



Meridian Solar Farm

EN010169

Volume 7

Other Documents

7.1 Planning Statement -
Appendix D: Site
Selection Report

APFP Regulation 5(2)(q)

Infrastructure Planning (Applications:
Prescribed Forms and Procedure)
Regulations 2009

March 2026

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1. Introduction

1.1. Overview

- 1.1.1. This Site Selection Report forms part of an application by Meridian Solar Farm Limited to the Secretary of State under the Planning Act 2008 (the 'PA 2008') for a Development Consent Order (the DCO Application) for the Scheme.
- 1.1.2. The Scheme would comprise the construction, operation (including maintenance) and decommissioning of a solar PV electricity generating station with associated infrastructure, including co-located Battery Energy Storage System (BESS), Inter-Array Connections to link the land parcels that form the Solar Development Areas, and an up to 13km overhead line Grid Connection (with one short undergrounded section) which would run north towards a point of connection (PoC) at the proposed Weston Marsh B National Grid Electricity Transmission (NGET) substation, to the north of Weston.
- 1.1.3. The Solar PV generating station, associated BESS, on-site substations and other associated infrastructure would be located within four land parcels (A, B, C and D) referred to collectively as the Solar Development Area, as shown in **ES Figure 1-1** (Doc Ref. 6.2).
- 1.1.4. The Inter-Arrays would be the areas within which 132kV connection cables (the 'Inter-Array Connections') would link the land parcels of the Solar Development Area. The configuration of the Inter-Array Connections (132kV) would comprise underground cabling between Land Parcels A and B ('the Underground Inter-Array') and an overhead line between Land Parcels C and D ('the Overground Inter-Array').
- 1.1.5. The Grid Connection Route would be the area between the Solar Development Area and the National Grid Weston Marsh B Substation in which a 400kV overhead line (the 'Grid Connection') would be located. There is one section where the Grid Connection would route underground to avoid conflicts with an existing 132kV overhead line. Cable Sealing End Compounds (CSECs) would join the proposed underground cable at that section with the proposed overhead line.
- 1.1.6. The Scheme comprises a generating station of more than 100 MW and the installation of above ground electric lines greater than two kilometres in length and a nominal voltage of 132kV or greater. The Scheme therefore qualifies as an NSIP under sections 14(1)(a), 14(1)(b), 15(2) and 16 of the PA 2008.

- 1.1.7. The purpose of this Site Selection Report is to provide an overview of the site selection process undertaken by the Applicant to identify the location of the Scheme and the specific criteria to help define the potential use of land parcels within the Scheme. It presents the reason why the Scheme and its Order Limits are located in this particular location taking into account legal, policy and environmental considerations
- 1.1.8. As explained later in this report, there is no legal or policy requirement to demonstrate that the Scheme is the best location for a solar farm. There are, however, policy tests which require consideration of site selection alongside the desire to select an appropriate site. This report explains the process undertaken by the Applicant in having regard to these factors.
- 1.1.9. There are also certain legal tests regarding the consideration of alternative sites, such as if there would be an adverse effect on the integrity of a European protected site, the requirement to consider if there is more appropriate land outside areas of flooding, or justifying any land to be acquired compulsorily has been appropriately selected. The consideration of alternatives is principally contained within **ES Chapter 3: Alternatives and Design Evolution** (Doc Ref. 6.1), with the theme of alternatives also considered within this Site Selection Report, the **Planning Statement** (Doc Ref. 7.1), and the **Design Approach Document** (Doc Ref. 7.2).
- 1.1.10. This document should be read alongside information that is contained within the other application documents and plans.

2. Planning Policy Context

2.1. Overview

- 2.1.1. The Scheme’s compliance with planning policy is assessed in the **Planning Statement** (Ref. 7.1) which forms part of the DCO application. This section sets out the policy context that is relevant to site selection.
- 2.1.2. There is a strong correlation between site selection and the consideration of alternatives. The site selection component of this report explains the process which the Applicant has followed to identify an appropriate location for the Scheme. It demonstrates the logical steps followed to determine a location that will deliver against the objectives of the Scheme.

2.2. National Planning Policy

- 2.2.1. The below sections summarise the relevant policy documents that have been taken into account through site selection. Specific policies are also touched upon later in this report, with a full assessment of the Scheme against the policies contained in **Appendix B: National Policy Accordance Tables** to the **Planning Statement** (Doc Ref. 7.1).

Overarching National Policy Statement for Energy (EN-1)

- 2.2.2. EN-1 provides the overarching policies for energy infrastructure. It sets out the policy content for energy NSIPs, the urgent need for large-scale energy infrastructure as well as technology-agnostic policies for the consideration of energy infrastructure applications.
- 2.2.3. Paragraph 4.3.9 of EN-1 states “*this NPS does not contain any general requirement to consider alternatives or to establish whether the proposed project represents the best option from a policy perspective*”. However, Paragraph 4.3.15 places an obligation on applicants to “*include in their ES, information about the reasonable alternatives they have studied. This should include an indication of the main reasons for the applicant’s choice, taking into account the environmental, social and economic effects and including, where relevant, technical and commercial feasibility*”. **ES Chapter 3: Alternatives and Design Evolution** (Doc Ref. 6.1) addresses the matter of alternatives from an EIA Regulations compliance perspective with consideration against NPS policy as relevant.
- 2.2.4. The process of site selection is therefore implicit in determining alternative sites. Given the intrinsic link, this section identifies policies which are relevant to both

alternatives and site selection but recognises that each are subject to their own considerations and policy compliance requirements.

2.2.5. As referenced earlier, there are scenarios set out in EN-1 which requires the consideration of alternatives. These circumstances are set out below.

Table 2-1 Scenarios which require the consideration of alternatives from within EN-1

Circumstances within EN-1	Applicability to the Scheme
Where a scheme would involve the compulsory acquisition of land or interests in land (EN-1, paragraph 4.3.9).	The Applicant has secured the principal land parcels to deliver the solar farm by voluntary agreement although compulsory acquisition powers are still being sought to ensure deliverability as well as to deliver the grid connection between the Solar Development Area and the proposed Weston Marsh Substation. The Statement of Reasons (Doc Ref 4.1) provides further details on how the compulsory acquisition tests have been met for the Scheme.
Where a scheme would be located near a sensitive receptor site for air quality (EN-1, paragraph 5.2.7).	The Scheme is not within an AQMA, with the closest AQMA approximately 10km east at Wisbech. Alternatives are not required to be considered further from an air quality perspective.
Where a scheme would lead to significant harm to biodiversity and ecological conservation interests (EN-1, section 5.4).	ES Chapter 9: Ecology and Biodiversity (Doc Ref. 6.1) does not report significant harm to biodiversity or ecological conservation interests.
Where a scheme would result in an adverse effect on the integrity of a European site that cannot be avoided (EN-1, section 5.4).	ES Appendix 9-14: Habitats Regulations Assessment (Doc Ref. 6.3) carries out an Appropriate Assessment of the Scheme. It concludes that there would be no adverse effects on the integrity of any European sites.
Where a scheme would be located wholly within or partly within Flood Zone 2 or Flood Zone 3 (EN-1, section 5.8).	In this case, the Sequential Test should be exercised. If following application of the Sequential Test, it is not possible for the Scheme to be located in areas of lower flood risk, the Exception Test can be applied. This provides a method of allowing necessary development, including essential infrastructure, to proceed in situations where suitable sites at a lower risk of flooding are not available. Section 3.3 of this report discusses the consideration of flood risk at the site

	<p>selection stage, including steering development away from areas at the highest risk of flooding.</p> <p>The Planning Statement (Doc Ref. 7.1) discusses the application of the Sequential Test and Exception Test in more detail and should be read in conjunction with ES Appendix 11-3: Flood Risk Assessment (Doc Ref. 6.3).</p>
<p>Where a development would be located within a National Park, the Broads or an AONB (now National Landscape) (EN-1, Section 5.10).</p>	<p>The Scheme is not located in or near any national landscape designations, therefore no further consideration of alternatives is required.</p>

2.2.6. EN-1 also advises the Secretary of State (SoS), when considering alternatives, to be guided by the following principles at paragraph 4.3.22

“The consideration of alternatives in order to comply with policy requirements should be carried out in a proportionate manner; and

Only alternatives that can meet the objectives of the Proposed Development need to be considered”.

2.2.7. The practical application of the second point of the above is that effectively smaller scale projects should not be considered as a reasonable alternative since they would not be able to deliver the scale of energy generation enabled by the agreed grid connection, in this case 750MW. The objectives of the Scheme are set out in more detail in **ES Chapter 2: The Scheme** (Doc Ref. 6.1).

2.2.8. Paragraph 4.2.24 goes onto state that the SoS *“should not refuse an application for development on one site simply because fewer adverse impacts would result from developing similar infrastructure on another suitable site and should have regard as appropriate to the possibility that all suitable sites for energy infrastructure of the type proposed may be needed for future proposals”* which is of a similar vein to paragraph 4.3.9 of EN-1 but with recognition that an application for the Scheme is not required to articulate that it is the best option, rather, it is acceptable within the context of the relevant policy provisions.

2.2.9. This recognises that alternative sites could come forward as part of other applications but, critically, those proposals should be determined on their individual merits in accordance with relevant policy which forms the basis for decision making for planning.

National Policy Statement for Renewable Energy Infrastructure (EN-3)

2.2.10. EN-3 provides technology specific policy in relation to renewable energy infrastructure, including site selection matters for solar PV development. It describes a number of factors that are likely to influence site selection, namely:

- Irradiance and site topography;
- Network connection;
- Proximity of a site to dwellings;
- Agricultural land classification and land type;
- Accessibility;
- Public rights of way; and
- Security and lighting.

2.2.11. Each of these factors are addressed in turn in Section 3 of this report.

National Policy Statement for Electricity Networks Infrastructure (EN-5)

2.2.12. EN-5 describes factors influencing site selection and design in relation to new electricity network infrastructure. It recognises that the initiation and termination points of this infrastructure is not substantially within the control of applicants and is predominantly influenced by the location of new generating stations and/or system capacity and resilience requirements as determined by the National Electricity System Operation (NESO).

2.2.13. It broadly describes additional siting constraints, including engineering, environmental and community considerations (paragraph 2.2.7), as well as characteristics such as local topography (paragraph 2.2.9).

2.2.14. Paragraphs 2.2.10 to 2.2.12 describe the duty placed on transmission and distribution licence holders under the Electricity Act 1989 which requires them to “*have regard to the desirability of preserving natural beauty, of conserving flora, fauna and geological or physiographical features of special interest and of protecting sites, buildings and objects of architectural, historic or archaeological interest; and ...do 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 or objects*”.

- 2.2.15. While the Applicant is not a transmission or distribution licence holder, it has had regard to these policies in the site selection process.
- 2.2.16. Paragraph 2.9.21 states Government's position "*that overhead lines should be the strong starting presumption for electricity networks in general, this presumption is reverse when proposed developments will cross part of a nationally designated landscape (i.e. National Park, The Broads, or National Landscape)*".
- 2.2.17. Further, paragraphs 2.9.16 to 2.9.19 of EN-5 require the application of the Holford and Horlock Rules which apply to the routing and siting of overhead lines and substations. Paragraph 2.9.20 of EN-5 references the Electricity Transmission Design Principles which will receive policy support through EN-5 once consulted upon and published. The Electricity Transmission Design Principles were not yet published during the pre-application phase for the Scheme.

National Planning Policy Framework (NPPF)

- 2.2.18. The NPPF was first published in March 2012 and last updated in February 2025. The NPPF sets out Government's planning policies for England and how these are to be applied, including in respect of the development of agricultural land and renewable energy.
- 2.2.19. Paragraph 187(b) states that planning policies and decisions should take into account the economic and other benefits of the best and most versatile agricultural land. Furthermore, where significant development of agricultural land is demonstrated to be necessary, local planning authorities should seek to use areas of poorer quality land in preference to that of a higher quality.

Planning Practice Guidance

- 2.2.20. The policies contained within the NPPF are expanded upon and supported by the PPG. Paragraph 13 of the Renewable and Low Carbon Energy section (Ref: 5-013-20150327) sets out the factors that local planning authorities should consider in regard to ground-mounted solar farms:
- Encouraging the effective use of land by focusing on large-scale solar farms on previously developed and non-agricultural land, provided that it is not of high environmental value.
 - Where a proposal involves greenfield land, whether the proposed use of any agricultural land has been shown to be necessary and poorer quality land has been used in preference to higher quality land.

2.2.21. The Planning Practice Guidance (PPG) introduced further guidance in September 2025 on the application of the Sequential Test. Where a site-specific flood risk assessment demonstrates clearly that the proposed layout, design, and mitigation measures would ensure that occupiers and users would remain safe from current and future surface water flood risk for the lifetime of the development without increasing flood risk elsewhere, then the sequential test need not be applied (paragraph 027). This updated guidance does not apply to fluvial flood risk.

2.3. Local Planning Policy

- 2.3.1. Other planning policies may be considered relevant by the Secretary of State as important and relevant considerations in relation to the site selection process for the Scheme.
- 2.3.2. The South East Lincolnshire Local Plan does not contain any policies relating to site selection for solar generation, other renewables, or electricity networks.

3. Site Selection Assessment

3.1. Overview

3.1.1. This Section sets out the background and approach to the site selection process which the Applicant has undertaken and has resulted in the land that is subject of the Scheme being brought forward. This report should be read in conjunction with the **Planning Statement** (Doc Ref. 7.1) which contains a section on the need for the project which presents further detail on the need for the Scheme, its locational value and its contribution towards meeting the UK's decarbonisation requirements.

3.2. Site Selection Principles

3.2.1. There is no standard methodology for the selection of land for solar PV generation. As aforementioned, guidance is provided within NPS EN-3 and EN-5 with respect to the key factors that are likely to influence the location and layout of sites for solar farms, overhead lines and substations including:

- Irradiance and land topography;
- Network connection;
- Proximity of land to dwellings;
- Agricultural land classification and land type;
- Accessibility;
- Public rights of way (PRoW);
- Security and lighting;
- Holford Rules; and
- Horlock Rules.

3.2.2. It is generally acknowledged that large scale solar development requires three fundamental attributes, amongst other considerations:

- Existence of sufficient land to deliver the Scheme and meet the scale of the Scheme's aims;
- Availability and capacity of a suitable point of connection to the National Grid Electricity Transmission Systems (NETS); and

- Solar irradiation levels to support the Scheme’s potential to produce efficient and economic energy grid.

3.2.3. The Scheme has evolved through an iterative process which is outlined below and how these factors have influenced site selection.

3.2.4. The Applicant initially focussed on identifying land to form the Solar Development Area, this was followed by identifying options for the Grid Connection Route and application of the Holford and Horlock Rules.

3.3. Regional Site Selection

3.3.1. This stage refers to the identification of a search area at a macro-level leading to land assembly.

Irradiance and Topography

3.3.2. Two key factors when determining the location of a solar development are topography and irradiance (sunlight). Solar PV generation can be found across the UK at a wide variety of latitudes; however, their efficiency is driven by levels of irradiance at their location. Topography helps to maximise these irradiance levels, with flat land being most optimal as there is less shading on the panels, allowing for a better energy yield in comparison to undulating land. Flat topography is also preferential for construction and is generally less visually intrusive to the landscape and wider communities.

3.3.3. With the above in mind, the East of England (Lincolnshire, Norfolk and Cambridgeshire) benefits from high levels of irradiance and a broadly flat topography in comparison to other UK regions. Lincolnshire was, therefore, a favourable location in which to search for grid connection opportunities.

Network Connection

3.3.4. As set out above, the Applicant identified that the Lincolnshire region is characterised by large areas of flat land as well as suitably high levels of irradiation to support solar PV generation.

3.3.5. The Applicant commenced discussions with National Electricity System Operator¹ (NESO) in 2021 to identify potential opportunities for a new grid connection within the East of England region Due to the scale of generation proposed by the

¹ Formerly the National Grid Electricity System Operator.

Applicant, a connection to a local distribution network would not be suitable as it would not provide the capacity required for the Scheme.

- 3.3.6. National Grid Electricity Transmission (NGET) advised that a new large-scale substation (referred to herein as the proposed Weston Marsh Substation) was proposed to be constructed in Lincolnshire near the existing overhead line between Spalding and Walpole². This substation is proposed to be constructed by NGET to facilitate network reinforcement works in the area and to enable grid connections for offshore wind farms situated off the coast of Norfolk. The Applicant and NGET agreed a siting zone for further consideration however the indicative location of the substation was not known at this point in time.
- 3.3.7. Further engagement with NGET confirmed that a Point of Connection (PoC) would be developed, and the Applicant submitted a grid connection application. An offer was subsequently made for 750MW. Due to the confirmation of availability and confirmed capacity at the PoC, this location became the starting point of an area of search for the Scheme. Policy 2.10.16 of EN-3 recognises “*the connection voltage, availability of network capacity, and the distance from the solar farm to the existing network can have a significant effect on the commercial feasibility of a development proposal*”.
- 3.3.8. The grid connection agreement stipulated that the connection would be rated at 400kV, meaning that the Applicant had to provide a high voltage transmission connection to the PoC.
- 3.3.9. At the point of securing the grid connection agreement, the exact location of the proposed Weston Marsh Substation was not yet identified by NGET with its intention to deliver the substation as part of its Grimsby to Walpole NSIP. As part of its non-statutory consultation held in early 2024, NGET consulted on a search area for the proposed Weston Marsh Substation (**Figure 3-1**). The consultation included a graduated swathe which indicated where the substation could be sited, with the darker shading indicating where siting was more likely.

² At this point in time, NGET had not yet indicated the need to two substations at Weston Marsh.

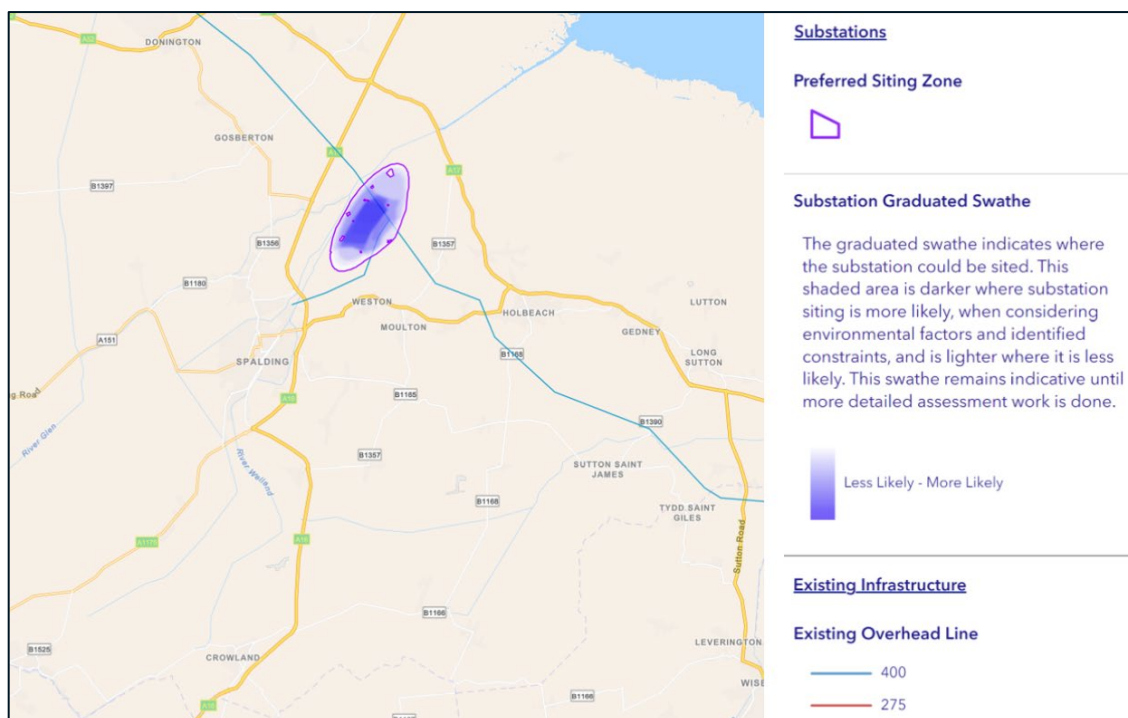


Figure 3-1 Location of the proposed Weston Marsh Substation as per the NGET non-statutory consultation documents (January 2024) for its Grimsby to Walpole project

- 3.3.10. This resulted in a search area for potential PV sites on the basis of connection to a substation which could be located between Spalding in Lincolnshire and Walpole in Norfolk. This would ensure that efficient use will be made of the capacity and proposed infrastructure in this location. The proximity to and availability of capacity on the National Grid is key to the feasibility of the solar farm and a driving factor for the siting of the Scheme.
- 3.3.11. Once suitable land holdings were identified (see section below), and it became apparent that the proposed Grimsby to Walpole NGET overhead line would pass the Scheme’s site in early 2024, the Applicant requested NGET consider approving a ‘tee-in’ connection to the planned Grimsby to Walpole scheme in mid-2024. This scheme comprises a new high voltage transmission line which passes close to one of the land holdings identified by the Applicant. A tee-in would avoid the requirement for a connection directly into the planned Weston Marsh substation, thus substantially reducing the length of the connection required. NGET initially advised in September 2024 that a tee-in connection could be feasible, and the Applicant would be required to submit a Mod-App to the connection agreement as soon as practical. However, at the end of October 2024, the Applicant was informed by NGET that a Mod-App for a tee-connection

would not be accepted and should not be submitted, and on this basis, only a connection into the future Weston Marsh substation was considered for the delivery of a grid connection.

- 3.3.12. It is noted that the above describes grid connection agreement and information on related infrastructure (including the Weston Marsh Substation and Grimsby to Walpole scheme) which the Applicant had at the time of site selection and refinement of the grid connection corridor in advance of statutory consultation (being 2022 – early 2025). Further detail setting out the updates to the Applicant’s grid connection agreement following the NESO Gate offers in December 2025, and engagement between the Applicant and NGET which followed the site selection stage, including refinement of NGET’s Weston Marsh substation and Grimsby to Walpole project is contained in the **Grid Connection Statement** (Doc Ref. 7.5) and the **Design Approach Document** (Doc Ref. 7.3).

Land Holdings

- 3.3.13. A guiding principle for site identification was the consideration of deliverability and availability of land for development. Larger land holdings aid mitigating commercial and deliverability risk associated with multi-party negotiations and provide flexibility for design. Large blocks of land within the holdings are beneficial for solar PV development as they can facilitate a large installation. The Applicant sought to identify large land holdings (of approximately 300-400 acres) with close proximity to one another. Often, the developable area is smaller than the field size due to the requirement for buffers and the consideration of other design constraints.
- 3.3.14. To maximise opportunities for the identification of one consolidated site sufficient to deliver the required capacity, large land holdings within close proximity to one another were identified by the Applicant to enter into discussions with landowners. Smaller land parcels are not considered as a reasonable alternative since they would not be able to deliver the scale of energy generation enabled for the grid connection, in this case 750MW.
- 3.3.15. Paragraph 2.10.14 of EN-3 states “*To maximise existing grid infrastructure, minimise disruption to existing local community infrastructure or biodiversity and reduce overall costs, applicants may choose a site based on nearby available grid export capacity*”. The Applicant did not adopt a rigid search area as the exact location of the Weston Marsh Substation was not confirmed at that point in time but sought to identify available land holdings as close as practicable (approximately 15km) to the anticipated location of the PoC which was understood to be between Spalding and Walpole. Land was identified where there was interest from

landowners, noting the Applicant sought to enter into voluntary agreements for land to develop for the generating station. There is limited consistency between the size of search areas adopted for other solar NSIPs, due to project-specific objectives and the availability of site and area characteristics.

3.3.16. This led to the identification of five principal land holdings for further consideration as illustrated on **Figure 3-2**. Further engagement with landowners, resulted in the removal of the green land parcel and part of the pink land parcel from further consideration.

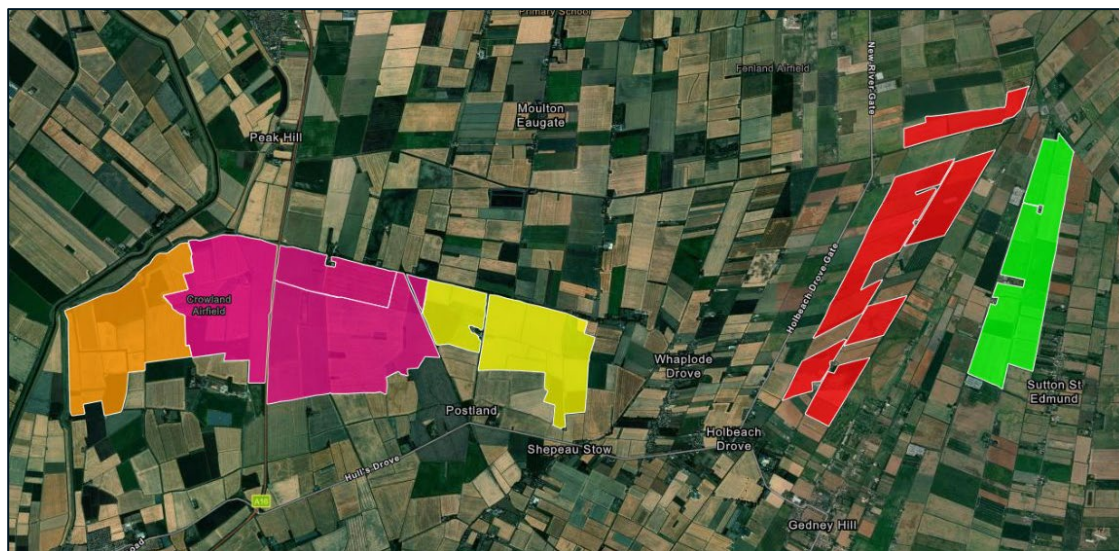


Figure 3-2 Initial land holdings identified for further consideration

3.3.17. The four main land parcels taken forward – referenced within the DCO application as Land Parcels A, B, C and D, are shown on **Figure 3-3**. Some fields within the larger land parcels were removed from further consideration due to the presence of UXO risk, location of heritage assets, feedback from Crowland Airfield, and preference from some of the landowners to retain certain fields for agricultural use.

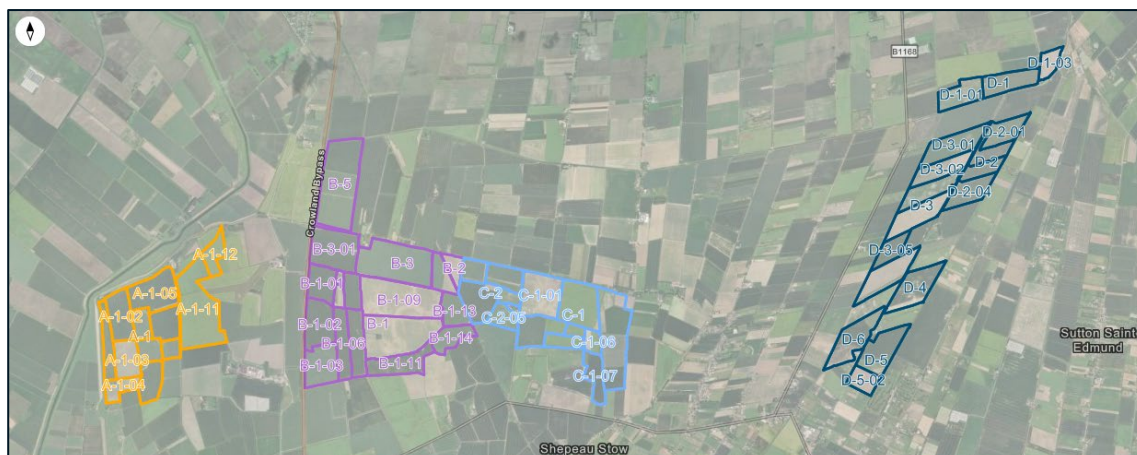


Figure 3-3 Land Parcels taken forward to form the Solar Development Area

3.3.18. Engagement and consultation activities since initial site selection has not subsequently identified landholdings of a suitable size closer to the PoC.

Agricultural Land Classification and Land Type

3.3.19. Paragraph 2.10.21 of EN-3 promotes the development of large-scale solar development on previously developed land, brownfield land, contaminated land and industrial land, however it confirms that land type should not be a predominating factor when determining the suitability of a site, and clearly sets out at paragraphs 2.10.22 and 2. 10.23 that the development of ground mounted solar arrays is not prohibited on BMV agricultural land, and at this scale, applicants are likely to be required to use some agricultural land.

3.3.20. The Applicant has considered previously developed and brownfield land, however, the majority of land near the PoC is undeveloped and agricultural. There is no brownfield land reasonably available that is of a size that could accommodate NSIP scale solar development.

3.3.21. While EN-3 does not prohibit the use of BMV and recognises that nationally significant scale solar is likely to include some agricultural land, the preference is that poorer quality land is prioritised.

3.3.22. Using Defra’s Predictive Land Assessment tool, which models the characteristics and potential of land using existing data, areas with potential to be BMV agricultural land were identified.

3.3.23. This provisional mapping illustrates that the large majority of the opportunity area for the Scheme is identified as either urban/industrial (red) or a high likelihood of

BMV land (>60% area) (purple) as part of Defra’s Predictive Land Assessment – East Midlands Region³ (see **Figure 3-4**).

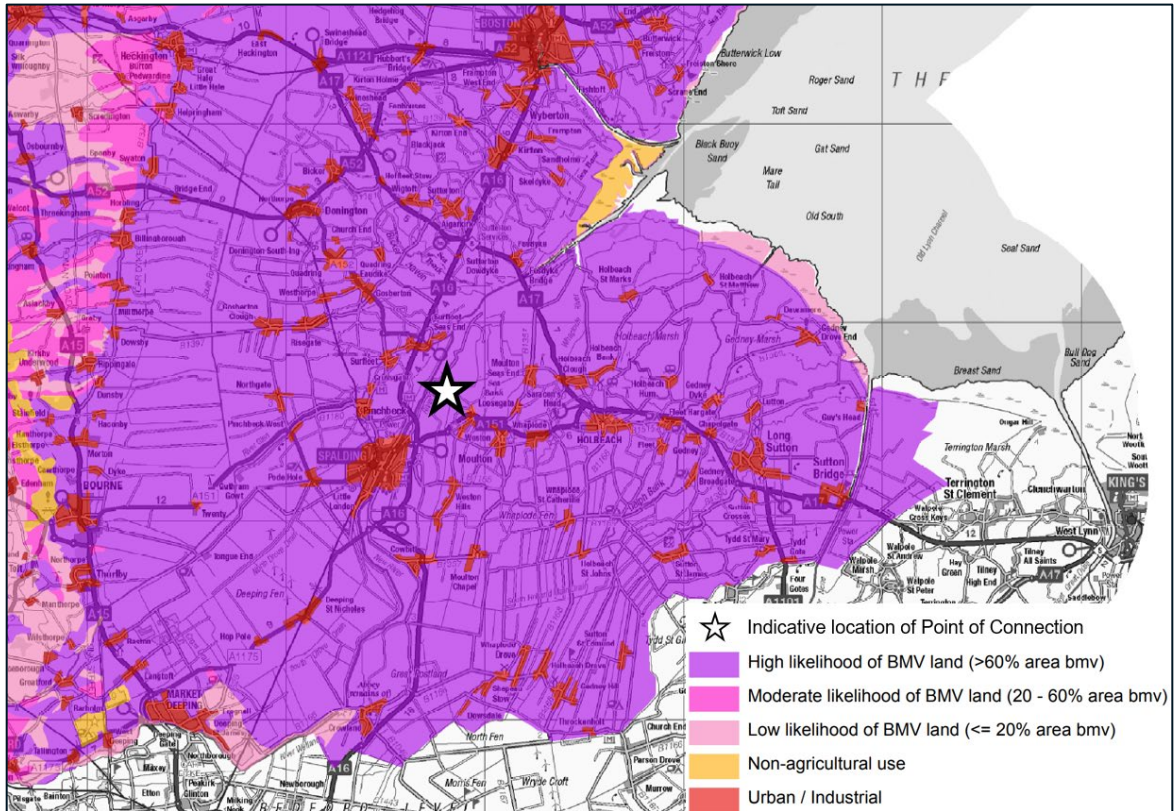


Figure 3-4 Predictive Land Assessment – East Midlands Region

3.3.24. Of this land, with a high likelihood of being classed as BMV, Natural England’s Agricultural Land Classification Map – East Midlands Region⁴ indicates that the PoC is likely to be in an area of ‘Excellent’ ALC (darker blue), with the land further out being of ‘Very Good’ quality (lighter blue) (see **Figure 3-5**). Opportunities for land were considered in these lighter blue areas of land.

³ Natural England (2017). Likelihood of Best and Most Versatile (BMV) Agricultural Land – Strategic Scale Map East Midlands Region. <https://publications.naturalengland.org.uk/file/5955660136579072> [Accessed February 2026].

⁴ Natural England (2010). Agricultural Land Classification Map – East Midlands Region. <https://publications.naturalengland.org.uk/publication/143027?category=5954148537204736> [Accessed February 2026].

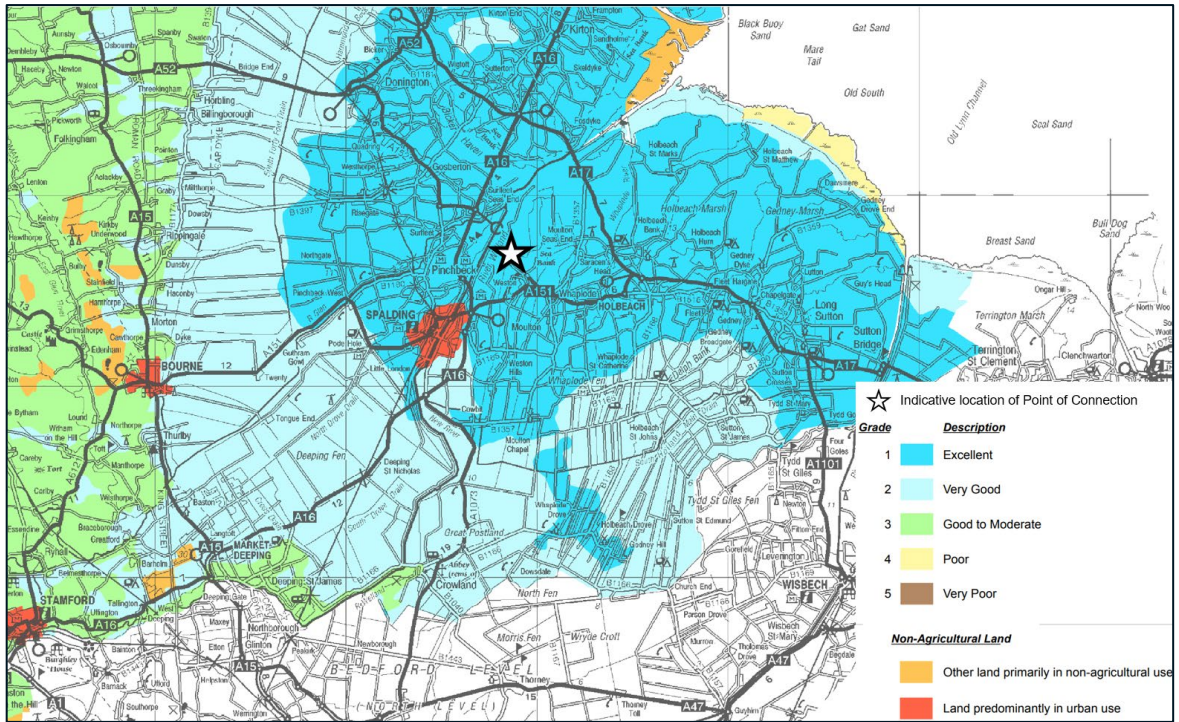


Figure 3-5 Predictive Land Assessment

- 3.3.25. As noted at paragraph 2.10.21 of EN-3, land type should not be a predominating factor in determining the suitability of the site location, and where the proposed use of any agricultural land has been shown to be necessary, areas of poorer quality land should be preferred to higher quality land to avoid the use of BMV agricultural land where possible.
- 3.3.26. There is no land of sufficient scale for a 750MW solar farm that is located within proximity to the PoC which does not have a high likelihood of BMV land, making complete avoidance of BMV agricultural land impossible for the Scheme. The Predictive Land Assessment tools shows that BMV land is likely to be in abundance in all areas surrounding the Weston Marsh PoC (see **Figure 3-6**).

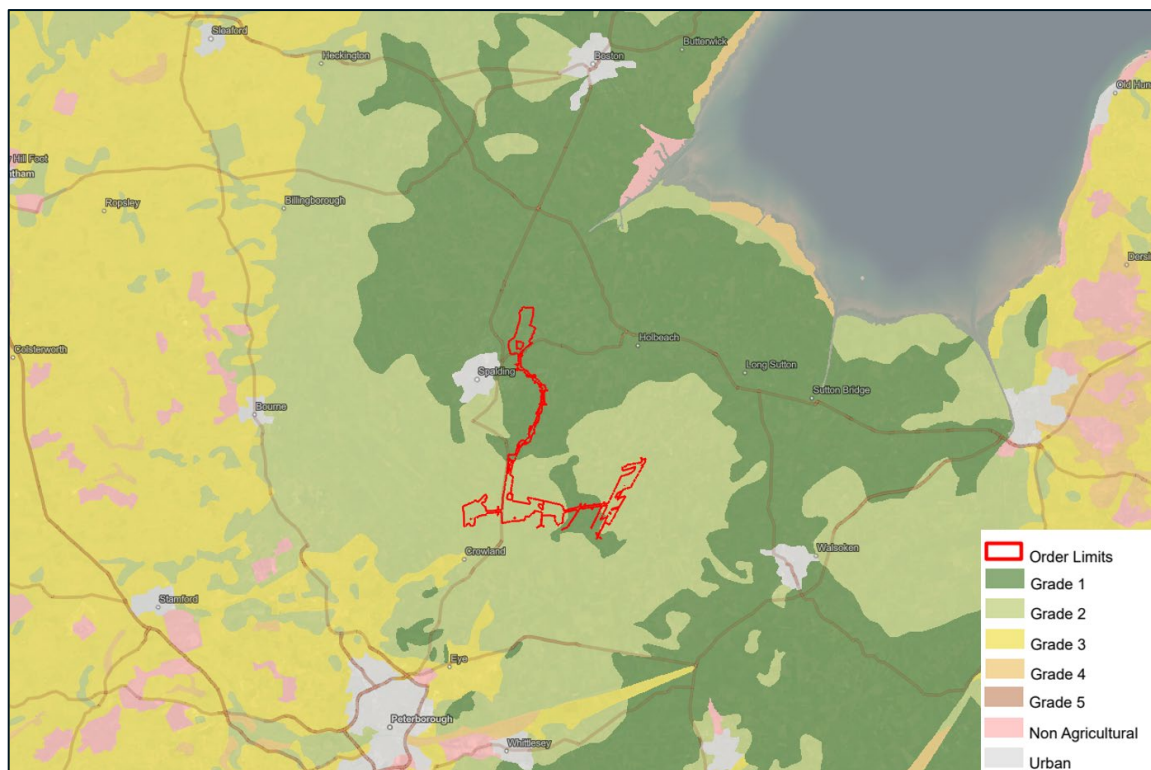


Figure 3-6 The Scheme’s Order Limits in relation to Natural England’s Provisional ALC Mapping

- 3.3.27. The Applicant has taken into account agricultural land quality when identifying the Order Limits, based on publicly available information. This approach to considering ALC values, in terms of the use of provision and predictive mapping, has been considered satisfactory and proportionate by Examining Authorities in the case of several solar farm decisions to date, including those for the Mallard Pass Solar Farm DCO and Gate Burton Energy Park DCO.
- 3.3.28. The Applicant subsequently undertook soil sampling and modelling to understand the likely quality of soils within the selected land holdings. The outputs informed the siting of infrastructure within the Site as detailed within the **Design Approach Document** (Doc Ref. 7.3). Further details of the soil sampling undertaken and how this informed site selection at a more localised level is contained within Section 3.4 of this report.

Flood Risk

- 3.3.29. Paragraph 5.8.21 of EN-1 requires application of the Sequential Test to ensure “that a sequential, risk-based approach is followed to steer new development to areas with the lowest risk of flooding, taking all sources of flood risk and climate change into account”.

- 3.3.30. As outlined earlier in this report, during the site selection stage, the secured grid connection at the Weston Marsh Substation was the starting point for the identification of land suitable for solar development. Grid connection points / National Grid substations with available capacity are finite and should be fulfilled wherever possible to meet the urgent need for new renewable energy as part of Government’s net zero statutory targets.
- 3.3.31. Having secured the grid connection, the Applicant undertook a search for suitable areas of land for NSIP scale solar development which would make best use of the 750MW capacity offer.
- 3.3.32. The majority of land near the PoC is within Flood Zones 3a and 3b as illustrated on **Figure 3-7** below.

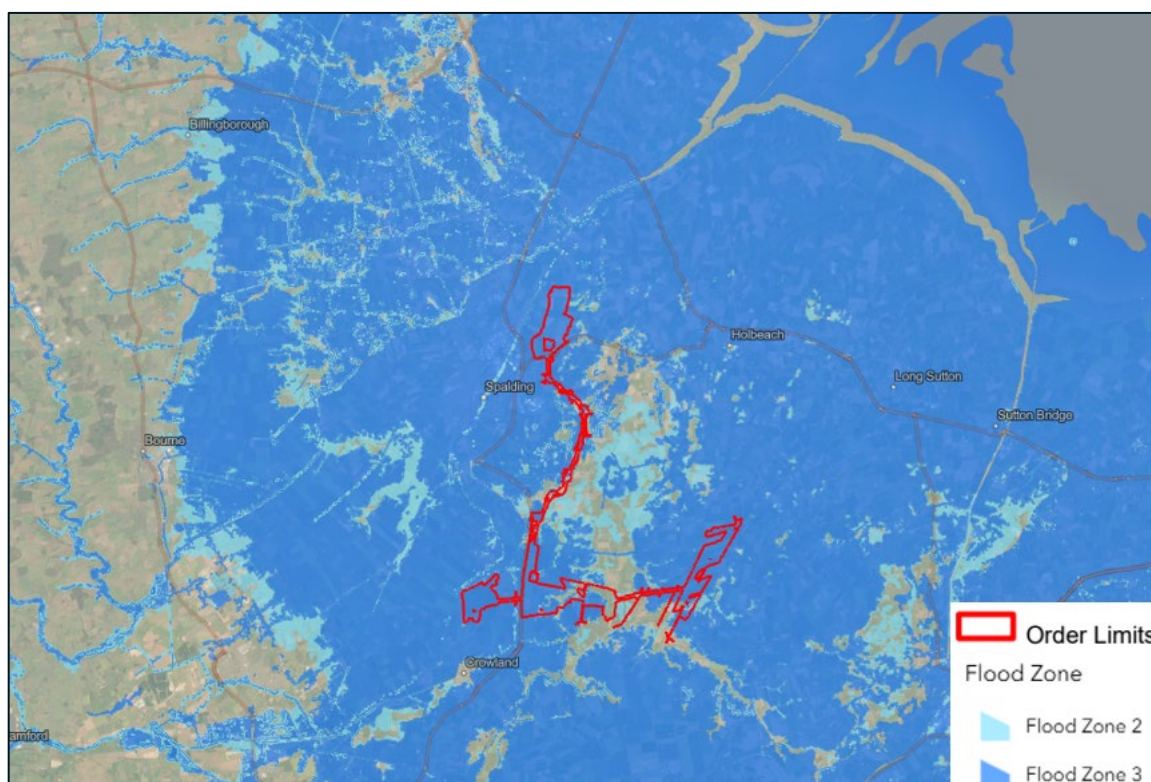


Figure 3-7 Flood Risk Planning Map

- 3.3.33. The nearest large area of land which is located wholly outside of Flood Zone 3 is the area to the west of the A15, north of Bourne. This area of land is approximately 18-20km to the west and north-west of Spalding. Multiple constraints are present in this direction, including significant areas of protected woodland, a network of PRow and substantial areas of Crown land which would restrict the availability and deliverability of a scheme, as well as presenting a constraint to the routing of a connection to the Weston Marsh PoC.

3.3.34. The pockets of Flood Zone 1 identified on **Figure 3-7** to the south of Weston are of such a size they could not fully accommodate an NSIP scale solar development of this scale alone or in combination, therefore additional land is required to utilise the connection. These areas free of flooding were discounted at the site selection stage because they were not suitable taking into account wider sustainable development objectives, as set out in paragraphs 5.8.9 and 10 of EN-1, for the development of large scale solar, for the following reasons:

- the landowners were not willing to put their land forward for the Scheme and the Applicant's aim is to secure the land parcels by voluntary agreement where possible;
- the land is Crown land, and therefore subject to more stringent land acquisition requirements;
- the land is already developed; or
- the land is within close proximity to built up areas.

3.3.35. The Flood Map for Planning⁵ shows flood extents without defences in place. The Long-Term Flood Risk Map⁶ indicates where areas benefit from flood defences. The Long-Term Flood Risk Map shows some parts of Land Parcel B are impacted by areas of 'medium chance (i.e. Flood Zone 3a) with Land Parcel D largely within an area of 'low chance' (i.e. Flood Zone 2). The Grid Connection Route passes through long-term mapping that shows Flood Zone 3a to the south of Austendike/Moulton Mere Drain.

3.3.36. The detailed application of the Sequential Test and the Exception Test is dealt within the **Planning Statement** (Doc Ref. 7.1) and the site-specific application of the Sequential Test and Exception Test in terms of the Scheme layout is included in **ES Appendix 11-3: Flood Risk Assessment** (Doc Ref. 6.3). These documents demonstrate how the Scheme has met both the Sequential and Exception Tests.

Planning and Environmental Designations

3.3.37. The Applicant took into account spatial planning constraints within the areas potentially suitable for solar, including proximity to built up areas such as Spalding and Crowland.

⁵ Environment Agency (2026). <https://flood-map-for-planning.service.gov.uk/> [Accessed February 2026].

⁶ Environment Agency (2026). [Technical map - Check your long term flood risk - GOV.UK](#) [Accessed February 2026]

3.3.38. The Applicant has sought to avoid national designations in its search for land holdings including SSSIs, National Nature Reserves, National Parks, the Broads, National Landscapes, Registered Parks and Gardens and World Heritage Sites. National designations are prevalent along the coast and to the north-east of Kings Lynn and to the south-east of the approximate PoC to the west and north-west of Peterborough.

3.3.39. Land to the north-west and to the south of the PoC is generally free of national planning and environmental designations (see **Figure 3-8**).

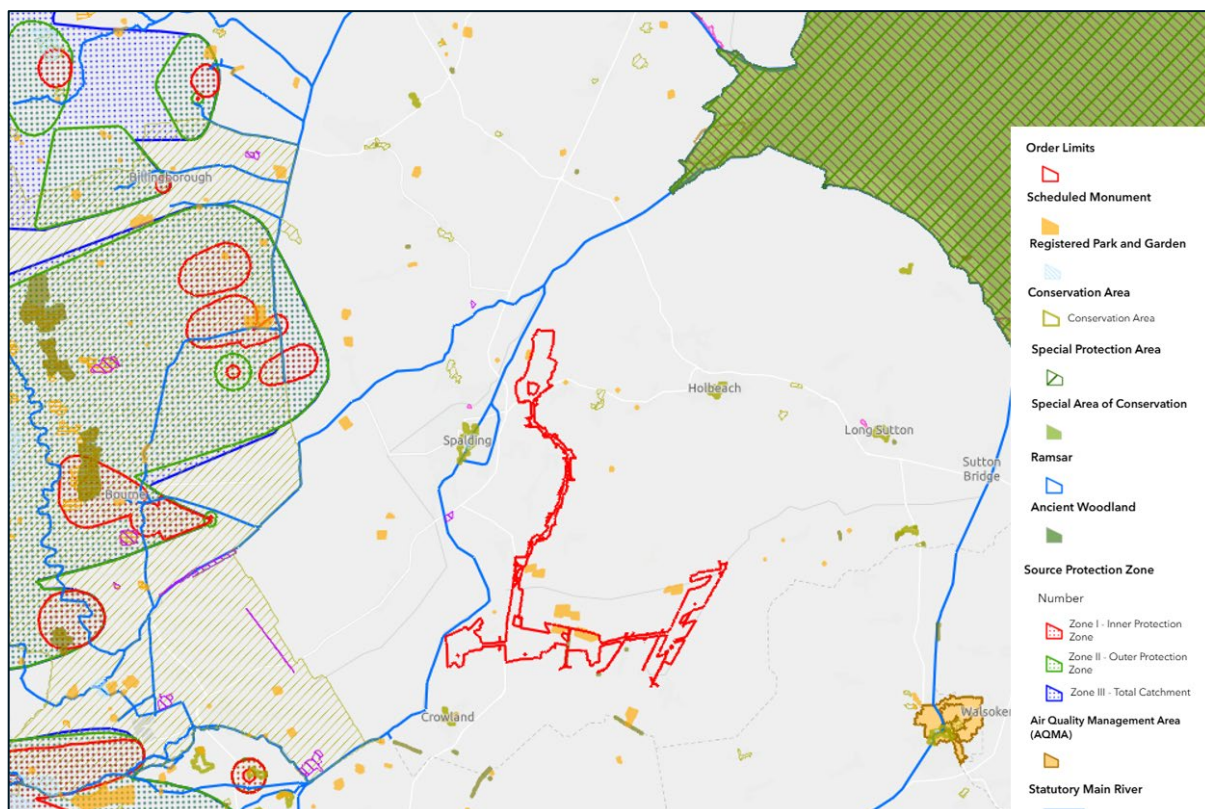


Figure 3-8 Key planning and environmental designations

3.3.40. At the land holdings themselves:

- There are no listed buildings or conservation areas either on or immediately adjacent to the Solar Development Area. There are two scheduled monuments within land parcel C; however, it was considered at the feasibility stage that development in the vicinity of these monuments could be appropriately managed with Site-specific investigation and surveys, and by way of exclusion zones.
- No National Landscapes (Areas of Outstanding Natural Beauty), Broads or National Parks were identified in the area of search. No areas of Green Belt

were located within the area considered for siting of the Solar Development Area.

- No SSSIs, SACs, SPAs, SPA protection buffers, Ramsar sites or National Nature Reserves (NNRs) were present in, or in close proximity to, the Solar Development Area. There are also no proposed internationally or nationally designated ecological and geological sites, within the Solar Development Area.

3.3.41. Between the land holdings and the Weston Marsh PoC, there are no significant constraints that would necessitate an overhead line or cable to traverse in order to reach the point of connection. However, some localised constraints were identified as part of the optioneering exercise undertaken by the Applicant which led to the selection of the western corridor to be taken forward for refinement of the Grid Connection Route. The detail of this optioneering is set out within **ES Chapter 3: Alternatives and Design Evolution** (Doc Ref. 6.1)

3.4. Localised Site Selection

3.4.1. The following subsections describe the principles considered at a more local level to select the Site.

Proximity of the Land to Dwellings

3.4.2. Paragraph 2.10.19 of EN-3 advises that utility-scale solar farms may have a significant zone of visual influence with the likely impacts to sensitive receptors being that of residential amenity and glint and glare.

3.4.3. Residential properties near the land holdings considered by the Applicant are sparse enough with sufficient additional land available within the land holding to provide offsets to residential receptors through setbacks and screening. Individual fields adjacent to clusters of residential properties were discounted.

3.4.4. Throughout the design evolution, the Applicant has applied setbacks from residential and sensitive receptors (such as the Crowland Airfield). Further detail of the design considerations to avoid particular receptors is set out in the **Design Approach Document** (Doc Ref. 7.3) and **Design Parameters** (Doc Ref. 7.4).

Agricultural Land Classification and Land Type

3.4.5. As set out earlier in Section 3.3. of this report, the Applicant considered the likelihood of BMV land at a regional level when identifying available land holdings near the PoC.

- 3.4.6. Once the Applicant identified the larger land holdings available, it sought to identify parcels of land within those holdings which may be better suited for the siting of solar infrastructure based on agricultural land quality.
- 3.4.7. Initially, reconnaissance surveys were conducted to understand the feasibility of the land parcels forming the Order Limits. This identified areas of mixed Grade 1 and 2 soils within Land Parcels B and C as shown on **Figure 3-9**. The remaining land parcels contained a combination of ALC grades ranging from Grade 2 to Grade 3b.



Figure 3-9 Initial ALC survey results

- 3.4.8. These results informed the siting of infrastructure within the land parcels for the design presented at Statutory Consultation and the initial conclusions reported within the Preliminary Environmental Information Report (PEIR) with solar infrastructure sited on land other than Grade 1.
- 3.4.9. Further soil sampling was undertaken at a greater sampling density in accordance with feedback from Natural England. The survey results were presented on an averaged field basis (see **Figure 3-10**) which represents how the fields would be farmed. The field averaged methodology is an approach accepted for the following consented solar farms: Longfield Solar Farm, West Burton Solar Farm, Cottam Solar Farm, Gate Burton Solar Farm and East Yorkshire Solar Farm.

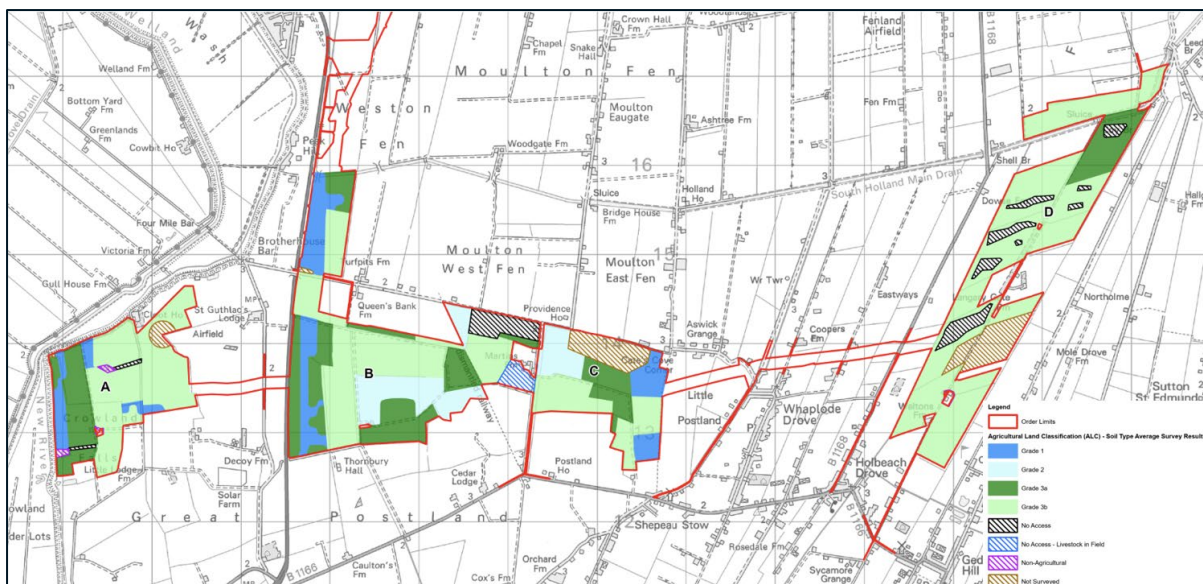


Figure 3-10 Field averaged survey results

3.4.10. The refined distribution of ALC grades across the Solar Development Area was used to inform design decisions for the siting of infrastructure. For example, in areas where Grade 1 ALC land was no longer identified, solar panels were relocated within the Site to respond to other constraints present such as the presence of Flood Zone 3b with Land Parcel B. Where slithers of Grade 1 ALC land were identified within Land Parcels A and B, it was not considered that their avoidance would provide viable parcels of land for arable use, due to their size and shape. Furthermore, it was not considered possible to relocate the 400kV On-Site Substation and BESS Compound to avoid Grade 1 ALC land, as its location is determined by the route of the Grid Connection. Grade 1 ALC land identified within Land Parcel C was excluded from physical development and defined as a habitat management area. The changes to the design resulting from the amended methodology were presented as part of the Targeted Consultation held in September and October 2025.

3.4.11. Subsequent to those updates and as part of ongoing engagement, Natural England requested a point-by-point survey approach to also be outlined. The results of the sampling and analysis using both techniques (field averaged and point-by-point) are therefore presented in **ES Chapter 5: Agriculture and Soils** (Doc Ref. 6.1). The point-by-point analysis results are illustrated on **ES Figure 5-1** (Doc Ref. 6.2) and reproduced at **Figure 3-11**.

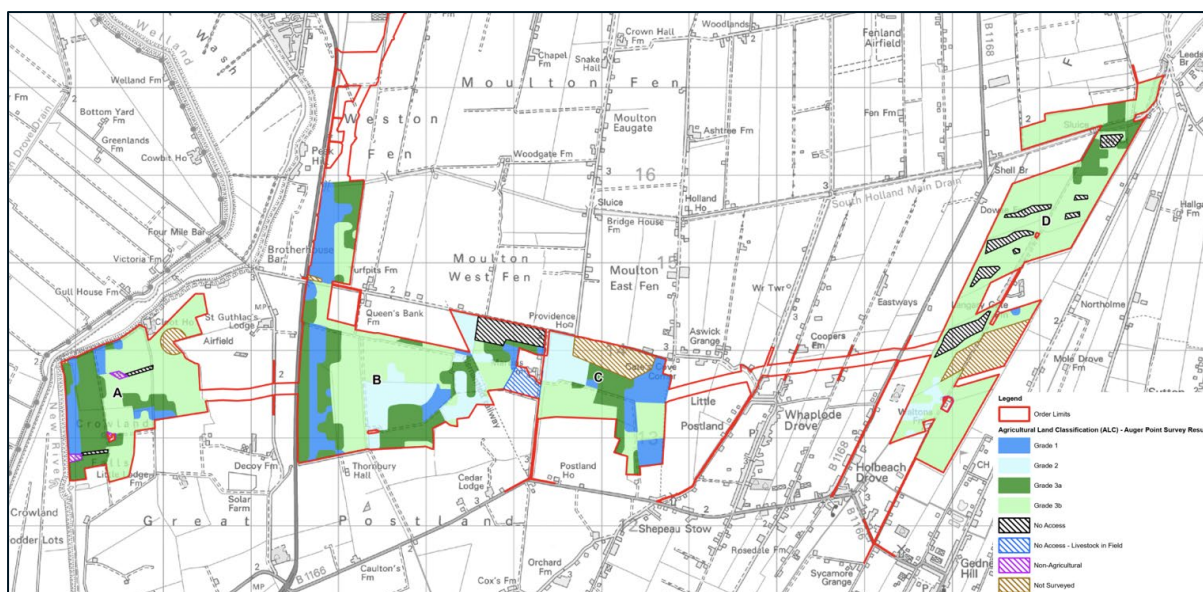


Figure 3-11 Auger point survey results

- 3.4.12. The sampling and methodologies highlight that the soil conditions at the Site are highly variable. This can likely be attributed to the reclaimed nature of the land, the presence of roddens and the ploughing/ compaction / erosion of soils resulting from past agricultural land activities. Variation is expected as even slight differences in survey points can result in variations in depth or soil texture due to the influence of ancient riverbed formations. The differences in the two results are negligible, and not significant enough to require any further changes to the design as presented at the targeted consultation.
- 3.4.13. As set out within **ES Chapter 5: Agriculture and Soils** (Doc Ref. 6.1) both methodologies demonstrate a similar proportion of BMV grade soils within the Solar Development Area; with 35.2% being BMV using the field average approach and 39.2% being BMV using the auger point approach.
- 3.4.14. The **Design Approach Document** (Doc Ref. 7.3) sets out the siting of infrastructure within the Order Limits influenced by soil survey outcomes. **ES Chapter 5: Agriculture and Soils** (Doc Ref. 6.1) provides greater detail of the two methodologies presented and an assessment of likely significant effects on best and most versatile land. The **Planning Statement** (Doc Ref. 7.1) provides a view from a policy compliance perspective.

Flood Risk

- 3.4.15. As set out in Section 3.3, it is not possible to fully avoid Flood Zone 2 or 3 given its prevalence across this area of Lincolnshire. The Applicant has undertaken

flood modelling which has supported the application of the Sequential Test to site the most critical solar infrastructure outside of areas with the highest risk of flooding. This includes the 400kV Substation and BESS Compound, the 132kV substations and the solar stations.

- 3.4.16. **ES Appendix 11-3: Flood Risk Assessment** (Doc Ref. 6.3) sets out the indicative location of critical infrastructure in relation to the functional floodplain extents as well as detailing the application of the Sequential Test. The **Planning Statement** (Doc Ref. 7.1) also provides further commentary on the application of the Sequential Test.
- 3.4.17. It demonstrates that all critical infrastructure can be sited outside of Flood Zone 3b extents with the exception of six solar stations within the Gotts Catchment at Land Parcel D. It has not been possible to locate these solar stations outside of the functional floodplain without either acquiring additional land (noting surrounding land is also within Flood Zone 3b) or removing these land parcels from the Solar Development Area altogether, which would reduce the generating capacity of the Scheme. Where these solar stations cannot be micro-sited outside of the flood extent during detailed design, they will be raised on plinths to remain operational in a flood event.

Accessibility

- 3.4.18. Paragraph 2.10.27 of EN-3 requires applicants to “*consider the suitability of the access routes to the proposed solar farm for both the construction and operation*”.
- 3.4.19. Proximity to the Major Road Network was considered at the outset with the majority of land within proximity to the Weston Marsh PoC, being near the MRN, including the A16, A17 and A151. The closest part of the Strategic Road Network is the A47, approximately 8 km south of the Solar Development Area.
- 3.4.20. The majority of HGV movements would access the area using the A16 with shorter movements required on the local road network as illustrated on **ES Figure 15-3: Heavy Goods Vehicle Routing** (Doc Ref. 6.2).
- 3.4.21. The Applicant has sought to utilise existing internal tracks where suitable, with temporary internal access tracks to be constructed to serve construction, operation and decommissioning of the Scheme. Where necessary, the Applicant has included land within the Order Limits to facilitate minor improvements to the existing highway to provide suitable access points.

- 3.4.22. **ES Chapter 15: Traffic and Access** (Doc Ref. 6.1) reports no significant adverse effects from the Scheme alone which evidences the effectiveness of the access strategy for the Scheme which largely avoids minor roads.

Public Rights of Way

- 3.4.23. Consideration of impacts on PRoW from a planning policy perspective are set out in Section 5.15 of the **Planning Statement** (Doc Ref. 7.1), however, there are no guidelines set out in EN-3 about how these should be considered from a site selection perspective. Instead, the policy focusses on how impacts on PRoWs are addressed as part of the application (i.e. though the inclusion of appropriate diversions to manage impacts on PRoW).

Security and Lighting

- 3.4.24. Paragraphs 2.10.38 to 2.10.40 of EN-3 set out measures for applicants to consider relating to security and lighting, including the use of natural features such steep gradients, hedging and rivers in addition to perimeter security measures.
- 3.4.25. Security and lighting were considered as part of the design with measures including fencing and lighting incorporated as per the design commitments within the **Design Parameters** (Doc Ref. 7.4). Further details are set out in the **Design Approach Document** (Doc Ref. 7.3).

Overhead Lines - Holford Rules

- 3.4.26. Paragraphs 2.9.16 and 2.9.17 of EN-5 summarise the Holford Rules which apply to the routing of new overhead lines. In summary, the seven Holford Rules are:
- Avoid altogether, if possible, the major areas of highest amenity value, by so planning the general route of the line in the first place, even if total mileage is somewhat increased in consequence;
 - Avoid smaller areas of high amenity value or scientific interest by deviation, provided this can be done without using too many angle towers, i.e. the bigger structures which are used when lines change direction;
 - Other things being equal, choose the most direct line, with no sharp changes of direction and thus with fewer angle towers;
 - Choose tree and hill backgrounds in preference to sky backgrounds wherever possible. When a line has to cross a ridge, secure this opaque background as long as possible, cross obliquely when a dip in the ridge provides an opportunity. Where it does not, cross directly, preferably between belts of trees;

- Prefer moderately open valleys with medium or moderate levels of tree cover where the apparent height of towers will be reduced, and views of the line will be broken by trees;
- Where country is flat and sparsely planted, and unless specifically preferred otherwise by relevant stakeholders, keep the high voltage lines as far as possible independent of smaller lines, converging routes, distribution poles and other masts, wires and cables, so as to avoid a concentration of lines or ‘wirescape’; and
- Approach urban areas through industrial zones, where they exist; and when pleasant residential and recreational land intervenes between the approach line and the substation, carefully assess the comparative costs of undergrounding.

3.4.27. The Grid Connection Route and Inter-Array Connections have been developed through an iterative constraints-led process which is consistent with the Holford Rules, EN-5 and established national overhead line routing practice. It also takes into account landscape heritage, ecology, flood risk, settlement pattern, safety clearances and coordinated planning with the proposed NGET Grimsby to Walpole project.

3.4.28. The **Design Approach Document** (Doc Ref. 7.3) describes in detail how the design of the Grid Connection Route and Inter-Array Connections complies with the seven Holford Rules and has balanced other environmental and planning constraints. **ES Chapter 3: Alternatives and Design Evolution** (Doc Ref. 6.1) provides detail of the alternatives considered when developing the routes.

Substations - Horlock Rules

3.4.29. Paragraphs 2.9.18 and 2.9.19 of EN-5 summarise the Horlock Rules which apply to the design and siting of substations. In summary, the Horlock Rules are:

- Consider environmental issues from the earliest stage to balance the technical benefits and capital cost requirements for new developments against the consequential environmental effects in order to keep adverse effects to a reasonably practicable minimum;
- Seek to avoid altogether internationally and nationally designated areas of the highest amenity, cultural or scientific value by the overall planning of the system connection;
- Protect as far as reasonably practicable areas of local amenity value, important existing habitats and landscape features including ancient

woodland, historic hedgerows, surface and ground water sources and nature conservation areas;

- Take advantage of the screening provided by land form and existing features and the potential use of site layout and levels to keep intrusion into surrounding areas to a reasonably practicable minimum;
- Keep the visual, noise and other environmental effects to a reasonably practicable minimum;
- Consider the land use effects of the proposal when planning the siting of substations or extensions;
- Consider the options available for terminal towers, equipment, buildings and ancillary development appropriate to individual locations, seeking to keep effects to a reasonably practicable minimum;
- Use space effectively to limit the area required for development consistent with appropriate mitigation measures and to minimise the adverse effects on existing land use and rights of way, whilst also having regard to future extension of the substation;
- Make the design of access roads, perimeter fencing, earth-shaping, planting and ancillary development an integral part of the site layout and design, so as to fit in with the surroundings;
- In open landscape especially, high voltage line entries should be kept, as far as possible, visually separate from low voltage lines and other overhead lines so as to avoid a confusing appearance; and
- Study the inter-relationship between towers and substation structures and background and foreground features so as to reduce the prominence of structures from main viewpoints. Where practicable the exposure of terminal towers on prominent ridges should be minimised by siting towers against a background of trees rather than open skylines.

3.4.30. Technical and environmental constraints have been considered and balanced in the siting and design of the substations. No internationally or nationally designated sites, ancient woodland, historic hedgerows or designated nature conservation areas are impacted by the siting of the substations. As set out earlier in this report, flood risk has been a key consideration in the siting and design of the Scheme's substations.

3.4.31. The **Design Approach Document** (Doc Ref. 7.3) describes in detail how the design and siting of the substations comply with the Horlock Rules and has balanced

other environmental and planning constraints. **ES Chapter 3: Alternatives and Design Evolution** (Doc Ref. 6.1) provides detail of the alternatives considered when considering the siting of the substations.

4. Summary

- 4.1.1. There is a critical urgent need for renewable energy generation in the UK as set out with the NPSs. The Scheme presents a significant opportunity to contribute towards the UK's net zero and energy security ambitions.
- 4.1.2. The Applicant has followed a logical approach to inform its site selection. It takes into account the site selection principles included within the relevant NPSs as well as the PoC for the Weston Marsh Substation.
- 4.1.3. No available brownfield land of a suitable size for NSIP scale solar development was identified near the PoC, with the majority of land in this part of Lincolnshire being agricultural.
- 4.1.4. The Applicant identified several landowners with large holdings that could facilitate a large solar installation. A greater number of smaller land parcels are not considered as a reasonable alternative since they would not be able to deliver the scale of energy generation enabled for the grid connection without substantial fragmentation and additional grid infrastructure.
- 4.1.5. In identifying the Order Limits to take forward for the Scheme, the Applicant balanced other opportunities and constraints including agricultural land classification, flood risk and environmental designations. Given the scale of the Scheme, it is not possible to wholly avoid all constraints. For example, the requirement to avoid siting critical infrastructure within areas of the highest flood risk means it has not possible to completely avoid BMV land. The Applicant has sought to balance these various constraints at the Site when determining the Order Limits and the siting of infrastructure within them.
- 4.1.6. In addition to this report, **ES Chapter 3: Alternatives and Design Evolution** (Doc Ref. 6.3) and the **Design Approach Document** (Doc Ref. 7.3) describe the evolution of the Order Limits and the alternatives considered as part of developing the Scheme presented in this DCO Application.
- 4.1.7. The Applicant's approach to site selection accords with the policies relating to site selection and alternatives within EN-1, EN-3, EN-5, the NPPF and the PPG.

