

The Great Grid Upgrade

Section 37 4ZM Overhead Line Works

Environmental Assessment Report

June 2026

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nationalgrid

S37 4ZM Overhead Line Works

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1. Introduction

1.1 Overview

- 1.1.1 This Environmental Assessment Report (EAR) has been prepared on behalf of National Grid Electricity Transmission plc (National Grid).
- 1.1.2 National Grid are proposing to undertake works to construct a new electricity substation, new sections of overhead line and modification of existing overhead lines west of the Spalding Tee-Point in the Weston Marsh area, within the administrative boundary of South Holland District Council (SHDC) in Lincolnshire.

1.2 Summary of the Scheme

- 1.2.1 In totality, the Scheme consists of four components, each planned to be progressed via separate consenting routes. These are summarised in **Table 1.1**.

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) (Ref 1) Component referred to as ' 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 lines Other associated works	Section 37 of the Electricity Act 1989 (Ref 2) 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.	The Town and Country Planning (General Permitted Development) (England) Order 2015 (Ref 3) and The Overhead Lines (Exemption) (England and Wales) Regulations 2009 (Ref 4) Component referred to as ' Exempt Overhead Line Works '

- 1.2.2 The Substation Works will require consent from SHDC under the TCPA. A planning application was submitted for the Substation Works on the 11 May 2026.
- 1.2.3 The new S37 4ZM Overhead Line Works and S37 2WS Overhead Line Works (collectively referred to as ‘the S37 Overhead Line Works’) will require consent from the Secretary of State for Energy Security and Net Zero under Section 37 of the Electricity Act 1989 (Section 37) (Ref 2).
- 1.2.4 The Exempt Overhead Line Works constitute permitted development under Part 15 Class B of the Town and Country (General Permitted Development) (England) Order 2015 (Ref 3) and The Overhead Lines (Exemption) (England and Wales) Regulations 2009 (Ref 4).
- 1.2.5 The Scheme Site Boundary, which consists of the land required to construct and operate the Scheme in its entirety, is illustrated on **Figure 1**. The Scheme in its totality is a standalone development to enable connection of the Outer Dowsing Offshore Wind Farm to the national electricity transmission system. Each component included in **Table 1.1** is required for the Scheme to fully function as part of the national electricity transmission system (NETS).

1.3 Purpose of this Report

- 1.3.1 This EAR is concerned with the S37 4ZM Overhead Line Works component of the Scheme only. It has been prepared in accordance with the relevant Government guidance relating to the statutory consents regime for overhead power lines in England and Wales under Section 37 of the Electricity Act 1989 (Ref 2).
- 1.3.2 The purpose of the EAR is to inform the decision-making process on the application for S37 consent for modification of the 4ZM overhead line. The EAR also demonstrates that in preparing the application for consent, National Grid has:
- (a) had regard to the desirability of preserving natural beauty, of conserving flora, fauna and geological and physical feature of special interest and of protecting sites, buildings and objects of architectural, historic or archaeological interest; and
 - (b) done what they 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 of objects.
- 1.3.3 The scope of this EAR includes those temporary and permanent works which are specifically required to construct and operate the S37 4ZM Overhead Line Works as illustrated on **Figure 2**.
- 1.3.4 There are other elements of temporary works required to construct the S37 4ZM Overhead Line Works. This includes a temporary on-site haul road from Stone Gate to the main working area, temporary construction compounds and associated temporary drainage works. These components are not included within the scope of the application for the S37 4ZM Overhead Line Works or within this EAR as these are included within the scope of the TCPA application. The TCPA application was submitted to SHDC on 11 May 2026 for the Substation Works, the supporting documentation for which is set out within **Table 1.2**.
- 1.3.5 An environmental constraints figure has been produced to accompany this report, which can be found on **Figure 2**. Full details of the environmental constraints can be found within the appropriate technical reports referenced in **Table 1.2**.

1.4 Structure of this Report

1.4.1 This EAR comprises the following sections:

- 1) **Section 1 Introduction** (this Section) – This provides a background of the wider Scheme and applicable consenting regimes, as well as the purpose and structure of this report;
- 2) **Section 2 Legislation, Key Policy and Guidance** – This details the legislation, key policy and guidance which are relevant to the S37 4ZM Overhead Line Works;
- 3) **Section 3 Consultation** – This section provides a summary of the consultation activities undertaken for the S37 4ZM Overhead Line Works;
- 4) **Section 4 S37 4ZM Overhead Line Works Description** – The details of the overhead line works that are the subject of this consent application are presented, as well as contextual information of the site location;
- 5) **Section 5 Environmental Measures** – this sets out the design (embedded), control and additional mitigation measures that would be in place for the construction and operation of the S37 4ZM Overhead Line Works;
- 6) **Section 6 Environmental Assessment** – This sets out an overview of the environmental receptors considered relevant to the S37 4ZM Overhead Line Works, and an assessment of the likely impacts and effects which would result from the construction and operation of the S37 4ZM Overhead Line Works; and
- 7) **Section 7 Conclusion** – This summarises the key conclusions of the environmental assessment and provides a summary of effects as a result of the S37 4ZM Overhead Line Works.

1.5 Environmental Impact Assessment Screening

1.5.1 As set out within the Electricity Works (Environmental Impact Assessment) (England and Wales) Regulations 2017 (Ref 5) (the EIA Regulations), development of a description set out in Schedule 1 requires environmental impact assessment and the production of an EIA Report. The Scheme in its totality, inclusive of both components of S37 Overhead Line Works, does not meet this definition and is not Schedule 1 development.

1.5.2 The EIA Regulations also stipulate that development of a description set out in Schedule 2 requires screening if no EIA report is provided in support of the application. As the Scheme includes development to provide a change to or extension of an electric line installed above ground with a voltage of 132 kilovolts or more (less than 2 km in total length), it meets the definition of Schedule 2 development as defined in the EIA Regulations. Therefore, a screening decision is required from the Secretary of State for Energy Security and Net Zero (the Secretary of State).

1.5.3 Part 2, Chapter 2, regulation 10 of the EIA Regulations makes provision for a developer to request a screening decision in advance of an application for S37 consent. However, during pre-application engagement with the Department for Energy Security and Net Zero (DESNZ), National Grid were advised that the process as set out within Part 2, Chapter 2, regulation 11 (4) of the EIA Regulations would be

applied. That is, that the Secretary of State would, with regard to the criteria set out in Schedule 3 of the EIA Regulations, make a screening decision in respect of the development before determining the application (rather than in advance of the application).

- 1.5.4 In addition to this EAR, the application for consent for the S37 4ZM Overhead Line Works is also supported by the **Report to Inform the Screening Decision**. National Grid's view is that the Scheme in its entirety does not constitute EIA development. In reaching this view, National Grid have engaged with the relevant Statutory Environmental Bodies, including the Environment Agency (EA), Natural England and Historic England. Further information is provided within the **Report to Inform the Screening Decision**.
- 1.5.5 Given that the Substation Works require consent from SHDC under the TCPA, an EIA screening request was made to SHDC under the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (Ref 6) for the Substation Works. SHDC determined that these works do not constitute EIA development and therefore an Environmental Statement (ES) was not required and was not prepared in support of the planning application submitted on 11 May 2026.
- 1.5.6 Based upon National Grid's view that the Scheme does not constitute EIA development, an EIA Report as defined by the EIA Regulations has not been submitted in support of the application for the S37 4ZM Overhead Line Works. This EAR does, however, provide the following information to inform decision-making in relation to this application:
- 1) A plan of the site of the development;
 - 2) A description of the development comprising information on the location, design, size and other relevant features of the development;
 - 3) An explanation of the likely impacts and effects on the environment of the development; and
 - 4) A description of the features of the development and any measures envisaged in order to avoid, prevent or reduce adverse effects on the environment.

1.6 Supporting Documents

- 1.6.1 Whilst National Grid does not consider the Scheme to constitute EIA development and has not prepared an EIA Report, a number of stand-alone technical baseline reports and environmental assessments have been completed and are set out within **Table 1.2**.
- 1.6.2 The preparation of these deliverables has been informed by the pre-application advice undertaken with SHDC in relation to the Substation Works, noting that the Screening Opinion provided by SHDC determined that an Environmental Statement was not required.
- 1.6.3 The deliverables listed in **Table 1.2** consider the Scheme in its entirety and have been drawn upon when reporting the baseline conditions and impacts and effects specifically associated with the S37 4ZM Overhead Line Works within this EAR.

Table 1.2 Supporting Documentation

Title	Document Reference
Arboricultural Impact Assessment	GWNC-WSP-SS50-XXXXXX-RPT-ES-000005
Agricultural Land Classification Report	GWNC-ARC-SS50-XXXXXX-RPT-ES-000002
Air Quality Assessment and Screening Assessment	GWNC-WSP-SS50-XXXXXX-RPT-ES-000004
Habitats Regulations Assessment Stage 1 Screening Report	GWNC-ARU-SS50-XXXXXX-RPT-ES-000014
Phase 1 Geo-environmental Desk Study	GWNC-WAA-SS50-XXXXXX-RPT-ES-000001
Historic Environment Desk Based Assessment	GWNC-ARU-SS50-XXXXXX-RPT-ES-000017
Landscape and Visual Appraisal	GWNC-GIL-SS50-XXXXXX-RPT-ES-000001
Landscape and Visual Photomontages	GWNC-GIL-SS50-XXXXXX-VIS-ES-000001
Indicative Landscape and Ecological Mitigation Proposals	GWNC-GIL-SS50-XXXXXX-PLN-ES-000001
Noise and Vibration Assessment	GWNC-ATG-SS50-XXXXXX-RPT-ES-000001
Transport Statement	GWNC-ARU-SS50-XXXXXX-RPT-ES-000018
Flood Risk Assessment	GWNC-WSP-SS50-XXXXXX-RPT-ES-000002
Hydraulic Modelling Report	GWNC-WSP-SS50-XXXXXX-RPT-ES-000006
Water Framework Directive (WFD) Assessment	GWNC-WSP-SS50-XXXXXX-RPT-ES-000003
Bat Survey Report	GWNC-ARU-SS50-XXXXXX-RPT-ES-000008
Badger Survey Report (Confidential)	GWNC-ARU-SS50-XXXXXX-RPT-ES-000007
Aquatic Survey Report	GWNC-ARU-SS50-XXXXXX-RPT-ES-000006
Breeding Bird Survey Report	GWNC-ARU-SS50-XXXXXX-RPT-ES-000009
Non-breeding Bird Survey Report	GWNC-ARU-SS50-XXXXXX-RPT-ES-000010
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
Habitat Classification Survey Report	GWNC-ARU-SS50-XXXXXX-RPT-ES-000013
Outline Construction Environmental Management Plan	GWNC-ARU-SS50-XXXXXX-RPT-ES-000019
Outline Construction Traffic Management Plan	GWNC-WSP-ZZZZ-ZZZZZZ-PLN-PM-000002
Cumulative Effects Assessment Report	GWNC-ARU-SS50-XXXXXX-RPT-ES-000020

2. Legislation, Key Policy and Guidance

2.1 Legislation

Electricity Act 1989

- 2.1.1 The Electricity Act 1989 requires network operators to secure consent from the appropriate government authority in advance of installing or keeping installed any overhead electric line which meets the thresholds set out within S37.
- 2.1.2 Consents for the construction of overhead lines with a nominal voltage of less than 132 kilovolts or that are less than 2 kilometres in length are regulated by DESNZ under the provisions of S37.
- 2.1.3 The Planning Act 2008 regulates development consent for Nationally Significant Infrastructure Projects (NSIPs) and the threshold set in the Planning Act 2008 for Overhead Lines is for applications for lines with a nominal voltage capacity of 132 kilovolts or greater and more than 2 kilometres in length. Given that the total length of new overhead line within the Scheme is less than 2km, the Scheme does not meet the relevant NSIP threshold.

The Electricity Works (EIA) (England and Wales) Regulations 2017

- 2.1.4 The EIA Regulations establish the legal requirement for environmental assessments in support of applications for the following consents as defined in the Electricity Act 1989:
 - 1) Section 36 consents;
 - 2) Section 36 variations; and
 - 3) Section 37 consents.
- 2.1.5 Schedule 1 of the EIA Regulations defines development (EIA development) for which environmental impact assessment is a mandatory requirement. Schedule 2 of the EIA Regulations defines thresholds for developments which require screening if no EIA report is provided.
- 2.1.6 The EIA Regulations also set out the procedures for screening decisions either in advance of applications or in the event that an application for consent has been submitted and is not accompanied by an EIA Report as defined by the EIA Regulations. Further detail on these procedures is included within the **Report to Inform the Screening Decision**.

The Conservation of Habitats and Species Regulations 2017

- 2.1.7 Annex I of the Habitats Directive (Ref 7) (whose protections have been retained in domestic law as at 31 December 2020 through the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (Ref 8)) comprises a list of 189 habitat types for which Member States must consider designation of Special Areas of

Conservation (SAC) for each of the features which occurs in their European territory. This includes the designation of extensive or exceptional areas of Annex I habitats as SAC. In the context of the UK, 78 Annex I habitat types are believed to occur (Ref 7). A sub-set of the Annex I habitat types are defined as being ‘priority’ because they are considered to be particularly vulnerable and are mainly, or exclusively, found within the European Union (Article 1d).

2.2 Key Policy and Guidance

National Planning Policy Framework

2.2.1 The revised National Planning Policy Framework (NPPF) (Ref 9) was published in December 2024 and further amended on 7 February 2025. It is a material consideration for planning decisions. The Framework establishes a presumption in favour of sustainable development (paragraph 11) as its central principle and requires the planning system to pursue three mutually supportive overarching objectives (economic, social and environmental objectives (paragraph 8)).

2.2.2 Chapter 14 of the NPPF is directly relevant to the receptors identified within this report. Paragraph 182 states that:

“[planning] applications which could affect drainage on or around the site should incorporate sustainable drainage systems...These should provide multifunctional benefits wherever possible, through facilitating improvements in water quality and biodiversity...”

2.2.3 Chapter 15, paragraph 187 establishes that:

“...[planning] decisions should contribute to and enhance the natural and local environment by: preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by...unacceptable levels of...water pollution...and wherever possible, help to improve local environmental conditions such as...water quality, taking into account relevant information such as river basin management plans.” (Ref 9)

National Policy Statement EN-1

2.2.4 The Overarching National Policy Statement (NPS) for Energy (EN-1) (Ref 10) sets out the national policy for energy infrastructure projects. It sets out the government’s policy for delivery of major energy infrastructure, and the key environmental considerations for decision makers. It also describes the need for new clean energy infrastructure and the requirement to enable infrastructure to meet energy demands.

2.2.5 Whilst EN-1 is primarily applicable to NSIPs, Paragraph 1.2.1 of EN-1 states that the document may be a material consideration in decision making on applications that fall under the TCPA. Although Section 37 applications are not expressly referred to, it has been considered that EN-1 is a material consideration in the determination of this application.

National Policy Statement EN-5

2.2.6 The National Policy Statement for Electricity Networks Infrastructure (EN-5) (Ref 11) is read in conjunction with EN-1 and covers above ground electricity lines. As identified in EN-1, the government has concluded within EN-5 that there is a critical

national priority (CNP) for the provision of nationally significant low carbon infrastructure. This includes: for electricity grid infrastructure, all power lines in scope of EN-5 including network reinforcement and upgrade works, and associated infrastructure such as substations.

- 2.2.7 Whilst EN-5 is primarily applicable to NSIPs, Paragraph 1.2.1 of EN-1 states that the document, in-combination with any relevant technology specific NPSs, may be a material consideration in decision making on applications that fall under the TCPA. Although Section 37 applications are not expressly referred to, it has been considered that EN-5 is a material consideration in the determination of this application.

Guidance Note – The Statutory Consents Regime for Overhead Power Lines in England and Wales under Section 37 of the Electricity Act 1989

- 2.2.8 This guidance provides an outline of the statutory consenting process in England and Wales under section 37 of the Electricity Act 1989 to install and keep installed overhead lines (Ref 12). As stated at paragraph 1.2 of the guidance:

“The section 37 regime enables views to be gathered on any particular overhead line proposal before the Secretary of State makes a decision to grant consent. Views are obtained by the applicant from the relevant planning authority on behalf of the local community, and from statutory bodies with responsibilities for environmental and heritage protection such as Natural England...English Heritage¹... and, where appropriate, the Environment Agency. These views are submitted to the Secretary of State to help inform the decision making process on the application.”

“The applicant seeking consent for the works from the Secretary of State must serve notice of their application on the relevant planning authority¹ in whose area the development is proposed to be situated. The applicant will send the appropriate “Form B” document to the relevant planning authority which describes the proposed development and seeks confirmation of any objections from the relevant planning authority.”

- 2.2.9 With respect to EIA requirements, the guidance states that:

“..an EIA will only be required where the Secretary of State determines that the proposed development is likely to have significant effects on the environment by virtue of factors such as its nature, size or location. In the opinion of the Secretary of State overhead lines are unlikely to require an environmental statement if their nominal voltage is less than 132 kV or if they are less than two kilometres in length. Proposals that exceed these parameters should apply to the Secretary of State for a screening opinion...”

- 2.2.10 Where an EIA is required, an environmental statement (EIA Report) must be submitted with an application to the Secretary of State and a copy of the environmental statement should be sent to the relevant planning authority with the Form B. As set out previously, subject to a Screening Decision from the Secretary of

¹ English Heritage officially separated and rebranded as Historic England and English Heritage in 2015. Historic England are the relevant statutory body in the context of section 37 consents.

State, National Grid's position is that an Environmental Statement (EIA Report) is not required.

2.2.11 Form B for 132kV and above overhead lines is included within Annex C of the guidance.

3. Consultation

3.1 Form B

- 3.1.1 The Form B is the mechanism to relay the Local Planning Authority's (LPA's) views on the proposed overhead line works so that these can be submitted to the Secretary of State to inform their decision-making process.
- 3.1.2 Prior to submitting the S37 applications to the SoS, the applicant is required to obtain the views of the LPA on behalf of the local community.
- 3.1.3 The Form B was submitted to both Lincolnshire County Council (LCC) and SHDC in March 2026 for the S37 4ZM Overhead Line Works (a separate Form B was submitted for the S37 2WS Overhead Line Works).
- 3.1.4 Form B was submitted with an accompanying Environmental Summary Document. Due to the advanced nature of the consultation, this Environmental Summary Document contained the preliminary findings and expected environmental effects.
- 3.1.5 The Environmental Summary Document was based on an earlier iteration of the design and summarised the potential for likely effects as assessed at that point in time, prior to all surveys and detailed assessments being completed.
- 3.1.6 Since the Form B consultation, further detailed assessments have been completed as set out within **Table 1.2**, which were informed by technical engagement with parties including:
- 1) The Environment Agency (EA);
 - 2) Natural England; and
 - 3) Historic England.
- 3.1.7 Based upon the further assessment, this EAR is now being provided to inform the decision making process, noting that the conclusions of both the Environmental Summary Document and this are consistent.

3.2 Technical Engagement

- 3.2.1 Technical engagement has been undertaken with the Environment Agency, Historic England, and Natural England.
- 3.2.2 The EA were consulted on three occasions with regard to the water environment and flood risk. Meetings were undertaken and responses received between October 2025 and March 2026 for the **Flood Risk Assessment** which was submitted for the Substation Works. Formal engagement with the EA was also undertaken during preparation of the **Water Framework Directive Assessment**, and a further engagement session on 17 April 2026 focused on reviewing EA comments relating to the Weston Marsh Scheme and outcomes for the WFD assessment.
- 3.2.3 Technical engagement with Historic England was undertaken for the **Historic Environment DBA**. A consultation response was received from Historic England via

email in December 2025 regarding the Scheme design and potential impacts to designated heritage assets.

- 3.2.4 A pre-application conversation was undertaken with Natural England to inform the ecological deliverables for the Scheme.

3.3 Public Consultation

- 3.3.1 Public consultation on the Scheme took place in autumn 2025 and is summarised within the Statement of Community Involvement prepared for the TCPA application [document reference GWNC-CAV-ZZZZ-ZZZZZZ-RPT-PM-000001]. Bi-lateral consultation on technical matters has been undertaken with the relevant statutory organisations.

4. S37 4ZM Overhead Line Works Description

4.1 Overview

- 4.1.1 As described in **Section 1** and illustrated on **Figure 2**, the S37 4ZM Overhead Line Works would include the following:
- 1) Construction of new sections of overhead line to connect the new substation into the existing 4ZM overhead line;
 - 2) Removal of a section of the existing 4ZM overhead lines; and
 - 3) Other associated works associated with the construction of the S37 4ZM Overhead Line Works.
- 4.1.2 The reconfiguration of the existing 4ZM overhead line would be necessary to turn it in to and out of the new Weston Marsh Substation A. The new sections of overhead line would not exceed 0.9 km in total, split into two sections of up to 0.5 km and 0.4 km respectively. The first section would originate from new pylon 4ZM414-N and extend south to tie into the northern façade of the new Weston Marsh Substation A. The second section would originate from the new Weston Marsh Substation A and extend east where it would tie into the new pylon 4ZM407-N. Along this stretch there would be four structures, with both new sections respectively linking to two gantries at a height of up to 15 m which would be located within the new Weston Marsh Substation A (and consented as part of the Substation Works), and four pylons ranging from a height of approximately 55 m to 65 m (including Limits of Deviation (LoD)).
- 4.1.3 In addition, 0.7 km of existing 4ZM overhead line and two existing pylons (4ZM414-N – 4ZM407-N) that currently run in parallel with the proposed Weston Marsh Substation A would be removed.

4.2 Existing Site Context

- 4.2.1 The Scheme Site Boundary (the site) is a predominantly rural location, located to the east of the River Welland. Within the site and surrounding area are a number of minor watercourses and a small number of rural properties. There is a network of Public Rights of Way (PRoW) that surround the site, connecting the small villages and communities in the wider area. There is one PRoW which runs east to west through the Scheme and joins Marsh Road, which is located to the west of the Substation Works, and another which crosses a haul road to the east of the site.
- 4.2.2 At present, there is the existing 4ZM and 2WS overhead lines which join each other adjacent to the south east of the proposed Weston Marsh Substation A. The existing 4ZM overhead line runs north west to south east, and the existing 2WS overhead line runs south west to north east, joining the existing 4ZM overhead line from the south.
- 4.2.3 As described in **Section 1**, it is planned for the Substation Works to be consented under the TCPA. **Figure 1** illustrates the location of the Substation Works in relation to the S37 2WS Overhead Line Works, the S37 4ZM Overhead Line Works and the

Exempt Overhead Line Works. This report is only concerned with the S37 4ZM Overhead Line Works.

4.3 Permanent Design Elements

- 4.3.1 The new pylons would comprise steel lattice mast pylons, the foundations of which would either be a standard foundation (concrete pad and column) or non-standard foundation (either concrete pad and column of increased dimension or depth, or piled foundations). The selection of foundation type would depend upon the ground conditions encountered and would be determined during detailed design, based upon the findings of ground investigation. For the purposes of assessments completed in support of the consent applications, reasonable worst case assumptions have been adopted. For example, that percussive piling would be required, use of culverts as a worst case assumption, reasonable worst cases for vegetation removal, including that pylon working areas would require all existing vegetation to be removed; maximum worst case assumptions for access and conservative construction programme assumptions.
- 4.3.2 Pylons are in general either:
- 1) Suspension pylons, from which the conductor is simply suspended; or
 - 2) Tension (angled) pylons, which are more robust structures that hold conductors in tension where the alignment of an overhead line changes direction or to maintain tension in long straight sections of the route.
- 4.3.3 In some locations, such as on the overhead line entries to the new Weston Marsh Substation A, terminal pylons are required. The S37 4ZM Overhead Line Works require the removal of suspension pylons, and the construction of tension and terminal pylons.
- 4.3.4 The conductors are connected to the pylon by an insulator assembly consisting of a set of insulators (components made from a material with a high resistance to the flow of electric current such as porcelain, glass or polymer) and steel fittings and conductor clamps. Additional fittings, such as spacers and vibration dampers, would be fitted to the conductors. Spacer dampers prevent the conductors from touching each other and vibration dampers prevent oscillations from the conductors from reaching the insulator fittings and minimise effects of fatigue loading. Arcing horns would also be required, to protect insulators from over-voltages due to electrical faults or lightning strikes.
- 4.3.5 The main components of an overhead line are shown in **Image 4.1**, which shows a typical steel lattice suspension pylon. **Image 4.2** shows a typical suspension pylon alongside a typical tension pylon. **Image 4.3** shows a typical terminal pylon.

Image 4.1 Components of a typical transmission connection

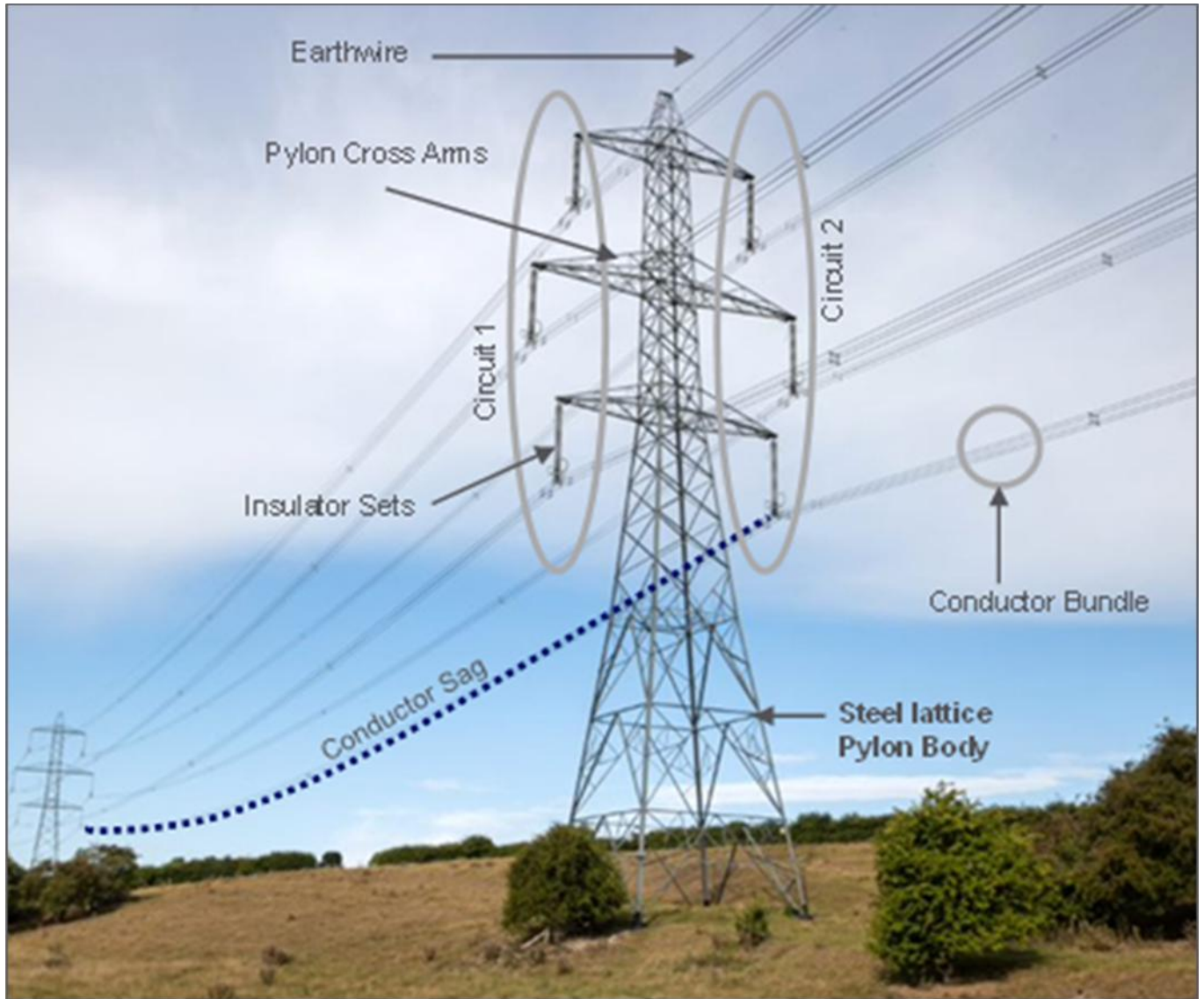


Image 4.2 Typical suspension pylon (left) and typical tension pylon (right)



Image 4.3 Typical terminal pylon



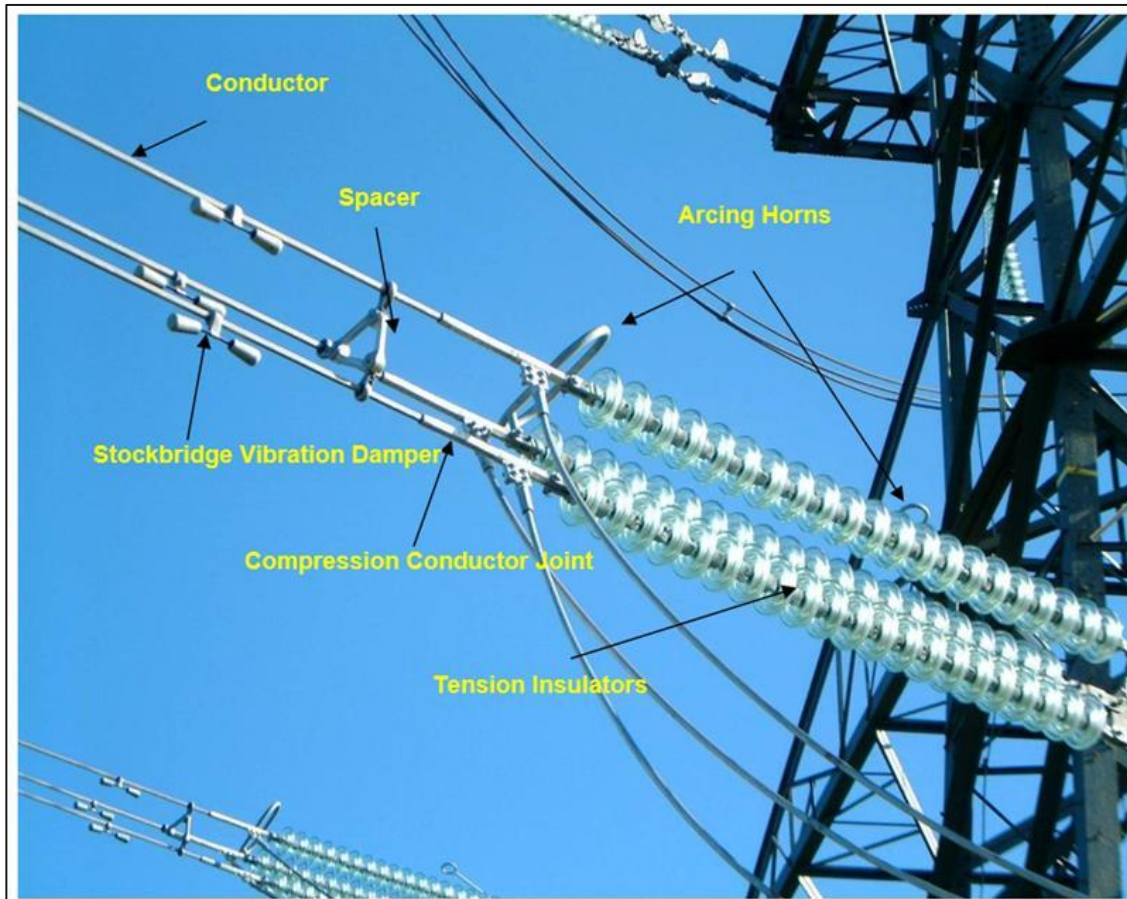
- 4.3.6 The proposed pylons for the Scheme would comprise of steel lattice with three crossarms on either side of a central body.
- 4.3.7 The S37 4ZM Overhead Line Works includes a total of four new pylons and the removal of two pylons, resulting in a net increase of two pylons on the 4ZM overhead line. The individual structures are identified in **Table 4.1** below and illustrated on **Figure 2**.

Table 4.1 Proposed structures – added, removed, and temporary

Structure number	Structure type	Structure status
4ZM414-N	Pylon - tension	New
4ZM413-N	Pylon - terminal	New
4ZM408-N	Pylon - terminal	New
4ZM407-N	Pylon - tension	New
4ZM408	Pylon - suspension	Existing - Removed
4ZM409	Pylon - suspension	Existing - Removed

- 4.3.8 The conductor type would be triple Araucaria or alternative technology that performs to the same or a better standard in relation to reducing operational noise. The triple Araucaria conductor comprises of three sub-conductors per bundle, and a total of 6 phases made up of 18 sub-conductors per pylon which carry the electrical current along the overhead line route.
- 4.3.9 The overhead line would also be installed with an earthwire, typically consisting of a smaller single conductor which runs along the peaks of the pylons. The earthwire provides an electrical earth connection between the pylons to provide protection against lightning and distribution of fault currents. The earthwire may also contain a fibre optic cable which allows for telecommunication signals to be communicated along the overhead line route.
- 4.3.10 Insulators can be made of different types of material, but the most common industry standard is either glass or polymer.
- 4.3.11 Suspension pylons would typically have a single insulator string hanging vertically downwards from each crossarm end to carry the conductor bundle, giving six sets of suspension insulators on each suspension pylon. A tension pylon would typically have one insulator string in a horizontal position per conductor in each conductor bundle attached to the end of each cross arm (i.e. three insulator strings for a conductor bundle consisting of three conductors). For one circuit on one side of the pylon, this gives a total of 18 sets of tension insulators (nine sets facing along one direction of the overhead line route, and nine sets facing the opposite direction). Across both circuits there would be a total of 36 sets of tension insulators per tension pylon. Tension insulators are oriented roughly horizontally outwards from the crossarm ends and accommodate the longitudinal force of the tension of the conductors. For the current to continue flowing at a tension pylon, jumpers are used to join the conductors. These consist of 3 single sub-conductors per phase joining onto the fittings on the positive side of the insulator string. Conductor fittings are shown in **Image 4.4**.

Image 4.4 Indicative conductor fittings



- 4.3.12 Within the design of the Scheme, there is a need for some flexibility, which has been accounted for in the assessments for this application. The horizontal Limits of Deviation (LoD) applied either side of the full length of the overhead line centreline is 50 m, for a total width of 100 m. Where the width of the LoD is 100 m, the extent of movement of any pylon is limited by the span length and conductor swing. At a maximum span length, the centre of the pylon could move approximately 20 m either side of the centreline subject to topography and local conditions.
- 4.3.13 There would be no fixed limit on the movement of a pylon along the centreline of the proposed route i.e. pylons can move up and down the centreline (longitudinal LoD). While there is no fixed limit, in practical terms the movement of pylons along the centreline is constrained by a combination of the span distance between adjacent pylons and maintaining the necessary ground clearances without exceeding the vertical LoD.
- 4.3.14 The vertical LoD applied along the length of the overhead line is 6 m to allow for the pylon height to be increased, in order to increase ground clearances.

4.4 Construction

- 4.4.1 The construction of the new S37 4ZM Overhead Line Works would generally follow the sequence outlined below:
- 1) surveys including archaeological investigation;
 - 2) ground investigation;

- 3) site preparation activities, including vegetation clearance;
- 4) installation of fencing (stock or demarcation) depending on land use and gates or equivalent as required;
- 5) topsoil stripping, temporary drainage installation where required;
- 6) installation of haul roads (including culverts and bridges) and demarcated pylon working areas;
- 7) installation of pylon foundations (pad and column, mini pile, tube pile or bespoke);
- 8) steelwork lay out and assembly and erection of steelwork;
- 9) installation of pylon signage including safety notice plate and anti-climbing devices;
- 10) installation of crossing protection prior to stringing of conductors, including scaffolding and road/lane closures;
- 11) installation of insulator assemblies on suspension pylons;
- 12) establishment of machine sites for conductor stringing;
- 13) conductor and earthwire stringing;
- 14) temporary earthing;
- 15) installation of tension insulator assemblies on tension and terminal pylons;
- 16) setting conduction tensions (sagging) and clearances, and installing spacers and jumpers;
- 17) removal of construction equipment and reinstatement of ground and restoration of soils;
- 18) removal of haul roads, bellmouths, temporary culverts and access bridges; and
- 19) removal of construction compounds and ground reinstatement.

- 4.4.2 There would be a temporary construction corridor established along the route which comprises a temporary haul road (which is assumed to be stone, noting that trackway may be used in some localised areas), soil storage and temporary drainage. Construction access points would be established where construction traffic would access and egress the construction corridor.
- 4.4.3 Temporary access points would be removed following completion of construction, and access for maintenance and inspection would typically be via field gates agreed with landowners.
- 4.4.4 This S37 Application is intrinsically linked to, and contingent upon, the approval of the Substation Works being progressed under the TCPA. The TCPA application incorporates a number of key ancillary elements which are fundamental to the construction, operation and ongoing maintenance of both the substation and the overhead lines' infrastructure.
- 4.4.5 In particular, the TCPA application includes shared infrastructure such as the principal haul road accessed from Stone Gate and the construction compounds. These elements are intended to serve all components of the Scheme. Accordingly, these shared works have been assessed and applied for as part of the TCPA application.

- 4.4.6 Approximately 1261 m of haul road would be used exclusively for the S37 4ZM Overhead Line Works, these form ancillary works to this S37 application.
- 4.4.7 There is one construction access point for heavy goods vehicles associated with both the Substation Works and S37 4ZM Overhead Line Works construction, which is via the proposed haul road off Stone Gate. HGV and Light Goods Vehicles (LGV) deliveries would be made to the main construction compound via a haul road from Stone Gate to limit HGV movements along narrower rural roads. 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.
- 4.4.8 While HGVs would use the haul road from Stone Gate, construction workers cars/vans could also use Marsh Road for direct access to the north western compound.

Pylon Working Areas

- 4.4.9 Pylon working areas would typically be 60 m by 60 m for a suspension pylon and 80 m by 80 m for a tension pylon. They would either be stone laid on a geotextile, or formed of interlocking panels, depending on ground conditions and the duration and type of use. Soil stabilisation techniques could be considered subject to local conditions.

Installation of Pylon Foundations (pad and column, mini pile, or tube pile)

- 4.4.10 The foundations for the pylons would either be pad and column, mini pile or tube pile (or bespoke if required). The selection of foundation type would depend upon the ground conditions encountered, this would be determined during detailed design.

Assembly and Erection of Steel Work

- 4.4.11 The steelwork components would be brought to each pylon working area. The steelwork components would be bolted together on the ground. The pylon would be assembled in sections beginning from ground upwards, using a telehandler for the lower sections and a mobile crane for the upper sections. Assembly of horizontal steel would be undertaken at ground level.

Installation of Insulators

- 4.4.12 The insulators would be fastened to the cross arms of the pylons, with running out wheels hung from the end of the insulators to carry the pilot wires in preparation for installing the conductors.

Establishment of Machine Sites for Conductor Stringing

- 4.4.13 The conductors would usually be installed from tension pylon to tension pylon along intermediate suspension pylons, often termed a 'section', with machine sites required at either end of the section.

- 4.4.14 The machine sites for conductor stringing would normally be located within the pylon conductor pulling positions, typically sited on earthed aluminium interlocking panels laid directly onto the ground surface reducing disturbance to the underlying soils.
- 4.4.15 A conductor pulling position would be established at each end of the section with a pulling machine ('puller') and empty steel reels to accept pilot wires. At the other end of the section the full conductor drums would be arranged in close proximity to the tensioning machine ('tensioner').

Conductor Stringing

- 4.4.16 The conductors would be delivered to pulling positions on large cable drums. Depending on the conductor type and length of section to be strung, a typical completed drum could weigh up to 8 tonnes, although larger and heavier drums are possible depending on the supplier and the length of conductor. The drums containing the conductors would typically be delivered to the construction compound, or satellite compound, first, and would be distributed from there.
- 4.4.17 Light pilot wires are laid along the section between pulling positions, sometimes requiring vegetation clearance, and threaded through pylons using running wheels. These wires pull progressively stronger wires, which are then used to install the conductors under controlled tension to keep them off the ground. Once installed, conductors are secured at final height, with components such as spacers, dampers, and fittings added. In some cases, conductors may be prepared at ground level using scaffold supports for later lifting. Temporary backstays or concrete blocks are used to stabilise pylons during installation and are removed as work progresses or relocated as needed. Access tracks may be required, and drones or helicopters can support construction and equipment transport.

Dismantling the Existing 4ZM Overhead Line

- 4.4.18 There are a number of methods that can be used to remove the pylons depending on available space and surrounding features. A tractor or a large mobile hydraulic crane may be used to fell or dismantle the pylon either whole or in parts. Where a crane is used, a crane pad would be positioned at the pylon base. This would be sized according to crane size/site constraints and typically may be constructed using stone following topsoil stripping. Topsoil will be stored and reinstated in accordance with the **Outline Soil Management Plan**, which is an environmental control plan which accompanies the **Outline Construction Environmental Management Plan** as part of the S37 4ZM Overhead Line Works application.
- 4.4.19 Once the pylon is felled it would typically be cut into sections for removal off site. Unless there was a compelling need for removal of all the foundations, these would be removed to approximately 1.5 m deep, sufficient for safe agricultural use of the land and subsoil and topsoil reinstated. All waste would be removed from site and recycled in compliance with waste disposal legislation at the time, and measures outlined in the **Outline Construction Environmental Management Plan**.

Construction Programme and Working Hours

- 4.4.20 Subject to the Scheme being granted permission through the various consenting routes in 2026, it is anticipated that access and construction would begin in 2028.

This would begin with enabling works, with construction of the S37 4ZM Overhead Line Works continuing through until Q2 2031.

- 4.4.21 The proposed core construction working hours are:
- 1) Monday to Friday 07:00 – 19:00; and
 - 2) Saturdays, Sundays, Bank Holidays and other Public Holidays 08:00 – 17:00.
- 4.4.22 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.
- 4.4.23 Some construction activities may take place outside of the proposed core working hours referred to above, to minimise disruption to the public.

4.5 Operation

- 4.5.1 The S37 4ZM Overhead Line Works would enable the Substation Works to connect to the National Grid and also facilitate the connection of the Outer Dowsing Offshore Wind Farm (ODOW). Once operational, activity would be limited to regular inspections and maintenance.

4.6 Decommissioning

- 4.6.1 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.
- 4.6.2 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 S37 4ZM Overhead Line 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.
- 4.6.3 There are currently no specific plans to decommission the S37 4ZM Overhead Line Works.
- 4.6.4 In terms of the decommissioning of the S37 4ZM Overhead Line Works, typically, above ground features would be removed (unless otherwise agreed). Any above ground structures 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.

5. Environmental Measures

5.1 Design Measures

- 5.1.1 Design measures are those that are intrinsic to and built into the design. For National Grid projects this includes the application of the Holford Rules (Ref 13) and Horlock Rules (Ref 14), that are applicable to overhead line routing and the siting of substations respectively.
- 5.1.2 The siting of the new Weston Marsh Substation A north west of and in close proximity to the existing Spalding Tee-Point overhead line junction, represents the greatest opportunity to limit the spread of environmental effects, overhead line deviations of the two existing overhead lines (4ZM and 2WS) and reduce technical complexity during construction and operation.
- 5.1.3 Locating the new Weston Marsh Substation A close to the tee point between existing 400 kV overhead lines reduces the amount of new overhead line required, reducing the spread of new infrastructure within the landscape and views.
- 5.1.4 The locations of access tracks and bellmouths has minimised loss of vegetation, reducing the loss of existing vegetation which in turn would help to screen and filter views of the S37 4ZM Overhead Line Works.
- 5.1.5 Additionally, the shortest and most direct route has been adopted for the turn-ins to the new substation, and the shortest practicable route for the S37 4ZM Overhead Line Works route has been chosen.
- 5.1.6 Appropriate stand-off distances of 50 m or 100 m have been applied to sensitive receptors (including designated sites, priority habitats, heritage assets, residential properties and watercourse) to avoid direct effects where practicable. Individual pylons and temporary haul roads have been designed to avoid direct and indirect impacts on sensitive receptors (including residential properties, businesses, designated sites and heritage assets) as far as possible.

5.2 Control Management Measures

- 5.2.1 Control management measures comprise management activities, control measures and techniques, that would be implemented during construction of the Scheme to limit impacts. They include adherence to good site practices and achieving legal compliance. These measures are included within the **Outline Construction Environmental Management Plan (CEMP)** submitted in support of the S37 consent application for the S37 4ZM Overhead Line Works.
- 5.2.2 The **Outline CEMP** is intended to provide the basis of a final CEMP, the details of which will be agreed with the relevant consenting authorities in advance of the start of construction.

5.3 Additional Mitigation

- 5.3.1 Additional Mitigation comprises measures over and above any design or control and management mitigation measures, for which environmental assessment has identified a requirement to further reduce environmental effects, for example landscape planting.
- 5.3.2 Additional mitigation included within the Scheme primarily addresses the impacts of the Substation Works component. However, planting illustrated on the **Indicative Landscape and Ecological Mitigation Proposals** would also contribute to some screening and filtering of localised views towards the 4ZM Overhead Line Works from properties and for users of the public right of way.
- 5.3.3 This 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 the plan 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 west 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; and
 - 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.
- 5.3.4 The proposed planting has had regard for the local landscape, introducing woodland belts to mimic existing such as that along Lord's Drain and focussing on screening and filtering views from the closest visual receptors so that the landscape remains as open as possible.

6. Environmental Assessment

6.1 Introduction

- 6.1.1 As described in **Section 1** of this EAR, informed by the Screening Opinion provided by SHDC in relation to the Substation Works and based upon the conclusions set out within the **Report to Inform the Screening Decision**, the Scheme is not considered to constitute EIA development. This is on the basis that significant environmental effects due to construction and operation of the Scheme are not likely.
- 6.1.2 The following sections describe the likely impacts and effects specifically associated with the S37 4ZM Overhead Line Works. Reference is also made to the supporting assessments listed in **Table 1.2**, which may be read in conjunction with this EAR.

6.2 Landscape and Visual

Baseline

- 6.2.1 A **Landscape and Visual Appraisal** was undertaken for the Scheme, which considered the Scheme in its entirety, including assessment of impacts attributable to the S37 4ZM Overhead Line Works.
- 6.2.2 The assessment of landscape effects considers changes on the landscape as a resource. Landscape effects relate to the changes to the fabric, character and quality of the landscape and how it is experienced. Visual effects deal with the effects of change and the introduction of the S37 4ZM Overhead Line Works on views and visual amenity, specifically by changes in content and character of views. Although effects on the landscape and visual environment are interrelated, they are assessed and reported separately in the EAR.
- 6.2.3 The S37 4ZM Overhead Line Works are not located within or adjacent to any National Parks or National Landscapes (formerly Area of Outstanding Natural Beauty), the closest being Norfolk Coast National Landscape which is located approximately 28 km to the east of the S37 4ZM Overhead Line Works Site Boundary. There are no Country Parks, areas of open access land or registered parks and gardens within 10 km of the S37 4ZM Overhead Line Works Site Boundary.
- 6.2.4 The whole of South Holland District lies within National Character Area (NCA) 46: The Fens, and the S37 4ZM Overhead Line Works are within RLCT 2A Settled Fens and Marshes, a low-lying, flat landscape used for arable farming, with a network of rivers and small streams, as defined in the East Midlands Landscape Character Assessment (Ref 15). The S37 4ZM Overhead Line Works are also located within the Settled Fens Landscape Character Type (LCT) as defined in the South Holland Strategic Landscape Capacity Study (Ref 16).

Assessment of Impacts and Effects

Construction

- 6.2.5 During construction there is the potential for impacts to RCLT 2A Settled Fens and Marshes and Settled Fens LCT as a result of the S37 4ZM Overhead Line Works, however it is likely that any effects would not be significant. This is due to the presence of the already existing overhead lines in the landscape and localised construction area. Effects are assessed as minor adverse.
- 6.2.6 During construction there is the potential for visual effects to community areas such as Pinchbeck, Surfleet, The Moulton and Weston; and recreational routes and receptors including MacMillan Way; and Wigwam Holidays Crowtree. However, due to the existing 4ZM and 2WS overhead lines it is not predicted that there would be significant visual effects as a result of the construction of the S37 4ZM Overhead Line Works. Any effects during construction are assessed as minor adverse or negligible.
- 6.2.7 The **Outline CEMP** includes the following measures which detail mitigation required for landscape and visual: LV01-LV07.

Operation

- 6.2.8 There would be a net increase of two new pylons introduced to the landscape as a result of the S37 4ZM Overhead Line Works during operation. However, due to the existing 4ZM and 2WS overhead lines it is not expected that there would be significant effects to RLCT 2A: Settled Fens and Marshes, or Settled Fens LCT, and any effects are assessed as negligible.
- 6.2.9 Any visual impacts to the communities of Pinchbeck, Surfleet, The Moultons, Weston, or the receptors at MacMillan Way or Wigwam Holidays Crowtree as a result of the S37 4ZM Overhead Line Works during operation are not expected to result in significant effects due to the presence of the existing overhead lines. Effects are assessed as negligible for all locations except Weston which would experience a minor adverse effect.
- 6.2.10 In summary, no long-term significant effects are anticipated as a result of the S37 4ZM Overhead Line Works with additional landscape planting to further filter views and integrate the Scheme into the landscape, effects at year 15 are considered to be minor adverse at most.

6.3 Ecology and Biodiversity

Baseline

- 6.3.1 To assess the baseline of the ecological environment, various ecological surveys were undertaken and the results are presented in the following reports: **Bat Survey Report, Badger Survey Report, Aquatic Survey Report, Breeding Birds Survey Report, Non-Breeding Birds Survey Report, Otter and Water Vole Survey Report, Great Crested Newt Survey Report, and Habitat Classification Survey Report.** In addition, a **Report to Inform Habitats Regulations Assessment Stage 1 Screening** has been prepared for all components of the Scheme.

Designated Sites

- 6.3.2 An assessment of the baseline ecological environment for the Scheme identified that the internationally designated sites of the Wash Special Protection Area (SPA) and Ramsar Site, and the Wash and North Norfolk Coast Special Area of Conservation (SAC) are located 6.1 km north east of the S37 4ZM Overhead Line Works Site Boundary. The following nationally designated sites were identified during an assessment of the baseline - Surfleet Lows Site of Special Scientific Interest (SSSI) which is located 3.4 km to the west of the S37 4ZM Overhead Line Works Site Boundary, the Wash SSSI which is located 6.1 km to the north east of the S37 4ZM Overhead Line Works Site Boundary, and Vernatts Local Nature Reserve (LNR) which is located 4.3 km south west of the S37 4ZM Overhead Line Works Site Boundary.
- 6.3.3 In total there are 6 non-statutory designated sites located within 2 km of the S37 4ZM Overhead Line Works Site Boundary, the closest of these are Surfleet Seas End Saltmarsh (654 m), and Vernatts Drain (736 m) which are both located to the west of the S37 4ZM Overhead Line Works Site Boundary.

Habitats

- 6.3.4 Habitats of Principal Importance were identified within 2 km of the S37 4ZM boundary: Coastal Saltmarsh, Mudflats, Coastal and Floodplain Grazing Marsh, and Rivers.
- 6.3.5 Habitat types recorded within the S37 4ZM Overhead Line Works Site Boundary included hedgerow (priority habitat), other rivers and streams, other standing water, line of trees, lowland mixed deciduous woodland, arable and horticulture, cereal crops, other cereal crops, other non-cereal crops, modified grassland, and developed land. Detailed information on habitats within the Scheme boundary is provided in the **Habitat Classification Survey Report**.

Protected and Notable Species

- 6.3.6 Protected/notable species were identified within the S37 4ZM Overhead Line Works Study Area (as identified within the baseline reports listed above). The results of the desk study and field surveys are summarised below.

Invertebrates

- 6.3.7 The moth species knot grass *Acrionicta rumicis* (a Species of Principal Importance (SPI)), and the bee species large garden bumblebee *Bombus ruderatus* (a SPI) and sea aster bee *Colletes halophilus* were recorded within the Study Area. The most abundant habitat type within the S37 4ZM Overhead Line Works Site Boundary is cropland which is managed for agriculture. This habitat is common and widespread within Lincolnshire and is unlikely to support notable invertebrate assemblages. Grassland, hedgerows and trees are likely to support a more diverse range of common invertebrate species.

Great crested newt

- 6.3.8 The full results of the great crested newt *Triturus cristatus* (GCN) surveys are provided in the **Great Crested Newt Survey Report**. There were no recent records of GCN or other amphibians returned within the Study Area. Habitat suitability assessments and Environmental DNA (eDNA) surveys were completed for

waterbodies and ditches within 250 m of the Scheme. No evidence of GCN has been recorded during the field surveys to date, however one ditch (GtW-ARP-AHALn-21760) remains to be surveyed in 2026.

Reptiles

- 6.3.9 The desk study returned no recent records of reptiles within the Study Area. An incidental recording of a live grass snake *Natrix helvetica* was observed in the Study Area in July 2024. Field margins and ditches within the S37 2WS Overhead Line Works Site Boundary have suitability for species such as grass snake and common lizard *Zootoca vivipara*.

Birds

- 6.3.10 Full bird survey results are provided in the **Breeding Bird Survey Report** and the **Non-breeding Bird Survey Report**. The desk study returned 80 records of 30 bird species out to 2 km from the Scheme. [REDACTED]
- [REDACTED]. In addition, five further species of principal importance under Section 41 of the NERC Act 2006; skylark *Alauda arvensis*, yellow wagtail *Motacilla flava*, linnet *Linaria cannabina*, corn bunting *Emberiza calandra* and reed bunting *Emberiza schoeniclus*, were also considered to be breeding within the S37 4ZM Overhead Line Works boundary. Four BoCC5 red-listed species were recorded breeding (Ref 17), comprising skylark, yellow wagtail, linnet and corn bunting. A further two amber-listed species were also considered to be breeding, including meadow pipit *Anthus pratensis* and reed bunting. A total of 26 target species were recorded utilising the Scheme Study Area during the non-breeding bird surveys, across the two-year survey programme. These comprised of four species of wader, six species of Anseriformes (ducks, geese, and swans), five species of gull, four raptor species and seven other waterbird species. There were 23 other non-target species also recorded incidentally, with multiple species of conservation concern recorded.

Badger

- 6.3.11 The full results of the badger surveys are provided within the **Badger Survey Report**. [REDACTED]

Bats

- 6.3.12 The full results of the bat surveys are provided within the **Bat Survey Report**. The desk study returned nine records of bat roosts within the Study Area for the Scheme, these were for soprano pipistrelle *Pipistrellus pygmaeus*, Daubenton's bat *Myotis daubentonii*, pipistrelle species, brown long-eared *Plecotus auritus*, and unknown bat species. The desk study also returned 28 bat activity records within the Study Area for the Scheme. These records were for common pipistrelle *Pipistrellus pipistrellus*,

soprano pipistrelle, Daubenton's bat, pipistrelle species, brown long-eared and unknown bat species. The field surveys identified trees within the S37 4ZM Overhead Line Works Site Boundary with suitability for roosting bats, however due to the trees being located on the boundary, or an access route, it has been determined that they would not be impacted by the S37 4ZM Overhead Line Works. As these trees are not going to be impacted, no further surveys on the trees for bats are required for the S37 4ZM Overhead Line Works. The night-time bat walkover and static detector surveys completed within the Scheme recorded at least eight bat species to be present: common pipistrelle, soprano pipistrelle, Nathusius' pipistrelle *Pipistrellus nathusii*, Daubenton's bat, *Myotis* sp., noctule *Nyctalus noctula*, Leisler's bat *Nyctalus leisleri*, brown long-eared and barbastelle *Barbastella barbastellus*.

Otter

- 6.3.13 The full results of the otter surveys are provided in the **Otter and Water Vole Survey Report**. The desk study returned one record of an otter fatality located 2.4 km north east of the Scheme Site Boundary. The field surveys found that the majority of watercourses within the Survey Area were dry with significant levels of terrestrial vegetation (e.g. grasses, nettles and bramble), suggesting that they had been dry for a long period of time. Three watercourses within the S37 4ZM Overhead Line Works Site Boundary were considered suitable for otter. One potential otter holt was recorded within the S37 4ZM Overhead Line Works Site Boundary. The potential holt was a disused badger sett on the bank of RIPWC_1637. Monitoring of the hole commenced on 14 January 2026. An internal inspection on 10 February 2026 recorded that the internal area of the hole had collapsed, with rat sized burrows within. As of April 2026, there were no signs of otters recorded at the hole. Monitoring will continue into early summer 2026.

Water vole

- 6.3.14 The full results of the water vole surveys are provided in the **Otter and Water Vole Survey Report**. The desk study returned 216 records of water vole field observations. Five of the records were from within the Scheme Site Boundary. The records were concentrated on Lord's Drain to the east and south of the Scheme Site Boundary. No field signs of water vole were recorded within the S37 4ZM Overhead Line Works Site Boundary. Given the absence of field signs, it is assumed that water voles are absent from the S37 4ZM Overhead Line Works Site Boundary. However, it should be noted that these findings are subject to ongoing survey work and therefore represent a preliminary baseline pending completion of surveys scheduled for July 2026.

Aquatic species

- 6.3.15 Full details of the aquatic macroinvertebrate, macrophyte and fish surveys are provided in the **Aquatic Survey Report**. There were two records of one notable macroinvertebrate species identified within 2 km of the Scheme and one record of one notable macrophyte species within 2 km of the Scheme. One historical record of one notable fish species was identified within 2 km of the Scheme, the European eel *Anguilla anguilla*. A search for additional migratory species was conducted at a catchment level upstream and downstream of the Scheme over the last ten years. 56 records of brown/sea trout *Salmo trutta*, three records of lamprey (Petromyzontidae), and six records of lamprey (*Lampetra* sp.) were identified upstream of the Scheme, but no additional migratory fish species were recorded downstream of the Scheme.

- 6.3.16 Crossing points TCPA-OHL-WCX-15 & 16 cross Lords Drain (watercourse ID: WC_WM_69), where a temporary culvert for access is proposed. The ditch was within a field boundary between two agricultural fields to the west of Carrington Road. The unshaded channel (average width: 5 m; average depth: 0.60 m) was a straightened, realigned ditch with a flow less than 10cm/second and low turbidity. The substrate here was soft and predominantly comprised silt. The spring community in the sample for this site was moderately diverse (21 taxa), dominated by the non-biting midge Chironomidae which accounted for 81% of the community. Also abundant were several snail species including the non-native, non-invasive New Zealand mud snail and various beetle taxa such as *Haliphus lineatocollis*. The autumn assemblage was slightly more diverse than in spring (26 taxa) and was dominated by snails, particularly the non-native, non-invasive New Zealand mud snail, which accounted for 84% of the community. Also recorded in the sample for this site were damselfly larvae, true bugs such as the common backswimmer *Notonecta glauca*, and two beetle species.
- 6.3.17 Macrophyte surveys were completed at crossing points WM-WCX-3/ TCPA-OHL-WCX-10 & 11/ TCPA-OHL-WCX-15 & 16/WM-WCX-19, however, survey data was lost due to a software upload error and is no longer available. These sites will be re-surveyed in June 2026. While survey data is no longer available, it was confirmed that no notable species were encountered at these sites, as rare or notable species would have been recorded photographically independent of the survey proforma by the surveyor.
- 6.3.18 A semi-quantitative, single anode, electric fishing survey was conducted over an ~100 m reach of Lord's Drain at the crossing points TCPA-OHL-WCX-15 & 16. A total of three fish species were present at this site. Among the species identified, the notable and migratory protected European eel (n=6) were caught along the survey reach. The most numerically dominant fish species caught was roach (*Rutilus rutilus*; n=12), while only three three-spined stickleback *Gasterosteus aculeatus* were caught.

Other notable species

- 6.3.19 The desk study returned records of SPI species hedgehog *Erinaceus europaeus* and pole cat *Mustela putorius* within the Study Area. Habitats such as hedgerows and field margins are suitable for hedgehog and polecat. Arable habitats within the S37 4ZM Overhead Line Works Site Boundary are suitable for brown hare *Lepus europaeus* (also an SPI).

Invasive non-native species

The desk study returned records of invasive non-native faunal species Canada goose *Branta canadensis*, barnacle goose *Branta leucopsis* and the invasive Chinese mitten crab *Eriocheir sinensis* within the Study Area. The non-invasive amphipod *Crangonyx pseudogracilis/floridanus* and New Zealand mud snail *Potamopyrgus antipodarum* were recorded during the aquatic ecology surveys.

Assessment of Impacts and Effects

Construction

- 6.3.20 No impacts upon statutory or non-statutory designated sites are predicted due to the embedded measures within the **Outline CEMP**. The land associated with the Scheme Site Boundary is not viewed as important functionally linked land, given the distance to The Wash SPA and Ramsar sites, the limited records in the area over two years as a proportion of the designated sites' populations. The **Report to Inform Habitats Regulations Assessment Stage 1 Screening** provides further assessment of likely significant effects of the Scheme upon European designated sites.
- 6.3.21 In the absence of mitigation, there is the potential the following impacts for habitats and protected/notable species: habitat loss, habitat degradation and / or the, disturbance, killing and injury of protected/notable species and the introduction and spread of Invasive Non-native Species (INNS).
- 6.3.22 Measures to retain and protect habitats, control pollution and control the spread of INNS are detailed within the **Outline CEMP** (measures B02, B04, B05, B08, and B13).
- 6.3.23 Appropriate licences will be obtained where necessary from Natural England for protected species impacted by the works (**Outline CEMP** measure B01). Habitat translocation or any species translocation (if required) that is not covered by protected species licences will be undertaken in accordance with a strict method statement (**Outline CEMP** measure B09).
- 6.3.24 In the event that vegetation or any other feature with the potential to support breeding birds is required to be removed during the main breeding bird season (01 March to 31 August) or, in the case of Schedule 1 birds (e.g. barn owl), is likely to be disturbed, then appropriate measures will be undertaken in accordance with **Outline CEMP** measure B02. Active nests of wild birds are protected at all times and therefore the same measures will be put in place if an active nest is identified at any time of year.
- 6.3.25 Where there will be a risk of animal entrapment, a means of escape will be installed into all excavations left open overnight in accordance with **Outline CEMP** measure B03.
- 6.3.26 Subject to the location and scale of impact, suitable habitat for common reptiles will be subject to two-stage habitat manipulation that will take place between mid-March and mid-October in accordance with **Outline CEMP** measure B05.
- 6.3.27 The proposed works will result in impacts upon hedgerows and ditches within the S37 4ZM Overhead Line Works Site Boundary which may be used by the local bat populations for foraging and commuting. The amount of habitat lost is considered to represent a small fraction of the habitat available to foraging bats in the local landscape and the availability of alternative connections to the wider area shall maintain commuting routes for the local population. It is therefore considered that the impact of the Scheme would have a negligible effect on foraging and commuting bats. Habitats adjacent to the Substation Works will be protected throughout construction to avoid further loss and/or damage of suitable habitat in accordance with **Outline CEMP** measure GG25.

- 6.3.28 Changes in lighting during construction have the potential to disturb nocturnal wildlife. Restrictions detailed within the **Outline CEMP** (LV05 – LV07) will make sure that disturbance of species is minimised throughout construction.
- 6.3.29 Alternative bat roost structures (bat boxes) and alternative barn owl breeding sites (barn owl boxes) will be installed where appropriate (in accordance with **Outline CEMP** measures B06 and B07).
- 6.3.30 Measures to protect fish species include avoidance of in channel works within key spawning and migration periods (**Outline CEMP** measure B10) and restrictions on dewatering of waterbodies and piling activities (**Outline CEMP** measures B11 and B14 respectively).
- 6.3.31 In addition, a method statement to ensure works within watercourse crossings include suitable measures to allow the passage of otters, water vole and fish throughout construction (i.e., during fluctuating water levels) (**Outline CEMP** measure B12).
- 6.3.32 Changes in lighting during construction have the potential to disturb nocturnal wildlife. Restrictions detailed within the **Outline CEMP** (LV05 – LV07) will make sure that disturbance of species is minimised throughout construction.
- 6.3.33 With the embedded and additional measures proposed, no significant effects upon ecology and biodiversity are predicted during construction of S37 4ZM Overhead Line Works.
- 6.3.34 In summary, the **Outline CEMP** contains the following measures which detail the mitigation required for ecology and biodiversity: GG01, GG03, GG04 – GG07, GG09, GG13 – GG15, GG17, GG20, GG25, GG26, LV01, LV02, LV04, B01-B14, W01 – W06, W10 – W11, LV05 – LV07.

Operation

- 6.3.35 National Grid policies and procedures will ensure that contamination of habitats will be avoided during maintenance activities. The S37 4ZM Overhead Line Works include the construction of new sections of overhead line to connect the new substation into the existing 4ZM overhead line. The works will include the removal of two pylons and the addition of four pylons (resulting in an overall increase of two) and a net increase of approximately 0.2 km of overhead line.
- 6.3.36 On this basis, there is considered to be a negligible change in collision risk associated with the Scheme from baseline.
- 6.3.37 With the embedded and additional measures proposed, no significant effects upon ecology and biodiversity are predicted during the operation of the S37 4ZM Overhead Line Works.

6.4 Historic Environment

Baseline

- 6.4.1 A **Historic Environment Desk Based Assessment** (DBA) was undertaken for the Scheme in its entirety, inclusive of S37 4ZM Overhead Line Works. The DBA included aerial photographic and LiDAR assessment and was informed by a geophysical survey of accessible areas within the Scheme Site Boundary.

- 6.4.2 The **Historic Environment DBA** confirmed that there are no designated heritage assets within the Scheme Site Boundary, a number of designated heritage assets were identified within the surrounding 2 km Study Area. These comprise two Scheduled Monuments Wykeham Chapel, NHLE 1019096 and Churchyard Cross, St Mary's Churchyard, NHLE 1013529 & 1064473). Listed buildings identified within the 2 km Study Area include the grade I listed Wykeham Chapel of St Nicholas (NHLE 1064471) and its associated grade II listed farmhouse (NHLE 1147513) situated within the Wykeham Chapel scheduled monument, the grade II listed Wraggmarsh House Farmhouse (NHLE 1147603) and Pigeoncote to the east (NHLE 1064477) approximately 1.1 km to the north, and on the southern edge of the 2 km Study Area the grade I listed Church of St Mary (NHLE 1064475) and six grade II listed buildings were identified within the within the village of Weston.
- 6.4.3 The **Historic Environment DBA** also identified that there were non-designated assets such as medieval and post-medieval sea defences, field boundary ditches, trackways and former natural watercourses which survive as earthworks and cropmark features within the S37 4ZM Overhead Line Works Site Boundary. At least five circular features, two of which intersect the S37 4ZM Overhead Line Works Site Boundary (AEC525) have been noted.
- 6.4.4 Within the wider 2 km Study Area the **Historic Environment DBA** identified further non-designated heritage assets including evidence for former agricultural field systems including medieval dyings (field comprising blocks cultivated strips of land bordered by droves and dykes, typical of the siltlands of the Fens) and ridge and furrow cultivation; a medieval moated site, post-medieval sea defences, trackways, boundary ditches and extant and now demolished historic post-medieval farmsteads and the former Wragg Marsh tramway.

Assessment of Impacts and Effects

Construction

- 6.4.5 There is potential for temporary and permanent setting changes to several designated heritage assets and non-designated farms from the construction of the S37 4ZM Overhead Line Works. The increased noise, light and construction equipment, associated with the construction of the new pylons and the removal of the obsolete pylons, would temporarily alter the setting of these heritage assets.
- 6.4.6 The S37 4ZM Overhead Line Works have the potential to cause temporary changes to the setting of both designated and non-designated heritage assets comprising the Wykeham Chapel scheduled monument, the grade I listed Wykeham Chapel of St Nicholas (NHLE 1064471) and its associated grade II listed farmhouse (NHLE 1147513), the grade II listed Wraggmarsh House Farmhouse (NHLE 1147603) and Pigeoncote to the east (NHLE 1064477). The non-designated historic farmsteads are Top Yard (MLI122919) to the south east and Crowtree Farm ((MLI122916) and Welland House Farm (MLI122918) to the west.
- 6.4.7 While new pylons would be constructed, existing pylons visible in the landscape would also be removed. As such, the permanent presence of the pylons would result in a limited change to these heritage assets' settings, as modern infrastructure already exists and the new pylons would replace existing ones. This would result in less than substantial harm.

- 6.4.8 Crowtree Farm is approximately 550 m west of the nearest proposed pylon (4ZM414-N). Welland House Farm is located approximately 1.1 km west of the proposed pylons (4ZM411-N; 4ZM4112-N; 4ZM413-N). There would be views of new and existing pylons to the east and north of the buildings, as there are views from these buildings across the flat, agricultural landscape. The increased noise, light and construction equipment, associated with the construction of the new pylons and the removal of the obsolete pylons, would temporarily alter the setting of these buildings.
- 6.4.9 There is potential for temporary impacts to the setting of several non-designated heritage assets from the S37 4ZM Overhead Line Works, including Crowtree Farm (MLI122916), Top Yard (MLI122919), Chestnut House (MLI122926) and Shepherd's Farm (MLI122924). There is also potential for temporary and permanent setting changes to the non-designated asset the Ship Inn (MLI87121) from the S37 4ZM Overhead Line Works. These changes would result in less than substantial harm.
- 6.4.10 There may be temporary short-term impacts to the non-designated Medieval Sea Bank (ML198445) from increased noise and traffic upon the setting of the heritage asset arising from construction activities, these are not anticipated to affect the significance of the medieval sea bank or the way it is understood, with no long-term permanent impacts anticipated to the asset's setting arising from the S37 4ZM Overhead Line Works. The temporary changes to the setting and significance of the heritage asset are assessed as being less than substantial harm.
- 6.4.11 Overall, there are no expected physical impacts to designated or non-designated historic buildings, however, there is the potential for permanent and temporary setting changes as a result of the S37 4ZM Overhead Line Works. These impacts would result in less than substantial harm to the significance of the heritage assets.
- 6.4.12 There is potential for permanent impacts arising from the construction works associated with the S37 4ZM Overhead Line Works to non-designated archaeological assets. These include post-medieval ditches and former field boundaries (AEC511 and AEC518), former watercourses (AEC538), post-medieval sea defences (AEC529) and buried peat deposits (AEC562) with geoarchaeological and palaeoenvironmental interest. These changes would result in less than substantial harm.
- 6.4.13 Two non-designated archaeological assets, the circular features (AEC525) and an undated ditch (AEC514) located within the Scheme Site Boundary would experience no harm as a result of the S37 4ZM Overhead Line Works.
- 6.4.14 Further consultation will be undertaken with the Lincolnshire County Council Archaeological Advisor to SHDC (LCCAA) to determine the scope of any archaeological evaluation and/or mitigation works ahead of construction of the S37 4ZM Overhead Line Works.
- 6.4.15 The **Outline CEMP** contains the following measures which detail the mitigation required for the historic environment: H01-H04.

Operation

- 6.4.16 There are no significant effects to heritage assets expected during operation of the S37 4ZM Overhead Line Works.

6.5 Water Environment

Baseline

- 6.5.1 A Surface Water Drainage Strategy was completed for the Substation Works. This considered that the S37 4ZM Overhead Line Works would result in a net increase in two pylons relative to the existing overhead lines and therefore these works were not considered within the Surface Water Drainage Strategy. The new pylons do not require any permanent drainage and therefore site drainage is not considered further within this report.
- 6.5.2 A **Flood Risk Assessment** was developed for the Substation Works. This considered that the S37 4ZM Overhead Line Works would result in a net increase of two pylons and there would be no new pylons in the functional floodplain, this is explained further below.
- 6.5.3 A **Water Framework Directive Assessment** (WFD) was undertaken for the S37 4ZM Overhead Line Works, to assess the potential for impacts to the Moulton River.
- 6.5.4 The WFD compliance assessment considered the potential impacts of both the construction and operational phases of the S37 4ZM Overhead Line Works on hydromorphological, biological, and physio-chemical quality elements.

Assessment of Impacts and Effects

Construction

- 6.5.5 A screening exercise for the S37 4ZM Overhead Line Works identified that a number of activities during the construction phase have the potential for runoff, sediment mobilisation and hydromorphological disturbance of the Moulton River Water Body resulting in a potential change to aquatic habitats.
- 6.5.6 It also identified that activities could result in a risk of flow alteration, sediment release, loss of aquatic habitat, and mortality/harm to aquatic species through increased shading and impacts to habitat connectivity. In addition, some activities could result in potential disturbance to aquatic species through noise and vibration.
- 6.5.7 During the construction phase, a range of potential impacts were identified, including increased fine sediment delivery, disturbance to riverbed and banks, temporary alternations to flow pathways, loss of habitat continuity and risks associated with pollution and INNS. These impacts have been addressed through a comprehensive suite of mitigation measures, which are included within the **Outline CEMP**. Measures such as sediment and pollution control, bed and bank protection, flow and water quality safeguards, and biosecurity protocols are designed to avoid or minimise adverse effects and ensure that construction activities do not result in deterioration or WFD status or compromise the ability of any water body to achieve good ecological status or potential.
- 6.5.8 The **Outline CEMP** contains the following measures which detail the mitigation required for the water environment: W01-W14.

Operation

- 6.5.9 A **Flood Risk Assessment** was developed for the Substation Works component of the Scheme. On the basis there would be no new pylons within the functional floodplain, the S37 4ZM Overhead Line Works were not considered further within this assessment.
- 6.5.10 Nonetheless, further assessment of predicted flood depths in the post-development 0.1% annual probability +2015 climate change defence breach scenario has been undertaken, the results of which are presented in **Table 6.1**.

Table 6.1 Predicted flood depths in the post-development 0.1% annual probability +2015 climate change defence breach scenario

Structure Number	Depth (m)
4ZM407-N	0.2657
4ZM408-N	0.4211
4ZM413-N	0.7408
4ZM414-N	0.6413

- 6.5.11 All modelled depths are less than 1 m, demonstrating that conductor and cable heights will be above flood levels in this event.
- 6.5.12 During the operational phase, the **Water Framework Directive Assessment** has identified that, with the implementation of embedded and additional mitigation measures, the S37 4ZM Overhead Line Works would not result in deterioration of WFD status or potential.
- 6.5.13 In conclusion, the S37 4ZM Overhead Line Works as designed and with the construction and operational measures in place, is compliant with the objectives of the WFD. It represents a Scheme 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.

6.6 Geology and Hydrogeology

Baseline

- 6.6.1 A **Phase 1 Geoenvironmental Desk Study** was undertaken for the Scheme, which considered the Scheme in its entirety.
- 6.6.2 The land within the S37 4ZM Overhead Line Works has historically been used for agriculture and, other than pylons and overhead lines, there are no structures within the S37 4ZM Overhead Line Works Site Boundary. Satellite imagery indicates that the comprises flat-lying agricultural land at various levels of production or vegetation growth, from widespread grass cover to no grass/vegetation cover, crossed by private roads or access tracks.
- 6.6.3 There are a number of historical boreholes within the Study Area, most of which are confidential records (so have not been reviewed). There are two non-confidential

historical borehole records located within the S37 4ZM Overhead Line Works Site Boundary. These boreholes, which were up to 12 m deep, encountered variable superficial deposits with both granular and cohesive constituents. Neither borehole was extended into the underlying bedrock, therefore it can be assumed that there is a local thickness of superficial cover in excess of 12 m.

- 6.6.4 The Study Area is considered overall to present a Low Risk of contamination associated with past land use, current land use and ground conditions.

Assessment of Impacts and Effects

Construction

- 6.6.5 The Preliminary Conceptual Site Model (CSM) identified several potential contaminant source-pathway-receptor linkages, and a qualitative risk assessment of these linkages has identified a Low risk to human health (from ground contamination), Controlled Waters and structures.
- 6.6.6 The **Outline CEMP** includes control measures that will ensure that any the construction works do not cause contamination, and that any pre-existing contamination sources (e.g. unrecorded / unexpected contamination) are suitably identified and managed. Pre-construction ground investigation is being undertaken that will include an appropriate suite of laboratory geochemical testing, informed by the Preliminary CSM, to confirm the absence of contamination and risks to receptors, or establish any additional control and protection measures if required. The findings of the ground investigation will inform any refinement of the final CEMP. By following the measures in the **Outline CEMP**, it is concluded that the Low risk identified with the S37 4ZM Overhead Line Works will be suitably managed.
- 6.6.7 The **Outline CEMP** contains the following measures which detail the mitigation required for geology and hydrogeology: GH01-GH10.

Operation

- 6.6.8 It is considered that the S37 4ZM Overhead Line Works would not result in environmental effects to geology and hydrogeology receptors (including human health from ground contamination and Controlled Waters) during operation. This is due to the combination of the low risk ground conditions, the minimal ground disturbance associated with operating overhead electricity infrastructure, and the fact that the infrastructure itself does not present a risk of causing contamination.

6.7 Agriculture and Soils

Baseline

- 6.7.1 To assess the site-specific sensitivity an Agricultural Land Classification (ALC) survey, presented in the **Agricultural Land Classification Report**, was undertaken for the Scheme in its entirety.
- 6.7.2 The report identifies that the S37 4ZM Overhead Line Works will be situated on land which is predominantly ALC Grade 1 land and is therefore classified as Best and Most Versatile (BMV) land. The Scheme would result in Grade 1 land take of 19.69 ha, which 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 ALC Grades 1, 2 and 3), in Lincolnshire.

- 6.7.3 Available national soil survey mapping data indicates that the Soil Association present within the Scheme Site Boundary is predominantly the Wisbech Association. The Wisbech Association comprises deep stoneless calcareous coarse silty soils. Groundwater is usually controlled by ditches or pumps as the land is flat with low ridges. There is a risk of wind erosion locally associated with these soils. They are seasonally waterlogged and affected by a shallow fluctuating groundwater table. These soils are developed mainly within or over permeable material and have predominantly mottled or greyish coloured horizons within 40 cm depth of the surface.
- 6.7.4 The ALC survey indicated that the dominant soil is stoneless calcareous deep light silt with light silt over medium/heavy silt in places. The soils described are typical of Wisbech series, in agreement with the Soil Association.
- 6.7.5 The England Peat Map Portal (Ref 18) shows that there is not expected to be any peat present within the S37 4ZM Overhead Line Works.

Assessment of Impacts and Effects

Construction

- 6.7.6 The S37 4ZM Overhead Line Works involve the removal of a section of existing overhead line, the construction of a new overhead line, the removal of two existing pylons, and the installation of four new pylons, as such the permanent land take is assumed to be limited to the footings of the new infrastructure.
- 6.7.7 During construction there will be temporary disturbance to agricultural land and soils through planned construction activities. Post-construction, all land and soils required temporarily will be reinstated to pre-construction condition. An **Outline Soil Management Plan** (oSMP) (included in the **Outline CEMP**) has been produced for the Scheme in its entirety, which identifies measures that will be implemented to protect soil resources during the construction of the S37 4ZM Overhead Line Works to ensure that soils remain suitable for successful reinstatement.
- 6.7.8 A Soil Resources Survey will be undertaken prior to construction to establish a holistic baseline of soil pH, fertility, structural assessment and soil carbon content such that the resulting soil nutrient data can be used to inform the detailed design of landscape and ecological mitigation measures and will support soil re-use decisions alongside the ALC survey data.
- 6.7.9 The **Outline CEMP** contains the following measures which detail the mitigation required for agriculture and soils: AS01-AS08.

Operation

- 6.7.10 The S37 4ZM Overhead Line Works would not result in significant environmental effects to agriculture and soils during operation. During operation, land taken temporarily will have been reinstated and returned to agricultural use, whilst land taken permanently would no longer be in agricultural use and has already been accounted for.

- 6.7.11 Any maintenance or repair work during operation is expected to be small-scale and temporary, with all works undertaken in accordance with good soil handling practice at the time of the works.

6.8 Traffic and Movement

Baseline

- 6.8.1 The **Transport Statement** for the Scheme considers the S37 Overhead Line Works and Substation Works, as it is not possible to separate out the traffic from the Substation Works, and traffic from the S37 Overhead Line Works. Traffic from the Exempt Overhead Line Works was excluded from this as traffic flows for this element are likely very low.
- 6.8.2 The prediction of traffic and movement related effects in the EAR is focused on activities that could directly and indirectly impact on receptors within the defined Study Area. Receptors include users of the local transport network including drivers, public transport passengers and pedestrians, cyclists and equestrians.
- 6.8.3 The Study Area in the **Transport Statement** included those roads which may be significantly utilised during construction and upon which there is the potential for a significant impact. These include the A16 and A17 which run in an approximate north south direction and provide strategic connections across the region, and the A151 which runs in an approximate east west direction connecting the A16 and A17. From the A151, Stone Gate and Marsh Road are local roads providing access to the Scheme site.
- 6.8.4 Baseline traffic levels on the A151 were established through surveys undertaken in October 2024, by automatic traffic counts (ATC) for a duration of two weeks. These comprised one week during school term time and one week during school half term holidays for comparison purposes.
- 6.8.5 In addition, fully classified turning counts and queue length surveys were undertaken at the junction of Stone Gate and Marsh Road on Wednesday 5th November 2025 between 06:00 hrs and 20:00 hrs. The date was chosen to reflect a 'neutral' day in line with best practice.
- 6.8.6 In discussion with LCC as the Local Highway Authority, no capacity or congestion issues were identified on the local highway network. Recent highway improvement measures have been implemented at the A16 / A151 Springfields Roundabout to improve operation of the junction.
- 6.8.7 A review of accident data shows no specific clusters or issues on the local highway network.
- 6.8.8 The nearest bus stops are located on the A151 and in Weston and the nearest rail station is located in Spalding. The Scheme is located outside generally acceptable walking distances from bus stops and rail stations, therefore, it is considered unlikely that public transport will be used to access the construction site.
- 6.8.9 There is limited pedestrian and cycle infrastructure on the local roads providing access to the Scheme with intermittent infrastructure provision on the A151 and no provision on Stone Gate and Marsh Road. Two PRowS are crossed by the Scheme Site Boundary including footpath Wstn/7/1 which is crossed by the S37 4ZM Overhead Line Works Site Boundary.

Assessment of Impacts and Effects

Construction

- 6.8.10 Details of the current construction programme and works activities have been provided to forecast construction traffic impacts. Construction of the Scheme is expected to be undertaken from January 2028 to early 2031. The peak year for construction traffic is anticipated to be September 2028 to August 2029 with 265 average construction traffic movements forecast daily across the year. This comprises 55 HGV movements, 150 LGVs and 60 construction workers cars/vans on average daily during the peak year of construction.
- 6.8.11 Construction workers cars/vans and LGVs bringing materials/equipment will typically arrive at the start of the day and leave at the end of the day. For the purposes of assessment, construction HGVs have been profiled to arrive and depart across the 10 hour working day 08:00-18:00hrs.
- 6.8.12 Based on the forecast daily flows and construction operations, a total of 20 workers cars/vans and 50 LGVs will be added on to the network during the 07:00-08:00 hrs development AM peak and the 18:00-19:00 hrs development PM peak. It is noted that these cars/LGVs avoid the network peak hours of 08:00-09:00 hrs and 17:00-18:00 hrs. During the day, 6 HGV movements will be added to the network each hour, including in the network peak hours 08:00-09:00 hrs and 17:00-18:00 hrs.
- 6.8.13 Construction workers cars/vans will route on strategic and local roads including through Spalding and Marsh Road (west). HGVs and LGVs will route on strategic roads on to A16, A151 and Stone Gate. A construction haul road is provided from Stone Gate for access for HGVs and LGVs to avoid routing via Marsh Road.
- 6.8.14 On the basis of the forecast hourly construction traffic flows and their hours of impact, it is not considered that this would result in severe impact on operation of the local highway network. It is therefore not considered that this would result in severe impact on users of the local road network including drivers, public transport passengers and pedestrians, cyclists and equestrians.
- 6.8.15 Temporary highway improvement works comprising localised widening have been identified on Stone Gate to enable construction HGVs to access the construction site with swept path analysis provided to confirm feasibility of vehicle movements.
- 6.8.16 Temporary suspension and diversion of PRow Wstn/7/1 is required to maintain safe movement of pedestrians during construction of the Scheme. Details of this will be agreed with the local highways authority and measures in place to advise users of the PRow of the suspension and diversion. Following completion of the works, the PRow will be reinstated. On this basis, there will be temporary impact to pedestrians resulting from construction of the Scheme and S37 4ZM Overhead Line Works.
- 6.8.17 The **Outline CTMP** will accompany the application, containing management and mitigation measures to be implemented during the construction phase. The **Outline CTMP** will be updated and agreed with LCC with a requirement for the Final CTMP secured through an appropriate planning condition prior to construction works starting on site.
- 6.8.18 The **Outline CEMP** contains the following measures which detail the mitigation required for traffic and movement: TT01-TT04.

Operation

- 6.8.19 Traffic impacts resulting from operation of the new Weston Marsh Substation A and associated overhead lines are considered to be immaterial and therefore have not been assessed within the **Transport Statement**.
- 6.8.20 On the basis of this assessment, it is considered that the Scheme can be satisfactorily accommodated on the local transport network

6.9 Noise and Vibration

Baseline

- 6.9.1 A **Noise and Vibration Assessment** was undertaken for the Scheme, which considered the Scheme in its entirety but identified aspects that were specific to the S37 4ZM Overhead Line Works.
- 6.9.2 The S37 4ZM Overhead Line Works are located in a predominantly rural area, and the majority of Noise Sensitive Receptors (NSR) are isolated dwellings and farms, and small settlements. There are three villages within the Study Area for noise of 300 m, these are Surfleet Seas End to the west, Spalding to the south west, and Weston to the south east. Vibration impacts considered a reduced Study Area of 100 m.

Assessment of Impacts and Effects

Construction

- 6.9.3 The closest noise sensitive receptors to the location of the proposed S37 4ZM Overhead Line Works are Old School House (500 m north) and Crowtree Cottages (adjacent) located on Marsh Road. The impact on these NSRs were as follows:
- “Significant adverse impacts are not expected during ‘weekday’ daytime periods. Potential significant adverse impacts during weekend periods, without mitigation. However, with standard mitigation measures, significant adverse impacts are not expected.”*
- 6.9.4 During construction, the assessment indicated that significant adverse impacts from construction noise are not likely. For most activities, this would be the case even without mitigation. For some activities, mitigation measures are required to avoid potential significant adverse impacts if works are undertaken during weekend periods. However, with standard mitigation measures noise levels can be readily mitigated to non-significant levels during weekend periods.
- 6.9.5 Pylon construction has the potential to generate vibration, however any impacts would be controlled through measures identified in the **Outline CEMP**.
- 6.9.6 Best Practicable Means (BPM) as defined by The Control of Pollution Act 1974 (Ref 19) and detailed in BS 5228-1:2009+A1:2014 Code of practice for Noise and Vibration control on construction and open sites – Part 1: Noise, and Part 2: Vibration (Ref 20) will be employed by the contractor(s) to reduce any potential adverse effects. These measures will be detailed further within the **Outline CEMP**, which will be finalised prior to construction based upon the detailed design and refined construction and logistics plans.

- 6.9.7 The **Outline CEMP** contains the following measures which detail the mitigation required for noise and vibration: NV01-NV03.

Operation

- 6.9.8 Operational noise and vibration were excluded from the assessment. This is because the proposed overhead line system would use 'triple Araucaria' conductors or alternative technology that performs to the same or better standard in relation to noise. Noise from traffic was also excluded due to the low levels of traffic on all proposed routes.
- 6.9.9 The assessment indicates that significant adverse effects are not expected from the S37 4ZM Overhead Line Works, during either the construction or operational phases, where standard mitigation measures are incorporated into the works.

6.10 Air Quality

Baseline

- 6.10.1 An **Air Quality Assessment** was undertaken which considered the Scheme in its entirety, as it is not possible to separate out air quality impacts as a result of the individual consenting boundaries.
- 6.10.2 For many parts of the UK, the primary pollutants of concern are those relating to road traffic emissions and, to a lesser extent, heating and commercial sources. The key pollutants of concern are therefore typically Nitrogen Dioxide (NO₂), PM₁₀ and PM_{2.5} for human health receptors, and Nitrogen Oxides (NO_x) (comprising Nitrogen Monoxide, NO, and Nitrogen Dioxide, NO₂) and Ammonia (NH₃) for ecological receptors.
- 6.10.3 A series of standards and objectives for concentrations of these pollutants in ambient air are established in legislation, where standards represent concentrations of pollutants that are considered safe, based on current scientific knowledge about their effects on human health and the environment. Objectives represent policy-based targets that take into account technical and economic feasibility (some therefore involve a margin of tolerance, such as a limited number of permitted exceedances).
- 6.10.4 The area surrounding the Scheme is predominantly rural in nature, with land mostly used for agriculture. The settlement of Moulton Seas End is located to the east of the Scheme and Weston is situated to the south. The assessed sensitive human receptor locations across the Study Area are either at the extents of these and other small settlements, closest to the Scheme Site Boundary, or represent individual scattered properties within the wider rural area. These properties include those located in several small hamlets and individual agricultural holdings.
- 6.10.5 There are three designated ecological sites identified within the baseline Air Quality Study Area which are potentially sensitive to construction dust effects: Surfleet Bank Local Wildlife Site, to the north, and Vernatt's Drain and Surfleet Seas End Saltmarsh Local Wildlife Sites, to the west of the Scheme. Figure 2 of the **Air Quality Assessment** demonstrates the sensitive human and ecological receptors in the Air Quality Study Area.
- 6.10.6 SHDC's 2025 Annual Status Report (ASR) states that there are no AQMAs within their administrative area (Ref 21). SHDC routinely measure NO₂, PM₁₀ and Ozone

(O₃) concentrations using a network of passive diffusion tubes and continuous automatic monitoring stations across their administrative area. PM_{2.5} is not routinely measured by SHDC.

- 6.10.7 The closest diffusion tube monitoring location to the Scheme is located approximately 1.9km west, in Surfleet Seas End, and is considered to be representative of air quality conditions at the Scheme. Monitoring of annual mean NO₂ concentration at this location indicates an overall trend of decreasing concentrations in recent monitoring years (2022 to 2024), with no recent exceedances of the Air Quality Objective (AQO) seen at this monitoring location or across the wider SHDC administrative area.
- 6.10.8 As annual mean NO₂ concentrations are below 60 µg/m³, in line with guidance published by the Department for Environment Food and Rural Affairs (Defra) (LAQM.TG22) (Ref 22), it is reasonable to assume that the 1-hour mean AQO is also not exceeded in the air quality baseline.
- 6.10.9 SHDC undertakes PM₁₀ monitoring at two locations within their administrative area. Of these, site ID CM1 is the closest to the Scheme, located approximately 6.8 km south west and is judged to be representative of the conditions. The PM₁₀ data shows similar trends to those seen in the NO₂ data. There have been no exceedances of the AQO for PM₁₀ between 2020 and 2024.
- 6.10.10 Overall, baseline air quality in the Air Quality Study Area is very good. There are no exceedances of the annual mean NO₂ or PM₁₀ AQOs in the SHDC monitoring data.
- 6.10.11 There are designated ecological sites in the Air Quality Study Area where current predicted NH₃ concentrations are above their respective lower critical level, and acid deposition rates are above their respective maximum critical loads. Nutrient nitrogen deposition rates are above the respective critical load for neutral grassland and calcareous grassland. This is consistent with UK-wide trends which show that the majority of UK habitats are exposed to NH₃ concentrations above the lower critical level and exceed the site-specific nitrogen deposition critical loads across the UK.

Assessment of Impacts and Effects

Construction

- 6.10.12 For the construction phase, an assessment of potential impacts associated with fugitive dust and PM₁₀ emissions was undertaken in line with the relevant Institute of Air Quality Management (IAQM) 'Guidance on the assessment of dust from demolition and construction' (Ref 23) given by Natural England during the Grimsby to Walpole DCO Scoping Opinion (Ref 24).
- 6.10.13 This identified that a High Risk of dust soiling impacts and a Medium Risk of health impacts from increases in particulate matter concentrations due to construction activities. However, through good site practice and the implementation of control mitigation measures set out in the **Outline CEMP**, the dust and particulate matter impacts would be substantially reduced. The residual effects of the construction phase on air quality are judged to be not significant.
- 6.10.14 A construction phase traffic emissions assessment is not required for the S37 4ZM Overhead Line Works as the vehicle movements associated with the construction phase fall below Environmental Protection UK (EPUK) / IAQM 'Land-Use Planning & Development Control: Planning For Air Quality' guidance screening criteria (Ref 25).

Therefore, it is predicted that air quality effects from construction and operational phase traffic would be not significant.

- 6.10.15 The **Outline CEMP** contains the following measures which detail the mitigation required specifically for air quality: AQ01-AQ06. In addition, the **Outline CEMP** sets out overarching environmental commitments relevant to the control and management of construction dust and Particulate Matter (PM₁₀ and PM_{2.5}) emissions during construction.

Operation

- 6.10.16 The operational and maintenance vehicle movements are expected to be low and infrequent; consequently, they are not anticipated to meet the EPUK / IAQM screening criteria (Ref 25) for detailed assessment. Therefore, the assessment of operation and maintenance traffic impacts has not been included within the scope of this report.
- 6.10.17 During operation, no back-up generators (or other combustion based sources of heat and energy production) are proposed as part of the design therefore, consideration of impacts associated with their use has been scoped out of this assessment and will not be considered further.
- 6.10.18 Due to the reasons stated above, it is judged that the development proposals are unlikely to result in a significant adverse effect, and will comply with national policy, set out in Section 2.2 of the **Air Quality Assessment**, and local policy for air quality, as set out in Section 2.3 of the **Air Quality Assessment**.

6.11 Arboriculture

Baseline

- 6.11.1 An **Arboricultural Impact Assessment** was undertaken for the Scheme, which considered the Scheme in its entirety.
- 6.11.2 The assessment of the baseline conditions for arboriculture identified one group of trees that are under a Tree Preservation Order (TPO), no areas of ancient woodland, and no veteran trees.
- 6.11.3 Within the S37 4ZM Overhead Line Works Site Boundary there are six individual trees, nine tree groups, and two hedgerows.

Assessment of Impacts and Effects

Construction

- 6.11.4 No high quality arboricultural features require removal or partial removal to facilitate the S37 4ZM Overhead Line Works.
- 6.11.5 During the construction of the S37 4ZM Overhead Line Works, one moderate quality tree group and one low quality tree group have the potential to be impacted through partial or full removal.
- 6.11.6 The **Outline CEMP** details any measures which would be required for arboriculture: LV01 – LV03.

Operation

- 6.11.7 The S37 4ZM Overhead Line Works would not result in significant environmental effects to arboriculture during operation.

6.12 Socio-economics, Recreation and Tourism

- 6.12.1 The potential for impacts to socio-economics, recreation and tourism was previously screened in the **Report to Inform Screening Decision** and subsequently assessed through a **Socio-Economic Impact Assessment**. It was determined the assessment excluded consideration of the S37 4ZM Overhead Line Works due to the location of the works in relation to socio-economic receptors, of which none are anticipated to be directly impacted. In addition with the implementation of the appropriate standard mitigation measures within the Outline CEMP, no notable impacts upon socio-economic receptors are anticipated. As such, it is not considered further within this report.

6.13 Cumulative Effects

- 6.13.1 A **Cumulative Effects Assessment** was undertaken for the Scheme, which included the S37 4ZM Overhead Line Works where relevant. This considered the potential for the Scheme to result in significant inter and intra project effects.
- 6.13.2 Intra-project cumulative effects (sometimes referred to as combined or interactive effects) could occur where a single receptor is affected by more than one source of effect from the Scheme.
- 6.13.3 Inter-project cumulative effects could occur where a single receptor experiences effects from a number of separate developments, including the Scheme. This potentially includes effects which in isolation are not significant, but when considered together could create a significant cumulative effect on a common receptor.
- 6.13.4 The assessment of the potential effects of a number of individual environmental impacts upon the same receptor (intra-project cumulative effects) has adopted the following two-stage approach:
- 1) a screening exercise to determine whether receptors assessed within each of the individual aspect assessments is exposed to more than one type of environmental effect; and
 - 2) where receptors are likely to be exposed to two or more types of effect, an intra-project assessment considering whether the combination of effects is likely to lead to intra-project effects which are significant.
- 6.13.5 Although the Scheme does not constitute a Nationally Significant Infrastructure Project (NSIP), cumulative effects assessment draws upon the approach contained within the Planning Inspectorate's Advice on Cumulative Effects Assessment (Ref 26). This is considered suitable best practice guidance to undertake a robust assessment of potential inter-project cumulative effects associated with the Scheme.
- 6.13.6 Where appropriate, the potential for cumulative effects was assessed within the topic specific reports that were prepared for the application. The full details of the assessment can be found in the **Cumulative Effects Assessment**.

- 6.13.7 The assessment of inter-project effects resulted in a short list of other committed developments which may have the potential to result in significant cumulative effects. This included nine NSIPs, four planning applications, and six policy allocations.
- 6.13.8 There are two NSIPs which interface directly with the Scheme Site Boundary, these are the ODOW farm and the Meridian Solar Farm, and both of these projects plan to connect to the grid via the Scheme. The site boundary for ODOW extends into the S37 4ZM Overhead Line Works Site Boundary from the north, and the site boundary for Meridian Solar Farm extends to just south of the S37 4ZM Overhead Line Works Site Boundary and into the Substation Works Site Boundary. The full details of the assessment of cumulative effects for these two NSIPs plus others identified in the short list, can be found in the **Cumulative Effects Assessment**.
- 6.13.9 The closest planning application to the S37 4ZM Overhead Line Works is Land to the East of Surfleet Bank and West of Woad Farm, Spalding (PL/0065/24 and H17-1097-23). This application is for a new plant protein extraction facility, complete with a factory building, digestate processing, waste transfer, and ancillary external plant, and is located approximately 1.7 km north west of the S37 4ZM Overhead Line Works. The full details of the assessment of cumulative effects with other planning applications can be found in the **Cumulative Effects Assessment**.
- 6.13.10 The conclusion of the assessment of cumulative effects was that significant cumulative environmental effects as a result of the S37 4ZM Overhead Lines in combination with other committed developments are not expected.
- 6.13.11 The S37 4ZM Overhead Lines would be constructed in adherence to an **Outline Soil Management Plan** and **Outline CEMP** which both contain measures to mitigate any environmental impacts and avoid significant environmental effects. Construction traffic will also be managed through the **CTMP** to introduce control measures for traffic control and works.

7. Conclusion

- 7.1.1 **Table 7.1** summarises the conclusions for each environmental topic considered within this report.
- 7.1.2 This EAR considers the environmental receptors that could potentially be impacted by the construction and operation of the S37 4ZM Overhead Line Works.
- 7.1.3 This report comprises the information required pursuant to Regulation 12 (1) of the Electricity Works (Environmental Impact Assessment) (England and Wales) Regulations 2017 (EIA), and has also taken account of Schedule 3 to the EIA Regulations (Ref 5).
- 7.1.4 Overall, National Grid does not consider that the S37 4ZM Overhead Line Works would have the potential to result in significant environmental effects.

Table 7.1 Summary of the potential for significant environmental effects as a result of the S37 4ZM Overhead Line Works

Topic	Summary of the potential for significant effects
Landscape	Significant effects to landscape and visual receptors, within the context of the existing overhead lines, are not predicted during construction or operation. Any effects are assessed as minor adverse at worst due to the already existing infrastructure in the environment.
Ecology and Biodiversity	Impacts during construction to designated sites, habitats, protected species, and impacts to the spread of INNS, are controlled through measures in the Outline CEMP . No significant effects to ecology are predicted during the operation of the S37 4ZM Overhead Line Works.
Historic Environment	There would be temporary impacts to designated and non-designated heritage assets during construction, but these temporary changes are assessed as being less than substantial harm. No significant effects to heritage assets are predicted during the operation of the S37 4ZM Overhead Line Works.
Water Environment	The S37 4ZM Overhead Line Works would not have significant impacts to flood risk or drainage. The WFD Assessment contains the control measures required for to control any impacts to the water environment, and these are included within the Outline CEMP . With these measures, significant effects to the water environment are not predicted.
Geology and Hydrogeology	The Outline CEMP includes control measures that will ensure that the construction works do not cause contamination, and that any pre-existing contamination sources are suitably identified and managed. The S37 4ZM Overhead Line Works would not result in environmental effects to geology and hydrogeology receptors (including human health from ground contamination and Controlled Waters) during operation.
Agriculture and Soils	The land take from the S37 4ZM Overhead Line Works involves a small area of land. Any land used temporarily during construction would be returned to agricultural use, in accordance with the Soil Management Plan within the Outline CEMP .

Topic	Summary of the potential for significant effects
Traffic and Movement	Impacts as a result of an increase in traffic during construction have been assessed in the Transport Statement, and mitigation included within the Outline CEMP and Outline CTMP . There are no likely significant effects to receptors as a result of traffic during the operation of the S37 4ZM Overhead Line Works.
Noise and Vibration	Any adverse effects during construction will be controlled through measures identified in the Outline CEMP . Operational noise and vibration were excluded from the assessment as significant effects during operation are not expected.
Air Quality	Significant adverse effects to air quality are not predicted during either the construction or operational phases. Measures to control effects during construction are included within the Outline CEMP .
Arboriculture	During the construction of the S37 4ZM Overhead Line Works, one moderate quality tree group and one low quality tree group have the potential to be impacted through partial or full removal. During operation no significant effects are predicted.
Socio-economics, recreation and tourism	No significant effects are predicted outside of the Substation Works and therefore the S37 4ZM Overhead Line Works would not result in any significant environmental effects.
Cumulative	Significant intra project environmental effects, or cumulative environmental effects as a result of the S37 4ZM Overhead Line Works in combination with other committed developments, are not predicted.

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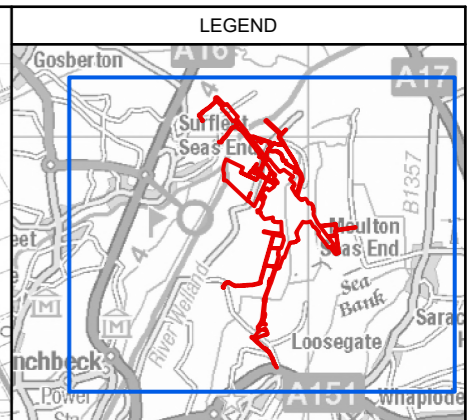
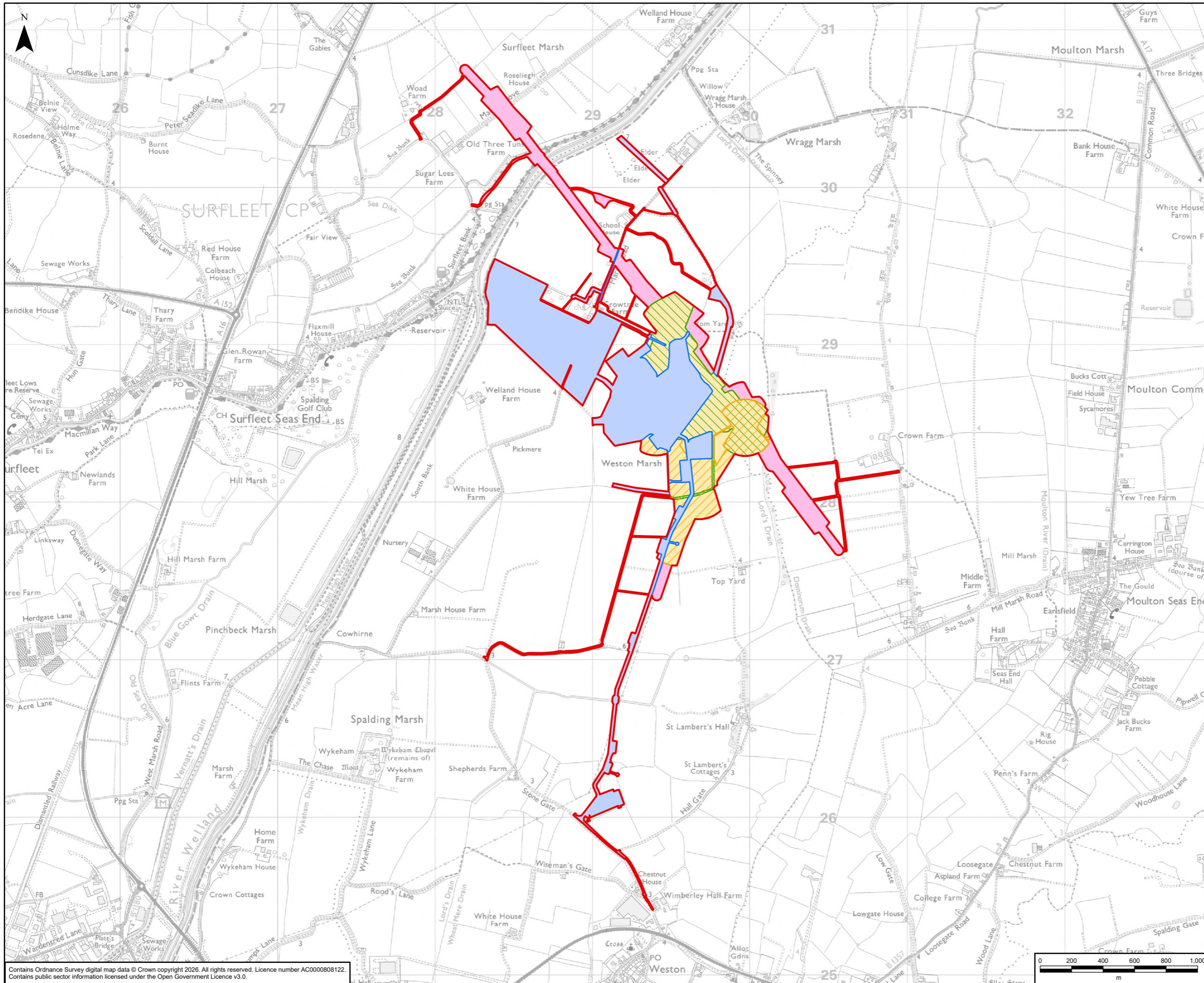
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Figure 1 Scheme Site Boundary



- Legend**
- Scheme Site Boundary
 - Substation Works Site Boundary
 - S37 OHL Works Site Boundary
 - Exempt Overhead Line Works Site Boundary
 - S37 - 4ZM - OHL Works Site Boundary
 - S37 - 2WS - OHL Works Site Boundary

A	27/05/2026	First Issue	MM	SC	DR
Rev	Date	Description	GIS	Chk	App

nationalgrid					
Purpose: S37 APPLICATION					
Scheme: PROPOSED ELECTRICITY SUBSTATION AND OVERHEAD LINE WORKS AT WESTON MARSH					
Document Title: FIGURE 1 SCHEME SITE BOUNDARY					
Creator:	Date:	Checker:	Date:	Approver:	Date:
MM	27/05/2026	SC	27/05/2026	DR	27/05/2026
Document Type:	Scale:	Format:	Sheets:	Rev:	
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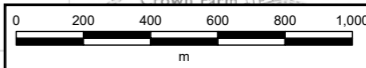
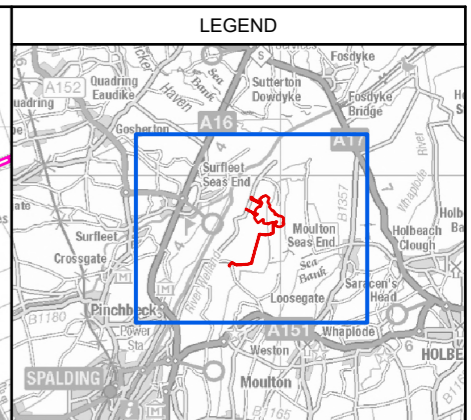
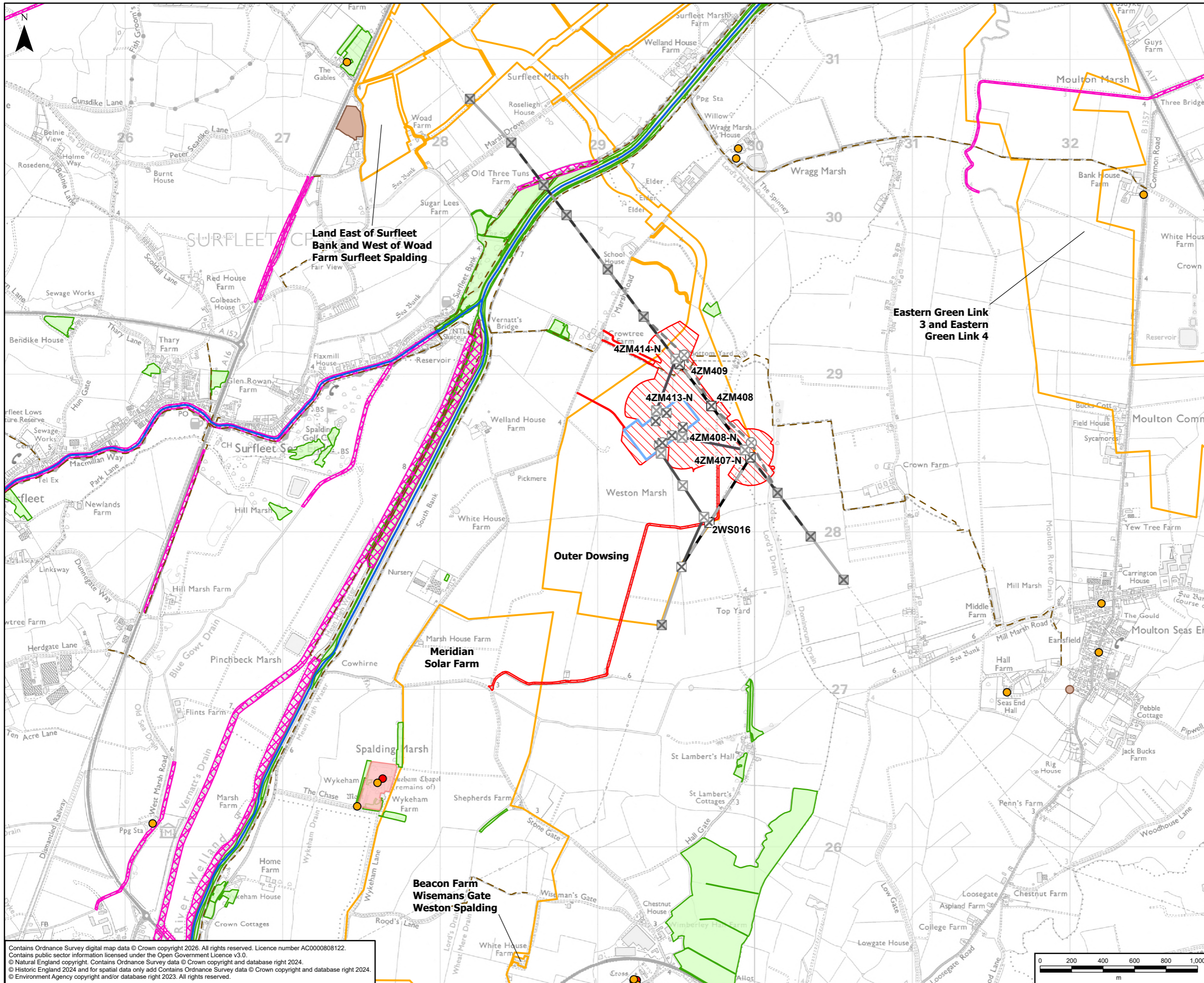


Figure 2 Environmental Constraints Plan



- Legend**
- S37 - 4ZM - OHL Works Site Boundary
 - Existing Overhead Line - not affected
 - Existing Pylon - not affected
 - Overhead Line Works - Section 37**
 - Existing Pylon to be Dismantled
 - New Pylon
 - Dismantled NG OHL
 - Modified NG OHL
 - New NG OHL
 - Substation - Town and Country Planning Act**
 - Indicative New Substation Boundary
 - New Gantry
 - Environmental Constraints**
 - Listed Building - Grade I
 - Listed Building - Grade II
 - Statutory Main River
 - Public Right of Way
 - Site of Special Scientific Interest (SSSI)
 - Local Wildlife Site (LWS)
 - Priority Habitats Inventory
 - Historic Landfill Site
 - Scheduled Monument
 - Cumulative Development Boundary
 - S37 2WS Overhead Line Works**
 - Existing Overhead Line to be Dismantled
 - Existing Overhead Line to be Modified
 - New Overhead Line
 - Existing Pylon to be Modified
 - New Pylon
 - Exempt Overhead Line Works (consented via exemptions)**
 - Existing Overhead Line to be Modified (4ZM)
 - Temporary Overhead Line (4ZM)
 - Temporary Structure (4ZM)

Rev	Date	Description	GIS	Chk	App
A	19/06/2026	First Issue	MM	SC	ET

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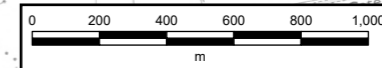
Purpose: S37 4ZM APPLICATION

Scheme: PROPOSED ELECTRICITY SUBSTATION AND OVERHEAD LINE WORKS AT WESTON MARSH

Document Title: FIGURE 2 ENVIRONMENTAL CONSTRAINTS PLAN

Creator: MM	Date: 19/06/2026	Checker: SC	Date: 19/06/2026	Approver: ET	Date: 19/06/2026
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