Electricity Transmission PLC (hereafter referred to as NGET) is the part of the National Grid Group which owns, builds and maintains the electricity transmission network in England and Wales. NGET is the Applicant for the TCPA Application.

2.1.3 NGET is licenced by the Government as an electricity transmission company and is regulated by Ofgem, the electricity and gas markets regulator, which sets price controls and monitors how the companies develop and operate their networks on behalf of consumers. Under the Electricity Act 1989 (Ref 4), National Grid holds a transmission licence under which it is required to develop and maintain an efficient, coordinated and economical electricity transmission system. National Grid is also required to consider ways to preserve amenity under Schedule 9 of the Act.

2.1.4 NGET is required under Section 38 of the Electricity Act 1989 (Ref 4) to comply with the provisions of Schedule 9 of the Act, that requires licence holders in the formulation of proposals to transmit electricity, to preserve amenity by complying with the following:

1) Schedule 9, paragraph 1(1)(a) '…have '*regard to the desirability of preserving natural beauty, of conserving flora, fauna and geological or physiographical features of special interest and of protecting sites, buildings and objects of architectural, historic or archaeological interest;*' and

2) Schedule 9, paragraph 1(1)(b) '…*do what [it] reasonably can to mitigate any effect which the proposals would have on the natural beauty of the countryside or on any such flora, fauna, features, sites, buildings or objects'*.

2.1.5 Under Schedule 9, paragraph 1(2) of the Electricity Act 1989 (Ref 4), NGET also has a duty:

1) To develop and maintain an efficient, coordinated, and economical system of electricity transmission; and

2) To facilitate competition in the supply and generation of electricity. This includes a statutory obligation to offer to connect any new generating stations or interconnectors applying to connect to the transmission system.

2.1.6 The key role of the transmission system is to connect electricity generators with substations which transform the power voltage from 400kV or 275kV to lower voltages for onward distribution by Distribution Network Operators (DNOs). It is the role of the DNOs to then supply businesses and homes. NGET is at the heart of the UK energy system, connecting millions of people and businesses to the energy they use every day, delivering a clean, fair, and affordable energy future.

2.1.7 NGET is a statutory undertaker as defined under the Electricity Act 1989 (Ref 4). UK Power Networks, the DNO in the application area, is also a statutory undertaker.

National Grid Strategic Infrastructure (NGSI)

2.1.8 NGSI is a part of NGET and is responsible for delivering 17 major new projects to connect more clean, low-carbon power to the transmission network in England and Wales.

2.1.9 These projects play a vital part in achieving the UK Government's ambition of connecting 50GW of offshore wind by 2030. They will be delivered under the regulator's Accelerated Strategic Transmission Investment (ASTI) framework.

2.1.10 NGSI will work closely with the Electricity Transmission (ET) business unit to ensure efficient and effective delivery, and will transfer the projects over to ET once they're complete and ready to be accepted onto the wider network. ET will then be responsible for the ongoing operation and maintenance of the infrastructure when in service.

2.1.11 As well as these 17 projects, NGSI will also focus on the early-stage development of other strategic infrastructure that Ofgem has requested NGET to examine.

National Grid Electricity Distribution (NGED)

2.1.12 NGED is the regional electricity distribution division of National Grid. It provides the power and manages the electricity distribution network for customers in the Midlands, South West and Wales.

National Grid Ventures (NGV)

2.1.13 NGV runs separately from National Grid's core regulated operations and is a business focussed on the energy transition, investing in technologies and partnerships that help accelerate the move to a clean, fair and affordable energy future by building resilient and affordable energy networks. This includes a diverse portfolio of projects including: subsea electricity interconnectors - connecting the UK with countries across the North Sea, allowing trade between energy markets and efficient use of renewable energy resources; solar generation, battery storage, conventional generation and liquefied natural gas regasification and storage. NGV are also developing emerging technologies such as offshore hybrid assets and hydrogen, which will play a key role in decarbonising and strengthening energy networks.

The Great Grid Upgrade

2.1.14 The Great Grid Upgrade comprises major infrastructure projects that are helping to connect more clean, secure energy to homes and businesses across England and Wales. The UK's electricity grid was originally built to connect electricity generated in power stations from fossil fuels, such as coal from the North and Midlands of England and South Wales.

2.1.15 As the UK moves away from fossil fuels and increases clean energy generation, the UK will be using more electricity than ever before.

2.1.16 Demand for electricity is expected to increase by 50% by 2035 and double by 2050, as the UK decarbonises the sources of energy supplies. Significant new infrastructure is needed to connect this clean energy from where it's generated to where it's needed.

2.1.17 To transmit the clean energy from where it's generated, for example from offshore windfarms in the North Sea, to homes and businesses, NGET needs to build new electricity transmission infrastructure, as well as upgrading existing infrastructure.

2.1.18 The UK Government has committed to connect 40GW of electricity generated from offshore windfarms to the electricity grid by 2030, making 50GW in total to meet government targets.

2.1.19 NGET's existing network of cables, pylons and substations does not have the capacity to transmit the volume of energy that will be generated offshore. As a result, there is a need to upgrade our onshore electricity network via the installation of new wires, cables and pylons.

2.1.20 National Grid's Great Grid Upgrade comprises 17 major infrastructure projects that are helping to connect more clean, secure energy to homes and businesses across England and Wales. Further details can be found on the National Grid website: The Great Grid Upgrade | Powering The Things You Love

2.1.21 Several Great Grid Upgrade Projects are located within the East Midlands region, each serving a unique purpose in reinforcing the network, connecting clean energy from where it is generated to where it is needed. These are set out in **Table 2.1.**

Table 2.1 Great Grid Upgrade Projects in the East Midlands Region

Project	Brief Project description	Delivery timescales
Grimsby to Walpole	Grimsby to Walpole is a 140 km overhead line between North East Lincolnshire and North Norfolk. The Project includes the erection of six new substations along the route: one at Grimsby West, two located south-west of Mablethorpe in East Lindsey, two located at Weston Marsh north-east of Spalding in South Holland, and one at Walpole (Walpole B substation), west of the village of Walpole St Andrew. The Project is needed to reinforce the network and connect new sources of electricity planned in the area, including offshore wind, solar, gas-fired generation, interconnectors, battery storage and subsea links from Scotland.	• Development Consent Order application submission: 2027 • Anticipated construction 2028-2033
EGL3 and EGL4 (Eastern Green Link)	EGL 3 and EGL 4 are two predominantly offshore subsea cables, needed to move clean wind energy generated offshore in Scottish waters to the Midlands and South East of England. Key marine and onshore elements of the project in England and English waters are: subsea high voltage direct current (HVDC) cables of approximately 430km to landfall at the Lincolnshire Coastline at Anderby Creek. From this point there would be transition joint bays and approximately 100km underground HVDC onshore cables to two new converter stations at Walpole. There would also be new high voltage alternating current (HVAC) cables providing a connection between the converter stations and a new substation (Walpole B substation – which is also included in the Grimsby to Walpole DCO project) at Walpole in Norfolk. The two Projects will each power up to two million homes with clean, renewable energy.	• Development Consent Order application submission: 2026 • Anticipated construction: 2029-2034
EGL 5 (Eastern Green Link)	EGL 5 is a primarily offshore subsea cable route, needed to move clean wind energy generated offshore in Scottish waters to the East Midlands cable route connecting offshore wind power generated in Scotland to the Midlands. Key marine and onshore elements of the project in England and English waters are: approximately 415km	• Stage 2 consultation: 2026 • Development Consent Order application submission: 2027

Project	Brief Project description	Delivery timescales
	subsea HVDC cable to the transition joint bay at landfall at Anderby Creek on the Lincolnshire Coastline; approximately 9km of onshore underground HVDC cable from Anderby Creek to a converter station south-west of Mablethorpe in East Lindsey; and, approximately 3km of underground HVAC cables connecting the converter station to the Lincolnshire Connection Substation B.(which is one of the two substations proposed south-west of Mablethorpe in the Grimsby to Walpole DCO project).	• Anticipated construction: 2030-2035
Weston Marsh to East Leicestershire	Weston Marsh to East Leicestershire is a network reinforcement project between Lincolnshire and the East Midlands comprising the construction of approximately 60km of new overhead line running west from the Weston Marsh substations (proposed in the Grimsby to Walpole DCO project) and two new substations. One new substation WMEL-A near Corby Glen in Lincolnshire, and another, WMEL-B near Wartnaby in Leicestershire. This project also includes the upgrading of approximately 60km of the existing overhead line from near WMEL-B substation to the existing Grendon substation, east of Northampton.	• Stage 2 consultation: 2026 • Development Consent Order application submission: 2028 • Anticipated construction: 2029-2033

2.2 The Holford Rules and the Horlock Rules

2.2.1 Guidelines on overhead line routeing were first formulated in 1959 by Sir William Holford, as advisor to the Central Electricity Generating Board. Holford developed a series of planning guidelines in relation to amenity issues, that have subsequently become known as the Holford Rules (Ref 5) and remain a valuable tool in selecting and assessing potential overhead line route options as part of the options appraisal process. The guidelines provide a set of design criteria that have become accepted industry best practice in overhead line routeing. The guidelines now form an important part of national planning policy relating to the development of electricity networks, as set out in NPS EN-5.

2.2.2 National Grid devised the Horlock Rules in 2003 (Ref 6) and these were subsequently updated in 2009. They provide guidance for the siting and design of new substations, or extensions to existing substations, to avoid or reduce the environmental effects of such developments. The Horlock Rules facilitate the consideration of environment and amenity during the design and siting of new substation infrastructure.

2.3 Siting

2.3.1 The location of the Weston Marsh Substation A was established through the multi-phased approach to inform the design of the Grimsby to Walpole DCO project.

2.3.2 The Weston Marsh Siting Study Report (Ref 7) provides details of the approach and process followed to identify a preferred siting area for the two new substations at Weston Marsh, including the siting area for the proposed Weston Marsh A substation.

2.3.3 This Siting Study was undertaken in accordance with National Grid's Approach to Consenting (Ref 8) and has considered the Holford (Ref 5) and Horlock (Ref 6) Rules as part of the appraisal. It built on previous siting work already conducted in the Weston Marsh area for the Corridor Preliminary Routeing and Siting Study (CPRSS) (Ref 9).

2.3.4 A Strategic Options Report (SOR) (Ref 40) and the SOR Addendum (Ref 41) for the Grimsby to Walpole DCO project was published in May 2023. This identified a preferred strategic option for the Project as a whole, comprising a new primarily overhead line connection between a new Grimsby West Substation and a new substation at Walpole, via new Lincolnshire Connection Substation(s) (LCS). Following the publication of the SOR, further work was undertaken on developing and evolving the strategic option. This concluded that construction of a new substation at Weston Marsh was also necessary

2.3.5 The CPRSS, published in January 2024, then appraised overhead line route corridor and substation siting options and identified a preferred corridor and preferred siting zones, resulting in the production of a Graduated Swathe to indicate where infrastructure was considered more or less likely to be located. The CPRSS and Graduated Swathe were used in the Grimsby to Walpole DCO project Stage 1 Consultation in Spring 2024 in order to gather feedback from the public and stakeholders. Consideration of the outcomes from this consultation, alongside further environmental and technical studies, led to the identification of the Refined Weston Marsh Substation Siting Zone (the Study Area used for the Weston Marsh Siting Study Report).

2.3.6 The proposed location that had been identified for the new Weston Marsh Substation A, based on the Graduated Swathe presented in the CPRSS (Ref 9) was appraised from an environmental, socio-economic and technical perspective to ensure the location remained environmentally and technically favourable, taking account of surveys and environmental assessments which have taken place since the production of the CPRSS (Ref 9).

2.3.7 The need for two substations was identified by National Grid through engaging with generators who are contracted to connect in the Weston Marsh area, as well as reviewing the technical specifications required, since Stage 1 Consultation for the Grimsby to Walpole DCO project. Two substations were found to provide resilience on the transmission network and would ensure the network's safety and reliability. The need for a 1 km clearance and an underground cable connection between these two substations was identified to manage system-wide resilience. Three Siting Areas ('Option 1 Siting Area', 'Option 2 Siting Area' and 'Option 3 Siting Area') were identified and appraised to select a preferred option for the additional substation required in the Weston Marsh area, referred to as the new Weston Marsh Substation B. Environmental topics scoped in to the appraisal considered the three Siting Areas

in turn, and identified environmental constraints relevant to each option. Any technical constraints associated with each Siting Area were also considered.

2.3.8 Building on the siting work already conducted in the CPRSS (Ref 9), no further constraints were identified within the appraisal in the vicinity of the Weston Marsh A Siting Area and so the selection of this Siting Area was re-affirmed as the preferred location for the new Weston Marsh Substation A.

2.3.9 The location of the Substation Works in this TCPA Application has been informed by the aforementioned approach as evidenced in the relevant documents referred to for the siting of Weston Marsh A substation.

2.4 Optioneering/Design

2.4.1 The initial designs for the Weston Marsh Substation A were developed in accordance with National Grid Standards and specifications which ensure that the new sites can be constructed, operated and maintained safely.

2.4.2 The Substation Works have been designed as AIS rather than Gas Insulated Switchgear (GIS). AIS technology uses atmospheric air as an insulation medium between the electrical equipment in the substation, whereas GIS technology seals electrical equipment in pressured chambers filled with insulating gas.

2.4.3 AIS technology usually requires a larger footprint than GIS, with substation equipment typically located outdoors and requiring greater separation distances between each other to maintain electrical isolation, whilst for GIS, equipment is usually much closer together and enclosed within a building. In the absence of any requirements to use GIS, AIS was chosen as GIS is considered to have a greater impact on views and landscape character due to the height and scale of the building surrounding equipment.

2.4.4 An AIS substation is constructed with switchgear which relies on open air components, which can require large clearance areas for operation and safety, which takes up a larger area of land compared to a GIS substation. AIS substations are typically lower cost and typically involve less construction time, with fewer components required and easier maintenance. A GIS substation is constructed with switchgear using gas filled components, which allows operation and safety clearances to be reduced when compared to an AIS substation. However, they tend to be more costly, require specialised operation and maintenance, have longer outage repair times and typically require the use of sulphur hexafluoride (SF6) – a greenhouse gas that has a global warming impact 22,800 times that of carbon dioxide. As noted within NPS EN-5 (Paragraph 2.9.61), it should be considered carefully whether proposed development could be reconceived during the design phase to avoid the use of SF6-reliant assets. NGET policy generally precludes the use of gas insulated technologies due to the negative environmental impacts of SF6 based insulation gases, the reduced operational maintainability of the technology when compared to AIS, and the significantly increased cost of gas insulated equipment.

2.4.5 The size of the proposed substation was determined by the technical requirements including number of customers to be connected, capacity of customer connections, mode of connections to the existing transmission network and selection of technology.

2.5 Consultation

2.5.1 This application is accompanied by a **Statement of Community Involvement (SCI)** (GWNC-CAV-ZZZZ-ZZZZZZ-RPT-PM-000001) which provides details of the pre-application consultation and ongoing local communications that have been undertaken by NGET. The feedback received from interested parties during the consultation period is also summarised in the SCI.

2.5.2 A summary of the consultation and engagement process is provided below.

1) Pre-consultation stakeholder briefings, held virtually with local authority planning officers and offered to elected representatives and parish councils in October and November 2025.

2) An eight-page invitation newsletter distributed to 971 households and businesses within 1km of the proposals in the week commencing 17 November 2025.

3) Three consultation events, comprising two in-person public information events held in Weston (28 November 2025) and Moulton Seas End (29 November 2025), and one online webinar held on 3 December 2025.

4) A dedicated project website, supported by social media advertising and print and digital newspaper advertising, which recorded 17,150 homepage views across 7,298 sessions during the consultation period.

5) Multiple feedback channels, including an online feedback form, email, and Freepost address.

2.5.3 This engagement also formed part of National Grid's statutory consultation for the Grimsby to Walpole DCO application, setting out detailed proposals for Route Section 5 of the DCO project. Feedback was therefore invited as part of both the consultation for the Scheme and the wider DCO. The SCI presents only those responses received during the consultation period that are considered relevant to the application for the Substation Works. All feedback received, however, will be fully reported and considered within the Consultation Report submitted as part of the DCO application.

2.5.4 A total of 284 pieces of feedback were received, with 281 identified as relevant to the Substation Works and therefore considered as part of the TCPA Application. Respondents raised concerns about the scale of environmental, landscape, construction, agricultural and visual impacts. Some respondents questioned the adequacy of consultation, expressing doubt over their ability to influence the final proposals, and highlighting issues surrounding the duration of consultation, accessibility, clarity, and cumulative impact of the Substation Works alongside other projects in the region.

2.5.5 All responses were assigned topic-based codes according to the content of the issues raised. Requests and suggestions to change the design of the Substation Works were carefully reviewed, and where appropriate this feedback has informed post-consultation design development and refinement. These refinements have shaped the proposals now submitted as part of this application.

2.5.6 Following the close of consultation, National Grid also undertook further engagement to ensure that interested parties were kept up to date with the Scheme and wider

DCO. This included a short-form social media update video, and a poster shared with Parish Councils and underrepresented groups in April 2026.

2.6 Pre-application Advice

2.6.1 On 3 April 2025, NGET submitted a pre-application advice request to SHDC to inform the planning submission package, and to ensure that potential impacts resulting from the Substation Works are suitably assessed in the application.

2.6.2 A response from SHDC was provided in a Pre-application Advice Letter, received by NGET on 7 May 2025, as evidenced in Appendix C.

2.6.3 The SHDC advice identified that the main issues for consideration in the determination of the Substation Works application, and the relevant Development Plan policies in the South East Lincolnshire Local Plan 2011-2036 (SELLP) (Ref 3) and paragraphs of the National Planning Policy Framework (NPPF) (Ref 17) to be addressed were considered to be:

1) Principle of Development, (SELLP Policies 1 'Spatial Strategy'; 2 'Development Management', 3 'Design of New Development', 4 'Approach to Flood Risk', 28 'The Natural Environment', 29 'The Historic Environment', 30 'Pollution', and 31 'Climate Change and Renewable and Low Carbon Energy' and particularly Part B)

2) Permanent loss of BMV Agricultural Land (NPPF, Paragraph 187 (b))

3) Visual and Landscape Impact of the Proposed Development (SELLP Policy 28 'The Natural Environment')

4) Flood Risk (SELLP Policies 4 'Approach to Flood Risk', 31 'Climate Change and Renewable and Low Carbon Energy'

5) Ecology Impacts (SELLP Policy 28 'The Natural Environment')

6) Historic Environment (SELLP Policy 29 'The Historic Environment')

7) Impact on Public Rights of Way – part of WSTN/8/1 and all of WSTN/7/1

8) Impact of Construction Activities including Cumulative Impacts (SELLP Policy 30 'Pollution' in the context of residential amenity; and Policy 33 'Delivering a More Sustainable Transport in the context of construction traffic impacts)

2.6.4 Section 6 of this PDAS provides further details of the policies identified above.

2.6.5 The SHDC advice confirmed that:

The Principle of the Development of a 400 kV Substation is capable of being accepted however it is dependent upon the key issues being satisfactorily addressed. The key issues to address are the permanent loss of 8 hectares of BMW Agricultural Land and the Visual Impact of the Substation.

2.6.6 All other matters are considered either temporary in nature and reversible or are likely to be mitigatable through the submission of sufficient Impact Assessments and through careful consideration of avoidance and mitigation measures SHDC requested that cumulative impacts should also be considered as part of the planning

application submission, giving consideration to the various other NGET infrastructure projects in the surrounding area, in particular construction activities.

2.6.7 The pre-application request also specified that the following assessments would be required to support the planning application submission:

1) Planning Statement including Cumulative impacts and site selection
2) Design and Access Statement
3) Statement of Community Involvement
4) ALC Report
5) Socio Economic Impact Report
6) Phase 1 Contamination Report
7) Archaeology DBA/Geophysical Survey including WSI as necessary
8) Heritage Statement
9) Flood Risk Assessment including Sequential and Exception Test
10) Drainage Strategy Statement
11) Noise Impact Assessment as necessary
12) Lighting Impact Assessment
13) Air Quality Assessment/Screening Assessment
14) Biodiversity Net Gain Report
15) Ecological Assessment including HRA Stage 1 Screening
16) Landscape Visual Impact Assessment
17) Tree Report / AIA
18) Transport Statement as necessary
19) Construction Workers Travel Plan (CWTP) as necessary
20) Construction Traffic Management Plan (CTMP)
21) Construction Environmental Management Plan (CEMP)
22) Code of Construction Practice (COCP) (if not covered by CEMP)
23) Draft Heads of Terms for s106 (if appropriate)

2.6.8 Further discussions with SHDC following receipt of the pre-application advice confirmed that it would be acceptable to submit a PDAS, which would provide the information requested in items 1) Planning Statement and 2) Design and Access Statement in one document, which has led to the preparation of this document.

2.6.9 The Applicant has prepared an **Outline CTMP** (GWNC-WSP-ZZZZ-ZZZZZZ-PLN-PM-000002) which provides relevant information and measures for construction traffic management, which is designed to provide information that could potentially have been provided in the two separate CWTP and CTMP documents that SHDC have requested.

2.6.10 The Applicant has prepared an **Outline CEMP** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000019) which provides relevant information and measures for environmental management during construction, that could potentially have been provided in the two separate CEMP and COCP documents that SHDC have requested.

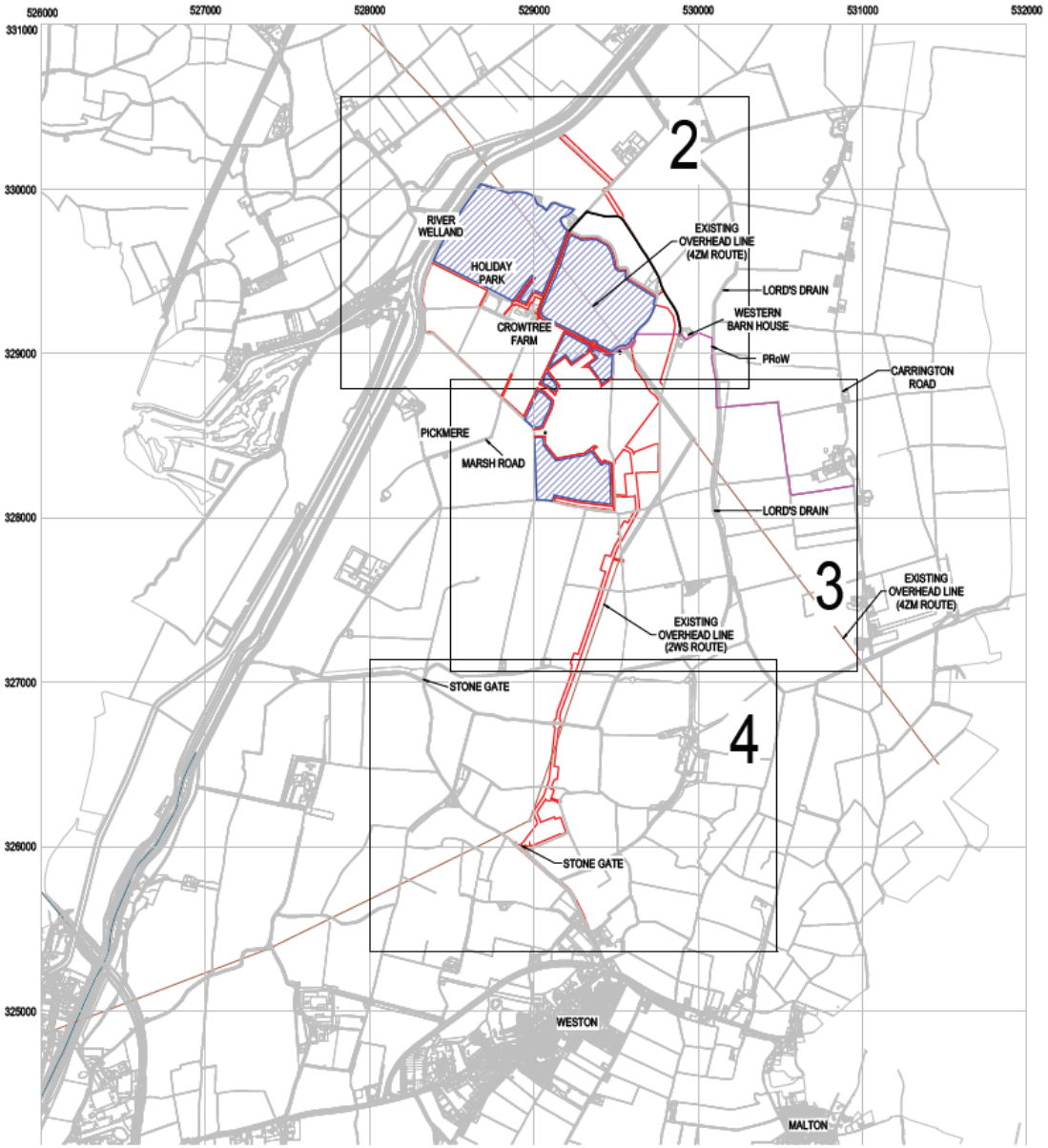
2.6.11 Through ongoing engagement with SHDC, the Applicant has been discussing whether there is a need for a Draft Heads of Terms for a s106 Agreement in relation to the purchase of off-site BNG units via a relevant scheme. Following a meeting on 7 May 2026, it is anticipated that SHDC may be in a position to control the submission of evidence regarding the Applicant's purchase of the relevant BNG units via a planning condition. This matter is still under consideration, but at this time, it is not considered necessary to submit a Draft Heads of Terms for a s106 Agreement with the planning application.

3. Site and Surroundings

3.1 Location of the proposed Substation Works

3.1.1 The location and extent of the Site for the proposed Substation Works is shown on the **Site Location Plan** (GWNC-WSP-ZZZZ-ZZZZZZ-PLN-PM-000001) and is illustrated in **Image 3.1**, which identifies the Planning Application Site Boundary (hereafter referred to as 'the Site') outlined in red. The Site is predominantly located east of Marsh Road, approximately 3.5 km to the north of the village of Weston, 3 km north-west of Moulton Seas End, and approximately 1 km east of the eastern bank of the River Welland with the location of the proposed new Weston Marsh Substation A centred on Ordinance Survey grid reference OS 529446, 328696. The Site is located within South Holland District.

Image 3.1~~3.13.1~~ Site Location Plan



3.1.2 The Site extends to 89.4 ha and comprises predominantly open flat agricultural land, punctuated by the existing 400kV 2WS and 4ZM overhead lines that form the Spalding Tee-Point.

3.1.3 The Site currently accommodates a number of agricultural enterprises operating across different land parcels. A large part of the Site forms part of Crowtree Farm which is not being used for agricultural purposes and is vacant. However, other existing agricultural enterprises are operational elsewhere within the Site. The proposed haul road and associated infrastructure will pass through parts of the existing operational farm holdings.

3.1.4 At this stage, National Grid does not hold detailed or verified information on current agricultural employment levels associated with these businesses. As such, it has not been possible to quantify whether the proposals would result in any change to existing employment numbers.

3.1.5 It is acknowledged that local and national planning policy seeks to safeguard agricultural employment where appropriate. The proposal has therefore been designed to minimise disruption to existing farm operations where feasible. Any potential effects on agricultural businesses and employment would be addressed through ongoing engagement with landowners and occupiers as the detailed design and implementation of the Scheme progresses.

3.1.6 The proposed location of permanent Weston Marsh Substation A infrastructure is located to the east of Marsh Road, east of Crowtree Farm on a site of approximately ~~10.6~~8.4 ha. The dimensions for the main compound would be approximately ~~523~~ 419.5 m by 185 m (approximately ~~9.7~~7.8 ha). An area of approximately 34.6 ha would be used for ecological mitigation to the west of the main Site. The remainder of the land within the Site would be used temporarily during the construction period to facilitate the construction works.

3.1.7 The Site is located adjacent and to the east of the River Welland.

3.2 Surrounding area and environmental designations

Environmental designations

3.2.1 The Site is located in a rural landscape, characterised by natural landscape features, including trees and vegetation. It is surrounded by a mixture of farmland and other power and energy related infrastructure, including the Spalding Tee Point. The Site is classified as BMV Agricultural Land (Grade 1).

3.2.2 There are two PRoW that cross the Site (Wstn8/1 and Wstn/7/1). Wstn/8/1 is located in the west of the Substation Works and runs from the River Welland in an east-west direction to Marsh Road. From Marsh Road Footpath Wstn/7/1 continues in an approximate east-west direction towards Western Barn House and Footpath Moul/2/1 follows Lord's Drain in a north south direction and follows field boundaries to join Carrington Road to the east of the Site Boundary.

3.2.3 The River Welland is located adjacent and to the west of to the Site. The Environment Agency Flood Zone Maps (Ref 8) identify that the majority of the Substation Works lies within Flood Zone 3, which is described as having greater than 1 in 100 annual probability of fluvial flooding in any year. However, there are pockets of land throughout the Site that are Flood Zone 2. The Site is adjacent to the River

Welland and is crossed by a number of drains and ditches. The ditches and drains could also contain suitable habitat for protected species. The **Ecological Impact Assessment (EcIA)** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000005) includes an assessment of statutory and non-statutory designated environmental sites, as well as habitats and species. The Study Area(s) for different ecological features have been identified from published guidance and by using professional judgement, and are detailed in Table 3.1 in the EcIA.

3.2.4 There are no statutory designated ecological sites within the Site itself, however, several statutory designations are located within the wider Study Area. The Wash Special Protection Area (SPA), Ramsar site and Site of Special Scientific Interest (SSSI), together with The Wash and North Norfolk Coast Special Area of Conservation (SAC), are located within 10 km of the Site. In addition, the Nene Washes SPA, Ramsar site and SSSI, designated in part for bird species with large foraging ranges, are located within 30 km of the Site.

3.2.5 The Site overlaps with the Surfleet Lows SSSI Risk Impact Zone and The Wash SSSI Risk Impact Zone. There are also several non-designated sites, including twelve Local Wildlife Sites (LWS), within 2 km of the Substation Works, which are non-statutory designated for their nature conservation value.

3.2.6 Three LWS are located within 0.2 km of the Substation Works and have therefore been scoped into the **EcIA** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000005) due to the close proximity and potential for impacts. These include:

1) Surfleet Seas End Saltmarsh, located approximately 0.1 km to the west;
2) Vernatt's Drain, located approximately 0.1 km to the west; and,
3) Surfleet Bank, located approximately 0.2 km to the west.

3.2.7 The River Glen Corridor LWS is situated within 0.3 km of the Application Site Boundary but is located upstream and has therefore been scoped out of further assessment. The remaining eight non-statutory designated sites have also been scoped out due to the separation distances to the Substation Works.

3.2.8 Other notable environmental designations near to the Site include:

1) The Wash SPA and Ramsar site and The Wash and North Norfolk Coast SAC located approximately 5.6 km to the north-east; and,
2) The Site is located within the Fens National Character Area (NCA) (Ref 11) and East Midlands Region Landscape Character Type (RLCT) 2A Settled Fens and Marshes (Ref 12).

3.2.9 There are no Country Parks, areas of open access land, or registered parks and gardens within 10 km of the Substation Works.

3.2.10 A series of ecological surveys have been undertaken to identify the presence of protected species within the Weston Marsh area. Several reports have been submitted with this planning application to summarise the survey findings, including:

1) **Bat Survey Report** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000008)
2) **Badger Survey Report** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000007)
3) **Aquatic Survey Report** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000006)
4) **Breeding Bird Survey Report** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000009)

5) **Non-Breeding Bird Survey Report** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000010)

6) **Great Crested Newt Survey Report** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000011)

7) **Otter and Water Vole Survey Report** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000012)

3.2.11 The **Historic Environment Desk Based Assessment** (DBA) (GWNC-ARU-SS50-XXXXXX-RPT-ES-000017) includes an assessment of statutory and non-statutory designated heritage assets. To establish the heritage baseline, the DBA uses two study areas: 1 km from the Scheme Site Boundary (the area covered by all works proposed as part of the Scheme described in Section 1) for non-designated heritage assets and an area of 2 km for designated heritage assets.

3.2.12 There are 40 designated heritage assets within 2 km of the Scheme Site Boundary, comprising two scheduled monuments, four grade I listed buildings, 33 grade II listed buildings, and one conservation area. There are no World Heritage Sites, Registered Parks and Gardens or Registered Battlefields within the 2 km Study Area. The nearest designated heritage assets, both located approximately 760 m to the south-west, are the Wykeham Chapel scheduled monument and the Grade I listed Wykeham Chapel of St Nicholas. The ruins of the Chapel of St Nicholas is also a designated Ancient Monument in the South East Lincolnshire Local Plan.

3.2.13 There are 54 non-designated heritage assets identified by the Lincolnshire Historic Environment Record within 1 km of the Scheme Site Boundary, comprising 31 archaeological sites, 22 buildings, and one findspot, with one being located within the Scheme Site Boundary. A further 72 heritage assets have been identified within the 1 km Study Area from other data sources, with 28 of these being located within the Scheme Site Boundary. In total, the **Historic Environment DBA** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000017) identifies 29 non-designated heritage assets within the 1km Study Area.

3.2.14 There is also potential for archaeology associated with the Medieval and post-Medieval period. The Medieval Sea Bank Weston is situated within the Site, as are a number of demolished farmsteads, and other proposals in the area have encountered archaeological artefacts.

3.2.15 There are no Air Quality Management Areas within 1 km of the Scheme Site Boundary, and no pollutants would be released into the air during operation apart from minimal vehicle emissions during routine or emergency maintenance.

Environmental policy designations

3.2.16 There are a number of environmental designations within the South East Lincolnshire Local Plan (Ref 3). These include:

1) The Countryside: the Site is within the countryside within the Spatial Strategy (Policy 1) and therefore development will be permitted that is necessary to such a location and/or where it can be demonstrated that it meets the sustainable development needs of the area in terms of economic, community or environmental benefits.

2) Ancient Monuments (now known as Scheduled Monuments): The ruins of the Chapel of St Nicholas Wykeham is a designated Scheduled Monument located

approximately 680 m to the west of the Site, with the nearest element of development being the temporary development of the proposed construction haul road. The relevant policy in the South East Lincolnshire Local Plan is Policy 29, The Historic Environment.

Planning allocations

3.2.17 There are a number of planning allocations identified in the SELLP (Ref 3) relevant to the Site which are summarised in **Table 3.1** below. The allocations identified as relevant in this context have been selected in line with the short-listed developments identified through the cumulative effects assessment process as set out within the **Cumulative Effects Assessment Report** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000020). Allocations that have completed construction are not included within the table.

Table 3.1 Planning Allocations

Development	Local Plan	Planning Allocations Reference	Distance from the Scheme Boundary	Status
Land west of Spalding Road	South East Lincolnshire Local Plan	PIN045	Approx. 4.5 km	Policy Allocation for 676 dwellings - and Hybrid planning application (H14-1218-21) seeking full planning permission for 100 new homes, landscaping and infrastructure and outline planning permission (all matters reserved except access) for up to 300 new homes, landscaping and infrastructure.
Wardentree Lane, Spalding	South East Lincolnshire Local Plan	SP001	Approx. 2.6 km	Proposed main employment area B1, B2, B8 uses
Land north of the Vernatts Drain	South East Lincolnshire Local Plan	PIN024	Approx. 5.3 km	Housing site (Phase 2 and 3) to be delivered alongside PIN045 (Phase 1)
Clay lake enterprise park	South East Lincolnshire Local Plan	SP012	Approx. 5.4 km	Proposed main employment area B1, B2, B8 uses
Holbeach Food Enterprise Zone	South East Lincolnshire Local Plan	HO002	Approx. 4.2 km	Proposed main employment area B1, B2, B8 and D1 uses
Holbeach West	South East Lincolnshire Local Plan	HOB048	Approx. 4.7 km	Housing site

Development	Local Plan	Planning Allocations Reference	Distance from the Scheme Boundary	Status
Land north of Bourne Road	South East Lincolnshire Local Plan	MON008	Approx. 6.8 km	Housing site
Wardentree Lane / Enterprise	Lincolnshire Minerals and Waste Local Plan	WA25-SH	Approx 2.1 km	Allocated Waste Area
Clay Lake Industrial	Lincolnshire Minerals and Waste Local Plan	WA26-SH	Approx 5.2 km	Allocated Waste Area

3.2.18 The review of the South East Lincolnshire Local Plan and the Lincolnshire Minerals and Waste Local Plan, as summarised in **Table 3.1** above, identifies several allocated housing and employment and waste uses within the area surrounding the Site.

3.3 Relevant Planning History

3.3.1 This section of the PDAS provides an overview of the relevant planning history associated with the land comprising the TCPA Application Site itself, together with planning applications in the surrounding area considered relevant to understanding the wider planning context of the TCPA Application Site -. This includes development proposals located within or directly adjacent to the Site, alongside nearby strategic infrastructure and major development proposals submitted within the last five years

3.3.2 A list of the relevant planning history for the Site is set out in **Table 3.2** below.

Table 3.2 Planning History

Planning Ref	Project Name and Location	Description	Stage	Determination date
EN0210007	Weston Marsh to East Leicestershire (DCO), Lincolnshire to Leicestershire electricity transmission route	An electricity network reinforcement project comprising 37-mile (60km) new overhead lines and two new substations, and additional works to existing overhead lines.	Pre-application	The application is expected to be submitted March 2028
EN0210006	Ossian Wind Farm (DCO), Offshore wind farm in the North Sea	An offshore wind farm located approximately 80km off the east coast of Scotland (the Ossian	Pre-application	The application is expected to be submitted October 2027

Planning Ref	Project Name and Location	Description	Stage	Determination date
		Array) and connection to the National Grid at two proposed substations near Spalding and Alford. The proposed substations are Lincolnshire Connection Node (near Alford) and Weston Marsh (near Spalding) which are included in the Grimsby to Walpole DCO project		
EN010169	Meridian Solar Farm (DCO), Land north of Spalding, Lincolnshire	An DCO application for a 750MW solar farm with associated infrastructure including co-located battery storage and an approx 12km Grid Connection to National Grid's planned Weston Marsh substation.	Pre-examination	Accepted for examination on 17th April 2026
H17-1097-23	Land East of Surfleet Bank and West of Woad Farm Surfleet Spalding	Proposed plant-based protein extraction facility and anaerobic digestor plant	Undecided	Decision due by 15th May 2026
EN010130	Outer Dowsing (DCO), Offshore wind farm off the Lincolnshire coast	The Outer Dowsing Offshore Wind project comprises an offshore wind farm and associated offshore and onshore infrastructure including offshore and onshore high voltage electricity cables, onshore and offshore electricity substation(s), connection(s) to the National Grid and ancillary and temporary works.	Granted Consent	10th February 2026
H22-1085-24	Agricultural barn to the north of Weston Barn House Marsh Road Weston Spalding PE12 6HQ	Conversion of agricultural barn to single dwelling including demolition of lean-to, erection of extension and garage and formation of new access	Approved	24th March 2025

Planning Ref	Project Name and Location	Description	Stage	Determination date
H22-0122-24	Cobblestones Marsh Road Wragg Marsh Spalding PE12 6HH	Division of Cobblestones into 2 Independent Dwellings (Retrospective) including New Vehicular Access to Annexe	Approved	18th March 2024
H22-0806-22	Crowtree Wigwams, C rowtree Farm Wragg Marsh Spalding PE12 6HF	Erection of clubhouse (retrospective) and part change of use of site to use for performing wedding/civil partnership ceremonies	Approved	5th October 2022
H22-0023-22	Sunnyfield House Wragg Marsh Spalding PE12 6HH	Extension, Alterations & Garage	Approved	7th March 2022
H22-0769-21	Sunnyfields Nurseries Marsh Road Weston PE12 6HH	Erection of multispan plastic greenhouses, rainwater collection tanks and attenuation pond	Approved	8th October 2021

3.3.3 The planning history review identifies a mix of major energy infrastructure proposals alongside smaller-scale agricultural, commercial and residential developments within the vicinity of the Site. Most notably, the presence of multiple NSIPs at different stages of the DCO process reflects the strategic importance of the area within the UK's electricity generation and transmission network.

3.3.4 The recent approval of the ODOW DCO, together with the acceptance of the Meridian Solar Farm DCO application for examination, the forthcoming Weston Marsh to East Leicestershire and Ossian Wind Farm DCO proposals, confirms that the Weston Marsh area is essential in relation to grid connection and substation infrastructure.

4. Need for and Benefits of the Substation Works

4.1 Moving towards Net Zero

4.1.1 The electricity industry in Great Britain is undergoing unprecedented change. The closure of fossil fuel-powered generators 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.

4.1.2 The UK Government's legally binding "Net Zero" commitment to achieve a 100 per cent reduction in greenhouse gas emissions by 2050 under the Climate Change Act 2008 (as amended) (Ref 13) requires a decisive transition away from fossil fuels and a shift to renewable sources of energy including offshore wind.

4.1.3 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, including capacity delivered by offshore wind farms, is geographically distant from these historical hubs. This required substantial updates to the transmission system, including substations, to connect more renewable sources of energy generation to the grid.

4.1.4 UK Government policy clearly sets out the critical requirement for significant reinforcement of the transmission system to facilitate the connection of renewable energy sources and to transport electricity to where it is used. In particular, the British Energy Security Strategy (Ref 14) sets targets for the connection of up to 50 GW of offshore wind by 2030 as a key part of a strategy for secure, clean and affordable British energy for the long term.

4.1.5 There continues to be a growth in the volume of renewable and zero carbon generation seeking to connect to the transmission system, particularly in the East Coast. Substantial reinforcement is required across the Midlands and East Anglia to handle the increased power flows from offshore wind generation.

4.1.6 NGET is investing heavily into reconfiguring the electricity network in the East of England in order to facilitate the energy transition. Where more capacity is required beyond what upgrades to existing infrastructure can provide, NGET needs to construct completely new parts of the network such as new reinforcement or new substations.

4.1.7 It is also recognised in the National Policy Statements (NPSs) for Renewable Energy that there is a need for significant amounts of new energy infrastructure to meet the Government's Energy objectives of Clean Power by 2030 (Ref 15). Paragraph 3.3.4 to 3.3.7 of NPS EN-1 (Ref 16) recognise that there are several different types of electricity infrastructure that are needed to deliver the Government's energy objectives, which includes electricity networks which are needed to connect the output of other types of electricity infrastructure with consumers and each other.

4.1.8 Paragraph 161 of the National Planning Policy Framework (NPPF) (Ref 17) confirms support for the transition to a low carbon future in a changing climate. It states that the planning system:

> *"…should help to: shape places in ways that contribute to radical reductions in greenhouse gas emissions, minimise vulnerability and improve resilience...and support renewable and low carbon energy and associated infrastructure."*

4.2 Outer Dowsing Offshore Wind

4.2.1 The Weston Marsh Substation A is the proposed connection point for several onshore and offshore renewable energy projects including:

1) Outer Dowsing Offshore Wind Farm (ODOW) (2030)
2) Meridian Solar Farm (2033)
3) Ossian Offshore Wind Farm (TBC)

4.2.2 ODOW is a 1.5GW wind farm comprising of 100 turbines approximately 54 km from the Lincolnshire Coast with the generated electricity transmitted to shore via underground cabling from point at Wolla Bank. It is a joint venture developed by Corio (and its affiliates), TotalEnergies and Gulf Energy Development. Upon completion, it is anticipated to generate renewable electricity for over 1.6 million households, significantly contributing to the UK's target of 50 GW of renewable energy generation from offshore wind by 2030 (listed as one of the UK Government's '10 Point Plan', contributing to net zero carbon by 2050).

4.2.3 The ODOW DCO was granted permission on 10 February 2026 by the Secretary of State (SoS) for the Department of Energy Security and Net Zero (DESNZ) (Ref 18). As such, ODOW is currently at a more advanced stage than the Grimsby to Walpole DCO Project.

4.2.4 Under Section 9(2) of the Electricity Act 1989 (Ref 4), National Grid has a duty to develop and maintain an efficient, coordinated, and economical system of electricity transmission; and to facilitate competition in the supply and generation of electricity. This includes a statutory obligation to offer to connect any new generating stations or interconnectors applying to connect to the transmission system.

4.2.5 An evaluation of two possible grid connection options (the 'Lincolnshire Node' and Weston Marsh) was considered in the ODOW Preliminary Environmental Information (PEI) Report. Following the publication of the PEI Report, ODOW received confirmation from NESO in August 2023 that the confirmed grid connection for ODOW would be Weston Marsh. The Order Limits for the ODOW DCO included land extending to and surrounding the Spalding Tee-Point at Weston Marsh ~~in order~~ to facilitate a connection to the transmission system, ~~and~~meaning that the suitability of this location for transmission connection infrastructure has already been assessed and accepted through the ODOW DCO examination and consenting process.

4.2.6 The proposed connection point provided by the TCPA Application is therefore located within an area where the principle of connection to the transmission system has already been accepted by the Secretary of State through the DCO process. The development proposed in the TCPA Application is therefore consistent with the strategic infrastructure objectives already recognised through the ODOW DCO.

~~4.2.5~~4.2.7 As part of the connection agreement between NESO and ODOW (and therefore the reciprocal contractual agreement between NESO and National Grid), a connection point onto the transmission system must be made available by 2030.

~~4.2.6~~4.2.8 A customer connection agreement has been made between the NESO and ODOW, (and therefore a reciprocal contractual agreement between NESO and NGET), confirming that connection for the ODOW DCO will be made available by 2030.

~~4.2.7~~4.2.9 Whilst the new Weston Marsh Substation A is included within the proposals for the Grimsby to Walpole DCO application, to accommodate this connection, elements of the Grimsby to Walpole DCO project including parts of the Weston Marsh Substation A need to be operational ahead of the Grimsby to Walpole DCO project's programmed completion date of 2033. The Grimsby to Walpole DCO application is not anticipated to be submitted until Summer 2027 with a construction date of 2029-2033, too late to successfully connect ODOW by 2030.

~~4.2.8~~4.2.10 National Grid is therefore seeking to bring forward the delivery of these elements, which includes the Substation Works, via separate consents comprising the Scheme as set out in **Section 1** and **Table 1.1** (including the TCPA Application). This would facilitate the installation and commissioning of the electrical infrastructure required to connect ODOW to the electricity transmission network by the agreed connection date of by 2030. The applications comprising the Scheme, if consented, would be deliverable regardless of the Grimsby to Walpole DCO Project.

4.3 Relationship with Grimsby to Walpole DCO

4.3.1 The consenting route for the Weston Marsh Substation A is sought via planning permission pursuant to the TCPA 1990 from SHDC as the LPA.

4.3.2 The TCPA route is however being progressed in parallel with other consenting routes for works to tie the new substation into the existing network as set out in **Section 1** and **Table 1.1** Components of the Scheme

4.3.3 The Weston Marsh Substation A also forms part of the Grimsby to Walpole DCO Project. A description of the Grimsby to Walpole DCO Project is provided in **Table 2.1** above.

4.3.4 As the Grimsby to Walpole DCO Project involves over 2 km of new electric line it is considered an NSIP under the Planning Act 2008 and an application for a DCO is currently being prepared. It is anticipated that this will be submitted in June 2027.

4.3.5 The Weston Marsh Substation A is being included within the DCO application as associated development. The proposed design for the Weston Marsh A substation within the DCO will seek consent for the necessary infrastructure to facilitate the connection of the three renewable energy projects identified in paragraph **4.2.1**

4.3.6 The TCPA Application, together with the other consents identified in **Section 1** and **Table 1.1** seeks consent for the necessary infrastructure to facilitate the connection of only ODOW to the electricity transmission network by 2030. This consenting strategy provides a 'twin track' approach to seeking planning consent for the required elements of the Weston Marsh Substation A to meet the customer connection agreement between the NESO and ODOW by 2030, and the Government's decarbonisation objectives by 2050.

4.4 Benefits of the Substation Works

4.4.1 The Substation Works and other elements of the Scheme described in **Table 1.1** will provide the following benefits in accordance with international, national and local strategies and national and local policy objectives:

1) **Net Zero and Clean Energy Benefits:** The Scheme will make a significant contribution to the UK's decarbonisation requirements and climate change targets. The Scheme supports the reduction of reliance on fossil fuels, and helps towards achieving the target of a fully decarbonized electricity system by 2035.

2) **Clean Energy Integration:** The Scheme will assist in ensuring that the supply of energy remains secure, reliable and affordable by providing a connection to the grid for a renewable energy generation project which would provide 1.5 GW of power to the UK energy supply.

3) **Energy Security and Independence:** By providing a connection to the grid for the ODOW project, the Scheme supports the supply of clean, renewable energy from a domestic source, to help reduce the UK's dependence on volatile imported fuels, stabilising energy costs.

4) **Meeting Increased Demand:** By providing a connection to the grid for the ODOW project, the Scheme supports the upgrading of the electricity transmission network to handle a predicted doubling of electricity demand by 2050.

5) **Improved Reliability and Modernization:** The Scheme will provide infrastructure with new, more efficient power lines, that will strengthen the overall network and enable a more automated, efficient, and flexible system.

6) **Lowering Long-Term Costs:** By providing a connection to the grid for the ODOW project, the Scheme supports the increased use of the sustainable domestic wind energy source and is intended to lead to lower utility bills for consumers and businesses.

7) **Habitat creation and enhancement:** The Substation Works will deliver biodiversity benefits through a combination of on-site and off-site habitat creation and enhancement, as set out in Section 5 below, and detailed in the following documents submitted with this application: Landscape and Visual Appraisal (GWNC-GIL-SS50-XXXXXX-RPT-ES-000001); EcIA (GWNC-ARU-SS50-XXXXXX-RPT-ES-000005); Surface Water Drainage Strategy (GWNC-WSP-SS50-XXXXXX-RPT-ES-000001), Indicative Landscape and Ecological Mitigation Proposals (GWNC-GIL-SS50-XXXXXX-PLN-ES-000001), and Biodiversity Net Gain Report (GWNC-ARU-SS50-XXXXXX-RPT-ES-000015). These documents include measures to provide significant landscape and ecological mitigation and enhancement. The proposed measures will secure a minimum of 10% BNG, delivered across habitat, hedgerow and watercourse units and supported by long-term management and monitoring to ensure delivery and maintenance of post-construction biodiversity outcomes. Delivering BNG off-site enables the delivery of more strategically located habitats, contributing to wider environmental benefits and resulting in better outcomes for biodiversity beyond the Substation Works Site Boundary.

8) **Economic Growth and Employment:** The Scheme is expected to create 76 (full-time equivalent) jobs per year on average during the construction phase. Whilst a temporary benefit, the increase in economic activity will result in increased

spending in the local economy such as in shops, hotels and amenity facilities, and will support related industries in the supply chain. National Grid's strategy, particularly with the RIIO-T3 plan, is to foster long-term collaborations with domestic suppliers to secure the necessary resources for net-zero goals by 2050.

5. The Proposed Substation Works

5.1 Key components of the proposed Substation Works

5.1.1 This section of the PDAS provides a description of the proposed Substation Works for which planning permission is being sought to facilitate the connection of ODOW to the electricity transmission network.

5.1.2 The Substation Works include the provision of the new Weston Marsh Substation A comprising an 400kV AIS substation and associated works with connection for up to 12 bays which are necessary to accommodate the connections for ODOW and the diversion of the existing 2WS and 4ZM overhead lines. The location and extent of the Substation Works are provided on the **Site Location Plan** (GWNC-WSP-ZZZZ-ZZZZZZ-PLN-PM-000001). The application is submitted with a **Topographical Plan** (GWNC-WSP-ZZZZ-ZZZZZZ-PLN-PM-000003) to illustrate existing site levels and features. The location and layout of the Substation Works, including temporary and permanent works, are shown on the **Site Layout Plan** (GWNC-WSP-ZZZZ-ZZZZZZ-PLN-EN-000001).

5.1.3 The total footprint of the permanent electrical infrastructure comprising new Weston Marsh Substation A would be approximately ~~10.6~~8.4 ha including a 5 m buffer around the fence line. The new Weston Marsh Substation A area includes three areas within the substation security fence:

1) a small air lock area at the eastern end of the new permanent access route to the substation from Marsh Road which provides a fenced area between two gates to provide secure access. (Together, the air lock area and the 5m buffer around the fenceline covers approximately 0.05~~3~~ ha);
2) an outer compound area of approximately 110 m by 50 m (approximately 0.6 ha) to accommodate ancillary buildings and equipment and car parking; and,
3) a high voltage compound area of approximately ~~523~~ 419.5 m by 185 m, (approximately ~~9.7~~7.8 ha) providing the specialist electricity equipment.

5.2 Summary of the Substation Works within the Application Site Boundary

5.2.1 The permanent infrastructure comprising the Substation Works includes:

1) Earthworks to change the existing ground level from approximately +3.6 m AOD (which varies across the site as illustrated in the **Topographical Plan** (GWNC-WSP-ZZZZ-ZZZZZZ-PLN-PM-000003)) to create a level platform to accommodate the Weston Marsh Substation A with a finished slab level (FSL) of +4.45 m AOD as shown on the **Substation Proposed Elevations Plan** (GWNC-WSP-ZZZ-ZZZZZZ-PLN-EN-000003).
2) A new bellmouth and 390 m long and 7.3 m wide permanent access track from Marsh Road to the Weston Marsh Substation A. This is intended to provide access for construction workers during the construction period as well as the main access during the operation of the Weston Marsh Substation A.

3) A Distribution Network Operator (DNO) substation to the north east of the permanent access road and close to, but outside, the Weston Marsh Substation A security fence.

4) An outer security air lock area, enclosed with security fencing and security gates, leading to an outer compound area.

5) An outer compound area containing a control building including amenity facilities, a stores/workshop building, a water tank, a diesel generator, 12 parking bays for cars/light vehicles and a cesspool.

6) Internal security fencing and gates leading to the high voltage compound area containing the 400 kV Air Insulated Substation (AIS) equipment comprising: air insulated switchgear; standard substation plant including circuit breakers, disconnectors, earth switches, instrument transformers, cable sealing ends, and busbars (not an exhaustive list); ancillary buildings including a stores building and 11 x portable relay rooms (PRRs); high voltage plant and overhead line gantries.

7) Electrified palisade security fencing around the perimeter of the Weston Marsh Substation A enclosing the compound areas described above and internal security fencing separating the different areas within the Weston Marsh Substation A footprint.

8) Lighting columns and lighting fittings within the substation security fence.

9) CCTV equipment within the substation security fence.

10) Ground treatment within the substation compound area to comprise loose stone and gravel substrate, with hardstanding for internal access routes, turning areas and parking, and foundations for containerised buildings and transmission assets.

11) Surrounding the substation compound area, there will be landscape and ecological mitigation areas, drainage features including two attenuation basins and two surface water pumping stations, drainage pipes, and the diversion of an existing drainage ditch (IDB Ditch 'New Drain') to a new location to the east of the new Weston Marsh Substation A.

12) Reinstatement of the original route of PROW Wstn/7/1 following the temporary diversion of the PROW during the construction works including provision for crossing over the diverted drain.

5.2.2 The temporary infrastructure comprising the Substation Works includes:

1) Construction of a new bellmouth access and 7.5 m wide temporary haul road running 2.6 km from Stone Gate to the Weston Marsh Substation A construction area to be used for the construction of the Substation Works and works necessary for the implementation of the other elements of the Scheme identified in **Table 1.1** and including associated drainage, and bridge and culvert crossings where required.

2) Four temporary construction compounds, welfare and laydown areas to be used for the construction of the Substation Works and works necessary for the implementation of the other elements of the Scheme identified in **Table 1.1** including the following:

   i. Provision of a temporary compound at the junction of the haul road with Stone Gate to provide a self-contained temporary unit and staff parking.

ii. Provision of two temporary compounds to the north west of the proposed Weston Marsh Substation A, including site cabins, welfare facilities and parking for workers cars/vans and soil and materials storage.

iii. Provision of the main construction compound to the south east of the substation for material / equipment laydown and storage.

3) Temporary localised highway improvements are proposed on Stone Gate to facilitate safer movement of HGVs during construction. These improvements comprise localised widening to provide 6m width to enable two HGVs to pass.

4) A temporary suspension of 980 m of PROW Wstn/7/1 and diversion during construction with two potential diversion route options suggested to maintain access and PROW network links (refer to Figure 6 in the **Transport Statement** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000018)). The proposed temporary diversions will route to the north of the existing 4ZM overhead line with the preferred option routing along a private road and the alternative option routing adjacent to the existing field boundary and both options returning along Marsh Road for connections to footpath Wstn/8/1. The diversions will result in an additional 600-750 m walking distance for users of the PRoW throughout the duration of the proposed construction works. Details of the proposed temporary suspension and diversion will be agreed with the LCC PRoW Officer. General measures include the provision of signage to inform users of the details of the suspension and diversion route as well as the timing of the suspension and appropriate construction site contact details. Condition surveys may be undertaken prior to construction to record the state of the PRoW and diverted route and identify any impact resulting from construction activity and to inform reinstatement measures as required.

5.2.3 The following plans submitted with the application provide details of the location, for different elements of the permanent Substation Works:

1) **Site Layout Plan** (GWNC-WSP-ZZZZ-ZZZZZZ-PLN-EN-000001)

2) **Substation Layout Plan** (GWNC-WSP-ZZZZ-ZZZZZZ-PLN-EN-000004),

3) **Substation Proposed Elevations** (GWNC-WSP-ZZZ-ZZZZZZ-PLN-EN-000003),

4) **Indicative Substation Buildings Elevations** (GWNC-WSP-ZZZ-ZZZZZZ-PLN-EN-000005),

5) **Typical Fence Plan** (GWNC-WSP-ZZZ-ZZZZZZ-PLN-EN-000005)

6) **Indicative Landscape and Ecological Mitigation Proposals Plan** (GWNC-GIL-SS50-XXXXXX-PLN-ES-000001)

7) **Public Right of Way Diversion Plan, included in the Transport Statement - Figure 6** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000018)

8) **Proposed Site Lighting Layout included as Appendix D to TCPA Lighting Strategy** (GWNC-WSP-ZZZZ-ZZZZZZ-STG-PM-000001)

9) **Technical Note to the Surface Water Drainage Strategy** (GWNC-WSP-SS50-XXXXXX-RPT-ES-000001)

10) **Indicative Site General Arrangement Plan showing the foul water drainage layout included as Appendix A to the Foul Drainage Strategy** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000020).

5.2.4 Temporary Construction Plans include:

1) **Illustrative Construction Compound Plan** (GWNC-LSTC-OH70-ZZZZZZ-DRW-EN-000032)
2) **Illustrative Culvert Details for Watercourse Crossings Plan** (GWNC-LSTC-OH70-ZZZZZZ-DRW-EN-000031)
3) **Illustrative Bridge Details for Watercourse Crossings Plan** (GWNC-LSTC-OH70-ZZZZZZ-DRW-EN-000030)
4) **Illustrative Watercourse Outfall Basin Plan** (GWNC-LSTC-OH70-ZZZZZZ-DRW-EN-000029)

5.2.5 Further details for each element of the Weston Marsh Substation A design are provided below.

5.3 Permanent infrastructure comprising the Weston Marsh Substation A Works

Control building within the Weston Marsh Substation A compound

5.3.1 A control building located in the outer compound area measuring 22 m wide, 50.5 m long and 6 m high accommodating essential operational and monitoring systems and amenity facilities for operational purposes including:

1) Relays and protection control systems
2) Telecommunication equipment
3) Low voltage Alternating Current (AC) supply equipment
4) Battery rooms

5.3.2 Additional accommodation may be included within the control building for:

1) Offices
2) Meeting rooms
3) Mess room
4) WCs
5) Changing/locker rooms
6) Archive storage

5.3.3 The plans, elevations and materials for this building are shown on Sheets 1 and 2 of 9 of the **Indicative Substation Buildings Elevations Plan** (GWNC-WSP-ZZZ-ZZZZZZ-PLN-EN-000005).

5.3.4 The proposed materials for the control building indicated on the drawing include brick walls with wall and roof cladding in RAL 7038 (Goosewing Grey). The wall and roof cladding would comprise Kingspan KS1000RW wall and roof panels. The wall panels would be laid vertically. The building would include uPVC framed windows and steel doors. The materials indicated above are submitted to illustrate the proposals. National Grid requests that the final details are controlled by a condition to allow the

submission of appropriate plans and materials following the detailed design stage by the appointed contractor.

Ancillary buildings and facilities within the Weston Marsh Substation A compound

5.3.5 Additional smaller required structures within the outer compound area include:

1) Water tank – One water tank of approximately 7.3 m in diameter and 5 m high located on a concrete plinth of 8 m x 8 m. The plans, elevations and materials for this building are shown on Sheet 7 of 9 of the **Indicative Substation Buildings Elevations Plan** (GWNC-WSP-ZZZ-ZZZZZZ-PLN-EN-000005). The proposed materials for the tank walls and roof comprise galvanised steel sheets. The materials indicated above are submitted to illustrate the proposals. National Grid requests that the final details are controlled by a condition to allow the submission of appropriate plans and materials following the detailed design stage by the appointed contractor and to be confirmed with the local fire authority.
2) Backup diesel generator – One generator of approximately 6.5 m wide, 2.65 m long and 3 m high (excluding plant on the roof of the generator unit). The generator will be a steel containerised solution with steel walls and roof. The proposed colour of the unit is RAL 9003 (Signal White). The plans, elevations and materials for this building are shown on Sheet 9 of 9 of the **Indicative Substation Buildings Elevations Plan** (GWNC-WSP-ZZZ-ZZZZZZ-PLN-EN-000005).
3) Store and workshop building approximately 8 m wide, 15 m long and 5 m high. The proposed materials include brick walls with Kingspan KS1000RW wall cladding in RAL 7038 (Goosewing Grey) laid vertically. The roof will be clad in Kingspan KS1000RW roof panels in RAL 7038 (Goosewing Grey). These details are provided on Sheet 6 of 9 of the **Indicative Substation Buildings Elevations Plan** (GWNC-WSP-ZZZ-ZZZZZZ-PLN-EN-000005). The materials indicated above are submitted to illustrate the proposals. National Grid requests that the final details are controlled by a condition to allow the submission of appropriate plans and materials following the detailed design stage by the appointed contractor.
4) Car Parking – 12 parking bays for cars/light vehicles; and
5) Cesspool and associated foul drainage connection between the welfare facilities in the control building and the cesspool.

5.3.6 Within the high voltage compound area, will be the following ancillary buildings

1) A store and workshop room approximately 10 m wide, 25 m long and 5.2 m high. The proposed materials include brick walls with Kingspan KS1000RW wall cladding in RAL 7038 (Goosewing Grey) laid vertically. The roof will be clad in Kingspan KS1000RW roof panels in RAL 7038 (Goosewing Grey). The building will be accessed via a steel door. These details are provided on Sheet 4 of 9 of the **Indicative Substation Buildings Elevations Plan** (GWNC-WSP-ZZZ-ZZZZZZ-PLN-EN-000005). The materials indicated above are submitted to illustrate the proposals. National Grid requests that the final details are controlled by a condition to allow the submission of appropriate plans and materials following the detailed design stage by the appointed contractor.
2) 11 x Portable Relay Rooms (PRRs) each of 7.95 m wide, 3.85 m long and 3.82 m high. The proposed materials include either blockwork walls of traditional

construction or a steel containerised solution in RAL 7038 (Goosewing Grey). The building will be accessed via a steel door. These details are provided on Sheet 5 of 9 of the **Indicative Substation Buildings Elevations Plan** (GWNC-WSP-ZZZ-ZZZZZZ-PLN-EN-000005). The materials indicated above are submitted to illustrate the proposals. National Grid requests that the final details are controlled by a condition to allow the submission of appropriate plans and materials following the detailed design stage by the appointed contractor.

5.3.7 These facilities support operational resilience, technical monitoring, and routine and emergency maintenance activities.

High-Voltage electrical equipment within the high voltage compound area

5.3.8 The new Weston Marsh Substation A includes a range of specialist electrical plant and operational structures including 400 kV Air Insulated Substation (AIS) equipment comprising: air insulated switchgear; typical substation plant including circuit breakers, disconnectors, earth switches, instrument transformers, cable sealing ends, and busbars (not an exhaustive list); high voltage plant and overhead line gantries. The layout of the proposed high voltage compound area is provided in **Indicative Substation Buildings Elevations Plan** (GWNC-WSP-ZZZ-ZZZZZZ-PLN-EN-000005) and all structures will sit within the following height parameters:

1) Maximum height of high-voltage plant of 12.5 m
2) Maximum height of overhead line gantries of 15 m.

5.3.9 These components will comprise metal structures predominantly of a matt grey appearance. They facilitate the connection between the Weston Marsh Substation A and the incoming and outgoing overhead lines for the diverted sections of the 4ZM and 2WS overhead lines, and the new electricity connection for ODOW.

Operational lighting

5.3.10 During operation, lighting would be required at the proposed Weston Marsh Substation A and would be located at required locations within the security fence to allow for safe movement and the inspection and operation of equipment. Security lighting would also be required. All lighting would be designed in accordance with the appropriate design standards and National Grid technical specifications. The security lighting would be event activated (i.e. would not be continuous) and would be designed to be environmentally sensitive (e.g. directional and low light not exceeding 50 lux). Further information regarding the substation lighting design has been provided in a **Lighting Strategy** (GWNC-WSP-ZZZZ-ZZZZZZ-RPT-PM-000001) and **Lighting Plan** (GWNC-WSP-ZZZZ-ZZZZZZ-STG-PM-000001). The proposals include:

1) Lighting columns which would be positioned to cover the substation area, including perimeter fencing and gates and access roads, verges, footpaths, designated walkways and areas occupied by plant or other equipment contained by the substation perimeter fencing. Each column would be mounted at a height of 6 m and fitted with 3 or 4 luminaires, depending on coverage requirements.
2) Light fixtures would be installed on all sides of the control building, each mounted at a height of 2.5 m.

5.3.11 National Grid requests that the final details are controlled by a condition to allow the submission of appropriate plans, details and materials following the detailed design stage by the appointed contractor.

Remote Security Monitoring Equipment

5.3.12 During operation, CCTV equipment is required at the proposed Weston Marsh Substation A and would be located at required locations within the security fence to allow the monitoring of activities to alert National Grid to instances of unauthorised access to the high voltage electricity equipment to ensure the safety and protection of the public. The remote security monitoring system will be prepared at the detailed design stage. It is anticipated that this would include the installation of pole-mounted security cameras around the perimeter of the compound areas, and potentially the installation of cameras on buildings and structures within the site. Where possible, the design will include measures to co-locate cameras on structures within the site, to keep the amount of additional structures required solely for CCTV monitoring purposes to a minimum.

5.3.13 National Grid requests that the final details are controlled by a condition to allow the submission of appropriate plans, details and materials following the detailed design stage by the appointed contractor.

Security Fencing

5.3.14 Security fencing will be required around the perimeter of the Weston Marsh Substation A to prevent unauthorised access to the high voltage electricity equipment. The location of fencing is shown on **Substation Layout Plan** (GWNC-WSP-ZZZZ-ZZZZZZ-PLN-EN-000004). The proposed design, dimensions and materials for the fencing and security gates is provided on **Typical Fence Plan** (GWNC-WSP-ZZZ-ZZZZZZ-PLN-EN-000005).

5.3.15 The proposals include a 2.4 m high galvanised palisade fence with additional electric fencing installed up to a maximum height of approximately 4 m. The fencing material will have a matt steel finish.

5.3.16 National Grid requests that the final details are controlled by a condition to allow the submission of appropriate plans, details and materials following the detailed design stage by the appointed contractor.

Ancillary buildings and structures outside the Weston Marsh Substation A

5.3.17 A Distribution Network Operator (DNO) substation is proposed outside the security fence for Weston Marsh Substation A compound, to the north east of the permanent access track to the Weston Marsh Substation A and to the north of the Security Gates. Sheet 3 of 9 of the **Indicative Substation Buildings Elevations Plan** (GWNC-WSP-ZZZ-ZZZZZZ-PLN-EN-000005) provides parameters for this building of approximately 4 m wide, 4 m long and 2.5 m high. The building is anticipated to have Glass Reinforced Plastic (GRP) walls and roofing materials. The external colour of the building would be either BS4800 (Dark Green) or 12-B-21 (Light Green), to be agreed in discussion with SHDC. The materials indicated above are submitted to illustrate the proposals. National Grid requests that the final details are controlled by a condition to allow the submission of appropriate plans and materials following the detailed design stage and subject to agreement with the DNO.

5.3.18 The **Surface Water Drainage Strategy** (GWNC-WSP-SS50-XXXXXX-RPT-ES-000001) proposes two attenuation basins each with a pumping station of the same design located nearby as shown on the **Site Layout Plan** (GWNC-WSP-ZZZZ-ZZZZZZ-PLN-EN-000001). The plans, elevations and materials for the pumping station are provided on Sheet 8 of 9 of the **Indicative Substation Buildings Elevations Plan** (GWNC-WSP-ZZZ-ZZZZZZ-PLN-EN-000005). The proposed pumping station is approximately 12 m wide, 8 m long and 4.5 m high. The building is anticipated to have Glass Reinforced Plastic (GRP) walls and roofing materials. The external colour of the building would be RAL 6005 (Moss Green), to be agreed in discussion with SHDC. The materials indicated above are submitted to illustrate the proposals. National Grid requests that the final details are controlled by a condition to allow the submission of appropriate plans and materials following the detailed design stage.

5.3.19 The **Foul Drainage Strategy Technical Note** (GWNC-LST-ZZZZ-ZZZZZZ-TEC-EN-000004) confirms the need for a cesspool to be installed at Weston Marsh Substation A to serve the staff welfare facilities contained within the control building. The Application is accompanied by a completed Foul Drainage Assessment Form (FDA) as required by SHDC's validation requirements.

5.3.20 An **Indicative Site General Arrangement Plan** is provided in Appendix A of the **Foul Drainage Strategy Technical Note** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000020) which shows the foul water drainage layout. This includes the location of the cesspool within the outer compound area of Weston Marsh Substation A. The cesspool will comprise a covered watertight underground tank with a minimum capacity 9000 litres.

5.3.21 Proper operation of the cesspool will be ensured through a clear and proactive maintenance strategy. The tank will be adequately sized to accommodate anticipated foul flows and be fitted with ventilation to prevent the build up of gases. A high level probe and/or telemetry system will be installed to continuously monitor tank levels and automatically indicate when emptying is required, removing reliance on visual inspection alone. The removal of sludge and liquid from the unit should be carried out by a contractor holding the relevant permits to transport and dispose of such waste at least monthly, or more frequently where indicated by telemetry, ensuring levels are controlled and overfilling is avoided. Suitable vehicular access will be provided, as part of the wider sub-station permanent works, to always allow safe and reliable tanker access. Together, these measures address potential concerns regarding poor maintenance, irregular emptying, access constraints, and inadequate capacity, and ensure the cesspool operates safely, reliably, and in accordance with best practice.

5.3.22 National Grid requests that the final details are controlled by a condition to allow the submission of appropriate plans and materials following the detailed design stage.

Landscape and Ecological Mitigation

5.3.23 The **Landscape and Visual Appraisal** (GWNC-GIL-SS50-XXXXXX-RPT-ES-000001) **EcIA** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000005) provide details of three types of mitigation which have been assumed to be incorporated into the Scheme and used for the assessments contained in those documents. These include embedded, control and operational management, and additional mitigation measures. The information provided below focuses on the proposed additional mitigation measures which are shown on the **Indicative Landscape and Ecological**

Mitigation Proposals Plan (GWNC-GIL-SS50-XXXXXX-PLN-ES-000001) which provides details of proposed landscape and ecological mitigation measures.

5.3.24 Additional mitigation comprises over and above embedded and standard mitigation measures to reduce environmental effects. This would include, but not be limited to, landscape and visual mitigation such as tree planting and the creation of replacement habitat areas where required.

5.3.25 Landscaping would be installed along the northern, western and southern facades of the new Weston Marsh Substation A to screen views of the new Weston Marsh Substation A. Additional areas of filtering vegetation would be planted to the north-west and south of the new Weston Marsh Substation A, as well as alongside Marsh Road to further reduce visibility of the Scheme. These areas would be managed in accordance with a Habitats and Landscape Management Plan (HLMP) which National Grid requests would be secured by planning condition.

5.3.26 Landscape mitigation includes proposals for planting including hedgerows and woodland planting and an indicative list of species mixes and sizes. A detailed Landscape Plan will be produced as part of the detailed design as it is reliant on other information which is currently indicative e.g. the drainage design, but the proposals commit to the following:

1) Planting around the boundary of the proposed substation where the overhead line entries and future cable entries allow. To the east of the substation, an area of woodland planting, with a minimum width of 30 m, is proposed to screen the substation from receptors on Marsh Road including Welland House Farm and Pickmere and properties further south along Marsh Road.
2) A belt of woodland planting to the south of the substation to filter longer distance views across the landscape from the south including from Bass Cottages and Stone Gate.
3) A belt of woodland planting to the north east of the substation to screen views from Western Barn House and filter longer distance views from properties on Carrington Road and from the PRoW.
4) Hedgerow and tree planting along Marsh Road and the PRoW to filter views for those visual receptors in closer proximity to the substation including Crowtree Cottages, people accessing Wigwam Holiday Cottage and people using the PRoW.

5.3.27 The proposed planting has had regard for the local landscape, introducing woodland belts to mimic existing such as that along Lord's Drain and focusses on screening and filtering views from the closest visual receptors so that the landscape remains as open as possible.

5.3.28 Ecological measures have also been proposed to protect the farmland bird assemblage and barn owls. These are as follows:

1) Approximately 35 hectares of agricultural land near Crowtree Farm has been included in the Substation Works Site Boundary to facilitate conversion to a different cropping regime to benefit farmland birds. The full extent of this area isn't required, the 35 ha demonstrates the flexibility across the farm ownership for compensatory measures (i.e. crop rotation);
2) One barn owl box will also be installed situated a suitable distance away from the Scheme.

3) One peregrine platform will be installed on a pylon a suitable distance away from the Scheme.

5.3.29 National Grid requests that the final details of proposed landscape and ecological mitigation measures are controlled by a condition to allow the submission of appropriate plans and materials following the detailed design stage.

Surface Water Drainage Design

5.3.30 The **Indicative Surface Water Drainage Layout** included as Appendix D to the **Surface Water Drainage Strategy** (GWNC-WSP-SS50-XXXXXX-RPT-ES-000001) provides details of the proposed surface water drainage measures around the Weston Marsh Substation A. This includes the installation of underground drainage pipes within and around the Weston Marsh Substation A and two attenuation ponds, one to the north of the substation and one to the south, each with and adjacent pumping station. The proposals include a road swale on the southern side of the new access track between Marsh Road and the Weston Marsh Substation A, which connects to a swale along the western edge of the proposed landscape planting area to the south west of the Weston Marsh Substation A.

5.3.31 The proposals also include the diversion route for the existing drainage ditch (IDB Ditch 'New Drain') to a new location to the east of the new Weston Marsh Substation A via a 10 m wide drain with an easement of 9m to facilitate access and maintenance activities.

5.3.32 National Grid requests that the final details for the surface water drainage layout are controlled by a condition to allow the submission of appropriate plans and materials following the detailed design stage.

Operational opening hours

5.3.33 The new Weston Marsh Substation A will operate permanently once commissioned, although the site will be monitored remotely and operational traffic associated with both the Weston Marsh Substation A and monitoring and maintenance of the nearby sections of the 4ZM and 2WS overhead lines are forecast to be very low (approximately four trips a month for routine checks and maintenance at the new Weston Marsh Substation A and typically two trips a year for maintenance at each pylon).

5.4 Temporary construction works

5.4.1 Construction of the Substation Works is expected to be undertaken from January 2028 to early 2031 and will require the construction of temporary infrastructure to facilitate the construction activities. The location and extent of temporary construction works are shown on the **Site Layout Plan** (GWNC-WSP-ZZZZ-ZZZZZZ-PLN-EN-000001). Further details are provided below.

5.4.2 A total of four temporary construction compounds would be required to facilitate the Scheme. These construction compounds would be required for the entirety of the construction period and would be used for the construction of the Substation Works proposed in this application as well as the works associated with the Scheme as set out in **Section 1** and **Table 1.1.** All compounds would be removed and the land reinstated once construction works have been completed (noting this assumption does not pre-empt outcomes of the Applications).

5.4.3 A compound would be situated to the south east of the new Weston Marsh Substation A and cover an area of approximately 3 ha. A stockpiling area is also proposed to the north of the new Weston Marsh Substation A, comprising an area of approximately 6 ha. A third compound is proposed to the east of the Weston Marsh Substation A.

5.4.4 A compound would be situated to the south east of the new Weston Marsh Substation A and cover an area of approximately 3 ha. A stockpiling area is also proposed to the north of the new Weston Marsh Substation A, comprising an area of approximately 6 ha. A third compound is proposed to the east of the Weston Marsh Substation A.

5.4.5 A fourth compound is proposed to the north of Stone Gate and in the vicinity of the proposed haul road measuring an area of approximately 2 ha. This compound would be established first and is required for the construction of the temporary haul road and associated bellmouth. This compound would not be required for the entirety of the construction period and would be scaled back once the construction of the haul road is complete.

5.4.6 Construction access to the new Weston Marsh Substation A would be via the A151 High Road, Stone Gate and a dedicated haul road originating just to the south of the existing 2WS overhead line and continuing adjacent to this existing infrastructure. It is proposed that the permanent operational access would also be used during the construction period by construction workers for accessing the construction compounds where appropriate.

5.4.7 An illustrative layout of a construction compound is provided in the **Illustrative Construction Compound Plan** (GWNC-LST-OH70-ZZZZZZ-DRW-EN-000032) and would typically include the following:

1) security gate house;
2) plant and construction vehicle parking;
3) site office parking area for vehicles and cycles;
4) site offices and welfare facilities including smoking area, gym, amenity/seating areas as necessary;
5) fencing;
6) safety/security lighting;
7) laydown area;
8) storage area;
9) wheel wash;
10) collection, storage and disposal of surface water, in addition to water from within the compound including grey and foul water;
11) soil bund;
12) spoil storage area;
13) power supplies (where feasible to do so alternatively fuelled generators would be used and/or a local grid connection); and
14) fuel storage.

5.4.8 Each compound may need to be used for some or all of these purposes during the construction period. It is proposed that further details on the layout and uses for each compound will be prepared by the contractor and submitted to SHDC for approval, prior to the commencement of development.

5.4.9 Further details of the temporary works can be found in the following drawings, which have been prepared and submitted alongside this planning application. These include:

1) **Illustrative Construction Compound Plan** (GWNC-LSTC-OH70-ZZZZZZ-DRW-EN-000032)
2) **Illustrative Culvert Details for Watercourse Crossings Plan** (GWNC-LSTC-OH70-ZZZZZZ-DRW-EN-000031)
3) **Illustrative Bridge Details for Watercourse Crossings Plan** (GWNC-LSTC-OH70-ZZZZZZ-DRW-EN-000030)
4) **Illustrative Watercourse Outfall Basin Plan** (GWNC-LSTC-OH70-ZZZZZZ-DRW-EN-000029)

Operation during construction period

5.4.10 The proposed site working hours during the construction period are:

1) Monday to Friday 07:00-19:00 hrs; and
2) Saturday, Sundays and Bank Holidays 08:00-17:00 hrs.

5.4.11 However, it is noted that practically, there may be limited activities on Saturdays, Sundays and Bank Holidays, therefore for the purposes of this assessment, construction traffic is considered on a weekday profile. This provides a robust assessment as forecast weekday trips are likely to be higher than at the weekends

5.5 Design and Access

5.5.1 This section of the PDAS describes the principles that have informed the design evolution of the Substation Works and explains how matters such as design quality and access have been carefully considered from the outset. It sets out how the Substation Works respond to the site context and relevant policy and guidance. The key considerations include:

1) Overarching design principles
2) Use
3) Scale
4) Access design
5) Appearance
6) Sustainability
7) Landscape and ecological enhancements
8) Materials and Waste

Overarching design principles

5.5.2 The importance of protecting and enhancing the environment has been recognised in the design of the Substation Works. An integral part of the iterative design for the Substation Works has been the consideration of mitigation through sensitive design development in accordance with the Horlock Rules. The design of the Substation Works follows the Horlock Rules on the design of the Substation Works are set out in **Table 5.1** below.

5.5.3 In selecting the preferred location for the new Weston Marsh Substation A, consideration was also given to the design of other overhead lines proposed to connect into the Weston Marsh Substation A. The substation location and orientation have been developed to allow efficient circuit entry from the approach directions of the new 400 kV overhead line from Route Sections 4 and 6 (of Grimsby to Walpole DCO) and from the likely approach directions of customers known to be connecting into Weston Marsh Substation A, to avoid the creation of narrow or overly constrained routeing corridors for these overhead lines (Horlock Rule 7; Horlock Rule 10).

5.5.4 The bay positions within the Weston Marsh Substation A have been designed, as far as practicable, to facilitate direct and efficient line entries without requiring lines to cross each other, which could result in excessive cabling, complex interactions of circuits or the need for additional cable sealing-end compounds (Horlock Rule 7).

5.5.5 The Substation Works have been designed with consideration to the policies set out in **Section 6** of this PDAS and has sought to consider features of the environment, built heritage and landscape and minimise any adverse effects. The design balances technical, economic and environmental considerations to reach reasonably practicable development proposals.

5.5.6 Additionally, the design of the Substation Works has considered vulnerability to climate change. The resilience of National Grid infrastructure to the effects of climate change are under continuous review and where relevant will result in appropriate updates to policy, procedure and design standards. The vulnerability of the Substation Works (all permanent assets) to future flooding is considered as part of the **Flood Risk Assessment (FRA)** (GWNC-WSP-SS50-XXXXXX-RPT-ES-000002)**,** submitted with this Application.

Table 5.1 Horlock Rules

Horlock Rule	Application of Rule
Rule 1	Siting the Weston Marsh Substation A close to a tee-point of the existing 400kV 4ZM and 2WS overhead lines to limit the length of overhead line reconfiguration and 400kV overhead lines into the new substation to minimise environmental impacts. Avoidance of identified centres of population.
Rule 2	N/A
Rule 3	Siting of the Weston Marsh Substation A considered the setting of the Wykeham Chapel Grade I listed building and Scheduled Monument as well as other Grade II listed structures.

Horlock Rule	Application of Rule
Rule 4	There is little vegetation in the vicinity of the Weston Marsh Substation A, the flat landform in this area means planting introduced will be effective in screening the Substation Works from residential areas at Weston.
Rule 5	Avoidance and mitigation of environmental effects was a key driver in the selection process for the location of the Weston Marsh Substation A. An AIS substation was chosen as this has a lower impact on views and landscape character.
Rule 6	The location of the Weston Marsh Substation A minimises the need to build new overhead line as far as practicable. This also takes into account the Intergen high pressure gas pipeline maintaining sufficient standoff. The footprints and compound have been arranged to use the smallest practicable area and reduce extent of the permanent land take.
Rule 7	The Substation Works are situated in close proximity to the existing Spalding Tee-Point which offers the greatest opportunities to limit the spread of environmental effects and limiting the lengths of realignment and replacement of existing 4ZM and 2WS circuits to tie the substation to the existing network.
Rule 8	The location of the Substation Works avoids constraining connection routes for customer connections that are proposed to connect to Weston Marsh Substation A. The construction compounds are located in close proximity to the Weston Marsh Substation A. Access roads take the shortest most practical path to the substations.
Rule 9	One permanent access for Weston Marsh Substation A is proposed from Marsh Road. Mitigation planting included in the landscape design to screen views from Weston and surrounding residential properties.
Rule 10	The location of the Weston Marsh Substation A in proximity to the Spalding Tee-point offers greatest opportunities to limit the spread of effects limiting the lengths of realignment.
Rule 11	Fenland character of the landscape with flat landform and low vegetation means there is little opportunity to use existing landform and vegetation.

Use

5.5.7 The Substation Works comprise permanent electricity infrastructure that would form part of the electricity transmission network. Once constructed, the Substation Works would operate as an essential element of the national electricity transmission system, supporting the secure and resilient supply of electricity and the required customer connection for ODOW.

5.5.8 During the operational phase, the Weston Marsh Substation A would not be permanently occupied. It would be largely unmanned, with routine operation managed remotely through monitoring and control systems. On-site facilities in the control building would be provided solely to enable occasional access for management, monitoring and maintenance purposes.

5.5.9 As set out in the **Transport Statement** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000018), traffic movements associated with the operational phase would be very limited and largely comprise infrequent, scheduled maintenance visits and occasional unscheduled inspections where required. No regular staff commuting is anticipated. Operational vehicle trips would therefore be significantly lower than those experienced during the construction phase.

5.5.10 The provision of up to 12 parking spaces within the outer compound of the substation is considered appropriate and proportionate to this limited level of activity. These spaces would facilitate safe and efficient access for maintenance and inspection personnel when required, without having significant impacts on the highways. This reflects the functional requirements of a permanent but largely unmanned substation and is consistent with the assessment presented in the **Transport Statement** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000018).

Scale

5.5.11 The scale of Substation Works is considered appropriate for the location.

5.5.12 The total footprint of the proposed Weston Marsh Substation A would be approximately ~~10.6~~8.4 ha, including a 5 m buffer around the fence, with dimensions for the high voltage compound of approximately ~~523~~ 419.5 m by 185 m, (approximately ~~9.7~~7.8 ha). An additional outer compound area of approximately 110 m by 50 m (approximately 0.6 ha) near the entrance to Weston Marsh Substation A for ancillary equipment and car parking.

5.5.13 The maximum height for the HV plant is 12.5 m and buildings within the substation is 6m. The maximum height for gantries, which connect the new overhead line to it, is 15 m.

5.5.14 The height of the Control Building would be 5.35 m.

Access design

5.5.15 A permanent new access road, approximately 390 m in length, would be constructed to provide operational access to the new Weston Marsh Substation A. This would be situated from Marsh Road to the north of the new Weston Marsh Substation A. During operation, workers or deliveries to the substation would access the Site via the new permanent access road via the local highway network including A151, Stone Gate and Marsh Road.

5.5.16 The permanent access would be constructed using the proposed haul road servicing the substation during the construction phase and overhead line installation. This would alleviate the need for construction traffic to use Marsh Road during the construction phase. Drainage would be provided in the form of a filter drain to allow surface water from the access road to drain into the main drainage system.

5.5.17 Construction traffic[1] would access the Site using the existing highway network including A151 and Stone Gate.

5.5.18 The construction traffic routes have been split down into Primary Access Routes (PARs). The **Transport Statement** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000018) provides predicted volumes of traffic on each PAR during the construction of the Substation Works.

Appearance

5.5.19 The proposed Substation Works would comprise a range of electrical equipment, buildings and associated infrastructure, typical of a 400 kV National Grid substation, as detailed further in Section 5.1 of this PDAS. The main elements would include high voltage electrical plant, transformers, gantries, support structures, control and relay buildings, internal access routes, security fencing, lighting, drainage infrastructure and ancillary equipment. The overall appearance of the Weston Marsh Substation A reflects its functional and operational requirements as energy infrastructure, while also seeking to minimise visual effects through siting, layout, design and landscape mitigation.

5.5.20 The total footprint of the Weston Marsh Substation A would be approximately ~~10.6~~8.4 ha, inclusive of a 5 m buffer around the perimeter fence line, as shown on the **Site Layout Plan** (GWNC-WSP-ZZZZ-ZZZZZZ-PLN-EN-000001). The high voltage compound area would measure approximately ~~523~~ 419.5 m by 185 m (approximately ~~9.7~~7.8 hectares). An outer compound area of approximately 110 m by 50 m (approximately 0.6 hectares) located near the Site entrance to accommodate ancillary equipment and vehicular parking. The maximum height for high voltage plant would be 12.5 m, and buildings within the substation is 6m. The maximum height for gantries, which connect the new overhead line to it, would be up to 15 m. The scale and height of individual structures would be directed by technical and safety requirements associated with 400 kV infrastructure, while remaining proportionate to their operational function. Buildings would be of a simple form, designed to house operational equipment and provide staff facilities.

5.5.21 The external appearance and materials would be selected to reduce visual contrast with the surrounding landscape, as far as reasonably practicable. Buildings and equipment would generally be finished in muted colours to limit prominence in views from nearby receptors and longer-distance viewpoints, consistent with the principles set out in the Horlock Rules. At this stage, detailed materials specifications, including colour references for structures and buildings, have been indicated on submitted drawings but not been confirmed. Where specified, boundary treatments such as palisade fencing would comprise galvanised metal. Final materials, finishes and colour treatments would be confirmed at the detailed design stage and would be informed by the **Landscape and Visual Appraisal** (GWNC-GIL-SS50-XXXXXX-RPT-ES-000001) findings.

5.5.22 The layout for the Substation Works, as shown on the **Site Layout Plan** (GWNC-WSP-ZZZZ-ZZZZZZ-PLN-EN-000001) and **Substation Layout Plan** (GWNC-WSP-ZZZZ-ZZZZZZ-PLN-EN-000004) allows for clear operational zones which provide required separation distances between equipment and facilities to ensure operational safety, while retaining flexibility for micro-siting of plant and equipment within the

[1] The construction traffic routes is the term used to describe the public roads upon which construction vehicles would travel to site, having left the Strategic Road Network.

defined footprint. This flexibility enables the detailed design to respond to local environmental constraints, including nearby receptors, drainage features, landscape features and any heritage considerations identified during detailed design development. Ancillary features such as lighting, fencing and security infrastructure would be designed to be functional and proportionate, with external lighting limited to that necessary to meet operational safety and security requirements, as set out in the **Lighting Strategy** (GWNC-WSP-ZZZZ-ZZZZZZ-RPT-PM-000001).

5.5.23 While the scale of the Substation Works means that it would remain visible within the open landscape, its appearance has been developed to limit visual intrusion as far as reasonably practicable, consistent with national policy, the Horlock Rules, and the technical requirements of nationally significant energy infrastructure.

Sustainability

5.5.24 Sustainability plays a significant role in the creation of new developments, as established through the requirements set out in national and local planning policy. The term 'sustainability' applies across a broad range of areas, including supporting economic growth and incorporating measures which reduce environmental impacts.

Reduction of environmental impacts during construction

5.5.25 An **Outline CEMP** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000019) for the Substation Works and other works as part of the Scheme as identified in **Table 1.1** in Section 1 sets out a wide range of measures to reduce environmental impacts during the construction phase.

Energy reduction & efficiency

5.5.26 The Substation Works would consume energy during manufacture and construction. A range of measures would therefore be considered to reduce energy consumption during the construction phase, including the use of energy-efficient plant and tools. Where viable, the Substation Works would utilise local grid connections for temporary site power. Where this is not practicable, alternative more sustainable options would be used, such as appropriately sized alternatively fuelled or hybrid generators.

5.5.27 An **Outline CTMP** (GWNC-WSP-ZZZZ-ZZZZZZ-PLN-PM-000002) for the Substation Works and other works as part of the Scheme as identified in **Table 1.1** in Section 1 sets out measures to reduce journeys, such as car sharing and using public transport where practicable. It also sets out commitments regarding using electric vehicles or vehicles conforming with emission standards ratings. The Outline CTMP would manage construction-related travel demand, including measures such as car-sharing, the use of public transport where practicable, and commitments to using electric or low-emission vehicles that meet required emissions standards. These measures would collectively reduce the energy associated with construction travel and help lower associated carbon emissions.

5.5.28 Energy consumption during maintenance and operation would be limited to the energy required to operate the new substation. National Grid has established processes for monitoring and managing operational energy use across its network.

Flood risk and sustainable drainage

5.5.29 Based on the current EA Flood Maps for Planning (Ref 8), the majority of the Site lies within Flood Zone 2 and 3 land and is therefore at a high risk of flooding. An **FRA** (GWNC-WSP-SS50-XXXXXX-RPT-ES-000002) and **Surface Water Drainage Strategy (SWDS)** (GWNC-WSP-SS50-XXXXXX-RPT-ES-000001) have been prepared and submitted alongside this TCPA application.

5.5.30 The surface water strategy uses filter drains, traditional piped systems, Sustainable Drainage Systems (SuDS) ponds, swales and gravel sub-base void storage to manage run off. Discharge from the Substation Works is limited to the greenfield QBAR rate of 8.1 L/s, and the system is designed for the 1 in 100-year storm event plus 40% climate change.

5.5.31 Total attenuation required is 13,888 m³, with 7,485 m³ (around 50%) provided within gravel surfaced areas. The SuDS ponds and an accompanying pumping station for each pond (to a maximum number of two pumping stations) would provide approximately 5,860 m³ of storage. Surface water outfalls include two ponds and a roadside swale which would feed into IDB R11, R20 and an LLFA ditch on Marsh Road. Swales and filter drains would incorporate check dams to slow flows and improve both storage and water quality.

5.5.32 For foul water, the Substation Works would be unmanned for the majority of the time and is therefore designed for low maintenance. In line with National Grid TS 2.10.09 Site Drainage, Section 3.2 Foul Drainage, a cesspool with a minimum capacity of 9000 L would be provided to store foul water from the Amenity Building. The cesspool would include ventilation, a float switch, a high-level probe and/or telemetry system, and high-level alarm to support safe operation and monitoring. These features would prevent the built up of gases and automatically indicate when emptying is required, removing reliance on visual inspection alone.

5.5.33 Foul waste would be tankered away infrequently as part of routine maintenance by a contractor holding the relevant permits to transport and dispose of such waste. This would be at least monthly, or more frequently were indicated by telemetry, ensuring levels are controlled and overfilling is avoided. Suitable vehicular access will be provided, as part of the wider substation permanent works, to always allow safe and reliable tanker access.

5.5.34 Together, these measures address potential concerns regarding poor maintenance, irregular emptying, access constraints, and inadequate capacity, and ensure the cesspool operates safely, reliably, and in accordance with best practice.

5.5.35 If, during design development, a viable sewer connection point is later identified, or if the site becomes permanently manned, the drainage approach will be reviewed.

5.5.36 A Foul Drainage Assessment (FDA) Form and **Foul Drainage Strategy** (GWNC-LST-ZZZZ-ZZZZZZ-TEC-EN-000004) accompany this planning application.

Landscape and ecological enhancements

5.5.37 Where existing habitats are potentially affected by the Substation Works, mitigation measures would be introduced to avoid any adverse effects. Ecology surveys have been, and will continue to be, carried out over the design process and prior to construction. These surveys have identified any areas where wildlife, particularly protected species. are present within the vicinity of the Substation Works. The **Landscape and Visual Appraisal** (GWNC-GIL-SS50-XXXXXX-RPT-ES-000001)

and **EcIA** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000005) reports accompanying this application identify ways in which the local wildlife can be protected. Three types of mitigation will be incorporated into the design of the Substation Works. These are:

1) **Design mitigation measures (embedded):** Mitigation measures embedded into the design of the Substation Works to avoid or reduce significant effects that may otherwise be experienced during construction and operation of the Substation Works. The design of the Substation Works would be continually reviewed in line with assessment work as it progresses to detailed design.

2) **Control mitigation measures:** Management activities and techniques that would be implemented throughout the construction of the Substation Works to minimise adverse effects upon the environment as far as reasonably practicable through adherence to good site practices. These are outlined in the **Outline CEMP** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000019), submitted alongside this planning application.

3) **Additional mitigation measures:** Additional mitigation comprises over and above embedded and standard mitigation measures to reduce environmental effects. This would include, but not be limited to, landscape and visual mitigation such as tree planting and the creation of replacement habitat areas where required.

5.5.38 In terms of additional mitigation measures proposed as part of this application, they are shown on the **Indicative Landscape and Ecological Mitigation Proposals Plan** (GWNC-GIL-SS50-XXXXXX-PLN-ES-000001) and summarised in paragraphs **5.3.23**–**5.3.29** above.

Materials and waste

5.5.1 The Substation Works would require the use of new materials during construction such as galvanised steel for pylons, reinforced concrete for the foundations, insulator sets (typically glass or polymer) and aluminium conductors. The materials sources are unlikely to be identified until the detailed design stage of the Substation Works, which would happen post-consent.

5.5.2 The nature of the Substation Works means that it is difficult to use secondary material sources during the construction, as this could affect the operation and the design life of the Substation Works. However, National Grid has existing processes in place to source materials from sustainable sources and to use recycled materials where these do not compromise the required design standards and operational life of the Substation Works. This includes the application of the six principles as defined in BS 8001:2017 (Ref 19) to manage resources more effectively and to ultimately eliminate waste.

5.5.3 Resource efficiency would include measures to reduce the use of resources from the Substation Works, including total waste generated, use of materials, use of fresh water and energy use. In addition, measures to increase material reuse and waste recycling rates, together with consideration of the use of secondary aggregate and modular and off-site construction methods, would form part of the resource efficiency planning.

5.5.4 Materials such as aggregate would be required for the temporary construction works for access routes and site compounds, works cabins and security fencing during the construction phase. Where practicable, temporary materials would be sourced from

other construction projects within the region and reused at other construction projects after completion of the Substation Works.

5.5.5 Waste materials will be produced by the development of the Substation Works. However, the **Outline CEMP** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000019) submitted with this TCPA application sets out the measures to reduce the generation of waste in the first place and appropriate measures to reuse and recycle materials where practicable, in accordance with the waste hierarchy.

5.5.6 Soil may need to be removed from the Site in certain circumstances, such as where the soil was found to be contaminated, in which case, the soils would be managed in an appropriate manner, as set out in the good practice measures within the **Outline Soil Management Plan (SMP)** (GWNC-ARC-SS50-XXXXXX-RPT-ES-000001).

5.5.7 During the Substation Works construction phase, any waste material generated would be managed in accordance with good site practices and applicable national legislation.

5.6 Construction

Proposed phasing of the Scheme

5.6.1 Subject to the Scheme being granted permission in 2026, it is anticipated that access and construction would commence in 2028. Construction would start with enabling works, including site clearance activities, the installation of construction compounds and access roads. It is expected the main construction works, including construction of overhead line and substation and all proposed landscaping and ecological mitigation works would continue through to 2031.

5.6.2 The nature of the Scheme is such that construction activities at the substation would occur for much of the two and a half year period, albeit peak construction traffic movements are anticipated during construction of the substation platforms and the haul road to facilitate construction.

Mitigation measures

5.6.3 The **Outline CEMP** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000019) includes measures to mitigate and manage construction impacts, including hours of operation, site management, noise abatement, dust management, pollution prevention and control.

5.6.4 An **Outline CTMP** (GWNC-WSP-ZZZZ-ZZZZZZ-PLN-PM-000002) has been submitted alongside this TCPA Application, which includes measures to control construction traffic to mitigate impacts on the local highway network.

5.6.5 Construction of the Weston Marsh Substation A would include the following key stages and activities:

1) site establishment and preparation;
2) site preparation and earthworks/excavation;
3) civil works;
4) construction of buildings;

5) installation of electrical equipment;

6) site reinstatement and landscaping; and

7) commissioning

Construction workforce

5.6.6 Construction of the Substation Works is expected to take around 40 months (February 2028 – May 2031). National Grid's resource forecast indicate that the works will require a total of 253 FTE years of labour over 3.3 years. This is equivalent to directly supporting around 76 FTE jobs per year on average across the construction period. Of these 76 FTE jobs:

1) Around 20 are expected to be staff roles, such as managers, engineers and surveyors; and

2) Around 56 are expected to be operative roles, such as foremen, steel fixers and general operatives.

5.6.7 It should be noted that workforce requirements will vary over time as construction activity intensifies and different phases of work progress. Therefore, the precise number of workers on-site at any given time may vary.

5.6.8 The **Outline CTMP** (GWNC-WSP-ZZZZ-ZZZZZZ-PLN-PM-000002) provides further details of management measures.

Construction working hours

5.6.9 The proposed core construction working hours are:

1) Monday to Friday 07:00 – 19:00

2) Saturdays, Sundays, Bank Holidays and other Public Holidays 08:00 – 17:00

5.6.10 The core construction working hours would exclude start up and close down activities which would take up to one hour before or after the core construction working hours.

5.6.11 Some construction activities may take place outside of the proposed core working hours referred to above, to minimise disruption to the public. Examples of these works, may include, but are not limited to the following:

1) the installation and removal of conductors, pilot wires and associated crossing protection across highways, railway lines, existing overhead lines or watercourses;

2) the continuation of operations commenced during the core working hours to a point at which they can be safely paused;

3) any highway works requested by the relevant highway authority as necessary to be undertaken outside of core working hours (where possible);

4) the testing or commissioning of any electrical plant installed as part of the authorised development;

5) the completion of works delayed or held up by severe weather conditions which disrupted or interrupted normal construction activities;

6) security monitoring and surveys; and,

7) large concrete pours that cannot be reasonably completed within the core working hours.

5.6.12 As detailed further in the **Outline CTMP** (GWNC-WSP-ZZZZ-ZZZZZZ-PLN-PM-000002), HGV movements would typically take place during working hours. Where possible, deliveries of construction materials would be timed outside of traditional peak traffic periods (i.e. 08:00 to 09:00 and 17:00 to 18:00 Monday to Friday) or as otherwise set out as part of the Permit Schemes (local highway authorities approach to managing activities on public roads). It is assumed that vehicles finishing at the end of a working day shall be permitted to leave site (i.e. a one-way movement out of the access point). These details would be secured and confirmed within the final CTMP following the grant of consent.

Construction compounds

5.6.13 Construction activities would begin with the preparation and installation of construction compounds.

5.6.14 The typical layout of a construction compound is detailed in Section 5.3 above. This will be a secured area that is designed and constructed to accommodate the project team and is likely to include the following;

1) Temporary offices with amenities and services to and from the buildings
2) Parking area
3) Security gate house
4) Storage areas for plant, equipment and materials
5) Working yard area
6) Suitable lighting

Construction access

Construction traffic routes

5.6.15 As detailed in the **Transport Statement** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000018), three distinct categories of access routes have been identified, based on their suitability for construction-related traffic:

1) Core Routes (CR) - the A16 and A17 are identified as the main A-roads providing strategic connection across the wider study area and are deemed suitable for use by both construction workers and HGVs.
2) Local Links (LK) - the A151 and Stone Gate are local links providing local access from the main A-roads to the haul route for access to the construction compounds. These have been assessed as generally suitable for HGV access, with localised improvements including widening or provision of passing places.
3) Worker Routes (W) – additional routes through Spalding to Marsh Road and local routes through Moulton, Whaplode and Spalding are identified as worker access routes. These are additional local roads and junctions not promoted for HGV use, but which may be used by workers cars/LGVs for accessing the Works sites.

5.6.16 The **Transport Statement** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000018) further details the methodology for the distribution of construction workers' cars/vans and of HGVs/LGVs on these routes. The traffic generation estimates presented within the Transport Statement include movements associated with bellmouths and the temporary access to the haul roads, with the analysis focusing on the anticipated peak construction period (around 2029) to identify potential congestion effects.

5.6.17 The **Outline CTMP** (GWNC-WSP-ZZZZ-ZZZZZZ-PLN-PM-000002) sets out the proposed arrangements for construction access to the Site, including the use of access routes and bellmouths to manage construction vehicle movements. The assessment and management measures detailed in the **Outline CTMP** have been informed by the assessment provided in the **Transport Statement** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000018). Construction traffic would be routed via the agreed highway network to minimise impacts on local communities and sensitive receptors, with access points designed to accommodate anticipated vehicle types and movements safely. The Outline CTMP also includes measures, such as routeing plans, delivery scheduling, and driver briefings to ensure that construction vehicles access the Site in a safe and managed manner. The measures detailed in the Outline CTMP would therefore assist in reducing the potential for congestion, highway safety issues, and disruption to other road users.

Haul roads

5.6.18 Dedicated on-site access routes, referred to as haul roads, would be established within the Site to facilitate movement of vehicles and plant during construction. Assess points (junctions) from the existing highway network would facilitate access to construction compounds and on-site haul roads (referred to as bellmouths).

5.6.19 A temporary haul road would be constructed from Stone Gate to facilitate the Substation Works and provide access for HGVs and LGVs. Workers' cars/vans would be able to use the existing Marsh Road to access the compound area to the west of the Weston Marsh Substation A directly.

5.6.20 The haul road would be approximately 7.5 m in width and would comprise a temporary stone running surface, with associated soil storage, drainage, and fencing. It would typically consist of stone laid on a geotextile membrane. The total assumed width of the stone haul road, including the associated working area, would be approximately 21 m. Alternative surface treatments may also be used, such as interlocking temporary panels, subject to ground conditions and the duration and nature of use. Where appropriate, soil stabilisation techniques may also be used, depending on local conditions.

5.6.21 The stone haul roads would be constructed using secondary or primary aggregates. The total amount of aggregate material that would be needed for the construction of the stone haul roads (including bellmouths) and pylon working areas will be determined through the development of the Substation Works.

5.6.22 On completion of construction, the haul roads would be removed, and aggregates taken to an appropriate facility which could include recycling, or onward use, for example as secondary aggregate in the construction industry.

5.6.23 Culvert installations (see **Illustrative Culvert Details for Watercourse Crossings** (GWNC-LST-OH70-ZZZZZZ-DRW-EN-00003) would be required for temporary haul roads to cross ditches and watercourses. The size and depth of a culvert is dependent upon the dimensions of the crossing, sensitivity, and importance of the

watercourse. To maintain the flow of a watercourse during installation of the culvert, a pump would be used on-site. The Substation Works would require 7 no. temporary watercourse crossings (including drains and ditches). The reasonable worst case assumption adopted should be that these would consist of culverts.

5.6.24 A culvert is not suitable for the crossing of Lord's Drain and a temporary bridge is proposed in this instance.

5.6.25 Where temporary bridges are required, they may need to accommodate a mobile crane. This would be subject to detailed design and would be assessed on a site-by-site basis. The majority of bridge crossings would comprise short-span, flat-deck structures, however, Bailey style bridges may also be used where appropriate. All bridges would be clear span, and the foundations would be placed clear of the main channel of the watercourse, where feasible.

5.6.26 Once the foundations are in place the temporary bridge would be fitted. Although the installation method is dependent on the type of bridge being installed, a typical bridge would be delivered in sections. Each bridge component would be assembled on-site and lifted into position by crane or Hiab. With the bridge in position, decking panels would be lifted and fixed into position.

5.6.27 Details of the location of relevant culvert installations and temporary bridges are shown on the **Illustrative Culvert Details for Watercourse Crossings** (GWNC-LST-OH70-ZZZZZZ-DRW-EN-00003) and the **Illustrative Bridge Details for Watercourse Crossings** (GWNC-LST-OH70-ZZZZZZ-DRW-EN-000030).

Installation of bellmouths and the creation of visibility splays

5.6.28 A new bellmouth access and temporary compound area would be established at the entrance to the haul road from Stone Gate and the haul road built out northwards towards the main construction compounds.

5.6.29 To the north west of the Weston Marsh Substation A, a second compound would be used for staff access, parking, site offices and welfare. From this compound an access track and new bellmouth access with Marsh Road would be constructed. This new track would provide a permanent access to the new Weston Marsh Substation A from Marsh Road.

5.6.30 The installation of bellmouths may require realignment or protection of existing underground services and the creation of visibility splays to create a line of sight for the safe use of the bellmouth. Within the visibility splay, vegetation would need to be cut to a specified height, relocation of street furniture or visual obstacles removed depending on local conditions, the speed rating of the road and whether traffic management was in place.

Highway widening

5.6.31 Stone Gate is classed as a local link to provide local access from the main A-roads to the haul route access for construction compounds. The road has been assessed as generally suitable for HGV access, with localised improvements including widening or provision of passing places.

5.6.32 Alongside highway widening at Stone Gate, potential ditch realignment may be necessary.

Topsoil stripping

5.6.33 Topsoil would be required to be stripped from the bellmouths, access routes, site compounds and substation and pylon working areas. The topsoil would be stored carefully; typically in bunds on-site for later reinstatement in the same area (usually removed, stored, and reinstated in the same land parcel to avoid any cross contamination). Should the topsoil not be used on-site, then the topsoil would be taken off-site and disposal would be in accordance with the measures as set out in the **Outline Soil Management Plan (SMP)** (GWNC-ARC-SS50-XXXXXX-RPT-ES-000001).

5.6.34 Temporary drainage would be installed as required, with environmental protection measures (such as silt fences or seeding of the storage bunds) installed where necessary.

5.6.35 The **Outline Soil Management Plan (SMP)** (GWNC-ARC-SS50-XXXXXX-RPT-ES-000001) has been prepared to protect soil resources during the preconstruction, construction, and reinstatement stages for the Substation Works in its entirety. This includes measures that would be in place for topsoil stripping for works within the TCPA Application.

Drainage

5.6.36 Temporary drainage would be required during construction to manage rainfall runoff and water encountered during excavation, installation of working areas and compounds, where appropriate. The drainage design includes a variety of potential measures to address silt runoff. Construction SuDS would be utilised for the construction of the Substation Works where appropriate.

5.6.37 The management of drainage during the construction phase is set out in further detail within the **Outline CEMP** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000019).

Vegetation clearance

5.6.38 Vegetation clearance would be undertaken prior to, or during, the construction activities. This would be in accordance with any ecological requirements identified within the **EcIA** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000005) and best practice measures within the **Outline CEMP** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000019). Vegetation would be permanently removed from the following areas of the Substation Works:

1) within the substation extents and ancillary works (e.g. Sustainable Drainage Basins);
2) within the substation permanent access road extents and associated permanent bellmouths;
3) within the footprint of identified permanent drainage works;
4) within the footprint of permanent highway improvement works; and,
5) within the footprint of pylon foundations (noting vegetation would be able to re-establish within the centre of the pylon base where concrete foundations are not present).

5.6.39 It is expected that existing vegetation would be retained within the extents of Additional Environmental Mitigation land parcels, noting that during the operational phase, enhanced or newly created habitats would be in place within these areas (e.g. existing grassland would be supplemented with woodland screening planting).

5.6.40 In summary, vegetation would be temporarily removed or managed within the following areas of the Substation Works:

1) haul roads, including associated temporary drainage;
2) temporary bellmouths and visibility splays;
3) pylon working areas;
4) crossing protection working areas;
5) bridge working areas;
6) trackway access and panel working areas;
7) stringing areas and between crossing protection (for netting);
8) proposed temporary drainage areas; and
9) third party works.

5.6.41 Unless otherwise stated it is assumed that vegetation within the Site (but outside one of the areas listed above) could be potentially affected when taking account of the flexibility afforded.

5.7 Operation

5.7.1 The Weston Marsh Substation A would be operated remotely, with regular visual checks, oil sampling, and thermographic surveys being undertaken. Regular maintenance would be undertaken via two strategies:

1) Planned Preventative Maintenance (PPM): Scheduled as required to maximise equipment life.
2) Predictive Maintenance: Undertaken as required through real-time monitoring of equipment.

5.7.2 Maintenance of the Weston Marsh Substation A would sometimes involve electrical isolation of equipment before it is worked on. If the substation required refurbishment or replacement works, vehicles would carry workers in and out of the Site and suitable vehicles would be used to bring new materials and equipment to the Site and to remove the old equipment.

5.7.3 Regular maintenance is crucial for preventing costly downtime and managing the life cycle of high-voltage equipment, ensuring maximum uptime, and safety for critical infrastructure.

5.7.4 Refurbishment of the Weston Marsh Substation A Weston Marsh Substation A would be undertaken on a phased basis to maintain continuity of electricity supply, with works typically carried out on one circuit at a time while the other remains operational. The refurbishment process may require temporary access arrangements, a small works compound and, where necessary, protective measures such as scaffolding to safeguard nearby infrastructure, roads or public rights of way.

5.7.5 Refurbishment and maintenance activities would involve the delivery and removal of equipment using vans and HGVs, with specialist abnormal loads required only in limited circumstances. Over the operational lifetime of the Weston Marsh Substation A, periodic replacement or refurbishment of components may be required. However, such activities would be short-term, localised and managed using temporary access and construction-style working areas where necessary, with staffing and vehicle movements proportionate to the scale of works.

5.8 Decommissioning

5.8.1 It is expected that the transmission of electricity would continue for as long as there is a business case for doing so and that any decommissioning activity would occur decades into the future. To date, relatively few transmission projects have been decommissioned since the main expansion of such infrastructure in the 1950s and 1960s. The cables and pylons for overhead transmission lines are replaced periodically, originally under National Grid's permitted development rights.

5.8.2 Decommissioning would only be undertaken if there were substantial changes to how electricity is transmitted around the country or significant changes to the sources of generation and areas of demand. If the Substation Works, or any part of it, is to be decommissioned, notification would be given to the relevant planning authorities at least six months prior to any decommissioning works. The decommissioning works would follow National Grid processes at the time for assessing and avoiding or reducing any environmental impacts and risks.

5.8.3 There are currently no specific plans to decommission the Substation Works.

5.8.4 In terms of the decommissioning of the Substation Works, typically, above ground features of the substation would be removed (unless otherwise agreed). Any above ground buildings would be demolished and taken off-site for suitable disposal along with any other above ground features such as electrical equipment. Any temporary access tracks and working areas required would be removed and the Site reinstated to an appropriate end use.

6. Planning Policy Context

6.1 Introduction

6.1.1 Section 38 (6) of the Planning and Compulsory Purchase Act 2004 (Ref 20) requires that development proposals shall be determined in accordance with the adopted Development Plan unless material considerations indicate otherwise.

6.1.2 This section gives an overview of planning policy relevant to the Substation Works, including relevant policies of the development plan and relevant national and local policy documents that constitute material considerations. Section 6 and 7 of this document set out a summary of the Substation Works compliance with planning policy and the planning balance.

6.2 Local Development Plan

South East Lincolnshire Local Plan 2011-2036

6.2.1 The South East Lincolnshire Local Plan (SELLP) 2011-2036 (Ref 3) was adopted in March 2019 and sets out the policies that will guide development and the use of land in South East Lincolnshire from 1 April 2011 to 31 March 2036.

6.2.2 The SELLP, together with the Lincolnshire Minerals and Waste Plan (LMWP) (Ref 21) forms the statutory Development Plan for the area.

6.2.3 The relevant policies within the SELLP for the Substation Works are:

1) Policy 1 Spatial Strategy.
2) Policy 2 Development Management.
3) Policy 3 Design of New Development.
4) Policy 4 Approach to Flood Risk.
5) Policy 5 Meeting Physical Infrastructure and service Needs.
6) Policy 28 The Natural Environment.
7) Policy 29 The Historic Environment.
8) Policy 30 Pollution.
9) Policy 31 Climate Change and Renewable and Low Carbon Energy.
10) Policy 32 Community, Health and Wellbeing.
11) Policy 33 Delivering a More Sustainable Transport.

Lincolnshire Minerals and Waste Plan

6.2.4 The LMWP (Ref 21) guides the management of mineral extraction and waste disposal in Lincolnshire. The plan consists of two main parts: the Core Strategy and Development Management Policies, which outlines the principles for mineral

extraction and waste management, and the Site Locations document, which identifies specific sites for these activities.

6.2.5 The policies in the LMWP relevant to the Substation Works are:

1) Policy M11: Safeguarding of Mineral Resources
2) Policy M12: Safeguarding of Existing Mineral Sites and Associated Minerals Infrastructure
3) Policy W8: Safeguarding Waste Management Sites
4) Policy DM1: Presumption in favour of sustainable development

6.3 Emerging Local Planning Policy

Emerging South East Lincolnshire Local Plan

6.3.1 The SELLP Call for Sites consultation ran between January 2026 until 31 March 2026. The Call for Sites consultation will form part of the evidence base to inform the emerging SELLP. At the time of writing this PDAS, there is no published draft plan or emerging policies.

Emerging Lincolnshire Minerals and Waste Plan

6.3.2 Lincolnshire County Council (LCC), as the minerals and waste planning authority, are required to review the adopted LMWP every five years to assess whether the policies in the plan need to be updated. The adopted LMWP was reviewed in 2020, and a series of conclusions were published in 2021 (Ref 22) that highlighted issues with a number of policies. As such, the Local Plan is currently undergoing an update in its entirety.

6.3.3 The updated plan will replace both the Core Strategy and Development Management Policies and cover the period up to 2041.

6.3.4 A preferred approach consultation was undertaken between 30 July 2024 and 24 September 2024, seeking views on the full suite of policies. These included policies carried forward from the adopted LMWLP, updated policies from the adopted LMWLP, and a number of new policies. Policies relevant to the Substation Works are:

1) Policy SM15: Safeguarding of Mineral Resources
2) Policy SM16: Safeguarding of Existing and Allocated Mineral Sites and Associated Minerals Infrastructure
3) Policy SW7: Safeguarding Waste Management Sites

Surfleet Neighbourhood Plan

6.3.5 The parish of Surfleet was designated as a neighbourhood plan area in March 2017, the boundary of the designated neighbourhood plan area intersects with the northern section of the Substation Works. At the time of writing this PDAS, there is no published draft or made neighbourhood plan for the area.

6.4 National Planning Policy

National Planning Policy Framework

6.4.1 The NPPF (December 2004 with February 2025 updates) (Ref 17) provides a framework for the Government's planning policies and sets out how these should be applied. It is a material consideration in all planning decisions. The NPPF sets out the Government's economic, environmental, and social planning policies for England and articulates the Government's commitment to a plan-led system where local planning authorities should approve development proposals that accord with the development plan without delay.

6.4.2 The NPPF is divided into a series of topics relating to delivering sustainable development. The topics that are directly relevant to the Substation Works are listed below:

1) Chapter 2: Achieving sustainable development
2) Chapter 8: Promoting healthy and safe communities
3) Chapter 9: Promoting sustainable transport
4) Chapter 11: Making effective use of land
5) Chapter 12 Achieving well-designed places
6) Chapter 14: Meeting the challenge of climate change, flooding and coastal change; and
7) Chapter 15: Conserving and enhancing the natural environment
8) Chapter 16: Conserving and enhancing the historic environment

6.4.3 In December 2025, a draft revised NPPF was released for consultation, the consultation ran until 10 March 2026.

6.4.4 The proposed revisions to the NPPF includes changes to its overall structure to improve clarity, usability and consistency. This more clearly splits plan-making and decision-making policies when compared to the current NPPF. Alongside these structural changes, the consultation includes a series of reforms to unlock more homes in the right places, and further support the commercial development needed to drive growth.

6.4.5 These reforms do not significantly change the consideration of the Substation Works in relation to national policy with the proposals in relation to suitably located development outside settlements including the development of energy infrastructure.

6.4.6 The Planning Practice Guidance (PPG) (Ref 23) is intended to supplement the NPPF. This will be updated to reflect the revised NPPF once adopted later in 2026.

6.4.7 As the consultation draft NPPF is not yet adopted policy consideration has been given to the provisions in the adopted NPPF where considered relevant.

National Policy Statements

6.4.8 NPSs provide the primary basis for decision making on DCO applications for NSIPs under the Planning Act 2008; however, NPPF paragraph 5 makes clear,

"National Policy Statements form part of the overall framework of national planning policy and may be a material consideration in preparing plans and making decisions on planning applications"

6.4.9 NPS-EN-1 at paragraph 1.2.1 further states that;

"In England, this NPS, in combination with any relevant technology specific NPSs, may be a material consideration in decision making on applications that fall under the Town and Country Planning Act 1990 (as amended)"

6.4.10 The NPSs relevant to the Proposed Development are:

1) Overarching National Policy Statement for Energy (EN-1), 2025 (Ref 16)
2) National Policy Statement for Electricity Networks Infrastructure (EN-5), 2025 (Ref 24)

6.4.11 The NPS's were prepared specifically to address the balance of impacts and benefits likely to result from energy projects that are of such a scale that their contribution to meeting government objectives is of national significance. As such, the Applicant considers NPS EN-1 and NPS EN-5 to be important and relevant to the determination of the Application.

6.4.12 NPS EN-1 sets out the Government's policy for the delivery of major energy infrastructure in England and Wales. This includes new electricity transmission and distribution network infrastructure and associated infrastructure such as substations. It establishes that there is a significant and urgent need to deliver new energy infrastructure in order to: support economic growth; boost productivity; enhance competitiveness; support social well-being; and decarbonise the energy system to meet the Government's net zero targets. NPS EN-1 sets out the general principles and impacts to be taken into account for all types of energy NSIP development. It forms the primary basis for determining if development consent should be granted for development in the energy sector.

6.4.13 NPS EN-5 principally covers high voltage long distance transmission and distribution infrastructure, but it also covers, at paragraph 1.6.1;

'distribution systems which can either be carried on towers/monopoles, or undergrounded and associated infrastructure e.g. substations (the essential link between generation, transmission and the distribution systems…)'

6.4.14 Nationally significant electricity networks infrastructure, including substations, are recognised as Critical National Priority (CNP) Infrastructure in NPS EN-1 meaning that they are to be treated as if they have met any tests which are set out within the NPS EN-1 and NPS EN-5, or any other planning policy, which requires a clear outweighing of harm, exceptionality or 'very special circumstances.'

6.4.15 The Substation Works are being brought forward to ensure that there is sufficient capacity to meet the demand from National Grid's customers ODOW for the provision of renewable energy and strategic network reinforcement and therefore responds directly to the urgent need for new electricity transmission established in NPS EN-1 and NPS EN-5. Whilst the Substation Works are not a NSIP the policy contained in the NPSs is material and relevant to a decision on the planning application for the Substation Works and as such the NPSs should be afforded significant weight in the consideration of the planning application.

6.5 Other Material Considerations

6.5.1 There is other national legislation and policy documentation relating to the energy sector and climate change which are considered relevant to this application and include the following:

1) Clean Power 2030 Action Plan: A new era of clean electricity (April 2025) (Ref 15) which sets out how the Government will deliver on the Prime Minister's Plan for Change to build an energy system that can bring down bills for households and businesses for good.

2) Seventh Carbon Budget 2038-2042 (February 2025) (Ref 26) which sets out the total amount of greenhouse gases the UK is allowed to emit between 2038 and 2042 as a legally binding limit. In February 2025, the Climate Change Committee published their recommendation to the UK government, mandating an 87% reduction in greenhouse gases by 2040 compared to 1990 levels and highlighting the importance of a low-carbon electricity supply.

3) Great British Energy Act 2025 (Ref 27) which received Royal Assent in May 2025 and provides the statutory basis for creating Great British Energy (GBE), a new publicly owned and operationally independent clean energy company.

4) Accelerating to Net Zero: responding to the CCC progress report and delivering the Clean Energy Superpower Mission (2024) (Ref 28)

5) The Energy Act (October 2023) (Ref 29) which aims to strengthen energy security, supporting the delivery of net zero and ensuring household bills are affordable in the long-term;

6) Powering Up Britain Energy Security Plan and Net zero growth plan (March 2023) (Ref 30) which sets out how the government will enhance energy security, seize the economic opportunities of the transition, and deliver on net zero commitments;

7) Progress Report to Parliament Climate Change Committee 2025 (Ref 31) which provides a comprehensive overview of the UK Government's progress to date in reducing emissions;

8) Environmental Improvement Plan 2025 (Ref 32) which sets out goals, Environment Act targets, and other commitments to drive specific improvements in the natural environment;

9) British Energy Security Strategy (2022) (Ref 14) which sets out how Great Britain will accelerate homegrown power for greater energy independence;

10) Mission Zero – the Skidmore Review (January 2023) (Ref 33) which provides an independent review of the Governments Approach to delivering Net Zero;

11) The Environment Act 2021 (Ref 2) is a UK law that sets out environmental targets, improvement plans, monitoring, enforcement and other measures;

12) Net Zero: Opportunities for the Power Sector (2020) (Ref 34) which is a report on changes to and challenges for the UK's electricity system in light of the government's 2050 net zero carbon emissions target;

13) Energy White Paper: Powering our Net Zero Future (2020) (Ref 35) which sets out how the UK will clean up its energy system and reach net zero emissions by 2050; and

14) The Climate Change Act 2008 and the Climate Change Act 2008 (2050 Target Amendment) Order 2019 (Ref 13) which set a target for the year 2050 for the reduction of targeted GHG emissions

15) Fens 2100+: Case for Change and Partnership Action Plan, April 2026 (Ref 36). An Environment Agency led programme responding to growing pressure on the Fens flood and water-management system, which seek to secure a climate-resilient future for the Fens.

7. Planning Appraisal

7.1 Introduction

7.1.1 Section 7 of this PDAS provides a summary of the Substation Work's compliance with relevant planning policy and material considerations.

7.1.2 The following policy themes have been identified following a review of the development plan, material considerations, as well as the pre-application consultation with SHDC (Appendix C):

1) Principle of Development
2) Design and Function
3) BMV/Agricultural Land
4) Landscape and Visual Impact
5) Flood Risk
6) Ecological Impacts
7) Biodiversity Net Gain
8) Arboriculture
9) Historic Environment
10) Residential Amenity
11) Contaminated Land
12) Transport and Access including the cumulative impact of construction activities and impact on Public Rights of Way

7.2 Principle of Development

7.2.1 The Weston Marsh area was identified as a preferred location for a new substation due to the presence of the existing 400 kV overhead line connecting between the existing Bicker Fen and Walpole 400kV substations (known as 4ZM) and the 400 kV double circuit transmission route from Spalding substation, in Spalding, to a Tee-Point (the Spalding Tee-Point) along the 4ZM 400 kV double circuit transmission route (known as 2WS).

7.2.2 An evaluation of two possible grid connection options (the 'Lincolnshire Node' and Weston Marsh) was considered in the ODOW Preliminary Environmental Information (PEI) Report. Following the publication of the PEI Report, ODOW received confirmation from NESO in August 2023 that the confirmed grid connection for ODOW would be Weston Marsh. The Order Limits for the ODOW DCO included land extending to and surrounding the Spalding Tee-Point at Weston Marsh in order to facilitate a connection to the transmission system, ~~and~~meaning that the suitability of this location for transmission connection infrastructure has already been assessed and accepted through the ODOW DCO examination and consenting process.

7.2.3 The proposed connection point provided by the TCPA Application is therefore located within an area where the principle of connection to the transmission system has already been accepted by the Secretary of State through the DCO process. The development proposed in the TCPA Application is therefore consistent with the strategic infrastructure objectives already recognised through the ODOW DCO.

~~7.2.2~~7.2.4 Section 4 of this PDAS describes the need for and benefits of the Substation Works which are being brought forward to ensure that there is sufficient network capacity to meet the connection requirements of ODOW by 2030. The Weston Marsh Substation A would therefore respond directly to the urgent need for new electricity transmission established in NPS EN-1 and NPS EN-5.

~~7.2.3~~7.2.5 At the local level there are no policies within the SELLP that specifically relate to the development of substation infrastructure.

~~7.2.4~~7.2.6 More broadly, there is policy support for the renewable energy sector through Policy 31 (Climate Change and Renewable and Low Carbon Energy) of the SELLP which highlights the commitment of the South East Lincolnshire Joint Strategic Planning Committee to supporting the transition to a low carbon future.

~~7.2.5~~7.2.7 Whilst the Substation Works will not generate renewable energy, it is a key piece of enabling infrastructure that will provide the required grid connection points and transmission infrastructure for the consented ODOW scheme, a nationally significant renewable energy development which forms a key component of the CP2030 and is required to support the transition to achieving net zero objectives. Policy 31 is therefore considered relevant to the consideration of the Substation Works, it states that (emphasis added):

*'With the exception of wind energy, the development of renewable energy facilities, **associated infrastructure** and the integration of decentralised technologies on existing or proposed structures will be permitted provided, individually, or cumulatively, there would be no significant harm to:*

1) *Visual amenity, landscape character or quality, or skyscape considerations;*
2) *residential amenity in respect of noise, fumes, odour, vibration, shadow flicker, sunlight reflection, broadcast interference, traffic;*
3) *highway safety (including public rights of way);*
4) *agricultural land take;*
5) *aviation and radar safety;*
6) *heritage assets including their setting; and*
7) *the natural environment.*

Provision should be made for post-construction monitoring and the removal of the facility and reinstatement of the site if the development ceases to be operational.'

~~7.2.6~~7.2.8 Policy 1 (Spatial Strategy) of the SELLP provides the settlement hierarchy for the area. The site of the Substation Works would be located in the countryside as defined at part D of Policy 1. Policy 1 outlines that within countryside locations;

'development will be permitted that is necessary to such a location and/or where it can be demonstrated that it meets the sustainable development needs of the area in terms of economic, community or environmental benefits'.

~~7.2.7~~7.2.9 The Substation Works are a key piece of associated infrastructure required to connect a nationally significant renewable energy generation project to the National Grid transmission network, supporting the transition to a low carbon future. The environmental information submitted in support of the application demonstrates that the Substation Works, with the implementation of appropriate mitigation measures would avoid significant harm to those environmental aspects listed under Policy 31 of SELLP. In relation to Policy 1, and as detailed in Section 2.3 of this document the Substation Works are necessary in this location given the existing transmission infrastructure into which the electricity generation will connect, via the proposed substation.

~~7.2.8~~7.2.10 The NPPF states that the purpose of the planning system is to contribute to the achievement of sustainable development, ensuring that development meets the needs of the present without compromising the ability of future generations to meet their own needs. Paragraph 11 of the NPPF states that,

> *'Plans and decisions should apply a presumption in favour of sustainable development',* and *'For decision-taking this means approving development proposals that accord with an up-to-date development plan without delay.'*

~~7.2.9~~7.2.11 Given that the proposed works are associated with the generation and transmission of clean energy, it is considered that the development should benefit from this presumption.

~~7.2.10~~7.2.12 NPS EN-1 paragraph 2.1.2 states that;

> *'To produce the energy required for the UK and ensure it can be transported to where it is needed, a significant amount of infrastructure is needed at both local and national scale'*

~~7.2.11~~7.2.13 NPS EN-5 paragraph 1.1.2 states that;

> *'A significant amount of new network infrastructure is required in the near term to directly support the government's ambition to meet our Clean Power 2030 Mission'.*

~~7.2.12~~7.2.14 In summary, the urgent need to bring forward renewable energy infrastructure and an improved electricity transmission network to contribute to meeting climate change, clean power and net zero targets is acknowledged at both local and national level. In particular, NPS EN-1, and other recent Government energy and climate change policies noted within Section 6.5 of this PDAS highlight the urgency of bringing forward energy infrastructure to support renewable energy generation and transmission and that actions to address this urgency would need to be accelerated. The Substation Works would provide a key piece of associated infrastructure required to connect an approved, large scale renewable energy generation project to the national grid, facilitating an important contribution of clean energy to the UK's decarbonisation requirements and climate change targets, and assisting in ensuring the supply of energy remains secure, reliable and affordable.

~~7.2.13~~7.2.15 The environmental information submitted in support of the application has demonstrated that the Substation Works with the implementation of appropriate mitigation measures would avoid significant harm to those environmental aspects listed under Policy 31 of SELLP. Whilst 19.~~7~~69 ha of BMV agricultural land would be lost this represents 0.03% of the land classified as Provisional Grade 1 land, and 0.004% of land classified as Best and Most Versatile in Lincolnshire. The loss of BMV agricultural land will need further consideration in the planning balance. This matter is considered further in section 7.4, below.

~~7.2.14~~7.2.16 The Substation Works are considered to therefore comply with Policies 1 and 31 of the SELLP, the NPPF, and NPS EN-1 and NPS EN-5.

7.3 Design and Function

7.3.1 The design of the Substation Works is largely dictated by the functional need and the safety requirements which derive from its role as a substation, and the technical requirements of National Grid as the operator.

7.3.2 Even so, and as set out in Section 5 of this PDAS, the design of the Substation Works has been an iterative process informed by environmental and technical survey and assessment work and consultation feedback to reach the current design which seeks to balance the impacts of the development with the operational requirements of National Grid, considering the natural environment, built heritage and landscape.

7.3.3 Policy 2 (Development Management) of the SELLP suggests that a proposal requiring planning permission will be permitted provided that sustainable development considerations are met. These include size, scale, layout, density and impact on the amenity, trees, character and appearance of the area as well as the quality of its design and orientation.

7.3.4 Paragraph 131 of the NPPF states that,

> *"Good design is a key aspect of sustainable development, creates better places in which to live and work and helps make development acceptable to communities."*

7.3.5 Paragraph 135 sets out that planning decisions should (amongst other things) ensure that developments: function well over their lifetime; are visually attractive as a result of good architecture, layout and appropriate and effective landscaping; and are sympathetic to local character, history and landscape setting, whilst not preventing or discouraging appropriate innovation or change.

7.3.6 On decision making, paragraph 4.7.11 of NPS EN-1 states that,

> *"the Secretary of State should be satisfied that the applicant has considered both functionality (including fitness for purpose and sustainability) and aesthetics (including its contribution to the quality of the area in which it would be located, any potential amenity benefits, and visual impacts on the landscape or seascape) as far as possible".*

7.3.7 The siting of the Substation Works was undertaken in line with established guidance within the Horlock Rules with an aim of balancing operational requirements and minimising environmental effects. As described in Section 4 of this PDAS, having followed the Horlock Rules, the application site was identified as the preferred location.

7.3.8 The design of the Substation Works as detailed in Section 5.5 of this document proposes to reduce landscape and visual impacts where possible through the inclusion of additional hedgerow and woodland planting, which, once established, will result in the apparent scale of the Substation Works appearing reduced, the introduction of additional planting would further mitigate landscape effects.

7.3.9 The Substation Works are considered to provide a sustainable design that is in accordance with Policy 2 of the SELLP, the NPPF and NPS EN-1.

7.4 BMV/Agricultural Land

7.4.1 The Site is located within an area identified as Grade 1 agricultural land, which is classed as BMV land. At the local level, Policy 3 (Design of New Development) of the SELLP requires proposals to create distinctive places through the use of high quality and inclusive design and layout. Policy 3 requires proposals to demonstrate, amongst other criteria that;

'the use of locally sourced building materials, minimising the use of water and minimising land take, to protect best and most versatile soils'.

7.4.2 As the Substation Works comprise a key piece of associated infrastructure for the connection and transmission of renewable generation, Policy 31 (Climate Change and Renewable and Low Carbon Energy) is also relevant. Policy 31 states,

With the exception of Wind Energy the development of renewable energy facilities, associated infrastructure and the integration of decentralised technologies on existing or proposed structures will be permitted provided, individually, or cumulatively, there would be no significant harm to:

1. visual amenity, landscape character or quality, or skyscape considerations;

2. residential amenity in respect of: noise, fumes, odour, vibration, shadow flicker, sunlight reflection, broadcast interference, traffic;

3. highway safety (including public rights of way);

4. agricultural land take;

5. aviation and radar safety;

6. heritage assets including their setting; and

7. the natural environment.

7.4.3 National policy is consistent in seeking to minimise negative impact on BMV land and to guide development away from BMV land where possible, except where its use is justified by other sustainability considerations. Notably, paragraph 168 of the NPPF requires significant weight to be afforded to the benefits of renewable and low-carbon energy generation and a proposal's contribution to achieving a net zero future.

7.4.4 Paragraph 187 (b) of the NPPF seeks to prevent the loss of BMV land and this is reiterated in NPPF footnote 65 which states that;

'Where significant development of agricultural land is demonstrated to be necessary, areas of poorer quality land should be preferred to those of higher quality.'

7.4.5 NPS EN-1 highlights at paragraph 5.11.34 that should BMV land be required, an acceptable justification would be required from the applicant and that;

'the Secretary of State should take into account the economic and other benefits of that land.'

7.4.6 Whilst policy provides the effects on BMV should be minimised there is no prohibition of the use of BMV if it is justified to be necessary, and the impacts are considered. However, where possible poorer quality land should be used as preference.

7.4.7 Two recent appeal decisions (Fendyke Solar: appeal reference: 6001659 and Caudwell Solar: appeal reference: 3372791) provide further context on the weight afforded to the loss of BMV land in the determination of energy proposals within the region.

7.4.8 The Fendyke Solar Farm scheme was refused planning consent by SHDC, with the main issue for refusal being the loss of BMV land (Ref 42). At appeal, the Inspector concluded that, while the loss of BMV land represented an adverse impact and a material consideration, the harm was limited by the temporary nature of the development and the availability of comparable or higher-grade agricultural land in the wider area. The Inspector confirmed that this harm should be weighed against the substantial public benefits of the scheme, including its contribution to renewable energy generation and storage, energy security, and national decarbonisation objectives. Significant weight was afforded to these benefits in accordance with local policy, the NPPF and PPG, particularly paragraph 168 of the NPPF. Overall, the Inspector found that the benefits of the development outweighed the limited harm to BMV land, and the proposal was considered compliant with the development plan and national policy.

7.4.9 Similarly, the Caudwell Solar Scheme was refused planning consent by SHDC due to impact on BMV, the effect of the proposal on the character and appearance of the surrounding landscape and safety. The Caudwell Scheme comprised an area of approximately 111 ha BMV land. Within the appeal decision the planning Inspector acknowledges that applicants should seek to minimise impacts on BMV land and preferably use areas of poorer quality land, however points to the fact that in this part of Lincolnshire has a significant proportion of England's grade 1 land. The Inspector also addresses the need to the site such schemes in proximity to the grid. In referring to the UK Food Security Report of 2024, the Inspector notes that there is some optimism that food production and security can be maintained despite removing land from production. The Inspector states that,

> *'the loss of 111 ha of BMV would be relatively insignificant in the local, regional and national spatial context. It is surrounded by land of equal quality which can continue to be used productively. The loss to production would be relatively minor and it is feasible that the loss could be compensated for by production elsewhere'.*

7.4.10 The **ALC Report** (GWNC-ARC-SS50-XXXXXX-RPT-ES-000002), identifies that all of the agricultural land within the wider Scheme Site Boundary is ALC Grade 1 (excellent quality agricultural land), accounting for 166.03 ha (98.0%) of the 169.34 ha affected by the Scheme. Of this Grade 1 land:

1) 19.69 ha would be taken permanently out of agricultural production by the Scheme, this comprises the substation access swathe and SUD basin, land required for drainage diversion and outfall pipe, a net increase of three pylons, and two areas required for permanent mitigation: a small area for permanent mitigation to the north west of the substation and a panel of screening planting to the east of the substation.

2) 111.21 ha would be taken temporarily during the construction period for uses such as construction access and construction compounds and reinstated after construction, this comprises the majority of the Scheme Site area;

3) 35.13 ha would be used for mitigation and would not impact the soil. This includes a band of existing trees for the potential siting of a barn owl box and fields where cropping proposed to be changed to provide skylark mitigation.

7.4.11 The permanent Grade 1 land take (19.69 ha) represents 0.03% of the land classified as Provisional Grade 1 land, and 0.004% of land classified as Best and Most Versatile (defined as land mapped as Provisional ALX Grades 1, 2 and 3) in Lincolnshire.

7.4.12 As stated in the NPPF and NPS, developments on BMV land are required to provide an acceptable justification for siting in this location. As shown on Natural England's ALC maps the entire area surrounding the Site is also classed as Grade 1 agricultural land. Therefore, owing to the nature of the Substation Works, the principles applied in siting through use of the Horlock Rules and the need for the infrastructure to be located near the existing overhead lines, it would not be possible to relocate the Substation Works to an area of lower quality agricultural land.

7.4.13 The approach to siting has sought to balance any wider potential environmental effects in accordance with the criteria listed in Policy 31(B) of the SELLP, including visual impacts, residential amenity, highway safety, heritage assets and the natural environment. Policy 31 also refers to harm to agricultural land take. Whilst the Substation Works will result in the loss of agricultural BMV land, an **Outline SMP** (GWNC-ARC-SS50-XXXXXX-RPT-ES-000001) has been submitted with this application to set out procedures for managing and maintaining the soil quality throughout the construction of the Substation Works. It describes procedures for stripping, handling, storing and restoration of soils to maintain (as far as practicable) the soil quality and viability as required for the proposed end use. Control measures would be put in place throughout the construction works as set out in the **Outline SMP** (GWNC-ARC-SS50-XXXXXX-RPT-ES-000001) and the **Outline CEMP** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000019).

7.4.14 The Substation Works will support the decarbonisation of the electricity network and allow an increase in renewable energy transmission in accordance with national and local strategies and policies by providing a connection point to the Grid for the consented ODOW renewable energy project. Given the abundance of ALC Grade 1 land in the vicinity, it is considered that the permanent loss of BMV land for the Substation Works would be marginal in the context of the wider availability of comparable high-quality agricultural land within the area.

7.4.15 The Substation Works will result in the permanent loss of 19.69 ha of BMV, Grade 1 agricultural land. Whilst multiple options were reviewed for the siting of the Substation Works, as the region is predominantly Grade 1 agricultural land the impacts on agricultural land was not differentiated by the siting options. No other site options were found which would have been on lower quality agricultural land and minimised other environmental effects. The Substation Works site was preferred due to the proximity to existing overhead lines required to connect into the substation and the required connection location for the ODOW scheme. Locating the Substation Works close to existing assets will reduce the amount of new infrastructure required to provide the required connection point. Furthermore, the OSMP has provided mitigation measures to reduce the loss of soil quality.

7.4.16 Whilst the loss in agricultural land is contrary to both local plan and national planning policy this will need further consideration against the substantial benefits being brought forward by the Substation Works as listed in section 4.4 of this document and whether these benefits outweigh the impacts of the loss of BMV land. While the development would take arable farmland out of production, the loss would be marginal in the context of the substantial comparable or higher-grade agricultural land available within the wider area. The Substation Works will improve energy

security and reduce dependency on imported fuels though providing a point of connection to a consented renewable energy project. The provision of renewable energy is supported in principle by Policy 26 of the SELLP and the NPPF, notably paragraph 168 which requires significant weight be given to the benefits associated with renewable and low carbon energy generation developments and their associated infrastructure. As provided for in the Fendyke Solar Farm and the Caudwell Solar appeal decisions, the presence of BMV land does not amount to an absolute constraint and that, where the need for renewable energy is clearly demonstrated and site selection has been approached in a proportionate and robust manner, the impact on BMV land may be considered acceptable in principle when justified by wider public benefits.

7.5 Landscape and Visual Impact

7.5.1 Policy 3 of the SELLP (Design of New Development) requires that the landscape character of the location of a development should be considered in the appropriate design of a development. Paragraph 3.4.4 of the SELLP states that,

> *'The character of the landscape in rural locations can influence the size, shape and orientation of buildings as a result of its ability to absorb development, indicated by the description and the sensitivities of the landscape in the landscape character assessments.'*

7.5.2 Policy 31 Part B (Renewable Energy) expects renewable energy proposals to ensure there is no significant harm to the visual amenity, landscape character or quality, or the skyscape of the area.

7.5.3 Paragraph 187 of the NPPF states that development should contribute to and enhance the natural and local environment by protecting and enhancing valued landscapes and recognising the intrinsic character and beauty of the countryside.

7.5.4 Paragraph 5.10.1 of NPS EN-1 sets out that,

> *'the landscape and visual effects of energy projects will vary on a case by case basis according to the type of development, its location and the landscape setting'.*

7.5.5 However, Paragraph 5.10.35 states that the scale of energy projects means that they will often be visible across a very wide area and therefore consideration should be given to whether any adverse impact on the landscape would be so damaging that it is not offset by the benefits (including need) of the project.

Landscape

7.5.6 The Substation Works would be located across sections of agricultural fields currently used for crop production. The Site would be located within NCA 46: The Fens (Ref 11). NCA 46 is characterised by a large-scale, flat and open low-lying landscape, which results in expansive views and level horizons that create a strong sense of openness. At a local level, it would also be within Regional Landscape Character Area (RLCT) 2A: Settled Fens and Marshes, as defined in the East Midlands Region Landscape Character Areas (Ref 12), as well as being defined in the South Holland Strategic Capacity Study (Ref 25) as Settled Fens Landscape Character Type (LCT). A **Landscape and Visual Appraisal** (GWNC-GIL-SS50-XXXXXX-RPT-ES-000001) has been submitted as part of this planning application.

7.5.7 At baseline, views across the flat, open farmland to level horizons are intermittently interrupted by long, straight roads and rail corridors, which frequently run along raised embankments. The rivers Witham, Welland, Nene and Great Ouse, together with the larger drainage dykes, follow canal-like courses bounded by high banks. While these linear features do not obstruct longer-distance views, they reinforce the sense of expansive skies and exposure to changing weather conditions, contributing to a strong sense of place characterised by tranquillity and isolation.

7.5.8 Woodland and tree cover are generally sparse, with hedgerows largely absent, resulting in small woodland blocks, individual trees and shelterbelts (typically comprising poplar, willow and leylandii around farmsteads) appearing as visually prominent features within the landscape. The Fens are crossed by major transport links, including the East Coast mainline railway and roads such as the A16, A17, and A47, which form elevated corridors and contribute to rising light pollution. Other infrastructure includes power stations and pylon lines, with the latter exerting a strong influence in the flat landscape.

7.5.9 During construction, it is expected that there would be a minor adverse effect on the landscape character due to the temporary presence of construction activity in the context of a potentially sensitive, flat and open landscape. The potential construction impacts on the landscape are considered further in the **Landscape and Visual Appraisal** (GWNC-GIL-SS50-XXXXXX-RPT-ES-000001). The **Outline CEMP** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000019) details mitigation measures to assist in protecting the landscape and reducing the impacts of construction.

7.5.10 The **Landscape and Visual Appraisal** (GWNC-GIL-SS50-XXXXXX-RPT-ES-000001) identifies that direct impacts of the Weston Marsh Substation A, once operational, would include the localised removal of landscape elements, such as ditches, arable fields, existing vegetation and grass verges, together with a change in land use from agricultural purposes to electrical infrastructure. As such, the presence of the Substation Works would directly impact both RLCT 2A: Settled Fens and Marshes and the Settled Fens LCT, particularly with regard to impacts to both the character of the landscapes and how they are perceived.

7.5.11 However, the Substation Works proposes additional hedgerow and woodland planting, which, once established, would reduce the apparent scale of the Substation Works, and would further mitigate landscape effects. The landscape mitigation plan is detailed in the **Indicative Landscape and Ecological Mitigation Proposals Plan** (GWNC-GIL-SS50-XXXXXX-PLN-ES-000001). The **Landscape and Visual Appraisal** (GWNC-GIL-SS50-XXXXXX-RPT-ES-000001) outlines how the landscape impacts from the substation, once operational, would be mitigated by planting.

7.5.12 The visual impacts on the landscape would be most apparent in the early operational phase, with the substation introducing a new urbanising element into open farmland. As mitigation planting matures, views of the substation would become increasingly filtered, reducing its prominence in the landscape.

7.5.13 As detailed in the **Landscape and Visual Appraisal** (GWNC-GIL-SS50-XXXXXX-RPT-ES-000001), the scale and extent of change in the open farmland would alter both character of the landscape and how it is perceived, but only over a localised area. At Year 1, the scale and form of the Substation Works would have a minor adverse effect on the characteristics of both the RLCT 2A Settled Fens and Marshes landscape, and the Settled Fens Landscape Character Type. At Year 15, mitigation planting around the new Weston Marsh Substation A would be maturing.
The planting would help to integrate the substation into the landscape, and the new

woodland blocks mimicking existing woodland belts within the wider landscape. Although planting would soften the effect of the substation in the landscape, its presence would still alter both the character of the landscape and how it is perceived over a localised area. Overall, the Landscape and Visual Appraisal concludes that at Year 15, the operational substation would have a minor adverse effect on both the RLCT 2A Settled Fens and Marshes landscape, and the Settled Fens Landscape Character Type.

7.5.14 An indicative landscape mitigation plan is presented on the supporting **Indicative Landscape and Ecological Mitigation Proposals Plan** (GWNC-GIL-SS50-XXXXXX-PLN-ES-000001). This sets out proposed planting measures, including hedgerow, woodland and tree planting, alongside an indicative list of species mixes and sizes. A detailed Landscape Plan will be produced as the detailed design stage, reflecting that some inputs are currently indicative. Additionally, the proposals detailed in the Indicative Landscape and Ecological Mitigation Proposals Plan would be used to inform a Landscape and Ecological Mitigation Plan (LEMP), which would be prepared prior to construction via a planning condition. As such, the proposals commit to a comprehensive package of planting measures around the Substation Works to screen the substation.

7.5.15 The proposed planting has been developed with regard to the local landscape character, including the introduction of woodland belts that mimic existing features, such as those along Lord's Drain. The planting strategy focuses on screening and filtering views from the closest visual receptors, so that the landscape remains as open as possible.

7.5.16 Alongside the additional planting proposed, the location of the Substation Works has also been identified so that the Site would be located in close proximity to existing overhead lines. This therefore helps to limit the extent of landscape change by avoiding the introduction of new, isolated features into the wider landscape. As a result, the longer-term effects of the substation once operational would be localised.

Visual

7.5.17 The **Landscape and Visual Appraisal** (GWNC-GIL-SS50-XXXXXX-RPT-ES-000001) identifies that the communities of The Moultons and Weston would be directly affected during construction, with the Substation Works being located within the parish of Weston and the potential for construction activities to impact views from The Moultons. In addition, the communities of Pinchbeck and Surfleet would be indirectly affected by the Substation Works, in terms of views from receptors being impacted by construction works.

7.5.18 There are several isolated hamlets and agricultural holdings in the vicinity of the Site. The properties closest to the construction works would be Western Barn House, Crowtree Farm, Crowtree Cottages, Pickmere, Welland House Farm, and Top Yard. Existing vegetation would generally screen and filter views from these properties, with the exception of Crowtree Cottages, which have more open views towards the construction compound to the north-west of the substation.

7.5.19 The **Landscape and Visual Appraisal** (GWNC-GIL-SS50-XXXXXX-RPT-ES-000001) assesses the visual impacts from recreational routes and receptors, including MacMillan Way footpath and Wigwam Holidays Crowtree. The assessment concludes that there would be temporary effects during the construction phase. Impacts to MacMillan Way would be small after 1 year and minor adverse after

15 years, whilst impacts to Wigwam Holiday Crowtree would be minor adverse after 1 year and very small to negligible adverse after 15 years.

7.5.20 Overall, construction activities would result in a small magnitude of change and a minor adverse effect for most receptors, however, due to proximity and open views, Crowtree Cottages would experience a medium magnitude of change and a moderate adverse effect during construction.

7.5.21 The **Landscape and Visual Appraisal** (GWNC-GIL-SS50-XXXXXX-RPT-ES-000001) explains that the Substation Works have been designed to avoid sensitive receptors as far as practicable, in accordance with the Holford and Horlock Rules. As the Substation Works would be in a landscape which has a number of existing overhead lines, the effects on landscape and visual receptors have been minimised by reducing the spread of infrastructure by siting the substation close to the existing Spalding tee-point. Additionally, the loss of existing vegetation has been reduced through the design of bellmouths and access tracks, which supports the screening of the Substation Works.

7.5.22 Once operational, the **Landscape and Visual Appraisal** (GWNC-GIL-SS50-XXXXXX-RPT-ES-000001) identifies that views from the community of Weston would be directly impacted by the Substation Works, as the substation would be located within the Weston community area. However, Weston itself is situated over 2 km from the Substation Works, and views towards the substation would be at mid-range distance. In these views, the substation would form only a small component of the overall outlook and would be filtered by scattered vegetation within the landscape and along Stonegate and Marsh Road. In the northern part of the community area, closer proximity views would be experienced by some receptors, particularly properties with more open views, such as Crowtree Cottages, and users of the PRoW. After Year 1, the overall impact of the operational substation on views would be moderate adverse, but after Year 15, this would be reduced to a minor adverse effect once mitigation planting along Marsh Road and around the substation has matured and can help filter views.

7.5.23 Pinchbeck, Surfleet, and The Moultons are located in proximity to the Substation Works. The **Landscape and Visual Appraisal** (GWNC-GIL-SS50-XXXXXX-RPT-ES-000001) identifies that views of the substation from these community areas would be largely screened by existing vegetation. From Surfleet and The Moultons, the Substation Works would result in a minor adverse effect on views from Year 1, which would remain minor adverse at Year 15. From Pinchbeck, the Substation Works would give rise to a very small effect on views during both Year 1 and Year 15. Where required, further mitigation measures, such as additional planting, would further filter views and integrate the substation into the landscape. By the time any new planting has been established and fulfils its intended screening function, it is considered that effects at year 15 would be minor adverse at most.

7.5.24 Full details of proposed mitigation are provided in the **Landscape and Visual Appraisal** (GWNC-GIL-SS50-XXXXXX-RPT-ES-000001), with additional planting detailed in an indicative landscape mitigation plan, which is presented on the supporting **Indicative Landscape and Ecological Mitigation Proposals Plan** (GWNC-GIL-SS50-XXXXXX-PLN-ES-000001). An **Outline CEMP** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000019) has also been submitted with the planning application, which sets out practical measures to minimise the effects of construction works on the character and visual amenity of the area. The Outline CEMP confirms that all reinstatement and mitigation planting would be subject to a five-year aftercare

period, with further details provided in the Landscape Plans. It also includes measures to mitigate the effects of construction lighting on the landscape, specifying that lighting would be of the lowest luminosity necessary to safely undertake works, directional in nature, and minimised where practicable.

7.5.25 With the proposed mitigation, the Substation Works would ensure that effects to the landscape and views are minimised. The Substation Works are therefore in accordance with NPPF NPS EN-1, and Policies 3 and 31 of the SELLP.

7.6 Trees and Hedgerows

7.6.1 Policy 2 (Development Management) of the SELLP states that a proposal requiring planning permission will be permitted provided that sustainable development considerations are met. These include size, scale, layout, density and impact on the amenity, trees, character and appearance of the area as well as the quality of its design and orientation.

7.6.2 Policy 3 (Design of New Development) requires development to use high quality and inclusive design and layout, to create development which is appropriate to the local area. Proposals should demonstrate the incorporation of existing hedgerows and trees, and the provision of appropriate new landscaping.

7.6.3 Paragraph 187 of the NPPF states that;

"planning policies and decisions should contribute to and enhance the natural and local environment by:

b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland."

7.6.4 The Site is located in the open countryside which is relatively flat in topography. An **Arboricultural Impact Assessment** (GWNC-WSP-SS50-XXXXXX-RPT-ES-000005) has been prepared in support of the planning application. The Assessment sets out that the initial baseline survey identified a total of 45 features within the Study Area, comprising 10 individual trees, 30 groups, and five hedges.

7.6.5 The **Arboricultural Impact Assessment** (GWNC-WSP-SS50-XXXXXX-RPT-ES-000005) acknowledges that two moderate quality features (G1, G18) (Category B), and seven low quality features (H1, G2, G5, G11, G12, G13, G30) (Category C) are required for removal or partial removal. These removals and partial removals have been identified due to construction works occurring within the root protection areas of these features. Of those identified above, only the following features are within the planning application boundary: G11, G12 G13, G18, G30 and T2.

7.6.6 Other potential arboricultural impacts include impacts from earthworks and machinery associated with construction, working space requirements during construction (below ground), and working space requirements during construction (above ground). These impacts would be as a result of activities that do not require the direct removal of a tree, but have the potential, without mitigation, to cause damage to retained arboricultural features. Table 5.2 in the **Arboricultural Impact Assessment** (GWNC-WSP-SS50-XXXXXX-RPT-ES-000005) further details the potential cause of damage and appropriate mitigation measures. Implementation of the mitigation measures

would assist in retaining the arboricultural features without significant loss of value or a notable reduction in tree health or longevity.

7.6.7 An **Outline CEMP** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000019) has been prepared in support of the consent applications for the Scheme. The mitigation measures included within the Outline CEMP include the retention of vegetation where practicable. Where vegetation is lost and trees cannot be replaced in situ due to the restrictions associated with land rights required for operational safety, native shrub planting approved by National Grid would be used as a replacement, in accordance with the Landscape Plans. Replacement vegetation would be planted as close by as practicable and will complement landscape character and be sympathetic to the local habitat type in order to provide a high biodiversity value. A five-year aftercare period would be established for all reinstatement and mitigation planting, details of which are set out on the Landscape Plans.

7.6.8 An indicative landscape mitigation plan is presented in the supporting **Indicative Landscape and Ecological Mitigation Proposals** (GWNC-GIL-SS50-XXXXXX-PLN-ES-000001). This includes proposals for planting, including hedgerows and woodland planting and an indicative list of species mix and sizes. The proposals detailed in the Indicative Landscape and Ecological Mitigation Proposals Plan would be used to inform a LEMP, which would be prepared prior to construction and would be secured via planning condition.

7.6.9 Tree removal would be compensated with a high-quality scheme of new tree and hedgerow planting. The proposed planting has had regard for the local landscape, introducing woodland belts to mimic existing, such as that along Lord's Drain, and focusses on screening and filtering views from the closest visual receptors so that the landscape remains as open as possible. Therefore, the Substation Works are in accordance with Policy 2 and 3 of the SELLP, together with relevant provisions of the NPPF.

7.7 Flood Risk

7.7.1 Policy 4 (Approach to Flood Risk) of the SELLP highlights the need for applications to include a site-specific flood risk assessment, covering risk from all sources of flooding and including the impacts of climate change. Policy 4(3) provides a general list of requirements to be demonstrated in the flood risk assessment, including mitigation measures.

7.7.2 Policy 31 (Climate Change and Renewable and Low Carbon Energy) of the SELLP requires the adoption of the sequential approach and Exception Test to flood-risk, alongside the incorporation of mitigation measures in the design of the development to reduce the effects of flooding, including the use of SuDS for all 'Major' applications.

7.7.3 The SELLP also reiterates the approach to the Sequential Test, as set out in the NPPF, EN-1 and PPG. Policy 4 (Approach to Flood Risk) states that applications will be permitted where:

> *'It can be demonstrated that there are no other sites available at a lower risk of flooding (i.e. that the sequential test is passed). The sequential test will be based on a Borough or District wide search area of alternative sites within the defined settlement boundaries, unless local circumstances relating to the catchment area for the development justify a reduced search area, i.e. there is a specific need for the development in that location.'*

7.7.4 Chapter 14 of the NPPF (Meeting the challenge of climate change, flooding and coastal change) is concerned with ensuring developments take account of flood risk. Paragraph 170 to 182 highlight the expected considerations for planning and flood risk, with paragraph 170 stating:

'Inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at highest risk (whether existing or future). Where development is necessary in such areas, the development should be made safe for its lifetime without increasing flood risk elsewhere.'

7.7.5 The NPPF states in paragraph 173 that:

'A sequential risk-based approach should also be taken to individual applications in areas known to be at risk now or in future from any form of flooding, by following the steps set out below.'

7.7.6 As such, a Sequential Test aims to locate development within the areas at the lowest risk of flooding.

7.7.7 In the instance that a development cannot be located in an area at lower risk of flooding, then Paragraph 177 of the NPPF states the expectation that the Exception Test is applied to assess whether the development would be considered acceptable in an area of higher flood risk. Paragraph 178 states that to pass the Exception Test, applications should demonstrate that:

'a) the development would provide wider sustainability benefits to the community that outweigh the flood risk; and,

b) the development will be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will reduce flood risk overall.'

7.7.8 Paragraph 179 of the NPPF states that both elements of the Exception Test should be demonstrated for the application to be granted consent.

7.7.9 Annex 3 of the NPPF sets out the Flood Risk Vulnerability Classification, which categorises development types for use in flood risk assessments, Sequential and Exception tests.

7.7.10 Paragraph 182 of the NPPF requires that proposals which could affect drainage on or around the site should incorporate sustainable drainage systems to control flow rates and reduce volumes of runoff, and which are proportionate to the nature and scale of the proposal.

7.7.11 The importance of ensuring that flood risk from all sources of flooding is reiterated in NPS EN-1, in order to prevent inappropriate development in areas at risk of flooding, including surface water flooding. Paragraph 5.8.36 states that the Secretary of State will consider how: 'In flood risk areas the project is designed and constructed to remain safe and operational during its lifetime, without increasing flood risk elsewhere'. NPS EN-1 sets out the expectation for the application of the Sequential Test in Paragraph 5.8.21, with footnote 193 referencing the Planning Practice Guidance (PPG) flood risk section, Paragraphs 023 to 030 (Ref 23). The PPG reiterates that all forms of flood risk (including groundwater flooding, reservoir flooding and surface water flooding) need to be treated consistently with river (fluvial) and tidal flooding mapping in probability and accessing vulnerability, so the Sequential Test is applied across all areas of flood risk. Paragraph 5.8.41 of NPS EN-1 states that whilst energy projects should not typically be located within Flood

Zone 3b, ‘where essential energy infrastructure has to be located in such areas, for operational reasons, they should only be consented if the development will not result in a net loss of floodplain storage, and will not impede water flows’. The Substation Works would be located approximately 1 km east of, the River Welland, which is designated by the Environment Agency (EA) as a main river. The wider Scheme Site (including mitigation) extends to the River Welland. In this location, the River Welland is tidally dominated, as the Site lies downstream of sluice structures that regulate fluvial influences on the river.

7.7.12 Approximately 1.4km north west of the Site is Vernatt’s Drain (managed by Welland and Deepings Internal Drainage Board (IDB)) and the River Glen (an EA main river joining the River Welland). The River Welland then flows into the North Sea at the Wash, approximately 16 km downstream of the Site. There are also several small watercourses and land drains in the vicinity of the Site, including R11 New Drain and the Lord’s Drain, which are both managed by the South Holland IDB. The R11 New Drain intersects with the Site and the Lord’s Drain is located approximately 700 m to the east.

7.7.13 To enable the construction of the Substation Works, a diversion of the R11 New Drain watercourse is required. It is currently proposed that the diversion will be routed along the eastern extents of the new Weston Marsh Substation A to meet the R11 New Drain further downstream. Discussions with the Water Management Alliance (South Holland IDB) are ongoing with respect to the design and approach to the watercourse realignment.

7.7.14 As shown on the EA’s Flood Maps for Planning (Ref 8), the Substation Works would be situated adjacent to the River Welland within Flood Zone 3, with some areas of the site within Flood Zone 2. There are a number of drains that cross the Site, which fall within the area of South Holland IDB, within the Lords North and South catchment. The Site is therefore considered to be at a high risk of flooding.

7.7.15 As the Site lies within Flood Zone 2 and 3 land, an **FRA** (GWNC-WSP-SS50-XXXXXX-RPT-ES-000002) has been prepared and submitted as part of this planning application. The FRA considers all sources of flooding in accordance with national and local policy and the PPG, including tidal, fluvial, surface water, groundwater, sewer, highway, artificial sources, and residual flood risk. The FRA has been used to inform the planning and design of the substation.

7.7.16 The **FRA** (GWNC-WSP-SS50-XXXXXX-RPT-ES-000002) concludes that the risk of flooding from all sources is low. The risk of flooding from foul sewers is also assessed as low under the current baseline scenario, however, this risk may increase as a result of the Substation Works. The FRA therefore recommends that potential effects are mitigated through the preparation of a foul drainage strategy at the detailed design stage, which could be secured by a pre-commencement planning condition. An **Outline SWDS** (GWNC-WSP-SS50-XXXXXX-RPT-ES-000001) has also been submitted as part of this planning application to manage the risk of flooding from surface water from the Substation Works. The Site drainage has been designed in such a way that it prevents any surface water flooding affecting the Site or adjacent properties.

7.7.17 The **FRA** (GWNC-WSP-SS50-XXXXXX-RPT-ES-000002) demonstrates that flood risk can be satisfactorily managed. Residual tidal and fluvial flood risk would be mitigated by locating the Weston Marsh Substation A and other sensitive infrastructure on a raised platform with a minimum finished flood level (FLL) of 4.42 m AOD. Fluvial flood risk would also be mitigated by ensuring that any diverted IDB

watercourses are designed to provide the same channel capacity as the existing watercourses. Consultation was undertaken with the South Holland Drainage Board in 2025 as part of the Grimsby to Walpole DCO consultation, which confirmed that the nearest IDB managed water level control structures are the Lord's Pumping Station and Lord's Sluice, located approximately 2 km north-west of the Site.

7.7.18 A **Water Framework Directive (WFD) Assessment** (GWNC-WSP-SS50-XXXXXX-RPT-ES-000003) has also been prepared and submitted with this planning application. The Assessment evaluates the potential construction and operational impacts arising from the Substation Works on WFD water bodies. The Substation Works interact with seven WFD water bodies throughout its length: thus, each activity associated with the Scheme, such as watercourse crossings, culverts and outfalls, etc., has been assessed against the Biological, Physico-chemical and Hydromorphological quality elements that comprise the WFD assessment.

7.7.19 The **WFD Assessment** (GWNC-WSP-SS50-XXXXXX-RPT-ES-000003) concludes that the Substation Works, as designed and with the construction and operational mitigation measures in place, is compliant with the objectives of the WFD. It represents a development that not only avoids adverse impacts on the water environment but also contributes positively to the long-term ecological resilience and hydromorphological integrity of the affected water bodies.

Sequential Test

7.7.20 The location of the Substation Works, including the Weston Marsh Substation A, lies within Flood Zone 3 which is land at high risk of flooding from rivers and the sea (not taking into account the presence of defences). As outlined in Annex 3 of the NPPF, the Substation Works is regarded as 'essential utility infrastructure' for which the sequential test and exception tests are required for development within heightened flood risk areas. The local and national policy states that the sequential test should direct new development to areas of lowest flood risk.

7.7.21 The need for the Substation Works in the Weston Marsh area was identified through National Grid's Strategic Options Report (SOR), which concluded that the preferred solution included new substations in Lincolnshire, including at Weston Marsh, to address capacity shortfalls while balancing cost, technical, environmental and socio-economic considerations. Subsequent work, including the Corridor Preliminary Routing and Siting Study, assessed potential siting areas and determined that locating a substation north-west and close to the existing Spalding Tee-Point of the existing 2WS and 4ZM 400kV overhead lines, would minimise environmental impacts, reduce the need for overhead line diversions, and limit technical complexity. Although much of the area falls within higher flood risk zones, this constraint was unavoidable due to network connection requirements. Later review through the Weston Marsh Siting Study Report reaffirmed that the preferred location remained appropriate, as it best meets the project's technical and environmental objectives.

7.7.22 In addition, the location of the Weston Marsh Substation A has been selected to provide a connection point for the approved ODOW Scheme, and the proposed Grimsby to Walpole Scheme, as part of the Great Grid Upgrade. The extensive coverage of Flood Zone 3 in the surrounding area presents a significant constraint on identifying alternative locations for the Substation Works at a lower risk of flooding from rivers and the sea. The location of the Substation Works has not been assessed as being at high risk from any other sources of flooding.

7.7.23 Having applied the sequential test to the Substation Works, it is not possible for the development to be located within an area of lower flood risk. Therefore, the Exception Test should be applied to Substation Works.

Exception Test

7.7.24 The Substation Works are classified as essential infrastructure and therefore permissible in Flood Zone 3, subject to passing both aspects of the Exception Test, which require:

a) the development would provide wider sustainability benefits to the community that outweigh the flood risk; and

b) the development will be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will reduce flood risk overall.'

Sustainability Benefits

7.7.25 As stated in the Sequential Test, there is no realistic alternative location for the Substation Works, given the requirement to connect to exiting overhead lines. The Substation Works would continue to contribute to energy independence, the UK's decarbonisation requirements and climate change targets. In providing a connection to the National Grid for the ODOW and Grimsby to Walpole NSIPs, the substation is therefore essential to assist in ensuring that the supply of energy remains secure, reliable and affordable.

7.7.26 In addition, the Substation Works would include habitat creation and enhancements as set out in Section 7.8 and 7.9 below.

7.7.27 Taking the above into account, it is considered that the Substation Works would provide wider sustainability benefits to the community, that outweigh its impacts on flood risk in accordance with the NPPF and NPS EN-1. Part A of the Exceptions Test is therefore considered to be passed.

Safe for its lifetime without increasing flood risk

7.7.28 As detailed in the **FRA** (GWNC-WSP-SS50-XXXXXX-RPT-ES-000002), Hydraulic modelling has been completed to compare the baseline with a future flood risk scenario, in order to identify whether the Substation Works and proposed access are likely to flood in the future. The assessment predicts that the Weston Marsh Substation A would not be at risk of flooding from tidal sources in the design flood event, as the 0.1% annual probability plus Upper End Climate Change (2105 epoch) over its predicted 75 year design life.

7.7.29 There is a residual risk to the Weston Marsh Substation A in the 0.1% annual probability plus Upper End Climate Change (2105 epoch). However, as a result of mitigation and the design of the Substation Works, Weston Marsh Substation A would remain operational and resilient in this scenario.

7.7.30 Mitigation measures have been incorporated into the design to ensure that the Substation Works, including the access, would be at low risk of flooding and would be safe for the lifetime of the Substation Works. These measures are discussed in further detail within Section 5 of this PDAS and includes draining surface water towards local water bodies, minimum floor heights and minimum road heights.

7.7.31 The Substation Works have been designed to incorporate resilience to the projected flood risk, taking into account future sea level rise projections. This included an assessment of future sea level rise in the Anglian River Basin District using current EA guidance, modelling conditions for both today (2026) and the end of the development's design life (2105) under the Higher Central, and Upper End climate change scenarios. A precautionary approach was taken by combining extreme sea level rise allowances with a 1-in-1,000-year event and upper confidence extreme water levels to model a worst-case climate change scenario.

7.7.32 Flood risk has been considered from all sources including fluvial, surface water, ground water, tidal, reservoirs and sewers. The implementation of construction methods and mitigation described in the FRA would ensure the risks of fluvial flooding during the construction phase would be effectively managed there would be no significant impacts in terms of flood risk.

7.7.33 Notwithstanding the above, paragraph 181 of the NPPF states that "When determining any planning applications, local planning authorities should ensure that flood risk is not increased elsewhere". The Weston Marsh Substation A would be set on a raised platform, providing a minimum freeboard of 300m above predicted flood levels. This would also provide mitigation and resilience against the residual risk of fluvial flooding from IDB managed watercourses due to flood protection infrastructure failure.

7.7.34 The impact of the raised platform on the flood depths of the surrounding land uses has been assessed in section 7.1 of the **FRA** (GWNC-WSP-SS50-XXXXXX-RPT-ES-000002). Paragraphs 7.1.6 and 7.1.7 of the FRA identify 'very little difference' in flood risk pre- and post-development. The impacts are considered to be a low probability residual risk associated with a tidally dominated river. This was agreed with the Environment Agency in March 2026.

7.7.35 Risk of flooding from surface water and foul drainage would be mitigated by implementing appropriate strategies, with an **Outline SWDS** (GWNC-WSP-SS50-XXXXXX-RPT-ES-000001) submitted alongside this application and the **Foul Drainage Strategy Technical Note** (GWNC-LST-ZZZZ-ZZZZZZ-TEC-EN-000004). No other sources of flood risk have been identified as requiring mitigation in the operational phase of the Substation Works.

7.7.36 The mitigation proposed within the FRA demonstrates that the Substation Works will be safe for its lifetime. Whilst there would be some impact on the neighbouring land uses due to the raised platform, the FRA confirms an agreed approach with the Environment Agency that does not adversely impact flood risk. Therefore, Section B of the Exception test is considered passed.

Flood risk conclusion

7.7.37 The Substation Works would support the decarbonisation of the electricity network and increase renewable energy generation in accordance with national and local strategies and policies.

7.7.38 A sequential approach has been applied in selecting the location of the Substation Works. The submitted FRA demonstrates that with design mitigation, the Substation Works would not increase flood risk elsewhere and would remain safe for its lifetime, taking into account climate change and therefore passes the Exceptions Test.

7.7.39 Therefore, the Substation Works is in accordance with Policies 4 and 31 of the SELLP, paragraphs 170 to 182 of the NPPF and NPS EN-1.

7.8 Ecological Impacts

7.8.1 Policy 28 (The Natural Environment) of the SELLP reiterates the importance of protecting, enhancing and managing natural assets. Policy 28 ensures that proposals that harm internationally designated sites would only be allowed in exceptional circumstances and must be fully compensated, and proposals affecting national or local sites and protected species would only be permitted where no less harmful alternatives exist, the benefits clearly outweigh harm, and effective mitigation and compensation are secured.

7.8.2 Chapter 15 of the NPPF (Conserving and enhancing the natural environment) seeks to ensure planning decisions contribute to and enhance the natural and local environment. Paragraph 187(a) states that developments should be achieved by,

'protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan)'.

7.8.3 Paragraph 193 of the NPPF establishes the key decision-making principles: where significant harm cannot be avoided through alternative siting, adequately mitigated, or as a last resort compensated for, planning permission should be refused; and development resulting in the loss or deterioration of irreplaceable habitats should be refused unless there are wholly exceptional reasons. Paragraphs 193(b), 194 and 195 afford strong protection to SSSIs and habitats sites, with the presumption in favour of sustainable development disapplied where a plan or project is likely to have a significant effect on such a site.

7.8.4 NPS EN-1 sets out considerations for biodiversity and geological conservation in Section 5.4. Paragraph 5.4.20 states the expectation that applicants show how the project has taken advantage of opportunities to conserve and enhance biodiversity and geological conservation interests.

7.8.5 Paragraph 5.4.23 also recognises the impact that energy projects can have on migratory species, stating:

'The design of energy NSIP proposals will need to consider the movement of mobile/migratory species such as birds, fish and marine and terrestrial mammals and their potential to interact with infrastructure.'

7.8.6 NPS EN-1 also details at paragraphs 5.4.26 – 5.4.32 the need for applicants to consult the appropriate Statutory Nature Conservation Bodies (SNCBs) from an early stage. Paragraph 5.4.27 states that,

7.8.7 *'if the SNCB indicates the proposed development is likely to have an impact on habitat sites, applications should provide such information as may reasonably be required to determine where a Habitat Regulations Assessment (HRA) Appropriate Assessment is required.'*

7.8.8 NPS EN-1 also highlights the need for mitigation where necessary, with paragraph 5.4.36 stating:

'Applicants should include appropriate avoidance, mitigation, compensation and enhancement measures as an integral part of the proposed development. In particular, the applicant should demonstrate that:

during construction, they will seek to ensure that activities will be confined to the minimum areas required for the works;

the timing of construction has been planned to avoid or limit disturbance;

during construction and operation best practice will be followed to ensure that risk of disturbance or damage to species or habitats is minimised, including as a consequence of transport access arrangements;

habitats will, where practicable, be restored after construction works have finished;

opportunities will be taken to enhance existing habitats rather than replace them, and where practicable, create new habitats of value within the site landscaping proposals. Where habitat creation is required as mitigation, compensation, or enhancement, the location and quality will be of key importance. In this regard habitat creation should be focused on areas where the most ecological and ecosystems benefits can be realised; and

mitigations required as a result of legal protection of habitats or species will be complied with.'

7.8.9 NPS EN-5 refers to the impacts of overhead lines on birds (paragraphs 2.10.2 to 2.10.4) and states that lines should be made visible where possible to avoid birds colliding with the lines and perching areas where birds could perch should be avoided.

7.8.10 An **EcIA** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000005) has been prepared and submitted alongside the planning application, which provides an assessment of potential effects of the Substation Works on the ecological features identified within the Site and in the wider study area. The EcIA was carried out using data obtained from desk studies and field surveys. The field surveys assessed features of ecological importance between 2022 and 2026, with details of the methods and results for these site surveys, and any specific limitations encountered, presented in the individual ecological receptor baseline reports submitted alongside the EcIA. The completed survey reports are outlined in **Table 1.2** above.

7.8.11 The **EcIA** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000005) identifies a range of potential impacts arising from the construction and operation of the Substation Works, including effects on water quality, loss of functionally linked land, habitat loss and degradation, and the potential for killing or injury to species. For all identified designated sites, habitats and species, the **EcIA** concludes that residual effects would be negligible to minor beneficial following the implementation of the mitigation measures proposed. Accordingly, the overall effects of the Substation Works are not significant.

7.8.12 Embedded mitigation measures are those that are intrinsic to and built into the design of a proposal. Table 5.1 in the **EcIA** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000005) outlines the embedded mitigation measures that are relevant to this assessment and have been incorporated into the design of Substation Works to date. The design of the Substation Works will be continually reviewed in line with assessment work and consultation feedback as it progresses to detailed design.

7.8.13 A suite of control measures, comprising appropriate management activities and construction techniques, would be implemented throughout the construction of the

Substation Works to limit potential impacts through adherence to good site practice. These measures are set out in the **Outline CEMP** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000019). The control and management measures relevant to potential effects are described in greater detail within the **EcIA** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000005). These include measures relating to:

1) The overarching environmental commitments.
2) Landscape and visual control measures.
3) Ecology and biodiversity control and management measures.
4) Water environment and flood risk control and management measures.
5) Lighting (construction).

7.8.1 During the operation of the substation, National Grid operatives would adhere with existing policies and procedures during the completion of routine maintenance activities, including the management of vegetation adjacent to permanent features. Key measures relevant to the control of potential impacts upon ecological receptors during operation and maintenance include:

1) Minimising pollution risks as far as practicable through the control of hazardous substances, including refuelling of plant and equipment away from drains or watercourses within dedicated areas and the use of secondary containment systems, such as bunds, drip trays and plant nappies;
2) Consultation with the relevant regulatory body where works are required in, around, or that may impact watercourses, or there is a potential impact on local flora and fauna of works near controlled waters;
3) Identifying and notifying the presence of invasive species within the operational areas of the site;
4) Proactively seeking to avoid disturbance to birds during the breeding season, including the use of deterrent measures, acting as early as possible;
5) Reviewing the need for licenses, ensuring existing licenses adequately cover the operations and activities planned on sites and ensuring the correct use of and compliance with licenses; and,
6) Ensuring that tenancy and land use agreements include requirements to protect, preserve and enhance habitats, biodiversity and ecosystem services.

7.8.2 During the operation and maintenance of the Scheme, National Grid or their appointed Main Works Contractor(s) would be required to appoint an ecologist during any maintenance or refurbishment works, to ensure the ecological constraints present at the time would be identified and mitigated accordingly. Additionally, habitats created or enhanced by the Scheme and embedded within the design, will be managed in accordance with the **Indicative Landscape and Ecological Mitigation Proposals Plan** (GWNC-GIL-SS50-XXXXXX-PLN-ES-000001).

7.8.3 Ecological mitigation during the operational stage would also be addressed through the implementation of the **Lighting Strategy** (GWNC-WSP-ZZZZ-ZZZZZZ-RPT-PM-000001), exterior lighting shall be installed at all substation sites to ensure safe movement and the effective operation of equipment, with all designs taking environmental considerations into account.

7.8.4 Additional mitigation comprises over and above embedded and standard mitigation measures to reduce environmental effects. This would include, but not be limited to, landscape and visual mitigation such as tree planting and the creation of replacement habitat areas where required. Landscaping and filtering vegetation would be planted around the substation to screen views from the surrounding landscape and reduce the visibility of the Substation Works, with long-term management secured through a planning condition requiring a Habitats and Landscape Management Plan. Additional ecological measures include the provision of compensatory farmland bird habitat, a barn owl box, and a peregrine platform located an appropriate distance from the Substation Works.

7.8.5 To assess the likely significant effects on European Sites, a **HRA Stage 1 Screening Report** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000014) has been produced and accompanies this application. The HRA process typically follows a three-stage approach, including Screening for Likely Significant Effects (LSE) (Stage 1), Appropriate Assessment (Stage 2), and Derogations (Stage 3). As detailed in the HRA Stage 1 Screening Report, in this instance, LSEs from all elements of the Scheme including the Substation Works were excluded on all pathways, and therefore a Stage 2 HRA will not be required.

7.8.6 Within the HRA, the following Habitats Sites were considered to fall within the Zone of Influence (ZoI) of the Substation Works, based on a source-pathway-receptor approach:

1) The Wash SPA (UK9008021)
2) The Wash Ramsar (UK11072)
3) The Wash and North Norfolk Coast SAC (UK0017075)

7.8.7 Potential negative impacts of the Substation Works, including all of its components, on these Habitats Sites were considered in relation to the following impact pathways:

1) Loss of functionally linked habitat (construction phase);
2) Disturbance displacement (construction phase);
3) Injury/mortality from overhead line collisions (operational phase);
4) Water quality (construction and operational phases);
5) Water quantity, level and flow (construction and operational phases);
6) Introduction and spread of invasive non-native species (construction phase);
7) Atmospheric pollution (construction phase); and,
8) Barriers to movement (construction and operational phases).

7.8.8 The **HRA Stage 1 Screening Report** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000014) concludes that bird-related impacts are considered the most prominent potential issue, however, survey evidence confirms that the Substation Works area does not regularly support significant SPA or Ramsar bird populations.

7.8.9 It is therefore anticipated that construction and operation of the Substation Works would not result in significant impacts to Ecology. The Substation Works would therefore be in accordance with Policy 28 of the SELLP, when also considered in the context of section 7.9 below as well as the NPPF, NPS EN-1 and NPS EN-5.

7.9 Biodiversity Net Gain

7.9.1 Policy 28 (The Natural Environment) of the SELLP requires that all development proposals provide an overall net gain in biodiversity. This reinforces the national requirement to deliver a mandatory biodiversity net gain arising from the Environment Act 2021 (Ref 2), as set out at paragraph **7.9.2** below. Policy 28 states that all qualifying development proposals must deliver an overall biodiversity net gain attributable to the development by:

' I. Protecting the biodiversity value of land, buildings and trees (including veteran trees) minimising the fragmentation of habitats;

ii. Maximising the opportunities for restoration, enhancement and connection of natural habitats and species of principal importance;

iii. Incorporating beneficial biodiversity conservation features on buildings, where appropriate; and maximising opportunities to enhance green infrastructure and ecological corridors, including water space; and

iv. Conserving or enhancing biodiversity or geodiversity conservation features that will provide new habitat and help wildlife to adapt to climate change, and if the development is within a Nature Improvement Area (NIA), contributing to the aims and objectives of the NIA.'

7.9.2 Under the Environment Act 2021 (Ref 2), (through its introduction of Schedule 7A to the TCPA) there is a mandatory requirement for new developments to provide BNG with at least a 10% increase in biodiversity value after the development, when compared to the level of biodiversity pre-development. There is also a legal obligation to monitor, manage and maintain any created and/or enhanced habitats for at least 30 years to achieve the target condition.

7.9.3 Paragraph 193 of the NPPF states that:

'if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused'.

7.9.4 The NPPF establishes a presumption in favour of sustainable development and Chapter 15 (Conserving and enhancing the natural environment) outlines the need for developments to contribute to and enhance the natural and local environment. Paragraph 187 (d) of the NPPF refers to:

'minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures and incorporating features which support priority or threatened species such as swifts, bats and hedgehogs'.

7.9.5 A **BNG Report** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000015) and **Statutory Biodiversity Metric** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000016) has been submitted alongside this Application.

7.9.6 The **BNG Report** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000015) explains the final BNG calculation undertaken for the Substation Works. The baseline for the Substation Works was established using field survey data collected within the Substation Works Site Boundary on various dates between May 2024 and September 2025. This baseline was used to calculate BNG, with the assessment

undertaken using the **Statutory Biodiversity Metric** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000016).

7.9.7 The design of the Substation Works has focused on minimising impacts to key habitats through option identification, appraisal, selection and refinement. The Site is located predominantly within arable farmland, with smaller areas of other neutral and modified grassland, boundary ditches, hedgerows and broadleaved woodland. As a result of the proposals, areas of arable land, modified grassland, hedgerows, boundary ditches and limited broadleaved woodland would be converted to buildings and hardstanding, alongside areas of retained and enhanced broadleaved woodland, scrub and other neutral grassland where practicable.

7.9.8 The calculation completed within the **Statutory Biodiversity Metric** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000016) established that the baseline represents 180.76 habitat units (comprising 89.40 ha), 4.26 hedgerow units (comprising 4.27 km), and 21.32 watercourse units (comprising 4.35 km) in total. No irreplaceable habitats, which would require exclusion from the Metric, were identified during the desk study or field survey.

7.9.9 The post-intervention calculation established that the Substation Works, and proposed planting specification, would result in a total of 146.42 habitat units, 8.43 hedgerow units and 18.92 watercourse units. Overall, this represents a net change of -34.43 habitat units (-19%), 4.18 hedgerow units (+98.08%) and -2.40 watercourse units (-11.27% net change). The legally required 10% BNG would therefore not be met on-site for habitat units or watercourse units. As such, to meet the legally required 10% BNG for habitat, hedgerow and watercourse units, and to meet the trading rules; 52.42 habitat units (low distinctiveness or better), 4.53 watercourse units (high and medium distinctiveness) are proposed to be purchased from third-party off-site unit providers. This is detailed further in the **BNG Report** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000015). National Grid request that a condition is included to control the submission of evidence of the purchase of the relevant habitat units to demonstrate compliance with BNG policy requirements.

7.9.10 The **BNG Report** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000015) also sets out the draft long-term management measures and monitoring requirements for each of the proposed habitat creation and enhancement measures included within the Substation Works and accounted for in the post-development BNG calculation. A detailed Habitat Management and Monitoring Plan would be secured by condition as part of the planning application.

7.9.11 The **BNG Report** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000015) has been prepared to assess the impacts of the Substation Works on biodiversity and to demonstrate how measurable gains for biodiversity will be delivered in accordance with statutory and policy requirements. The assessment has been undertaken using the **Statutory Biodiversity Metric** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000016). The report identifies opportunities for biodiversity enhancement within the design of the scheme, prioritising on-site habitat retention where practicable, although also outlining the use of off-site biodiversity units. The proposed approach ensures that biodiversity gains are measurable, deliverable and capable of being secured through appropriate planning conditions. Overall, the assessment demonstrates that the proposal is compliant with relevant national and local planning policy requirements for biodiversity, including the Environment Act 2021, Paragraph 187 of the NPPF, NPS EN-1 and NPS EN-5, and Policy 28 of the SELLP.

7.10 Historic Environment

7.10.1 Policy 29 of the SELLP, *The Historic Environment*, sets out that the historic environment in South East Lincolnshire should be conserved and, where appropriate, enhanced. This includes considering the significance of the context of both designated and non-designated heritage assets.

7.10.2 The NPPF states in Paragraph 212 that,

> *'When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation (and the more important the asset, the greater the weight should be). This is irrespective of whether any potential harm amounts to substantial harm, total loss or less than substantial harm to its significance'.*

7.10.3 Paragraph 213 goes on to state that any harm to, or loss of the significance of a heritage asset should be clearly justified. Paragraph 215 of the NPPF outlines that,

> *'Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal including, where appropriate, securing its optimum viable use'.*

7.10.4 The importance of assessing the historic context of a site is reiterated in the NPSs, with Section 5.9 of NPS EN-1 setting out how applicants and the Secretary of State should approach heritage assets when assessing energy infrastructure. NPS EN-1 paragraph 5.9.29 states that,

> *'Any harm or loss of significance of a designated heritage asset (from its alteration or destruction, or from development within its setting) should require clear and convincing justification'.*

7.10.5 Similarly, NPS EN-5 references the Electricity Act 1989 in Paragraph 2.2.10, stating that transmission proposals should,

> *'have regard to the desirability of preserving natural beauty, of conserving flora, fauna and geological or physiographical features of special interest and of protecting sites, buildings and objects of architectural, historic or archaeological interest'.*

7.10.6 NPS EN-5 paragraph 2.9.19 requires that in accordance with the Horlock Rules, the design of substations should seek to avoid altogether internationally and nationally designated areas of the highest amenity, cultural or scientific value.

Designated Heritage Assets

7.10.7 There are no designated heritage assets within the Site, and therefore the Substation Works would not result in any direct physical impacts to designated heritage assets.

7.10.8 The nearest designated heritage asset, the churchyard cross of St Mary, scheduled monument and Grade II listed building is located approximately 300 m to the south-west of the Site. The churchyard cross is located on the grade I listed Church of St Mary, with several other grade II listed buildings located within the same churchyard.

7.10.9 Several other scheduled monuments are located near to the Site. Wykeham Chapel (also Grade I listed) is located approximately 680 m to the south-west and Pinchbeck Engine (Grade II listed) is located approximately 440 m to the west.

7.10.10 Other nearby listed buildings are identified in the **Historic Environment DBA** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000017), which has been submitted with this Application.

7.10.11 Given the flat landscape with limited vegetation, there is potential for temporary and permanent setting changes to some designated heritage assets, including Wykeham Chapel scheduled monument and group of listed buildings, Wraggmarsh House Farm (Grade II listed) and associated Pigeoncote (Grade II listed). Notably, the **Historic Environment DBA** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000017) concludes that with regard to Wykeham Chapel, the historic site was positioned to offer panoramic views over the surrounding landscape. There may be views of the Weston Marsh Substation A during the winter months due to the deciduous nature of the surrounding trees. However, it is considered that the overall small change to the wider setting of the assets would have a minimal impact on their significance, and that this would result in considerably less than substantial harm to their significance for both temporary and permanent change in the landscape. The setting of each scheduled monument is considered further in the **Historic Environment DBA** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000017).

7.10.12 The historic core of Moulton is a designated conservation area, located approximately 1.35 km from the Site. The conservation area includes two Grade I listed buildings and sixteen Grade II listed buildings. The conservation area is considered further within the **Historic Environment DBA** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000017).

Non-designated Heritage Assets

7.10.13 There are 80 non-designated heritage assets identified by the Lincolnshire HER located within 1 km of the Site. Of those, a total of 17 non-designated heritage assets have been identified within the Site and are listed in the **Historic Environment DBA** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000017).

7.10.14 There is potential for permanent and temporary setting changes to the non-designated heritage assets due to the flat landscape and limited existing natural screening. The proposed Weston Marsh Substation A could therefore potentially impact the significance of these assets. However, as stated in the **Historic Environment DBA** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000017), any potential impacts have been assessed as having a less than substantial harm.

Archaeology

7.10.15 An assessment of the potential for archaeology has been completed and is detailed in the **Historic Environment DBA** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000017). The assessment concludes that the potential for the Substation Works to encounter archaeology form the prehistoric, Roman, early medieval, and modern periods is low. However, there is a moderate potential for the Substation Works to encounter prehistoric remains and a high potential to encounter medieval and post-medieval archaeological remains.

7.10.16 The **Historic Environment DBA** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000017) states that a programme of archaeological mitigation would be undertaken ahead of construction, with the scope being determined during consultation with the LCC Archaeological Advisor. It is expected that this would be secured by a pre-commencement condition attached to the planning permission.

Historic Environment conclusion

7.10.17 The Substation Works are located within an area that still retains a farmland character, but which has also been impacted by the construction of power and storage infrastructure, transportation infrastructure and light industrial development. The Substation Works have been designed and sited to minimise impact on the setting of heritage assets.

7.10.18 The Substation Works would likely result in less than substantial harm on the setting of several designated and non-designated heritage assets as a result of the introduction of new power infrastructure. However, in line with Paragraphs 212-215 of the NPPF and Section 5.9 of NPS EN-1, it is considered that the potential harms to the significance of heritage assets is justified in consideration of the substantial benefits being brought forward by the Substation Works. Additionally, the potential impacts to the historic environment are likely to be mitigatable and therefore comply with Policy 29 of the SELLP.

7.10.19 A **Historic Environment DBA** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000017) has been prepared and is submitted with this Application.

7.11 Residential Amenity

7.11.1 Policy 30 (Pollution) of the SELLP is concerned with pollution, and states that development proposals will be refused if, even with mitigation, they would cause unacceptable harm to public health and safety, local amenity, or the natural, historic, or built environment. This includes adverse impacts arising from air quality (such as fumes and odour), noise and vibration, light pollution, land contamination, or effects on surface and groundwater quality. The Policy requires that planning applications should include an assessment of the impact on amenity from existing uses, with details of the mitigation measures expected to be provided where necessary.

7.11.2 Policies 2 (Development Management) and 3 (Design of New Development) of the SELLP ensure that development does not significantly impact on neighbouring land uses by reason of noise, odour, disturbance or visual intrusion. Similarly, criterion 2 of Policy 31B in the SELLP refers to residential amenity.

7.11.3 Chapter 8 of the NPPF (Promoting healthy and safe communities) seeks to support development that protects health and the quality of life of local communities.

7.11.4 The NPPF also supports developments that are safe, inclusive and promote health and wellbeing in Chapter 12 (Achieving well-designed places), with the expectation that planning decisions *'create places that are safe, inclusive and accessible and which promote health and well-being, with a high standard of amenity for existing and future users'*.

7.11.5 Properties at Marsh House Farm, Pickmere and Base Cottages are located within the vicinity of, but lie outside, the Site. Notwithstanding this, these properties, along with others in proximity to the Substation Works, may experience temporary disturbance during the construction phase.

7.11.6 The **Socio-economic Impact Assessment** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000019) does not include an assessment of individual residential properties, however, it does consider potentially affected communities. The Assessment explains that effects on individual properties, as any requirements for compensation would be addressed separately in accordance with the Compensation Code, where losses

arise as a result of land take or disruption. This also reflects recognised socio-economic guidance, such as the recent ISEP guidance, which focuses on effects of population, communities and wider social outcomes rather than impacts at the level of individual dwellings.

7.11.7 As detailed in the **Outline CEMP** submitted with this application (GWNC-ARU-SS50-XXXXXX-RPT-ES-000019), construction impacts to residential properties would be minimised through the implementation of appropriate mitigation measures. Any construction activity carried out, or equipment located within construction compound that may produce a noticeable nuisance, including but not limited to dust, noise, vibration and lighting, will be located away from sensitive receptors such as residential properties were practicable.

7.11.8 The impacts of the Substation Works have also been assessed in relation to the potential effects from Electric and Magnetic Fields (EMFs), with specific regard to EMF regulations, guidelines, or practices. The assessment is detailed further in the **EMF Assessment** (GWNC-NGD-ZZZZ-XXXXXX-RPT-PM-000003) submitted with this planning application. The assessment considered the nature of the electrical infrastructure associated with the Substation Works, the predicted EMF levels arising from operational equipment, and the proximity of nearby residential receptors. The assessment demonstrates that EMF levels associated with the operational substation would be within the International Commission on Non-Ionizing Radiation Protection (ICNIRP) exposure limits at the Site and at the nearest residential properties. As such, the Substation Works are not expected to give rise to significant effects on residential amenity or human health arising from EMFs.

7.11.9 Noise and vibration impacts on human receptors have also been assessed within a **Noise and Vibration Assessment** (GWNC-ATG-SS50-XXXXXX-RPT-ES-000001), which is submitted to inform the Application. The Noise and Vibration Assessment considers the potential impacts arising from construction noise and construction vibration and identifies appropriate mitigation measures to minimise adverse impacts. These mitigation measures would be secured through the final CEMP. Overall, the Noise and Vibration Assessment concludes that no significant adverse effects are anticipated from the Substation Works during either the construction or operational phases, provided that standard mitigation measures are implemented as part of the proposals.

7.11.10 The Substation is located in proximity to residential properties, which as identified within the **Noise and Vibration Assessment** (GWNC-ATG-SS50-XXXXXX-RPT-ES-000001)**,** would most likely be impacted during the construction phase. The potential impact on residential amenity during the construction phase has been considered through the CEMP, CTMP and Noise and Vibration Assessment and will be controlled through the inclusion of appropriate conditions. The impact of the operation of the Substation Works following construction has also been assessed through the **Noise and Vibration Assessment** (GWNC-ATG-SS50-XXXXXX-RPT-ES-000001) and the **EMF Assessment** (GWNC-NGD-ZZZZ-XXXXXX-RPT-PM-000003).

7.11.11 The Substation Works would not have an adverse impact on residential amenity and therefore complies with the requirements of the NPPF, NPS EN-1 and EN-5, and Policies 2, 3, 30 and 31 of the SELLP.

7.12 Contaminated Land

7.12.1 Policy 30 (Pollution) of the SELLP requires development proposals will not be permitted where, taking account of any proposed mitigation measures, they would lead to unacceptable adverse impacts upon the health and safety of the public, the amenities of the area, or the natural, historic and built environment. Unacceptable adverse impacts include those caused by:

1) Air quality, including fumes and odour;
2) Noise including vibration;
3) Light levels;
4) Land quality and condition; or
5) Surface and groundwater quality.

7.12.2 NPPF Paragraph 198 states:

"Planning policies and decisions should also ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development."

7.12.3 NPPF Paragraph 201 states:

"The focus of planning policies and decisions should be on whether proposed development is an acceptable use of land, rather than the control of processes or emissions (where these are subject to separate pollution control regimes). Planning decisions should assume that these regimes will operate effectively. Equally, where a planning decision has been made on a particular development, the planning issues should not be revisited through the permitting regimes operated by pollution control authorities"

7.12.4 A **Phase 1 Geo-Environmental Desk Study** (GWNC-WAA-SS50-XXXXXX-RPT-ES-000001) has been included in the submission of this application. Section 8.2 of the study sets out the potential sources of contamination within and outside of the Site. Table 8.1 in the **Phase 1 Geo-Environmental Desk Study** (GWNC-WAA-SS50-XXXXXX-RPT-ES-000001) provides a risk classification and rationale of the potential sources on potential pathways and receptors. Table 8.1 demonstrates that the potential sources pose a low or very low risk to the potential pathways or receptors. The Phase 1 Geo-Environmental Desk Study recommends that a standard planning condition is imposed for ground investigation, to confirm any presence of contamination and secure mitigation, if required.

7.12.5 On this basis, it is considered that there is no unacceptable impact in respect of contaminated land, subject to the implementation of the identified mitigation. The Substation Works are considered to have an acceptable impact in respect of contaminated land. Therefore, the Substation Works accord with paragraphs 198 and 201 of the NPPF and Policy 30 of the SELLP.

7.13 Transport and Access including Public Rights of Way

7.13.1 At the local level Policy 33 (Delivering a More Sustainable Transport Network) of the SELLP is concerned about delivering physical long-term transport infrastructure and sustainable travel developments, and provides a relevant local framework for assessing and managing construction traffic. Policy 33 suggests that construction traffic should not undermine the functioning of the existing network and should align with the goal of promoting sustainable transport.

7.13.2 NPPF paragraph 115 requires consideration of appropriate opportunities to promote sustainable transport modes. Paragraph 116 states that,

> *'Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network, following mitigation, would be severe, taking into account all reasonable future scenarios.'*

7.13.3 NPPF Paragraph 105 states that "*Planning policies and decisions should protect and enhance public rights of way and access, including taking opportunities to provide better facilities for users*".

7.13.4 NPS EN-1 at paragraph 5.14.19 recognises that projects may give rise to substantial impacts on the surrounding transport infrastructure. It refers to the need for applicants to mitigate these impacts, including during the construction phase of the development and by enhancing active, public and shared transport provision and accessibility. It goes on to state at paragraph 5.14.22 that development should only be refused where there would be an unacceptable impact on highway safety, residual cumulative impacts on the road network would be severe, or it does not show how consideration has been given to the provision of adequate active public or shared transport access and provision.

Transport

7.13.5 The Substation Works would result in a temporary increase in traffic during construction, however once operational the substation would be unmanned, and traffic would comprise very low traffic movements for routine inspection and maintenance during the operational lifetime of the substation.

7.13.6 The **Transport Statement** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000018) provides an assessment of trip generation resulting from the Substation Works, concluding that the percentage impact of construction traffic on the main roads as a result of the Substation Works would be generally low. The impacts on the A16 and A151 would remain below 5% during peak periods, except for a slightly higher impact on the A151 between 18:00-19:00 due to lower baseline traffic flows. It is considered this level of impact would fall within normal day to day variation of traffic flows, therefore, the likely impact on operation of the local highway would be negligible.

7.13.7 Potential impacts to junctions have also been assessed in the Transport Statement, with local junctions considered to be operating satisfactorily as confirmed by LCC. Recent improvements to the A16 and A151 Springfields Roundabout have improved capacity and therefore would be considered capable of accommodating construction traffic without operational issues. As such, the Transport Statement does not provide further assessment of these junctions.

7.13.8 Table 3.4 of the **Transport Statement** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000018) sets out a list of emerging developments and their traffic and movement impact and includes the NSIPs identified in **Table 3.1** in this PDAS. The construction traffic forecast for ODOW has been included in the Transport Statement. Meridian Solar Farm has been assessed but the construction traffic hours do not coincide with the substation assessment hours and their operational traffic is low so they have not been considered further.

7.13.9 An **Outline CTMP** has been produced and submitted alongside this application (GWNC-WSP-ZZZZ-ZZZZZZ-PLN-PM-000002), which details the vehicle routes, parking arrangements, loading and unloading areas, storage arrangements and control measures for the emission of dust. The measures provided in the outline CTMP would reduce the impacts from construction traffic. The CTMP includes an Outline Worker Travel Plan (CWTP) which reduces private car use, avoid peak-hour highway impacts, and ensure safe, efficient access for workers. It is expected that the outline CTMP would be adopted as a full CTMP as a condition attached to the Planning Application.

7.13.10 The proposed core construction working hours would be between 07:00 and 19:00 Monday to Friday, and between 08:00 and 17:00 Saturdays, Sundays, Bank Holidays and other Public Holidays. However, the **Transport Statement** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000018) notes that that practically there may be limited activities on Saturdays, Sundays and Bank Holidays. As such, the Transport Statement assessed construction traffic on a weekday profile, providing a robust assessment as forecast weekday trips are likely to be higher than at the weekends.

Access

7.13.11 Construction traffic would access the Site using the existing highway network. The assessment provided in the **Transport Statement** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000018) is based on an indicative construction programme running from January 2028 to early 2031. The peak construction traffic period has been identified as September 2028 to August 2029, during which an average of 265 daily construction traffic movements is anticipated. This would comprise approximately 55 Heavy Goods Vehicle (HGV) movements, 150 LGVs and 60 construction workers cars/vans on average daily during the peak year of construction. During operation of the Substation Works only a very small number of vehicles are anticipated, with traffic primarily associated with routine inspection and periodic maintenance of the substation, pylons and supporting infrastructure. The **Transport Statement** concludes that the forecast operational traffic would be approximately two vehicles (four trips) a month for routine checks and maintenance.

7.13.12 Overall, the Substation Works would result in a temporary increase in traffic during construction, however operational traffic would comprise low traffic movements. Therefore, the Substation Works would not result in an adverse impact on the local highway network. The Substation Works would also manage the potential impacts of construction traffic through enforcing a CTMP and CWTP. As such, the Substation Works are in accordance with the NPPF, NPS EN-1 and the SELLP.

Public Rights of Way

7.13.13 Policy 31 of the SELLP (Climate Change and Renewable and Low Carbon Energy), requires that proposals for renewable energy facilities, associated infrastructure should not cause harm to highway safety and PRoW.

7.13.14 The importance of protecting and enhancing PRoWs is reiterated in Policies 32 (Community, Health and Well-being), and Policy 33 (Delivering a More Sustainable Transport Network).

7.13.15 Chapter 8 (Promoting healthy and safe communities) of the NPPF seeks to promote developments that assist in achieving healthy, safe and inclusive places. Paragraph 105 states that developments should protect and enhance PRoW and access.

7.13.16 Chapter 9 (Promoting sustainable transport) of the NPPF focuses on ensuring that transport-related issues are considered from the earliest stages of development proposals, with an emphasis on the need to pursue opportunities to promote walking, cycling and public transport use.

7.13.17 Paragraph 5.11.30 of NPS EN-1 highlights how Public Rights of Way are important recreational facilities, and that applicants are expected,

> *'to take appropriate mitigation measures to address adverse effects on coastal access, National Trails, other rights of way and open access land and, where appropriate, to consider what opportunities there may be to improve or create new access. In considering revisions to an existing right of way, consideration should be given to the use, character, attractiveness, and convenience of the right of way.'*

7.13.18 Paragraph 5.11.31 of NPS EN-1 highlights the importance of assessing whether the applicant's proposed mitigation is adequate and decide whether it should be secured through conditions or binding mechanisms.

7.13.19 As detailed in the **Transport Statement** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000018), two public footpaths cross the Site (Wstn/7/1 and Wstn/8/1). Construction of the Substation Works would require the temporary closure and diversion of the Wstn 7/1 route, but it is anticipated that Wstn/8/1 would be able to function as an open PRoW throughout the construction of the Substation Works.

7.13.20 With regard to the temporary diversion and reinstatement of the Wstn/7/1 PRoW, it is anticipated that when the PRoW is reinstated, there could be interaction with a watercourse diversion, which would be diverted as part of the Substation Works. In this instance, a watercourse crossing would be provided to ensure that the PRoW would retain its function in the future. This would be confirmed in the detailed design phase of the Substation Works.

7.13.21 Wstn/8/1 intersects with the west of the Site and is located in an area identified for environmental mitigation, specifically crop management. As such, it is not anticipated that the PRoW would need to be diverted during construction of the Substation Works. However, the PRoW is an existing vehicular access track and therefore would be permanently used for the maintenance of the Weston Marsh Substation A.

7.13.22 The **Outline CEMP** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000019) and **Outline CTMP** (GWNC-WSP-ZZZZ-ZZZZZZ-PLN-PM-000002) further set out control measures for the management of PRoW, with any potential permanent or temporary closures identified. All designated PRoWs crossing the working area would be appropriately managed, with access restricted only for the duration of construction activities and suitable diversions provided where required.

7.13.23 Details of any proposed temporary suspension and diversion of PRoWs would be agreed with the LCC PRoW Officer. While the **Transport Statement** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000018) outlines general mitigation measures, this may include the undertaking of a condition survey to establish the existing quality of affected PRoWs and any diverted routes. This would enable the identification of potential impacts arising from construction activity and inform appropriate reinstatement measures where necessary.

7.13.24 The **Socio-economic Impact Assessment** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000019) considers the impacts of the Substation Works on PRoW in the context of socio-economic conditions, including recreation. The assessment concludes that there would be both direct and indirect effects on PRoW users, given that one PRoW intersects the Site and several others are located within 500 m of the Substation Works.

7.13.25 Overall, impacts to PRoW during construction would be assessed and appropriately managed, with diversions provided where required. This aligns with local and national policy; including Policy 31 of the SELLP, which seeks to safeguard the use and amenity of PRoWs, while supporting the necessary renewable energy development activities. The temporary nature of closures, the provision of suitable diversions, and the implementation of necessary mitigation reflect policy requirements to protect and enhance PRoWs. The Substation Works are therefore in accordance with NPS EN-1, the NPPF and the local plan Policy 31.

7.14 Cumulative Impact of Construction and Operation of the Scheme

7.14.1 Policy 31 (Climate Change and Renewable and Low Carbon Energy) of the SELLP incorporates the need for the consideration of cumulative effects when assessing the potential impact of a development.

7.14.2 Paragraph 198 of the NPPF states that:

> *"Planning policies and decisions should also ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development."*

7.14.3 Paragraph 4.1.5 of NPS EN-1 states that:

> *'In considering any substation works, in particular when weighing its adverse impacts against its benefits, the Secretary of State should take into account:*
>
> *Its potential benefits including its contribution to meeting the need for the Clean Power 2030 Mission and net zero, energy infrastructure, job creation, reduction of geographical disparities, environmental enhancements, and any long-term or wider benefits;*
>
> *Its potential adverse impacts, including on the environment, and including any long-term and cumulative adverse impacts, as well as any measures to avoid, reduce, mitigate or compensate for any adverse impacts, following the mitigation hierarchy.'*

7.14.4 This need to assess cumulative effects is mirrored in NPS EN-5.

7.14.5 This section sets out the cumulative effects in relation to agriculture and soils, air quality, ecology and biodiversity, the historic environment, socio-economics, the water environment and population and health. There are a number of nearby consented developments in the immediate vicinity of the Substation Works, as detailed further in the **Cumulative Effects Assessment Report** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000020).

Agriculture and Soils

7.14.6 For the cumulative effects assessment, the Substation Works' ZoI for agriculture and soils is 500 m. Beyond this distance there is not considered to be potential for significant cumulative effects due to construction or operation of the Scheme.

7.14.7 As set out in the **ALC Report** (GWNC-ARC-SS50-XXXXXX-RPT-ES-000002), 19.69 ha of BMV agricultural land would be permanently affected by the Substation Works. This represents approximately 0.03 % of the land classified as Provisional Grade 1 land and 0.004 % of BMV land in Lincolnshire.

7.14.8 Although significant effects on agricultural land have been identified for other shortlisted schemes within the ZoI, the temporary (111 ha) and permanent (19.7 ha) agricultural land loss associated with the Substation Works would not give rise to any additional significant cumulative effects on BMV or soil function beyond those already identified for existing and committed developments, or for the Substation Works in isolation.

7.14.9 The implementation of, and adherence to, soil management plans would ensure that land required temporarily during construction is reinstated to agricultural use, with permanent loss limited to the substation compound, access, drainage and landscape planting areas.

Air Quality

7.14.10 The ZoI for air quality is 250 m for the assessment of potential impacts from construction dust and particulate matter on soiling and human health, including emissions arising from non-road mobile machinery and plant. Beyond this distance, significant cumulative effects are not anticipated, due to dispersion and the expected deposition of dust and particulate matter within the defined ZoI. For vehicle emissions associated with both the construction and operational phases, a screening distance of 200 m from any roads considered to be affected by changes in traffic associated with the construction and operational phases has been adopted.

7.14.11 The assessment of cumulative air quality effects considered construction dust, particulate matter and vehicle emissions arising from the Substation Works alongside other committed developments in the surrounding area. While there is potential for overlapping ZoI during construction, traffic assessments indicate that changes in vehicle flows would not exceed relevant screening thresholds and are unlikely to result in significant cumulative effects. Additionally, cumulative effects associated with air quality could occur during the construction and/or operation of the substation if traffic associated with both the substation and other developments uses the same or nearby roads, and there are sensitive receptors close to those roads.

7.14.12 Other committed developments within 250 m of the Substation Works have undertaken construction dust risk assessments and incorporated appropriate mitigation in accordance with IAQM Construction Dust Guidance (Ref 37). On the

basis that the mitigation measures proposed by each of the committed developments are enforced, no significant cumulative construction dust effects are anticipated.

7.14.13 The **Cumulative Effects Assessment Report** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000020) notes that a 'high' construction dusk risk has been identified. However, appropriate mitigation measures have been incorporated into the **Outline CEMP** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000019). With the application of best-practice dust and non-road mobile machinery controls across the Substation Works and other committed developments, no significant cumulative air quality effects are anticipated. National Grid would also coordinate construction activities with nearby developers to minimise concurrent dust-generating works where practicable.

Ecology and Biodiversity

7.14.14 The **Cumulative Effects Assessment Report** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000020) provides an assessment of the cumulative effects on ecology and biodiversity arising from the construction and operation of the Substation Works, alongside other shortlisted developments. The ZoI for the assessment is 20 km, which reflects the potential foraging range of mobile species which may be features of designated ecological sites, including bird species associated with internationally designated sites.

7.14.15 Given the scale and location of nearby projects, including a number of nearby NSIPs, potential cumulative effects are primarily related to other large-scale developments which interface directly with the Substation Works, namely the consented ODOW and the Meridian Solar Farm Project. However, the overlap between the Order Limits of these two NSIPs with the Substation Works Site Boundary are geographically separate, with ODOW impacting land to the north of the Substation Works in the locality of the River Welland, and the Meridian Solar Farm impacting predominantly agricultural land to the south.

7.14.16 With the implementation of proposed mitigation measures for both the Substation Works and nearby committed developments (including ODOW and the Meridian Solar Farm), no significant cumulative effects on ecology and biodiversity are anticipated.

7.14.17 While a full cumulative effects assessment for the Substation Works in combination with the Grimsby to Walpole Project, EGL 3 and EGL 4, and WMEL is dependent upon the publication of the environmental statements for these projects, the largely localised nature of the Substation Works' impacts means it is unlikely to give rise to significant cumulative effects. However, the environmental deliverables submitted in support of the DCO applications for the Grimsby to Walpole Project, EGL 3 and EGL 4 and WMEL will include further assessment of potential cumulative effects based upon the full details of these projects. These will be considered further during the respective DCO examinations for each of these projects.

7.14.18 Overall, given the scale and location of the shortlisted developments identified in the **Cumulative Effects Assessment Report** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000020), which lie within the ecology and biodiversity ZoI, the potential pathways for cumulative effects are limited. Based upon the largely localised nature of the impacts of the Substation Works and the mitigation measures set out on the **Indicative Landscape and Ecology Mitigation Proposals** (GWNC-GIL-SS50-XXXXXX-PLN-ES-000001) and **Outline CEMP** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000019), the

Substation Works are not predicted to result in any significant cumulative effects upon ecology and biodiversity receptors.

Geology

7.14.19 The geology and hydrogeology assessment considered the potential cumulative effects within a 1 km ZoI, beyond which significant effects are not anticipated.

7.14.20 The Substation Works and surrounding developments are located within an area of low geological and hydrogeological sensitivity, characterised by unproductive strata that limit groundwater pathways and the potential for contamination. Assessment of the Substation Works alongside other nearby developments, including ODOW, Meridian Solar Farm, Grimsby to Walpole, EGL 3 and EGL 4, indicates that impacts would not be significant, both individually or cumulatively.

7.14.21 Additionally, the **Phase 1 Geo-Environmental Desk Study** (GWNC-WAA-SS50-XXXXXX-RPT-ES-000001) did not identify any significant potential contamination sources within the Study Area (Substation Works Site Boundary plus a 500 m buffer). Several potential contamination sources were identified, although these were generally assessed as low risk or a potential localised constraint, and not anything with potential to affect other schemes through cumulative effects.

7.14.22 With the implementation of appropriate construction management measures set out in the **Outline CEMP** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000019), no significant cumulative effects on geology or hydrogeology are anticipated.

Historic Environment

7.14.23 When considered cumulatively with the other developments identified in the **Cumulative Effects Assessment Report** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000020) within the Historic Environment Zone of Influence (1 km for non-designated assets and 5 km for designated assets), the construction and operation of the Substation Works are unlikely to give rise to additional significant cumulative effects.

7.14.24 Potential cumulative interactions were identified with a small number of nearby major infrastructure projects, notably ODOW, EGL 3 and EGL 4 to the north and east of the Substation Works. For these projects, the potential effects on heritage assets were found to be adverse but not significant, with the addition of the Substation Works not making these effects significant. This is due to the Substation Works Site Boundary being located further away from the heritage assets than the other projects, as well as the short-term and temporary nature of the Substation Work's impacts during construction.

7.14.25 Significant effects on designated heritage assets have been identified for the Meridian Solar Farm and Grimsby to Walpole Project, particularly at Wykeham Chapel, however these effects arise from those schemes in isolation and the Substation Works are unlikely to give rise to any additional significant effects to those identified for these projects in isolation, or within their own cumulative effects assessment. These significant effects will be considered in due course during the Planning Inspectorate's examination of the respective DCO applications.

7.14.26 With the implementation of appropriate mitigation and archaeological management measures, including agreed programmes of investigation, where required, the Substation Works are not expected to give rise to significant cumulative effects on

archaeological and paleoenvironmental assets during either construction or operation. Any effects on unknown archaeological remains would be managed through a Protocol of Archaeological Discovery.

7.14.27 As impacts to buried archaeology are limited to the construction phase, no significant cumulative effects are anticipated during operation.

Landscape and Visual

7.14.28 The landscape and visual ZoI for the Substation Works extend to 5 km, beyond which no significant cumulative effects are anticipated. A review of nearby developments in the **Cumulative Effects Assessment Report** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000020), including ODOW, Meridian Solar Farm, and the emerging Grimsby to Walpole Project, indicates that while some of these schemes may give rise to significant landscape and visual effects in isolation (primarily due to new overhead lines), the Substation Works itself is unlikely to result in additional significant effects to those which have been reported within the respective environmental assessments for the relevant short-listed developments.

7.14.29 Where temporary construction activities may coincide, effects are expected to be localised, reversible, and capable of being mitigated or managed through coordination with adjacent projects. During operation, the Substation Works' permanent elements are relatively limited in extent and largely associated with existing infrastructure and the proposed mitigation planting would further reduce visual effects. When considered cumulatively with other nearby developments, the incremental contribution of the Substation Works is therefore not expected to give rise to additional significant effects on landscape character or visual amenity.

Noise and Vibration

7.14.30 As detailed in the **Cumulative Effects Assessment Report** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000020), for the noise and vibration assessment, the ZoI extends to 300 m for construction noise and vibration and 1 km for operational noise. Beyond this distance, significant cumulative effects are unlikely.

7.14.31 A review of nearby projects including ODOW, Meridian Solar Farm, the emerging Grimsby to Walpole Project, and EGL 3 and EGL 4, indicates that predicted effects at shared noise-sensitive receptors are generally minor or negligible and not significant in isolation.

7.14.32 Consistent findings across the respective environmental assessments for the other nearby projects show that, where receptors are shared between the projects, cumulative construction and operational noise and vibration effects are not expected to be significant. This would also be assisted by the application of best practicable means to mitigate and minimise the effects of construction noise and vibration by all projects.

Socio-Economics

7.14.33 The socio-economic ZoI is limited to the Substation Works Site Boundary. Beyond the Substation Works Site Boundary, there is not considered to be potential for significant cumulative socio-economic effects arising from the construction or operation of the substation.

7.14.34 A review of nearby developments, including ODOW, Meridian Solar Farm and the emerging Grimsby to Walpole Project, indicates no likely significant adverse socio-economic effects in isolation or in combination.

7.14.35 ODOW and Meridian Solar Farm both identify minor beneficial, non-significant effects on employment and the local economy and are dependent on the delivery of the Substation Works as enabling grid infrastructure. As such, Weston Marsh Substation A is intended to facilitate these developments, and coordination between the projects would avoid land-use conflict or adverse socio-economic interactions. The Grimsby to Walpole Supplementary Preliminary Environmental Report similarly does not identify significant cumulative socio-economic effects.

7.14.36 Overall, the Substation Works are not expected to result in significant cumulative socio-economic effects when considered alongside other planned or consented developments.

Traffic and Movement

7.14.37 Traffic and movement effects are not reported separately within the **Cumulative Effects Assessment Report** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000020), as the assessment presented in the Transport Statement is inherently cumulative and consistent with best practice published by PINS (Ref 38) and IEMA/ISEP (Ref 39).

7.14.38 The **Transport Statement** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000018) applies National Trip End Model growth factors to baseline traffic flows to account for anticipated future development and considers traffic associated with submitted applications and NSIPs within a 10 km radius of the Substation Works. Forecast construction traffic from the ODOW project has been included within the future baseline, while Meridian Solar Farm is not expected to affect peak highway periods. Other identified developments are forecast to generate low traffic volumes and are not anticipated to materially affect the local highway network.

7.14.39 During construction, a CTMP would be implemented to manage temporary highway impacts through appropriate control measures, ensuring traffic effects are effectively managed. An **Outline CTMP** (GWNC-WSP-ZZZZ-ZZZZZZ-PLN-PM-000002) has been submitted with this planning application.

Water Environment

7.14.40 The ZoI for water environment effects extends to 1 km from the Substation Works Site Boundary, beyond which significant cumulative effects are unlikely. A review of nearby developments, including ODOW, Meridian Solar Farm, the Grimsby to Walpole Project, and EGL 3 and EGL 4, indicates that potential effects on hydrology, hydrogeology and flood risk during construction, operation and decommissioning are generally minor or negligible and not significant in isolation.

7.14.41 Across all projects, embedded and standard mitigation measures are proposed, including the use of CEMPs, drainage strategies, SuDS, flood risk mitigation and pollution prevention measures. Where similar receptors may be affected, good practice construction controls and regulatory compliance are assumed. On this basis, the Substation Works are not expected to result in significant cumulative effects on the water environment when considered alongside other planned or consented developments.

Summary

7.14.42 The **Cumulative Effects Report** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000020) concludes that, when considered alongside the short-listed developments, the Substation Works is unlikely to give rise to significant cumulative environmental effects.

7.14.43 Across all assessed topics (agriculture and soils, air quality, ecology and biodiversity, geology and hydrogeology, historic environment, landscape and visual effects, noise and vibration, socio-economics, and the water environment), potential impacts are either not significant or would be effectively managed through established mitigation and best practice measures, such as the CEMP, other management plans, and construction best practice. Traffic and movement effects are addressed separately within the **Transport Statement** (GWNC-ARU-SS50-XXXXXX-RPT-ES-000018), which adopts an inherently cumulative approach.

7.14.44 Overall, with appropriate mitigation in place, the Substation Works would not result in adverse cumulative effects beyond those already identified in the relevant environmental assessments for the committed developments.

8. Summary and Conclusions

8.1 Overarching Need and Benefits

8.1.1 As outlined in Section 4 of this PDAS, there is a clear and recognised need for the Substation Works due to the need to make upgrades to the existing transmission network which transports electricity around the country, so that everyone has reliable access to the clean electricity generated from new renewable sources.

8.1.2 Specifically, the Substation Works are required to enable the consented ODOW renewable generation scheme to connect to the transmission network by 2030. This is identified as playing a critical role in achieving the UK Government's ambition to deliver 50 GW of offshore wind by 2030 and achieve net zero by 2050.

8.1.3 The needs case for the Substation Works is therefore compelling, and as set out in Section 4.4 of this document, the Substation Works and other elements of the Scheme will provide a range of benefits which ought to be afforded substantial weight in the consideration of the Scheme, including the contribution of the Substation Works toward:

- The reduction of reliance on fossil fuels and contribution to the UK's decarbonisation requirements and climate change targets.
- Ensuring the supply of energy remains secure, reliable and affordable.
- Supporting the supply of clean, renewable energy from a domestic source, by connecting the ODOW project.
- Meeting increased demand, with a predicted doubling of electricity demand by 2050.
- Providing new, more efficient infrastructure which will contribute to a more automated, efficient and flexible system.
- Lowering long-term costs, through connecting the ODOW project which is intended to lead to lower utility bills for consumers and businesses.
- Habitat creation and enhancement, through a combination of on-site and off-site works, ensuring a minimum 10% BNG.
- Economic growth and employment opportunities during construction.

8.2 Residual adverse impacts

8.2.1 The appraisal in Section 7 of this PDAS sets out that in the majority of cases, the Substation Works would not give rise to any residual adverse effects on environmental receptors. However, the Substation Works would give rise to the loss of BMV agricultural land (Grade 1), a matter which is a key consideration for the development of infrastructure associated with the transmission of renewable energy at both the local (Policy 31) and national levels (NPPF Paragraph 187 (b) and NPS EN-1).

8.2.2 However, as described within the appraisal, this impact on agricultural land is shown to be:

- Unavoidable – with reasonable alternatives considered in line with the Horlock Rules and the siting of Substation Works having been designed following a detailed iterative process and the design and function of the infrastructure is very much guided by operational requirements of National Grid as a transmission licence holder, and the need to connect customers to the transmission network.
- Limited in Scale – with efforts made to limit the amount of land required for the Substation Works and land beyond the operational footprint not sterilised. Furthermore, the **ALC Report** (GWNC-ARC-SS50-XXXXXX-RPT-ES-000002) acknowledges the abundance of Grade 1 agricultural land within the region and no other options to site the substation on lower grade agricultural land were identified.

8.2.3 The Substation Works are integral to the operation and decarbonisation of the electricity transmission network and there is an overriding need for the infrastructure in this location.

8.3 Conclusion

8.3.1 The urgent need for renewable energy infrastructure and an improved electricity transmission network to address the causes of climate change is acknowledged at both the local and national level. In particular, NPS EN-1 and other recent Government energy and climate change policy highlight the significant urgency of bringing forward energy infrastructure and that actions to address this urgency need to be accelerated. Locally, Policy 31 is supportive of the generation of renewable energy and development of 'associated infrastructure'.

8.3.2 The environmental information submitted in support of the application demonstrates that with appropriate mitigation in place, the proposed Substation Scheme would not lead to any significant effects. The exception to this is the permanent loss of BMV, Grade 1 agricultural land. Importantly, whilst policy provides that the effects on BMV should be minimised, there is no prohibition of the use of BMV if it is justified to be necessary, and the impacts considered.

8.3.3 When assessed in the round, the harm arising from the loss of Grade 1 agricultural land is clearly outweighed by the substantial benefits associated with the provision of essential electricity infrastructure.

8.3.4 The development accords with the overarching objectives of national energy and planning policy, particularly supporting the transition to a low carbon economy and ensuring energy security, with paragraph 168 of the NPPF requiring significant weight to be given to the benefits associated with all forms of renewable and low carbon energy and their associated infrastructure.

8.3.5 The development accords with the relevant development plan and should be approved in line with NPPF paragraph 11.

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Appendix A
Request for a Screening Opinion sent to SHDC on 10 April 2025

1-3 Strand
London WC2N 5EH

www.nationalgrid.com

[redacted]

Sent via email only

10th April 2025

Dear [redacted],

Request for a Screening Opinion The Town and Country Planning (Environmental Impact Assessment) Regulations 2017: Proposed Substation Development in the Vicinity of the Spalding Tee-Point, Surfleet Seas End and Moulton Seas End

I write on behalf of National Grid Electricity Transmission plc (NGET) (also referred to as 'the Applicant') to request a Screening Opinion from South Holland District Council (SHDC) under Regulation 6 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 ("the EIA Regulations") in relation to the development of a new 400 kilovolt (kV) substation, to be known as the 'Weston Marsh' Substation (also referred to as 'the Proposed Development').

The Regulations require that a Screening Opinion request be accompanied by a plan sufficient to identify the land affected, a description of the development and the aspects of the environment likely to be significantly affected, together with any other such information or representations as the person making the request may wish to make.

This Screening Opinion request sets out the background to and details about the Proposed Development and describes the findings of the screening assessment that has been undertaken having regard to the requirements of Schedule 3 of the EIA Regulations. Further detail is provided in **Appendix A EIA Regulations 2017 Screening Matrix**. Plans setting out the location of the Proposed Development and surrounding environmental constraints (**Figure 1 Screening Boundary** and **Figure 2 Environmental Constraints Plan**) are also provided.

If, under regulation 6 of the EIA Regulations, a developer makes a request for the relevant planning authority to provide a screening opinion the authority is required to provide a screening opinion. This screening request must include:

Information required	**Location in this request for a screening opinion**
(a) a plan sufficient to identify the land	Figure 1 Screening Boundary
(b) a description of the development, including in particular— (i) a description of the physical characteristics of the development and, where relevant, of demolition works; (ii) a description of the location of the development, with particular regard to the environmental sensitivity of geographical areas likely to be affected;	'The Proposed Development' Section pages 2-6
(c) a description of the aspects of the environment likely to be significantly affected by the development;	'Characteristics of Predicted Impacts and Likely Effects' Section pages 8-17

Information required	Location in this request for a screening opinion
(d) to the extent the information is available, a description of any likely significant effects of the proposed development on the environment resulting from— (i) the expected residues and emissions and the production of waste, where relevant; and (ii) the use of natural resources, in particular soil, land, water and biodiversity; and	'Characteristics of Predicted Impacts and Likely Effects' Section pages 8-17
(e) such other information or representations as the person making the request may wish to provide or make, including any features of the proposed development or any measures envisaged to avoid or prevent what might otherwise have been significant adverse effects on the environment.	'Characteristics of Predicted Impacts and Likely Effects' Section pages 8-17

Background

NGET are undertaking a major overhaul of the electricity grid. Known as the Great Grid Upgrade, the overhaul's objective is to support the transition to renewable energy by reinforcing the country's electricity network and facilitate the UK's commitment to reaching net zero by 2050.

The Grimsby to Walpole project forms part of the Great Grid Upgrade and is a Nationally Significant Infrastructure Project (NSIP) requiring a Development Consent Order (DCO). The project is currently at pre-application stage and is expected to be submitted to the Secretary of State in Spring 2027. It proposes a circa 140km long overhead line connecting new substations from Grimsby, Northeast Lincolnshire to Walpole, near Norfolk with new 400 kV substation infrastructure located in the vicinity of the Spalding Tee-Point in South Holland District. This will serve as a critical connection point for several renewable energy projects.

Outer Dowsing Offshore Wind is also a NSIP requiring a DCO. It was accepted for examination by the Secretary of State and at the time of writing is in the examination stage. It comprises a 1.5GW offshore wind farm located approximately 54km off the Lincolnshire coastline. This is a joint venture developed by Corio (and its affiliates), TotalEnergies and Gulf Energy Development. It involves the installation of up to 100 turbines. The electricity generated will be transmitted via underground cables from Wolla Bank. Upon completion, it is anticipated to generate renewable electricity for over 1.6 million households, significantly contributing to the UK's target of 50GW of renewable energy generation from offshore wind by 2030 (listed as one of the UK Government's '10 Point Plan', contributing to a carbon net zero by 2050).

Under Section 9(2) of the Electricity Act 1989, NGET has a duty:

- To develop and maintain an efficient, coordinated, and economical system of electricity transmission.
- To facilitate competition in the supply and generation of electricity. This includes a statutory obligation to offer to connect any new generating stations or interconnectors applying to connect to the transmission system.

An evaluation of two possible grid connection options (the 'Lincolnshire Node' and Weston Marsh) was considered in the Outer Dowsing Preliminary Information Environmental Report (PEIR). Following the publication of the PEIR, Outer Dowsing received confirmation from National Grid Electricity Systems Operator (NGESO) (now National Energy System Operator (NESO)) in August 2023 that the confirmed grid connection for Outer Dowsing would be Weston Marsh.

As part of the connection agreement between NESO and Outer Dowsing Offshore Wind (and therefore the reciprocal contractual agreement between NESO and NGET), a connection point onto the transmission

system must be made available by 2030. Therefore, to accommodate this, an element of the Weston Marsh substation will need to be operational ahead of the Grimsby to Walpole project's programmed connection date of 2033.

It is important to note that the Proposed Development is a standalone development from Outer Dowsing, and will need to fully function as part of the transmission system independently of the outcome of the Grimsby to Walpole DCO application. Consent for expanded Weston Marsh Substation infrastructure, and the connection of the new 400kV overhead line (OHL) to facilitate connection for other energy projects will be sought via the Grimsby to Walpole DCO.

In order to expedite delivery of a connection substation for Outer Dowsing ahead of the Grimsby to Walpole project, consent for the Proposed Development is to be sought separately from the wider DCO envelope.

Determining the Need for EIA

EIA Screening

Schedule 3 of the EIA Regulations sets out the considerations required of a screening opinion. To better facilitate the Council's duties in this respect, this screening opinion request letter provides the following information:

1. The characteristics of the Proposed Development;

2. A description of the Site associated with the Proposed Development; and

3. Consideration of the characteristics of potential impacts associated with the Proposed Development and the likelihood of environmental effects that might result.

This screening opinion request letter draws upon a preliminary review of the Screening Boundary and its surroundings, together with requirements as set-out in the EIA Regulations. It considers the scale and character of the Proposed Development in the context of its environment, as well as any cumulative issues associated with the OHL works, to be submitted to the Secretary of State (SoS) for Department for Energy Security and Net Zero (DESNZ) via Section 37 of the Electricity Act 1989.

Need for EIA Screening

The EIA Regulations

The EIA Regulations contain two lists of development projects. Schedule 1 identifies the types of development for which EIA is mandatory. Schedule 2 identifies the types of development for which EIA may be required, if certain thresholds or criteria are exceeded and significant environmental effects are likely.

EIA is required for Schedule 2 projects that exceed relevant thresholds or criteria set out in Schedule 2, only if the development is considered to be likely to give rise to significant environmental effects. Schedule 3 of the EIA Regulations sets out criteria for use in screening if development is likely to have significant effects on the environment.

Electricity substations are not a type of development that is listed in Schedule 1 of the EIA Regulations and is not therefore 'schedule 1 development'. Electricity substations are also not a type of development listed under Schedule 2 of the EIA Regulations and is not therefore 'schedule 2 development'.

Although the Proposed Development is not schedule 1 or schedule 2 development, where the development area of its projects' exceed the thresholds specified in Schedule 2 of the EIA Regulations, NGET voluntarily seeks to screen such developments. In this case, the area of the proposed substation exceeds the 5 hectare threshold above which developments described in Schedule 2, category 10 Infrastructure Projects require to be screened to determine if significant effects are likely.

If the Proposed Development is considered to give rise to likely significant effects, having regard to the criteria set out in Schedule 3 of the EIA Regulations, then an Environmental Statement will be submitted with the Planning Application. If the conclusion of the screening process is that significant effects are not likely then NGET will submit a non-statutory Environmental Assessment Report with the Planning Application.

A project listed in Schedule 2 that is located within, or partly in, a sensitive area will always need to be screened as EIA development, even if the project falls below the thresholds or does not meet the criteria. The EIA Regulations define a 'sensitive area' as being:

- A Site of Special Scientific Interest (SSSI) or Natura 2000 Site;
- A National Park, the Broads or an Area of Outstanding Natural Beauty (AONB)[1]; or
- A World Heritage Site or scheduled monument.

None of these apply to the Screening Boundary. As the Proposed Development is not located within or partly in these statutory designations, it is not located in a "sensitive area" as defined by the EIA Regulations.

The Proposed Development

Location of the Proposed Development

The Proposed Development is located approximately 0.6km north of Weston, 1.6km east of Surfleet Seas End, and 2km west of Moulton Seas End. The Screening Boundary is centred on National Grid Reference 529308, 328090 and includes a Marsh Road and Stone Gate as an indicative area for highway improvements to facilitate access.

The Screening Boundary is located on agricultural land that is Provisional Grade 1 Best and Most Versatile land. Access to the Site would be provided via Marsh Road and Stone Gate, which run adjacent to the western boundary of the Proposed Development Site and continues to the south before joining the A151. Highway improvement works will be required in places along Marsh Road and Stone Gate.

The Screening Boundary covers an area of approximately 436 ha; however, the substation compound itself would comprise approximately 8ha. The remainder of the land within the Screening Boundary would be required for the proposed development of a new 400kV OHL and modifications works to the existing 4ZM and 2WS OHLs (to be submitted to the SoS for DESNZ via Section 37 of the Electricity Act 1989), highway improvement works for Marsh Lane and Stone Gate, and areas to be utilised as a temporary construction compound. Subject to design, environmental surveys and assessments this also includes land which could be used for drainage, landscape screening, and Biodiversity Net Gain (BNG) provision.

Surrounding Area

The Screening Boundary is located within a semi-rural landscape, surrounded by farmland with the existing 4ZM OHL crossing the Screening Boundary from west to east towards the northern edge of the Screening Boundary as well as the existing 2WS OHL providing a connection to the Spalding Power Station which is routed through the Screening Boundary. **Figure 2 Environmental Constraints Plan** shows key environmental features within 1km of the Screening Boundary.

There are six Local Wildlife Sites (LWS) within 1km of the Screening Boundary. These sites are non-statutorily designated for their nature conservation value and are:

- Surfleet Seas End Saltmarsh, located approximately 350m to the west of the Screening Boundary;
- Vernatt's Drain, located approximately 400m to the west of the Screening Boundary;
- Pinchbeck Marsh, located approximately 430m to the west of the Screening Boundary;

[1] As of 22nd November 2023 all designated AONBs in England and Wales are becoming National Landscapes.

- Blue Gowt Drain, located approximately 850m to the west of the Screening Boundary;
- River Glen Corridor, located approximately 850m to the west of the Screening Boundary; and
- Surfleet Bank, located approximately 950m to the north of the Screening Boundary.

There are a total of 41 designated heritage assets within 2 km of the Screening Boundary. These comprise three scheduled monuments, three grade I listed buildings, 34 grade II listed buildings and one conservation area. Many of these assets are situated within Moulton Conservation Area, specifically one grade I listed building and 16 grade II listed buildings, with the north western extent of the conservation area approximately 1.7 km to the south east of the Screening Boundary.

There are several Public Rights of Way (PRoW) in the vicinity of the Screening Boundary as shown in **Figure 2 Environmental Constraints Plan**. The nearest of these are a collection of public footpaths which cross the Screening Boundary from east to west, as well as a bridleway and public footpath 300m and 400m west of the Screening Boundary, respectively.

The Environment Agency Flood Zone Maps identify that the majority of the Screening Boundary lies in Flood Zone 3, with pockets of the Screening Boundary sitting within Flood Zone 2. A Flood Risk Assessment will be submitted with the Planning Application.

There are nine areas of deciduous woodland within 1km of the Screening Boundary.

The Screening Boundary is located within National Character Area 46: The Fens (NCA 46).

Characteristics of the Proposed Development

The following elements are included as part of the Proposed Development:

- A new 400 kV Air Insulated Substation (AIS) substation;
- Road improvement works in places of Marsh Road and Stone Gate to widen the road for construction traffic and/or to introduce passing places along the route; and
- Landscaping, BNG, drainage and associated works.

Weston Marsh Substation

The proposed substation would be enclosed within a fenced compound occupying an area of approximately 8ha. The compound would be secured with a palisade fence extending 2.4m above the ground, backed by an electric pulse fence extending 4m above the ground. Beyond the palisade fence a stock proof fence, extending 1.2m above the ground, would prevent livestock from touching the palisade fence.

Lighting and Security

During operation, lighting would be required at the substation site to allow for safe movement and the operation of equipment. Security lighting would also be required. All lighting would be designed in accordance with the appropriate design standards and National Grid technical specifications. For the purposes of this screening request, it is assumed that the security lighting would be event activated (i.e. would not be continuous) and would be designed to be environmentally sensitive (e.g. directional and low light not exceeding 50 lux).

Substation access road

Access to the Site would be provided via Marsh Road and Stone Gate, which run adjacent to the western boundary of the Proposed Development Site and continue to the south before joining the A151. Highway improvements are required to facilitate access.

The Proposed Development has adopted a worst-case approach to the identification of highway improvements by identifying areas where a carriageway may be used to access the Site and is less than 6 m in width. This work is currently ongoing, and further details will be discussed with the relevant Local Highway Authority so that a final design layout can be agreed. The Proposed Development will not require the full extents of the indicative areas identified for highway improvements and these will be further refined. All works would be small scale in nature.

Overhead line works

Modification works to divert the existing 4ZM OHL into the new substation including reconductoring, removal of two towers and existing overhead line, and structural changes to existing towers.

Modification works to divert the existing 2WS OHL into the new substation including removal of two towers and existing overhead line and structural changes to an existing tower.

Development of a new 400kV OHL connecting from two new proposed towers along the existing 4ZM and the modification of an existing tower on the 2WS OHL to facilitate connections into the new substation. The new OHL routes will realign separate circuits along the existing OHLs (4ZM Bicker Fen Circuit, 4ZM Walpole Circuit, and 2WS Spalding Circuit) over a total length of less than 2km of new OHLs. Six new towers are proposed along these routes.

Consent for development of the new 400kV OHL will be submitted to the SoS for DESNZ under the Electricity Act 1989.

The modification works to the existing 4ZM and 2WS OHLs are likely to benefit from Permitted Development Rights under the General Permitted Development Order 2015, in combination with The Overhead Lines (Exemption) (England and Wales) Regulations 2009, or do not constitute development under the definition in Section 55 of the Town and Country Planning Act 1990.

Construction and Commissioning

Sequence of Work

The Proposed Development would be designed, constructed and operated in accordance with all relevant health and safety legislation. It would also comply with design safety standards including the National Electricity Transmission System Security and Quality Supply Standard (NETS SQSS)[2], which defines the criteria and methodology for coordinating and operating the National Electricity Transmission System. The NETS SQSS informs a suite of National Grid policies and processes, which set out the design standards and thresholds that must be met when designing, constructing and operating assets such as the proposed substation.

The construction and commissioning of the Weston Marsh 400kV substation would be expected to take approximately 33 months to complete. Construction and commissioning would require the following activities:

- Site preparation (enabling works) - The Site would be prepared for construction and would involve activities such as establishing access, establishment of the temporary construction compounds and removal of vegetation.
- Bulk earthworks - The large scale excavation, movement and placement of soil, rock or other materials of the Site would take place to prepare the Site for the construction of the proposed facility.
- Civil works - This involves the construction of the reinforced concrete foundations for the buildings required for the Proposed Development.

[2] see https://www.neso.energy/industry-information/codes/security-and-quality-supply-standard-sqss

- Electrical works: electrical equipment would be installed and connected into their respective circuits and control systems.
- De-mobilisation and landscaping: this would include reinstatement of the land used for the temporary construction compound and storage of materials.
- Energisation: after completing all the necessary commissioning and safety inspections, the HV equipment would be energised.

An outline Construction Environment Management Plan (CEMP) will be submitted with the Planning Application as part of a Preliminary Code of Construction Practice (CoCP) which will include measures to mitigate and manage construction impacts, including hours of operation, Site management, noise abatement, dust management, pollution prevention and control etc. A final version of the CEMP would be submitted to the Local Planning Authority (LPA) for approval prior to commencement of Proposed Development construction.

An outline Construction Traffic Management Plan (CTMP) will also be submitted with the Planning Application as part of a Preliminary CoCP which will set out measures to control construction traffic to mitigate impacts on the local highway network.

A communications plan is also proposed to form part of the outline CEMP, which will include provision to engage with other developers in the vicinity of the Site to ensure construction phases are coordinated to manage potential impacts (including potential cumulative effects) on the local community.

Construction Working Hours

The construction programme for the Proposed Development is based on a seven-day working week. Proposed core working hours will be 07:00 to 19:00 Monday to Friday and 08:00 to 17:00 on Saturdays, Sundays, Bank Holidays and other Public Holidays.

The core construction working hours would exclude start up and close down activities which would take up to one hour before or after the core construction working hours.

Some construction activities may take place outside of the proposed core working hours referred to above, to minimise disruption to the public. Any deviations from the core construction working hours stated above would be agreed in advance of the works taking place with SHDC.

Temporary Construction Compound

As part of the construction works, a temporary construction compound would be required to provide for storing construction materials, equipment, staff parking, site offices and welfare facilities. The substation compound would be located adjacent to the proposed substation. The temporary construction areas would be provided with adequate temporary lighting (as required) during the contractors' working hours and would be fenced off.

A construction compound would also be required to facilitate the OHL works. This has been accounted for in the site preparation works considered in this screening request as it is considered likely both compounds will be established at a similar time.

Following the construction phase, the construction compounds would be removed, and the land restored, as appropriate.

Construction Site Security and Lighting

The necessary infrastructure and personnel to maintain a secure and safe construction site would be provided together with the equipment necessary to prevent unauthorised site access. All systems would be regularly inspected and maintained.

The construction site would be adequately lit to ensure safe working conditions. All lighting would be positioned and adjusted so that it does not cause a nuisance to neighbouring properties. Night-time illumination, outside of working hours, would be minimised to reduce light pollution whilst maintaining the Site's security.

Operation

The Proposed Development would typically be operated remotely during operation. The substation would undergo regular visual checks. Regular maintenance of the substation would be undertaken.

Decommissioning

Owing to its nature, there would be no intention to decommission the Proposed Development. However, if the need arose, decommissioning would involve the removal of all above ground features using similar methods to those used for the construction phase.

In any scenario that involves decommissioning of the Proposed Development, a written scheme of decommissioning would be submitted to SHDC for approval at least six months prior to any decommissioning works. The decommissioning works would follow National Grid processes at the time for assessing and reducing any environmental impacts and risks.

Characteristics of Predicted Impacts and Likely Effects

The nature and extent of impacts (i.e. changes) predicted to occur as a result of the construction and operation of the Proposed Development are outlined below and are also set out in table format within **Appendix A EIA Regulations 2017 Screening Matrix**. The potential for human or other environmental receptors to be affected (and specifically to experience a likely significant effect) as a consequence of these impacts is then considered, in the context of the location of the Proposed Development as outlined previously.

With regards to the development of the substation, given the relatively straight-forward nature of both the construction and operation of the Proposed Development, the probability of impacts can be predicted with a good degree of certainty.

Unless otherwise specified, site preparation and construction impacts (and their resulting effects) are considered to be temporary in nature, limited in duration and reversible. The majority of operational impacts are considered to be long-term in nature.

This sub-section of the letter seeks to assist SHDC by examining whether the Proposed Development would be likely to have significant effects on the environment by virtue of factors such as its nature, size, or location.

Ecology and Nature Conservation

No statutory designated ecological sites are present within the Screening Boundary, however a number of statutory designated sites are present within the study area for ecology. This extends up to 30km for designated sites depending on the qualifying features of the designation.

The Wash SPA and Ramsar site and The Wash and North Norfolk Coast SAC fall within 10 km of the Screening Boundary. In addition, Nene Washes SPA and Ramsar site, where bird species with large foraging ranges are noted as, or one of, the qualifying feature fall within 30 km of the Screening Boundary.

There are two SSSIs and one LNRs within 5 km of the Screening Boundary. The Impact Risk Zones (IRZ's) for Surfleet Lows SSSI and The Wash SSSI partially overlap with the Screening Boundary.

There are 11 sites non-statutorily designated for their biodiversity value as Local Wildlife Sites (LWSs) within 2 km of the Proposed Development, three of which are located within 0.5 km of the Screening Boundary: Pinchbeck Marsh LWS and Surfleet Seas End Saltmarsh LWS and Vernatt's Drain LWS.

Given the proximity of the Proposed Development to the listed statutory designated sites above, a Habitats Regulations Assessment (HRA) Screening report will be submitted with the Planning Application.

An Ecological Appraisal will be included as part of the Planning Application. A BNG assessment will be submitted with the Planning Application by way of a BNG Technical Report which will summarise the findings of the BNG Metric assessment alongside supporting figures. The ecology and landscape teams will work collaboratively with the National Grid design team to ensure that BNG is delivered taking into account the BNG hierarchy.

Standard mitigation measures will be employed during the construction phase of the Proposed Development to avoid and/or minimise any direct or indirect impact on ecological features. These will be included in the outline CEMP to be submitted with the Planning Application. With the implementation of applicable standard mitigation measures, no significant effects on ecological features are anticipated.

Landscape and Visual

The Proposed Development is located in a predominantly open rural landscape surrounded by agricultural land and is located approximately 0.6km north of Weston, 1.6km east of Surfleet Seas End, and 2km west of Moulton Seas End at the closest point to the Screening Boundary.

The Screening Boundary is located within National Character Area 46: The Fens (NCA 46). At a local level, the Proposed Development is located within RLCT 2A Settled Fens, as defined in the East Midlands Region Landscape Character Areas.

The Screening Boundary is not within or adjacent to any National Landscapes, the closest being Norfolk Coast National Landscape (AONB) over 28km to the east. There are no Country Parks, areas of open access land or registered parks and gardens within 10km of the Screening Boundary.

The Screening Boundary is located within the parishes of Weston and The Moultons. The closest densely populated areas are located 500m to the south of the A151 at Weston, 800m to the west at Surfleet Seas End and 1.7km to the east at Moulton Seas End. However, subject to siting of the substation there are isolated hamlets and agricultural holdings that could be in close proximity to the Proposed Development, and therefore there is potential for likely significant effects from the presence of a new substation during construction and operation.

There are several Public Rights of Way (PRoW) in the vicinity of the Screening Boundary, with one within the boundary between Western Barn House and Crowtree Farm. A number of PRoW follow the River Welland 300m to the west of the Screening Boundary. This includes the MacMillan Way which is located 780m to the northwest. Due to the proximity of the PRoWs to the Proposed Development, there is the potential for users of these PRoWs to have their views affected during construction and operation.

A Landscape and Visual Impact Assessment (LVIA) will be prepared and submitted with the Planning Application.

The LVIA will be used to identify opportunities for landscape and visual mitigation within the Screening Boundary to help integrate the development into the landscape and in views whilst collaboratively ensuring BNG is delivered alongside any landscaping and drainage requirements.

Standard mitigation measures will be employed during the construction phase of the Proposed Development to avoid and/or minimise any direct or indirect landscape and visual impacts. These will be included in the outline CEMP to be submitted with the Planning Application. There are likely to be effects on visual receptors during construction, however effects would be localised and temporary. Mitigation planting will be included to integrate the substation into the landscape and mitigate the visual effects during operation. With

careful design of the Proposed Development, and the implementation of applicable standard mitigation measures, no significant landscape and visual effects are anticipated.

Traffic and Transport

The Proposed Development will take access during both the construction and operational phases from Marsh Road and Stone Gate, which runs adjacent to the west of the Proposed Development and continuing to the south until joining up with the A151. Some widening and road improvement works (addition of passing places) of Marsh Road and Stone Gate are expected to be required on a temporary basis to facilitate the construction of the Proposed Development.

The construction programme and the numbers of construction workers and associated Heavy Goods Vehicles (HGVs) has not yet been confirmed – these details will be set out within a Traffic and Transport chapter and supporting appendices. The main consideration is likely to be the management of construction traffic and any works to the local road network to ensure that it will continue to operate safely for all road users.

A review of the road safety data for the local highway network in the vicinity of the Screening Boundary for the previous five years will be undertaken to ensure that there are no existing underlying concerns that may be exacerbated by construction traffic.

An Outline CTMP will be prepared for the Planning Application and will set out a framework of potential measures that could be implemented by the contractor to minimise the traffic impact as far as is possible. A detailed CTMP would then be agreed with the Local Highway Authority prior to starting the construction phase.

Construction traffic would mainly consist of HGVs, light goods vehicles and construction personnel movement. Based on NGET's experience of developing similar projects, movements associated with the construction phase are not expected to result in a material increase to the Annual Average Daily Traffic flow (AADT) to the local road network. A detailed routeing and transportation plan will be developed in consultation with the Highways Authority and will inform the Outline CTMP, proposed to be secured by planning condition. During the operational phase of the Proposed Development, the number of vehicle movements will be minimal and limited to maintenance only. Traffic volumes generated by the Proposed Development during construction and operation are not likely to be sufficient to lead to any significant traffic and movement environmental related impacts.

A Transport Statement (TS) will be prepared as part of the Planning Application and will include details of the construction traffic generation throughout the day, including the potential impacts during the traditional weekday peak hours.

With the implementation of appropriate standard mitigation measures and traffic management and given the scale of the Proposed Development, no significant traffic effects are anticipated as a result of the temporary increase in traffic during construction or for maintenance vehicles during operation of the Proposed Development.

Historic Environment

A 2 km Study Area is considered proportionate to inform assessment of the potential impacts from the Proposed Development for designated heritage assets and a 1 km Study Area for non-designated heritage assets. To inform the historic baseline, reference has been made to designated entries sourced from the National Heritage List for England (NHLE) and non-designated heritage assets recorded by the Lincolnshire Historic Environment Record.

There are no World Heritage Sites, Registered Parks and Gardens or Registered Battlefields within 2 km of the Screening Boundary.

There are no designated heritage assets within the Screening Boundary. There are four non-designated heritage assets recorded within the Screening Boundary comprising the Medieval Sea Bank in Weston (MLI98445), and three former historic farmsteads which have all been demolished (MLI122922, MLI122921 and MLI122920). Buried archaeological remains relating to the farmsteads may be present within their former footprints. The find spots of two post-medieval artefact scatters are also recorded.

There are a total of 41 designated heritage assets within 2 km of the Screening Boundary. These comprise three scheduled monuments, three grade I listed buildings, 34 grade II listed buildings and one conservation area. Many of these assets are situated within Moulton Conservation Area, specifically one grade I listed building and 16 grade II listed buildings, with the north western extent of the conservation area approximately 1.7 km to the south east of the Screening Boundary.

The nearest designated heritage assets to the Screening Boundary, are two designated heritage assets of high significance located approximately 500 m to the south west of the Screening Boundary. These are the scheduled monument of Wykeham Chapel moated monastic grange constructed in the 14th century (NHLE 1019096) and the grade I listed Wykeham Chapel of St Nicholas (NHLE 1064471) which is included in the scheduled designation. Two grade II listed assets also form part of this group, the Chapel Farmhouse (NHLE 1147513) and associated gate piers (NHLE 1064472).

Other non-designated heritage assets are located outside the Screening Boundary but in close proximity to it, notably, Crowtree Farm (MLI122916), Bottom Yard (MLI122915) and Shepherds Farm (MLI122924).

It is not considered likely that significant effects would occur relating to any of these historic assets as a result of the Proposed Development. None of the designated heritage assets would incur physical impacts although some would experience changes to their settings which could be mitigated by landscape planting.

There is a potential for the Proposed Development to encounter previously unknown archaeological remains, of which their date, function, extent and significance are currently not completely understood. These may have the potential to be of regional to national significance, and so any impacts to these assets (where in existence) through truncation and/or removal need to be offset though a programme of appropriate archaeological evaluation and mitigation works. A Protocol of Archaeological Discovery (PAD) will also be included as part of the outline CEMP to mitigate any potential impacts on previously unknown archaeological assets. This will include procedures for the reporting, protection and management of unexpected archaeological discoveries.

A Historic Environment chapter will be included as part of the Planning Application, which will be supported by an Historic Environment desk-based assessment, examining the historic baseline in relation to the Proposed Development. The Historic Environment chapter will be supported by the results of a geophysical survey and will set out the need for further archaeological evaluation (e.g. archaeological trial trenching) as necessary. This information will be used to design a suitable evaluation and mitigation strategy to off-set any potential adverse effects the Proposed Development may have, as well as to better understand, and record, the archaeological resource of the area.

Socio-economics and Tourism

Several local businesses, including tourist accommodation that operate as businesses (including Wigwam Holiday and The Chequers Inn); and community facilities (including a tennis court along the Weston footpath, 2No. Post Offices, Weston Village Hall and St Mary's Church) are located within close proximity to the Screening Boundary (<250m).

There are several Public Rights of Way (PRoW) in the vicinity of the Screening Boundary. The nearest of these are a collection of public footpaths which cross the Screening Boundary from east to west (Ref P098/P132/P133), as well as a bridleway (Ref P120/P136) and public footpath (Ref P098/P132/P133) located approx. 300m and 400m west of the Screening Boundary respectively. The national Macmillan Way long-distance walking route runs along the River Welland to the north east of Spalding (approx. 400m to the west of the Screening Boundary). A short section of footpath (Ref P134) connects local roads to the north of Weston, approx. 500m south of the Screening Boundary. Whilst design for the Proposed Development is

under refinement, it is not considered that significant effects would be created for users of these PRoWs on the basis that these would remain open and accessible during construction and into operational phases of the Proposed Development.

A Socio-economic, Recreation and Tourism Assessment will be included as part of the Planning Application and will consider the construction and operational impacts of the Proposed Development considering the existing socio-economic characteristics of the area surrounding the Screening Boundary including:

- The labour market and employment;
- Local businesses, including tourism accommodation and visitor attractions;
- Community facilities;
- Development land;
- Open space; and
- Users of PRoW or other recreational routes.

Positive, temporary effects (direct and indirect) would likely be generated through employment opportunities within the construction supply chain, logistics and delivery of construction works on-site, with potential for further positive direct and indirect effects for local businesses (including those not within the supply chain or construction trade) during construction.

It is acknowledged that there is the potential for negative, minor and temporary effects upon amenity (by reasons of air quality, dust, noise and vibration) and/or potential access disruption for users of local businesses, community facilities, open space and PRoW located within close proximity to the Proposed Development construction area(s). Any necessary mitigation required to reduce such effects would be established in the outline CEMP.

Given the nature, scale, and location of the Proposed Development, and with the implementation of appropriate standard mitigation measures (to be included in the CEMP), no significant socio-economic and tourism effects are anticipated.

Air Quality

There are no Air Quality Management Areas within 1km of the Proposed Development and no pollutants would be released into the air during operation apart from minimal vehicle emissions during routine or emergency maintenance. Construction activities have the potential to generate emissions of inert particulate matter (dust and PM_{10}) as associated with minor earthworks. The area surrounding the Proposed Development is predominantly rural in nature, with land mostly used for agriculture. However, there are sensitive receptors present at the extents of the nearby settlements, as well as several small hamlets and agricultural holdings. It is considered due to the limited potential for air quality effects as a result of the Proposed Development, good practice measures as described below would be implemented to reduce the impact from dust and PM_{10} emissions such that significant effects would be avoided.

The following good practice measures would be implemented to minimise these impacts during construction:

- Where possible, all non-road mobile machinery will use fuel equivalent to ultra-low sulphur diesel;
- Machinery with exhaust emissions will be placed as far from sensitive receptors as practicable;
- Vehicles or plant will not be left idling unnecessarily;
- All vehicles and plant will be well maintained and regularly serviced according to manufacturers' recommendations; and
- Measures set out in the 'Control of Dust from Construction and Demolition Activities' document (Building Research Establishment, 2003) will be implemented.

Additional road traffic movements of light and heavy duty vehicles associated with the construction works are not anticipated to be large enough to generate a perceptible change in air pollutant (nitrogen dioxide (NO_2) and PM_{10}) concentrations at road side receptors.

An outline CEMP will be submitted with the Planning Application, with a final version being submitted to the LPA for approval prior to commencement of development. The outline CEMP will include standard mitigation measures to be followed to minimise dust generation or other air quality impacts (such as but not limited to those detailed above).

Overall, construction air quality and dust impacts are not predicted to be significant given there would be no perceptible change in air pollutant (NO_2 and PM_{10}) concentrations at road side receptors and dust generation would be minimised through the implementation of a CEMP. It is not anticipated that operation of the Proposed Development would result in significant traffic flow changes and thus is not anticipated to result in any significant air quality effects.

Geology and Hydrogeology

The study area is almost entirely underlain by mudstone of the Oxford Clay Formation and superficial deposits comprising Tidal Flat deposits, consisting of clay and silt. The superficial deposits (Tidal Flat deposits) and solid strata (mudstone of the Oxford Clay Formation) across the Study Area are designated as Unproductive Strata, defined as strata which have negligible significance for water supply or baseflows to rivers, lakes and wetlands.

There are no historic landfill sites within 1km of the Proposed Development Site. Therefore, it is not anticipated that the Proposed Development would be impacted by historical landfill gases. However, the outline CEMP to be submitted with the Planning Application will include for measures to mitigate any ground gas risks encountered during construction.

The Screening Boundary is not located within the proximity of a Mineral Safeguarding Area (MSA). No likely significant effects for minerals are predicted as a result of the Proposed Development.

Overall, the risk of encountering ground contamination and ground gases is considered to be low. A Ground Investigation would be undertaken prior to construction for geotechnical and design purposes. The outline CEMP, to be submitted with the Planning Application, will include guidance as to what action should be taken should any soils with visual or olfactory evidence of contamination be encountered during the construction works (e.g. material to be appropriately tested and disposed of).

Given the nature, scale and location of the Proposed Development, and with the implementation of appropriate standard mitigation measures to be included in the CEMP, no significant ground condition and minerals effects are anticipated.

Water Resources and Flood Risk

The Environment Agency Flood Zone Maps identify that the majority of the Screening Boundary lies in a large area of Flood Zone 3, with smaller pockets of Flood Zone 2, which means the area has a higher susceptibility to being flooded, due to its proximity to the River Welland. Given this and the nature of the Proposed Development, a FRA will be submitted with the Planning Application. The FRA will consider all sources of flooding - the final design/layout of the Proposed Development will take into account the FRA conclusions and recommendations, to ensure the Proposed Development is not at risk from flooding, and to ensure the Proposed Development would not exacerbate any future flooding in the region.

The Site drainage would be designed in such a way that prevents any surface water flooding affecting the Site or adjacent properties, and all drainage would be designed using a combination of permeable surfaces, Sustainable Drainage Systems (SuDS) and storage to ensure run-off from the Proposed Development Site achieves greenfield run-off rates. A Surface Water Drainage Strategy will be submitted with the Planning Application.

During the construction phase, the works would be undertaken using standard impact avoidance measures to protect groundwater and surface water resources (to be detailed within the outline CEMP). The CEMP will set out full details of how ground and surface water resources would be protected during the construction phase. With the inclusion of such standard impact avoidance measures, no impacts that could adversely affect water quality are expected, and therefore no significant water resource effects are anticipated during the construction of the Proposed Development.

No chemicals are anticipated to be stored on Site during Proposed Development operation, and thus no significant water resource effects are anticipated during the operation of the Proposed Development.

Noise and Vibration

The area surrounding the Proposed Development is predominantly rural in nature, with land mostly used for agriculture. However, there are sensitive receptors present at the extents of the nearby settlements, as well as several small hamlets and agricultural holdings.

Construction Noise

Construction of the Proposed Development has the potential to generate noise and vibration, but a range of good Site practices will be adopted including the following:

- Best practice working methods in accordance with the 'Considerate Constructors Scheme' to reduce the potential annoyance to receptors in close proximity to the Proposed Development;
- All plant used on Site will comply with the EC Directive on Noise Emissions for Outdoor Equipment, where applicable;
- Inherently quiet plant will be selected, where appropriate;
- All plant used on Site will be regularly maintained, paying particular attention to the integrity of silencers and acoustic enclosures;
- Machines in intermittent use will be shut down in the intervening periods between work or throttled down to a minimum;
- Drop heights of materials from lorries and other plant will be kept to a minimum;
- Adherence to the codes of practice for construction given in British Standard (BS) 5228 and the guidance given therein for minimising noise and vibration emissions from the Site;
- Compliance with the construction working hours listed above;
- Local residents will be kept informed and provided with a contact name and number for any queries or complaints; and

An outline CEMP to be submitted with the Planning Application will include measures to mitigate construction noise and vibration impacts as detailed above.

Additional road traffic movements of light and heavy duty vehicles associated with the construction works are not anticipated to be large enough to generate a perceptible change in noise at any roadside ecological and residential receptors.

With the application of standard impact avoidance measures (as listed above and to be included in the CEMP), noise and vibration effects are not anticipated to be significant during construction of the Proposed Development.

Operational Noise

In terms of operational noise, there are unlikely to be significant effects as there are no proposed sources of operational noise (such as transformers) during the normal operation of the Proposed Development.

Should this change during design development (i.e. if it is determined that transformers, or similar are required) and assessment of operational noise in accordance with BS 4142:2014+A1:2019 'Methods for rating and assessing industrial and commercial sound' would be undertaken.

Agriculture and Soils

The Screening Boundary lies within a large area of land classified as Agricultural Land Classification (ALC) Grade 1 (Excellent). ALC Grades 1, 2 and 3a are considered Best and Most Versatile (BMV) land and Grade 1 land is considered to be of very high sensitivity.

Lincolnshire County is mapped as comprising 94.5 % BMV land. Given the abundance of BMV land within the County and the extent of Provisional Grade 1 land at and around the proposed substation location, the preferential use of lower grade land will not be possible. The permanent loss of this land is considered to give rise to likely significant effects due to the size of the substation (approximately 8 ha) and the very high sensitivity of the Provisional Grade 1 land.

The soils within the Screening Boundary are mapped as comprising the Wisbech Association. These soils are described as seasonally wet, deep silty soils, overlaying marine alluvium geology. Soils in this Association are categorised as having a high sensitivity and having a low resilience to structural damage in relation to soil handling. Appropriate mitigation will be detailed as part of the soil handling methodologies to be included in an outline Soil Management Plan included as part of a Preliminary CoCP to be submitted with the Planning Application.

The permanent loss of these 8 ha of soil would affect the associated soil ecosystem services. Where practicable, all surplus soil resources would be re-used within the project where, depending on the proposed land use, some soil ecosystem services would be retained, restored, or potentially enhanced. Until it can be confirmed how practicable it would be to re-use the soil resources, it is considered that this would result in a likely significant effect on soil function.

Land use is predominantly arable with small sections of woodland and grassland. Given this predominant land use, land holdings as a receptor are considered to have a low sensitivity. A small area under Countryside Stewardship Management Agreement (Middle Tier) is mapped along the eastern edge of the project boundary near pylon 4ZM406. Land required temporarily would be reinstated to its pre-construction condition and impacts on individual agricultural businesses would be dealt with through financial compensation in accordance with the compensation code (which would include consideration of any active agri-environment and/or forestry/woodland schemes). As such, it is not considered there would be significant effects on agricultural landholdings.

An Agriculture and Soils Assessment will be submitted as part of the Planning Application.

Waste Management

During the Proposed Development construction phase, any waste material generated would be managed in accordance with good Site practices and applicable national legislation. The outline CEMP to be submitted with Planning Application will include for measures to mitigate and appropriately manage waste.

During the operational phase, no significant volumes of waste are anticipated to be generated.

Given the nature, scale, and location of the Proposed Development, and with the implementation of appropriate standard mitigation measures to be included in the CEMP, no significant waste management effects are anticipated.

Climate Change

The effect of the Proposed Development on climate change and the ability for climate change to impact upon any identified effects as a result of the Proposed Development are considered to be limited.

Greenhouse gas emissions during construction or operation of the Proposed Development are considered to be limited due to the scale and nature of the proposals.

There is the potential for flooding to be exacerbated in the area due to the effects of climate change. The effect of climate change and future flood levels will be considered as part of an FRA which would be submitted with the Planning Application.

In the absence of the Proposed Development, there would be delays to decarbonising the electricity sector. Although it is not feasible to quantify accurately, the constraints on the transmission network are increasing as electricity demand continues to rise and increasing levels of electricity generation are provided by renewable energy sources; this factor is essential to consider. The Proposed Development will provide an increase in network capacity in shorter timescales by expediating a connection point for the Outer Dowsing project ahead of the Grimsby to Walpole Project.

Major Accidents and Disasters

The risk of accidents occurring during the construction or operation of the Proposed Development is considered to be low due to the scale and nature of the Proposed Development as well as NGETs extensive experience in delivering and operating similar developments.

The Proposed Development would be designed, constructed and operated in accordance with all relevant health and safety legislation. The construction will adhere to best practice measures as detailed in an outline CEMP submitted as part of the Planning Application.

The Proposed Development would also comply with design safety standards including the National Electricity Transmission System Security and Quality Supply Standard (NETS SQSS), which defines the criteria and methodology for coordinating and operating the National Electricity Transmission System.

Cumulative Effects

Cumulative effects occur when the environmental impacts and effects of a proposed development interact with those associated with other planned projects and developments located within a given geographical scope where environmental impacts could act together to result in a great significance of effect on environmental receptors.

It is acknowledged that the Outer Dowsing DCO and the wider Grimsby to Walpole DCO both have the potential to cumulatively interact with the Proposed Development due to the proximity and scale of both developments.

With regards to the Outer Dowsing DCO, particularly when considering the construction of the two developments, there is the potential for temporal overlap of the construction of the substation and the construction of Outer Dowsing's connection point into the substation. At this stage it is unknown whether the two construction programmes will overlap.

With regards to the wider Grimsby to Walpole DCO, at this stage there is not enough information to conduct an assessment on the relevant section (Section 5) of the development as detailed design work remains ongoing. However, there is the potential for cumulative effects during construction and operation depending on the timing of the respective developments.

Both DCOs will be kept under review and the potential for cumulative effects between the Proposed Development and these developments will be considered in the assessments to be included with the Planning Application.

It is also acknowledged that the OHL works to the 4ZM and 2WS routes, (to be submitted to the SoS for DESNZ via Section 37 of the Electricity Act 1989), could cumulatively interact with the construction of the Weston Marsh substation.

For the purposes of both screening requests, an identical Screening Boundary has been used to ensure the same receptors have been considered for both sets of work. If unaccounted for, there could be the potential for the worsening of effects identified above for ecology, landscape and visual, traffic and transport, historic environment, socio-economics, recreation and tourism, air quality, noise and vibration, agriculture and soils and climate change if the proposed substation works and OHL works were constructed at the same time.

In addition, one committed development with the potential to cause cumulative effects has been identified within 2km of the Screening Boundary on the SHDC planning portal:

- H22-1011-23 – Erection of two new industrial units.

The timing of the construction works for the projects listed above are considered to be the crucial when considering the potential cumulative effects with the Proposed Development.

With regard to the OHL works specifically, NGET is the promoter for both applications, and as such will have the ability to sequence the works of both applications so not to cause any unintended cumulative effects between both streams of work. This will be set out in further detail in the outline CEMP to be submitted with the Planning Application. With the careful sequencing of construction works as well as appropriate mitigation, the potential for cumulative interactions between the Proposed Development and the OHL works are considered unlikely.

The outline CEMP to be submitted with the Planning Application will propose measures to manage construction impacts, including a communication plan setting out how NGET will engage with developers during the construction phase to manage potential cumulative impacts on the local community. It is considered that with appropriate mitigation at the individual development level and appropriate coordination between projects, significant cumulative environmental effects are unlikely. Cumulative effects will be considered within the assessments to be included within the Planning Application.

Conclusions

This EIA Screening request letter considers the Proposed Development to be Schedule 2 development and has considered the potential for significant environmental effects to occur as a result of Proposed Development construction and operation. Potential environmental impacts across a range of environmental topics have been considered taking into account the characteristics of the Proposed Development and the location of sensitive receptors in the vicinity of the Screening Boundary. The screening assessment indicates that the proposed construction and operation of the Proposed Development, when assuming standard design and construction mitigation measures, would not result in likely significant environmental effects for the majority of environmental topics, with the exception of Agriculture and Soils.

The permanent loss of Provisional Grade 1 land is considered to give rise to likely significant effects due to the size of the substation (approximately 8 ha) and the value of the Provisional Grade 1 land. While the construction, operation and maintenance of the Proposed Development could potentially have environmental effects in-combination with other projects near the Proposed Development, including overhead line works associated with the new substation, the assessment in the Section ‘Characteristics of Predicted Impacts and Likely Effects’ shows that these effects would mainly be related to temporary construction activities and would not be significant in the long term.

The screening assessment has identified that with the exception of a significant effect as a result of the loss of Provisional Grade 1 land, all other environmental effects are unlikely to be significant.

We therefore request the Council’s screening opinion in accordance with Regulation 5 of the EIA Regulations.

If you have any queries or require any further information, please do not hesitate to contact the undersigned.

Yours sincerely,



(On behalf of National Grid Electricity Transmission)

Appendix B
Screening Opinion received from SHDC on 30 April 2025

Your Ref:
Our Ref: PE-00094-25
Contact: [redacted]
E-mail: [redacted]
Date: 30th April 2025

National Grid
1-3 Strand
London
WC2N 5EH

Dear Sir or Madam

Re: EIA Screening Opinion for a new 400Kv Substation and associated works including highways improvements, landscaping and drainage infrastructure approximately 0.6 km north of Weston, 1.6 km east of Surfleet Seas End and 2 km west of Moulton Seas End

I am writing to provide you with a screening opinion from the local planning authority under Regulation 6 of the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 2017.

This screening opinion is provided in response to development proposals for a proposed 400 KV Substation and associated works including highways improvements, landscaping, Biodiversity Net Gain, and drainage infrastructure works approximately 0.6 km north of Weston, 1.6 km east of Surfleet Seas End and 2 km west of Moulton Seas End.

The Screening Boundary covers 486 hectares, but the proposed substation compound is proposed to be approximately 8 hectares in area. The remainder of the land within the Screening Boundary would be required for the proposed development of a new 400kV OHL and modifications works to the existing 4ZM and 2WS OHLs (to be submitted to the SoS for DESNZ via Section 37 of the Electricity Act 1989),

In case law about the EIA Directive, the Court has systematically stressed that the purpose of the directive cannot be circumvented by the splitting of projects. Where several projects, taken together, may have significant effects on the environment, their environmental impact should be assessed. However, in this case although there is clearly some operational linkage between the proposed substation and the wider Section 37 OHL proposals in the area, the relationship between the substation and the Section 37 OHL in the LPA ‘s view is capable of being separated as a matter of Planning Judgement resulting in separate EIA Screening Opinions.

The key issues for consideration therefore are whether the proposed Substation would comprise a Schedule 1 or Schedule 2 development for the purposes of the Regulations; and if so, whether the proposed development is in a sensitive area as defined by Regulation 2 (1) and would have significant adverse environment effects being mindful of factors such as the

nature of the development, size and location and the requirements of Schedule 3 of the Regulations.

In determining whether a type of development falls within a Schedule 1 or 2 EIA Guidance states that: *'LPA's and Developers should have regard to the ruling of the Court of Justice of the European Union that the Directive has a "wide scope and broad purpose" (In the Court of Justice of the European Union case (Kraaijeveld v Holland)). The fact that a particular development is not specifically identified in one of the Schedules does not necessarily mean that it falls outside the scope of the Regulations. For example, the Schedule 2.10(b) category, "urban development" (which accounts for by far the largest proportion of Environmental Impact Assessment development in England), includes residential and other development of an urban nature. It can also apply to development in non-urban areas which has an urbanising effect on the local environment.'*

In this context, it is considered that the proposed development does not fall within the scope of any of the categories of development listed in Schedule 1 of the Regulations. Although the proposed development is not specifically listed in Schedule 2 it is considered to be capable of being categorised as within the scope of paragraph 10 infrastructure part (b) urban developments of Schedule 2. The threshold for a development in this category is 5 hectares which would be exceeded in this case.

The site is not within a 'sensitive area' as defined by the Regulation 2(1). Development proposals that are Schedule 2 development are only considered to be EIA Development if the development is located within a sensitive area and is likely to have significant adverse effects on the environment.

Guidance on assessing the potential environmental impact is given in Schedule 3 (Selection criteria for screening Schedule 2 development) of the 2017 Regulations and sets out three categories for consideration:

1. Characteristics of development.
2. Location of Development; and
3. Characteristics of the potential impact.

The Town and Country Planning (Environmental Impact Assessment) Regulations 2017 EIA screening matrix attached to this screening opinion assesses the proposed development against the criteria of Schedule 3 of the 2017 Regulations. It is considered that the proposed development is not likely to give rise to significant adverse environmental effects as defined by the Regulations.

Conclusion

The development as described within the submitted Screening Report falls within the scope of paragraph 10 Infrastructure part (b) urban developments of Schedule 2 of the EIA Regulations 2017 and exceeds the relevant thresholds in column 2 of the table in that Schedule. The site is not within a 'sensitive area' as defined by the Regulation 2(1).

In evaluating the proposal in accordance with the guidance in Schedule 3 of the 2017 Regulations, the proposed development is not likely to give rise to significant adverse environmental effects as defined by the Regulations.

Accordingly, it is the Council's screening opinion, in accordance with Regulations 5 and 6 that the proposed development does not constitute EIA Development and an Environmental Statement would not be required to accompany any planning application in accordance with the 2017 Regulations.

It is important to note that a negative screening opinion, i.e. one which confirms EIA is not required, does not indicate that the proposed development will not have an adverse impact on the receiving environment in this case an adverse impact is the loss of approximately 8 hectares of Grade 1 Agricultural Land (BMV Agricultural Land). It merely constitutes an opinion that any impact is unlikely to be significant in terms of the criteria outlined in Schedule 3 of the Regulations.

This EIA Screening Opinion is given based upon the information currently available and without prejudice to any future decision made by the Local Planning Authority upon the receipt of further information.

If you have any queries, please do not hesitate to contact the case officer [redacted]. Many Thanks

Yours Sincerely

[redacted]

[redacted]

Enc. EIA Matrix

Appendix C
Pre-application advice received from SHDC on 7 May 2025

Your Ref:
Our Ref: PE-00094-25
Contact: [redacted]
E-mail: [redacted]
Date: 7th May 2025

National Grid
1-3 Strand
London
WC2N 5EH

Dear [redacted],

Re: Pre-Application Advice for the Proposed Substation Development and Overhead Line Works in the Vicinity of the Spalding Tee Point, Surfleet Seas End and Moulton Seas End.

Further to the submission of pre-application advice request for the above Proposed Development. Please take this letter as South Holland District Council's formal pre-application response.

As I understand it the Proposed Development is for:

- a 400 kV substation and associated works via TCPA
- a new build 400kV overhead line (OHL) and modification works to the existing 400kV 2WS and 4ZM overhead lines via sec 37 of the Electricity Act

TCPA Substation Advice

Planning Policy Context

Section 38 (6) of the Act requires that, 'where making any determination under the Planning Act, regard is to be had to the Development Plan, the determination shall be made in accordance with the plan unless material considerations indicate otherwise.'

The Development Plan for the area is the South East Lincolnshire Local Plan 2011-2036 (SELLP) which was adopted jointly by South Holland District and Boston Borough Council on the 8 March 2019.

The relevant policies within the South East Lincolnshire Local Plan 2011-2036 for the Proposed Development are:

- Policy 1 ‘Spatial Strategy’
- Policy 2 ‘Development Management’
- Policy 3 ‘Design of New Development’
- Policy 4 ‘Approach to Flood Risk’
- Policy 28 ‘The Natural Environment’
- Policy 29 ‘The Historic Environment’
- Policy 30 ‘Pollution’
- Policy 31 ‘Climate Change and Renewable and Low Carbon Energy’
- Policy 33 ‘Delivering a More Sustainable Transport

The Site

The Site extends to 486 Hectares however it is intended that the Substation itself be proposed at approximately 8 Hectares. It is predominantly open flat agricultural land punctuated by the existing 400kV 2WS and 4ZM overhead lines that form the Spalding Tee. It is located adjacent to the River Wellend and is almost entirely within Flood Zone 3 with small pockets of Flood Zone 2. A number of drains/ditches cross the site which may also contain suitable habitat for protected species.

The site is situated upon Best and Most Versatile Agricultural Land (Grade 1). Marsh Road, Stonegate and agricultural tracks are also located within the site boundary. PROW’s WSTN/8/1 and WSTN/7/1 cross the site. And there are areas of natural landscape features i.e. tree lines along Lord Drain and other vegetation within the site. There are also a number of farmhouses/residential properties inset within the Site Boundary namely Marsh House Farm, Pickmere and Base Cottages.

There are no designated heritage assets within the site but there are two designated heritage assets approximately 500 m to the southwest of the site (scheduled monument of Wykeham Chapel moated monastic grange and the grade I listed Wykeham Chapel of St Nicholas). There is the potential for currently unknown archaeological features associated with the medieval and post medieval periods.

Main issues

The Main issues for consideration of the Proposed Development are considered to be:

- Principle of Development
- Permanent loss of BMV Agricultural Land
- Visual and Landscape Impact of the Proposed Development
- Flood Risk

- Ecology Impacts
- Historic Environment
- Impact of Construction Activities including Cumulative Impacts

The proceeding sub-sections take each of the main issues in turn.

Principle of Development

There are no specific policies within the Development Plan that reference specific infrastructure developments such as the Proposed 400 KV Substation other than Policy 31 Part B Renewable Energy that references associated infrastructure and therefore any Application submitted will be considered against the criteria of this part of the Policy.

Policy 1 'Spatial Strategy' provides the settlement hierarchy for the area and in relation to development in the Open Countryside such as the Proposed Development it states, *'development will be permitted that is necessary to such a location and/or where it can be demonstrated that it meets the sustainable development needs of the area in terms of economic, community or environmental benefits.'*

Policy 2 'Development Management' requires proposals to demonstrate sustainable development considerations have been met through a number of criteria. The Policy is an overarching policy that all development proposals should be considered against.

The principle of development is therefore dependent upon the above criteria-based policies and the other general criteria-based policies namely 4, 28, 29 and 30 that are relevant and that apply to specific matters such as the Natural Environment which are considered in the subsections below.

Permanent loss of BMV Agricultural Land

The size of the substation (approximately 8 ha) and the high grade of Agricultural Land (Grade 1) mean that there will be a permanent loss of BMW Agricultural Land giving rise to adverse impacts. This is considered to be a key issue.

Politically this is a very sensitive issue with Members having put forward motions in recognition of South Holland as a Critical Food Producing Area, supporting both local and national food security, and contributing significantly to the agricultural economy.

From a planning policy perspective there is no policy presumption that precludes the development of BMV Agricultural Land. The Framework at Paragraph 187 (b) in relation to Agricultural Land states that: *'planning decisions should recognise the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land'.*

Officers' advice is that the Supporting Statement in respect of the adverse impact of the loss of BMW Agricultural Land will need to carefully consider and justify how the scheme through site selection has minimised the use of BMV Agricultural Land where practicable in the context of wider sustainability principles. Aswell as the

extent of BMV Agricultural Land within the District and the practicality of locating the Proposed Development upon lower grade Agricultural Land.

The adverse impact will also need to be considered in the context of there being no effective mitigation for the permanent loss of BMV Agricultural Land and the economic and other benefits of BMV Agricultural Land.

The permanent loss of BMW Agricultural Land will need to be adequately considered and justified within the submission however ultimately it will be an adverse impact that is weighed against the benefits of the Proposed Development in the overall planning balance.

Visual and Landscape Impact

Policy 28 'The Natural Environment' – Requires the protection, enhancement and management of natural assets, by ensuring all development proposals provide an overall net gain in biodiversity.

The size of the substation (approximately 8 ha) and its location within the Fenland Landscape has the potential to give rise to adverse impacts. This is considered to be a key issue.

Politically this is a very sensitive issue with Members having put forward motions in recognition of the importance of South Hollands Fenland Landscape particularly in regard to the unique and valuable characteristics of the Fenland landscape within the district that contributes significantly to local biodiversity and the identity of the area.

A Landscape Visual Impact Assessment should be submitted in support of any future Planning Application. The LVIA is likely to need to include consideration of views from receptors such as the PROW WSTN/8/1 and WSTN/7/1 and the closest Residential Properties to the Proposed Development.

The LPA expect that the LVIA will include proposed mitigation measures including a landscaping scheme and that the CEMP to be submitted to support the Planning Application should ensure that the landscape is adequately protected, and effects mitigated during construction activities.

A BNG Report would also be required to demonstrate at least a 10% Net Gain. The LPA is open to consider the delivery of BNG as either on site or off-site contribution towards a strategic scheme or biodiversity units. Please note that the Council will require certainty upon what off-site BNG contribution towards a strategic scheme and/or biodiversity units that is being delivered are. And also the mechanism for securing off site BNG will need to form part of the submission i.e. at the very least draft s106 heads of terms.

It is noted that within the Site Boundary along Lords Drain a band of trees is located and in other areas of the site sporadic vegetation exists. A Tree Survey and AIA would be required if these landscape features are affected by the Proposed Development and final siting of the Substation.

Any potential visual impacts will need to be adequately considered and justified within the submission however ultimately it will be a potential adverse impact that is weighed against the benefits of the Proposed Development in the overall planning balance.

Flood Risk

Policy 4 'Approach to Flood Risk' – developments must satisfy the sequential test and be supported by a site-specific flood risk assessment covering risk from all sources of flooding including the impacts of climate change. It must be demonstrated that surface water from the development can be managed and will not increase the risk of flooding to third parties.

Policy 31 'Climate Change and Renewable and Low Carbon Energy' requires all development proposals to demonstrate that the consequences of current climate change has been addressed, minimised and mitigated.

The Site Boundary is situated adjacent to the River Wellend within Flood Zone 3 with patches of Flood Zone 2 (depending on the exact siting of the Substation).

There are a number of drains that also cross the Site which fall within the area of South Holland Internal Drainage Board within the Lords North and South catchment. It is advised that South Holland Drainage Board are consulted on the Proposed Development at the appropriate time in relation to both drainage matters but also any byelaws that may need to be complied with particularly in relation to proximity of the Proposed Development to the Boards drains.

A Flood Risk Assessment incorporating Sequential and Exception Test and a Drainage Strategy will be required to support any Planning Application, it is advised that the content of which beyond Standing Advice and the requirements of Policy 4 should be agreed with the LLFA (Lincolnshire County Council) and South Holland Internal Drainage Board.

Subject to the detail of the submission it is likely that any potential impacts arising from Flood Risk or drainage matters are likely to be mitigatable and therefore likely to comply with Policy 4.

Ecology

Policy 28 'The Natural Environment' – Requires the protection, enhancement and management of natural assets, by ensuring all development proposals provide an overall net gain in biodiversity.

The Wash SPA and Ramsar site and The Wash and North Norfolk Coast SAC fall within 10 km of the Site Boundary. The Impact Risk Zones (IRZ's) for Surfleet Lows SSSI and The Wash SSSI partially overlap with the Site Boundary. Three LWS are located within 0.5 km of the Site Boundary: Pinchbeck Marsh LWS and Surfleet Seas End Saltmarsh LWS and Vernatt's Drain LWS.

Given the proximity of the Proposed Development to the above statutory designated sites, a Habitats Regulations Assessment (HRA) Screening report should be submitted with the Planning Application. An Ecological Appraisal should be included as part of the Planning Application and should include as necessary the assessment for protected species particularly in relation the habitat suitability of the numerous drains that cross the site.

Mitigation measures should be employed during the construction phase of the Proposed Development to avoid and/or minimise any direct or indirect impact on ecological features.

Subject to the detail of the submission it is likely that any potential impacts upon the Natural Environment are likely to be mitigatable and therefore likely to comply with Policy 28.

Historic Environment.

Policy 29 'The Historic Environment' - Distinctive elements of the Southeast Lincolnshire historic environment will be conserved and, where appropriate, enhanced.

There are no Designated Heritage Assets within the Site Boundary so no Designated Heritage Assets will be directly affected. The impact upon Designated Heritage Assets is likely to be therefore through alteration of their Settings either through the Construction Activities or the visual effect of the Proposed Development.

The Closest Designated Heritage Assets are approximately 500 m to the southwest of the site the scheduled monument of Wykeham Chapel moated monastic grange and the grade I listed Wykeham Chapel of St Nicholas. A Heritage Statement should accompany the Planning Application.

There are also a number of Non-Designated Heritage Assets within the Site Boundary and within the surrounding area. There is the potential for archaeology associated with Medieval and post medieval times. The Medieval Sea Bank Westin is situated within the Site Boundary as are a number of demolished farmstead and other proposals in the area have encountered archaeological artefacts. An Archaeological DBA supported by Geophysical Survey and WSI as necessary will be required to support the Planning Application Submission.

It is advised that you consult the Archaeological Service at the County Council and the District Councils Heritage Manager prior to the Submission of the Planning Application.

Subject to the detail of the submission it is likely that any potential impacts upon the Historic Environment are likely to be mitigatable and therefore likely to comply with Policy 29.

Impact upon PROW

Part of WSTN/8/1 and all of WSTN/7/1 PROW's cross the site. These PROW should remain open at all times during the Construction Period unless a temporary closure order is required.

The CEMP/CoCP to be submitted as part of the Planning Application should include measures to ensure that the users of these PROW's are not unduly affected by the Construction Activities.

Impact of Construction Activity upon Residential Amenity

Policy 30 'Pollution' Development proposals will not be permitted where, taking account of any proposed mitigation measures they would lead to unacceptable adverse impacts upon: health and safety of the public; the amenities of the area; or the natural, historic and built environment; by way of: air quality, including fumes and odour; noise including vibration; light levels; land quality and condition; or surface and groundwater quality. Planning Applications, except for development within the curtilage of a dwellinghouse as specified within Schedule 2, Part 1 of The Town and Country Planning (General Permitted Development) (England) Order 2015, or successor statutory instrument, must include an assessment of: impact on the proposed development from poor air quality from identified sources; impact on air quality from the proposed development; and impact on amenity from existing uses.

Properties at Marsh House Farm, Pickmere and Base Cottages are inset within but not part of the Site Boundary. Nevertheless, these properties and other properties in proximity to the Proposed Development will potentially be subject to disturbance during the construction period.

It is advised that disturbance should be kept to a minimum by virtue of Construction Environmental Management Plans, Code of Construction Practise including Communication Plans and Construction Traffic Management Plans. These Plans should be agreed with the District Council's Environmental Health Officer.

Subject to the detail of the submission it is likely that any potential impacts of the Construction Activity are likely to be mitigatable and therefore likely to comply with policy 30.

Construction Traffic Impacts

Policy 33 'Delivering a More Sustainable Transport Network' – reinforces the national approach to promoting sustainable alternatives to the car through new development, making the best use of, and seek improvements to, existing transport infrastructure and services. Solutions that are based on better promotion and management of the existing network and the provision of sustainable forms of travel are supported. To achieve this, a Transport Assessment and associated Travel Plan will be submitted with proposals.

Roads including Marsh Road and Stonegate are included within the Site Boundary and a series of tracks cross the site also. Highway Improvement works are

proposed in the form of widening and passing places however details are limited at this stage.

It is advised that such works and the Construction Traffic Management Plan are agreed with the Highway Authority (Lincolnshire County Council). It is also advised that you discuss the requirement for a Transport Statement and Construction Workers Travel Plan with the Highway Authority.

Developer Contributions

Policy 5 Meeting physical infrastructure and service needs and Policy 6 Developer Contributions refer to such Contributions. However, these policies relate to infrastructure and service needs that arise out of new development and/or mitigating new development impacts upon infrastructure and services rather than relating to infrastructure development itself. Any Contributions in this case are likely to relate to mitigation matters or Off-site provisions such as BNG or Landscaping as maybe deemed appropriate.

Cumulative Impacts

There are a number of Projects mainly NSIPs at varying stages in the process that there is the potential for cumulative impacts particularly with regard to Construction activities depending on potential overlap of activities.

Your pre-application submission identifies the Outer Dowsing Offshore Windfarm Project and another NGET Project Grimsby to Walpole Overhead Lines. It is advised that Cumulative impacts are considered within the Planning Statement to accompany the Planning Application.

Officers agree that particular note should be taken of the implications of Construction Activities and interactions of the above projects however Cumulative Impacts should be kept under review and agreed with the District Council in advance of submission of any Planning Application.

Officers also wish to highlight that for the Outer Dowsing OWF DCO Examination Document Reference 19.6 ‘Inter-relationship with other infrastructure projects’ (REP6-100) was produced by the Applicant to consider cumulative impacts particularly in relation to the potential for construction activity interaction of NSIP Projects in the locality.

Assessment Requirements to Support the Planning Application.

In summary the following Assessments will be required to support the Planning Application submission**:**

- Planning Statement including Cumulative Impacts and Site Selection.
- Design and Access Statement
- Statement of Community Involvement
- ALC Report

- Socio Economic Impact Report
- Phase 1 Contamination Report
- Archaeology DBA/Geophysical Survey including WSI as necessary.
- Heritage Statement
- Flood Risk Assessment including Sequential and Exception Test
- Drainage Strategy Statement
- Noise Impact Assessment as necessary
- Lighting Impact Assessment
- Air Quality Assessment/Screening Assessment
- BNG Report
- Ecological Assessment including HRA Stage 1 Screening
- Landscape Visual Impact Assessment
- Tree Report / AIA
- Transport Statement as necessary
- Construction Workers Travel Plan as necessary
- Construction Traffic Management Plan
- Construction Environmental Management Plan
- Code of Construction Practice
- Draft Heads of Terms for s106

The pre-application also requests advice upon the parameters of FRA/Drainage assessment, views upon loss of agricultural land and the principle of offsite BNG and other Developer Contributions. These matters are all considered within the above main issues section.

Conclusion

The Principle of the Development of a 400 KV Substation is capable of being accepted however it is dependent upon the key issues being satisfactorily addressed. The key issues to address are the permanent loss of 8 hectares of BMW Agricultural Land and the Visual Impact of the Substation.

All other matters are considered either temporary in nature and reversible or are likely to be mitigatable through the submission of sufficient Impact Assessments and through careful consideration of avoidance and mitigation measures.

Sec 37 Overhead Lines Advice

SHDC understands that an EIA Screening Request will be submitted to the Secretary of State prior to the requirement to complete Form B. The completed Form B will inform the Secretary of State of the Councils view on the proposals.

In order to do this the District Council will undertake consultation for 21 days with affected residents and internal departments of the District Council. It is understood that it is not necessary for the District Council to consult external consultees as the Applicant will have done so and provided any responses at the time of notification.

Although it is open to the LPA to consult further if there are concerns regarding these responses. It would therefore be useful for the District Council to know in advance who the Applicant intends to consult and provide their response with the Notification.

The Content of the Form B representation will need to be reported to the Planning Committee including any representations received from the above consultation exercise and any responses from statutory consultees that the Applicant submits.

The timescales for the consultation and the reporting of the content of the Form B to the Planning Committee will need to be factored into the s37 Project timeline. It is understood that from notification the LPA will have 2 months to submit the Form B.

This advice is therefore based upon the information available currently. Please note that the advice is given without prejudice to any future decision made by the Local Planning Authority upon the receipt of further information.

If you have any queries, please do not hesitate to contact the case officer [redacted]. Many Thanks

Yours Sincerely

[redacted]

[redacted]

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