



# Mallard Pass

Solar Farm

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### Environmental Statement Volume 1 Chapter 4: Alternatives and Design Development

**November 2022**

PINS Ref: EN010127

Document Ref: EN010127/APP/6.1

Revision P0

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations  
2009 - Reg 5 (2) (a)

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## **4.0 Alternatives and Design Development**

### **4.1. Introduction**

- 4.1.1. This chapter of the Environmental Statement (ES) outlines the alternatives considered in relation to the Proposed Development. A Site Selection report is appended to the Planning Statement **[EN010127/APP/7.2]** which provides an overview of the site selection process undertaken by the Applicant to identify the location of the Proposed Development.
- 4.1.2. Schedule 4, paragraph 2 of the EIA Regulations requires the following information to be presented in the ES: “A description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects”.
- 4.1.3. National Policy Statement (NPS) EN-1 paragraph 4.4.1 states that “as in any planning case, the relevance or otherwise to the decision-making process of the existence (or alleged existence) of alternatives to a proposed development is in the first instance a matter of law, detailed guidance on which falls outside the scope of this NPS”. The NPS confirms that from a policy perspective there is no general requirement to consider alternatives or to establish whether a development represents the best option. This is reinforced by Paragraph 4.2.11 of the Draft Revised NPS EN-1.
- 4.1.4. The NPS and Draft Revised NPS do, however, highlight that in addition to the requirement under the EIA Regulations set out above and referred to in the first bullet of paragraph 4.4.2 of NPS EN-1, which require applicants to include information in the ES on the reasonable alternatives studied, there

are other specific legislative requirements and policy circumstances which may require the consideration of alternatives.

- 4.1.5. These include requirements (when triggered) under the Habitats Directive, as transposed into UK law by the Conservation of Habitats and Species Regulations 2017, the requirements (when triggered) of the Water Framework Directive (and associated 2017 Regulations) and also in relation to avoiding significant harm to biodiversity and geological conservation interests, flood risk, and development within nationally designated landscapes set out in sections 5.3, 5.7 and 5.9 of NPS EN-1. Paragraph 4.4.3 of NPS EN-1 states “where there is a policy or legal requirement to consider alternatives the applicant should describe the alternatives considered in compliance with these requirements”.
- 4.1.6. Paragraph 4.2.13 of the Draft NPS EN-1, published by the BEIS in 2021, sets out that given the level of urgency of need for new energy infrastructure, the Secretary of State should, subject to any legal requirements which indicate otherwise, be guided by the nine principles, provided below, when deciding what weight should be given to alternatives:
- a. the consideration of alternatives in order to comply with policy requirements should be carried out in a proportionate manner;
  - b. only alternatives that can meet the objectives of the proposed development need be considered;
  - c. the Secretary of State should be guided in considering alternative proposals by whether there is a realistic prospect of the alternative delivering the same infrastructure capacity (including energy security,

climate change, and other environmental benefits) in the same timescale as the proposed development;

- d. the Secretary of State 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 it 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;
- e. alternatives not among the main alternatives studied by the applicant (as reflected in the ES) should only be considered to the extent that the Secretary of State thinks they are both important and relevant to the decision;
- f. as the Secretary of State must assess an application in accordance with the relevant NPS (subject to the exceptions set out in the Planning Act 2008), if the Secretary of State concludes that a decision to grant consent to a hypothetical alternative proposal would not be in accordance with the policies set out in the relevant NPS, the existence of that alternative is unlikely to be important and relevant to the Secretary of State's decision
- g. alternative proposals which mean the necessary development could not proceed, for example because the alternative proposals are not commercially viable or alternative proposals for sites would not be physically suitable, can be excluded on the grounds that they are not important and relevant to the Secretary of State's decision

- h. alternative proposals which are vague or inchoate can be excluded on the grounds that they are not important and relevant to the Secretary of State's decision; and
- i. it is intended that potential alternatives to a proposed development should, wherever possible, be identified before an application is made to the Secretary of State (so as to allow appropriate consultation and the development of a suitable evidence base in relation to any alternatives which are particularly relevant). Therefore, where an alternative is first put forward by a third party after an application has been made, the Secretary of State may place the onus on the person proposing the alternative to provide the evidence for its suitability as such and the Secretary of State should not necessarily expect the applicant to have assessed it.

4.1.7. Considering the policy and legal requirements as well as the iterative approach to the design to date, the following alternatives have been considered for the Proposed Development and are discussed in this chapter:

- a. Alternative sites, size and scale;
- b. Alternative technologies; and
- c. Alternative layouts.

4.1.8. The consideration of 'no development' as an alternative to the Proposed Development has not been considered as a reasonable alternative as it would not deliver the proposed renewable electricity generation capacity which is required in order to meet the UK's net zero targets.

## **4.2. Need for the Proposed Development**

- 4.2.1. There is a growing body of UK energy and climate change international commitments, law, policy, and guidance which highlights an urgent need for new low carbon energy generation infrastructure, particularly from renewable sources such as solar.
- 4.2.2. Decarbonisation is a UK legal requirement and is of global significance. In June 2019, Government passed law to end the UK's contribution to global warming by 2050: Net Zero.
- 4.2.3. Carbon Budgets set the trajectory for decarbonisation actions required to meet this commitment. They recognise that atmospheric carbon has a cumulative global heating effect and therefore urgent action is necessary. The Sixth Carbon Budget (enshrined in law in June 2021) runs from 2033 to 2037 and requires a 78% reduction in UK territorial emissions between 1990 and 2035.
- 4.2.4. UK electricity demand is expected to double by 2050. Decarbonisation requires the electrification of energy demand which is currently generated by burning fossil fuels and the UK's pathway to achieving Net Zero by 2050 must involve wider transitions outside of the power sector, including decarbonising transport, industry, agriculture, and homes. Extensive electrification requires support from a major expansion of renewable and other low-carbon power generation to ensure that the UK is capable of securely meeting future electricity demand, and with a significantly lower carbon intensity. The decarbonisation of UK electricity generation is therefore vitally important to meet the UK's legal obligations on carbon emissions and ensure sustainable energy resilience. The UK Government has therefore committed decarbonisation of the electricity system by 2035 as a critical step to achieving net zero greenhouse gas emissions by 2050.

4.2.5. The decommissioning of existing electricity generation assets increases the requirement to develop new low-carbon generation with urgency in order to “keep the lights on”. Nuclear power has historically met circa 20% of UK demand, but existing nuclear stations began to close in 2021. Only one existing nuclear plant is scheduled to remain operational beyond 2028 and currently only one new nuclear plant is scheduled to be commissioned in the late 2020s. Any others (although noting that none are currently yet under construction) will not commission before the mid-2030s due to the long construction periods associated with the technology. Only one UK coal station is still in commercial operation and in 2021, Government brought forward the final closure date for coal to 2024. Carbon Capture Utilisation and Storage (CCUS) is being developed to support Net Zero by facilitating the decarbonisation of the UK’s thermal (carbon emitting) fleet, currently circa 40GW, decarbonising industry, producing low-emissions hydrogen and delivering greenhouse gas removal technologies. Recent progress has been made towards bringing CCUS clusters forward by the end of the decade however in their ‘National Infrastructure Strategy, 2020’, Government recognises that “the technology has not been delivered at scale and significant risks remain” **[Ref 4-1]**

4.2.6. The UK has substantial renewable energy resources, including 40% of Europe’s wind resource. Government is targeting 40GW of offshore wind to be operational by 2030, with an ambition to deliver up to 50GW by 2030, to harness that resource and shield consumers from volatile international energy markets. But wind on its own is not sufficient. The development of large-scale solar in the UK (National Grid estimates up to 42GW of operational solar capacity by 2030 rising to 92GW by 2050) will provide an essential diversity to the UK’s low-carbon generation portfolio, working with other technologies to deliver security of supply and value to UK consumers. The Energy Security Strategy (April 2022) expects a five-fold



increase in solar deployment by 2035. Solar generation is therefore a critical element of the plan to decarbonise the UK electricity sector with urgency and is already a leading low-cost generation technology in the UK. The national need for solar generation is urgent and the capacity required is significantly greater than the capacity of projects currently understood to be in development.

4.2.7. Solar addresses all important aspects of existing and emerging government policy. It will make a critical and timely contribution to decarbonisation and security of supply in the UK, will help shield consumer bills from volatile energy prices and international supply markets, and provides the potential to deliver biodiversity net gains through its development.

4.2.8. It is therefore against the context of a clear and urgent national need for this type of infrastructure that the assessment of alternatives is set.

4.2.9. The Statement of Need **[EN010127/APP/7.1]** accompanying the DCO Application sets out a detailed and compelling case as to why the Proposed Development is urgently required and at the scale proposed.

### **4.3. Alternatives Considered**

#### **Alternative Sites**

4.3.1. A range of technical, environmental and economic factors are considered when investigating and assessing any potential site for large scale solar developments. A Site Selection Report has been prepared and forms Appendix 1 of the Planning Statement **[EN010127/APP/7.2]**. A summary is presented below.

4.3.2. The key reasons for why the land within the Order limits was selected and why it is considered a suitable location for a large-scale solar farm are that:

- a. The land within Lincolnshire has the potential to locate a large-scale solar development. This is due to the existence of large open areas of undeveloped land, which is predominantly made up of gently undulating topography and generally sparse settlement patterns. This region also has high levels of Solar Irradiation;
- b. There is the available capacity for the Project to connect to the National Grid transmission system at Ryhall National Grid Substation without additional capacity improvements needing to be made, making efficient use of existing infrastructure which means the Project can be completed in reasonable time and cost;
- c. There is suitable land in close proximity to the National Grid Ryhall Substation which has reduced the length of the grid connection cable between the Primary Onsite Substation and National Grid Ryhall Substation. Any alternative route would unnecessarily increase the length of the grid connection cable and associated environmental impacts.
- d. The land is not located within or close to internationally and nationally designated biodiversity sites;
- e. The Project avoids the use of large areas of best and most versatile (BMV) agricultural land, therefore, entire fields comprised of Grade 2 ALC have been removed Solar PV Site;
- f. The land is not located within or close to Areas of Outstanding Natural Beauty or designated areas of landscape value;
- g. The land is not located within a Green Belt Designation;

- h. The Project can avoid direct physical impact on designated heritage assets;
- i. The land is predominantly within Environment Agency Flood Zone 1, therefore, at a low risk of flooding (less than 0.1% annual probability of river or sea flooding);
- j. The land relatively close to part of the Strategic Road Network (SRN) by virtue of the A1 and has good accessibility via the rural road network for construction; operational maintenances; and decommissioning;
- k. There are also relatively few residential properties in immediate proximity to the Order limits and the impact on those that are can be effectively mitigated through offsets and sensitive landscaping; and
- l. The site has limited land use conflict with respect to local development plan allocations and displacement of existing businesses.

4.3.3. Following consideration of the above factors, the Order limits has been located at the site as it is considered as being a location having very good potential for a large-scale solar site where there is available capacity that is able to be maximised.

4.3.4. In summary, the availability of significant capacity at the National Grid Ryhall Substation without the need for upgrading was the primary driver in identifying a site in this part of Lincolnshire. Given the urgent need for renewable energy to address the climate crisis, this available capacity should be utilised (and made the most of) where it occurs.

4.3.5. As reported in the Site Selection Report, following a review to identify which of the land in proximity to the National Grid Ryhall Substation may be appropriate for solar from a technical, environmental and community

perspective, the Applicant then commenced discussions with landowners to identify whether there was a willingness to enter into lease agreements. The Order limits is considered to be preferable compared to possible alternative areas further away from the National Grid Ryhall Substation for a number of reasons, including the lack of availability of suitable and available previously developed land, relative distance from protected ecological and heritage assets (including Rutland Water SPA) compared to areas further west and south, and comparably favourable ALC with limited levels of Grade 3a and 2 land within the Order land compared to other locations; and seeking to minimise additional land take that would otherwise be required to create a cable connection route.

### **Alternative Renewable Technologies**

- 4.3.6. Alternative types of low-carbon forms of electricity generation for utilising the existing National Grid Ryhall Substation connection capacity were not considered by the Applicant as a solar farm development company. However, notwithstanding this, it is not considered that the Order limits would be suitable for other forms of renewable generation at the same scale of the Proposed Development within the Order limits. It is therefore considered that Solar Farm development is the best renewable generating solution for the Order limits.
- 4.3.7. Tidal power, offshore wind, and hydroelectric storage were not considered possible due to the location of the Ryhall Substation approximately 48km from the coast, and within an area of low, flat topography.
- 4.3.8. The Order limits is not considered suitable for onshore wind due to the low wind yield relative to other parts of the UK, coupled with the proximity to residential dwellings which would be subject to risks associated with shadow flicker and wind turbine noise. It is not expected that the Order

limits would have been able to host an economically viable and successful onshore wind farm without causing greater environmental consequences than the Proposed Development. Furthermore, it is noted that the policy context for onshore wind is currently not favourable.

- 4.3.9. It is therefore considered that Solar Farm development is the best renewable generating solution for the Order limits.

### **Alternative Solar Technologies / Layouts**

- 4.3.10. The parameters of the DCO Application will maintain a degree of flexibility under the Rochdale Envelope to allow for the latest solar technology to be utilised at the time of construction; further information can be found in **Chapter 2: Overview of EIA Process**, and **Chapter 5: Project Description**, of this ES [EN010127/APP/6.1]. Notwithstanding this, technological design options have been considered and discounted. The main reasons for discounting the technological options are set out below:

### **Solar PV Configuration**

- 4.3.11. East / West Solar PV Configuration – An East / West configuration (example shown in Plate 1) was discounted because, in comparison to the Fixed South Facing or Single Access Tracking, this configuration reduces the potential to deliver biodiversity gain and / or utilise the space between the panels for grazing. The level of light reaching the ground beneath the panels would be significantly reduced due to the density and compactness of the east / west configuration. An East / West configuration over the same area would potentially generate an increased number of heavy goods vehicle (HGV) movements than Fixed South Facing or Single Access Tracking as the East / West configuration allows for a greater number of modules to be installed per unit area.



**Plate 1 - Example of East West Configuration**

### **Alternative Grid Connection Routes**

- 4.3.12. No alternative grid connection corridors have been considered by the Applicant given the close proximity between the Onsite Substation and National Grid Ryhall Substation, and the available capacity at the Ryhall Substation.

### **Alternative Layouts**

- 4.3.13. The layout of the Proposed Development has evolved iteratively throughout the EIA and consultation process, taking into consideration the NPS, objectives of the Proposed Development, environmental effects, and feedback from stakeholders during the consultation processes.
- 4.3.14. The layout and extents of the Order limits, and proposed Solar PV Site, has undergone several stages of design evolution which are described below in Table 4-1.

**Table 4-1 Main design iterations and stages of design evolution**

<b>Stage</b>	<b>Proposed Order limits / Layout</b>	<b>Consultation and surveys which influenced the proposed layout at this stage</b>	<b>Design Evolution</b>
<p>Non-Statutory Consultation (Stage 1) Layout</p> <p>(Figure 4.1)</p>	<p>The area consulted upon was 880ha with a proposed Solar PV Site Area of 570ha.</p>	<p>This was a preliminary site boundary prior to extensive consultation with relevant stakeholders and therefore was not influenced by external parties above and beyond publicly available information as to designations.</p> <p>No designed layout was considered at this stage. However, minimum offsets to landscape and ecological features and designations were applied to inform the process of identifying the proposed Solar PV Site Area within the wider Order limits.</p>	<p>Following the initial appraisal, which included site visits and desktop analysis, identified areas within the Solar PV Site considered not suitable for accommodating Solar PV arrays were removed for the following reasons:</p> <ul style="list-style-type: none"> <li>- Setting of Essendine – the extent of solar development was pulled back and away from the settlement boundary of Essendine to reduce potential landscape and visual impacts as well as impacts to the setting of Essendine Castle Scheduled Monument.</li> <li>- Setting of Braceborough – The land to the east of the Solar PV Site was removed because of the potential impacts on the landscape character and the proximity to the Braceborough conservation area.</li> <li>- Braceborough Great Wood – the fields located to the north of Carlby Road due to their proximity to the ancient woodland and the existing PRow that traverse through the centre of the fields.</li> <li>- Burghley House – Two fields in the south-west of the Solar PV Site were removed due to the potential theoretical visibility from Burghley House as the two fields are located on land that slopes towards the River Welland valley and Burghley House to the south.</li> <li>- Little Warren Wood and Ryhall Pastures and Little Warren Verges SSSI – An opportunity was identified to improve</li> </ul>

Stage	Proposed Order limits / Layout	Consultation and surveys which influenced the proposed layout at this stage	Design Evolution
			<p>connectivity between Little Warren Wood and Ryhall Pastures and Little Warren Verges SSSI. The extent of solar infrastructure was set back from the northern boundary to reflect the offset to arable on the northern side of the ditch that runs through this part of the Order limits. This area will be used to improve green infrastructure connectivity with the SSSI, which is located outside of the Order limits.</p> <ul style="list-style-type: none"> <li>- Onsite substation – the location of the Onsite Substation was chosen due to its proximity to the existing National Grid Ryhall Substation, minimising the disruption of the export cable route. The location is also separated from Essendine by the East Coast Mainline, and other clusters of properties and public rights of way.</li> <li>- Retention of existing green infrastructure features – an early design principle was to retain all existing woodland blocks, hedgerows and ditches within the Order limits so to reduce potential impacts on protected species and integrate the layout into the fabric of the existing landscape pattern and character.</li> <li>- Following removal of the areas described above, the remaining area for that could potentially accommodate PV Arrays was approximately 570ha.</li> <li>- The removed areas were retained in the Order limits as</li> </ul>



Stage	Proposed Order limits / Layout	Consultation and surveys which influenced the proposed layout at this stage	Design Evolution
			<p>Mitigation and Enhancement Areas to potentially provide ecological mitigation and green infrastructure for example, areas for existing habitats, new planting, access and routes for Low Voltage Distribution Cables.</p>
<p>Scoping Boundary  (Figure 3.1)</p>	<p>The Order limits comprised 880ha. The layout remained the same as at Stage 1, with</p>	<p>Following Stage 1 non-statutory consultation, the Order limits was extended to include the highway network required to facilitate access.</p>	<p>The Scoping Boundary was defined with data from desk based and preliminary environmental surveys and was adopted with a view to including in the Scoping Report any land that</p>

Stage	Proposed Order limits / Layout	Consultation and surveys which influenced the proposed layout at this stage	Design Evolution
	the addition of highways included.		could ultimately be within the Order limits. The intention was that the area would be further refined following surveys, environmental assessment, and consultation.
PEIR Layout Stage 2 Statutory Consultation  (Figure 4.2)	The PEI Boundary comprised approximately 880ha in size with a potential solar PV Site Area of 463ha.  This is a reduction in size from the Scoping Boundary.	Landowner discussions  Non-statutory consultation feedback  Agricultural Land Classification Surveys  Geophysical Surveys  Environmental Surveys including landscape and visual, ecology, heritage, noise, transport, and other topics forming the PEI Report.	<ul style="list-style-type: none"> <li>- Grade 2 Agricultural Land – following the completion of the agricultural land classification survey, fields that were identified as consisting entirely of Grade 2 land were removed from solar development.</li> <li>- Residential Amenity – Following feedback from the Stage 1 consultation and further site visits, areas of the Solar PV Site were removed due a combination of potential residential amenity impacts and landscape and visual impacts. The extent of removal was reviewed at each individual location, with a suitable set back reflecting existing or historic landscape boundaries or features.</li> <li>- West Glen River – Areas for potential solar development have been removed along the West Glen River corridor in order to remove the majority of PV Arrays from the flood plain. This has also provided the opportunity to reduce any potential impacts on protected species using the river corridor and provide ecological habitat enhancement.</li> <li>- Access Strategy – The primary point of access to the Solar PV Site will be from Uffington Lane, opposite the existing access to the National Grid Ryhall Substation, with</li> </ul>

Stage	Proposed Order limits / Layout	Consultation and surveys which influenced the proposed layout at this stage	Design Evolution
			<p>vehicles approaching from the A6121 Stamford Road to the north. This point of access would provide access to the Onsite Substation and Ancillary Buildings and the primary construction compound. Up to eight secondary points of access to the Solar Arrays have been identified in order to access the Solar PV Site, which are shown on Figure 5.10. The primary and secondary points of access will be taken from existing agricultural tracks and field entrances, with the exception of the new point of access along the B1176, Carlby Road and Main Street (leading to Carlby).</p> <ul style="list-style-type: none"> <li>- After the removal of the areas described above the proposed area for PV Arrays is approximately 463ha (see Figure 4.2). The removed areas were retained in the Order limits as Mitigation and Enhancement Areas to potentially provide ecological mitigation, green infrastructure opportunities, access and routes for Low Voltage Distribution Cables.</li> </ul>
<p>DCO Application (Stage 3)  (Figure 4.3)</p>	<p>Total Order limits: 852.19ha  Total Solar PV Site Area: 425.88ha.</p>	<p>Comments from stakeholders  Further surveys including Agricultural land Classification, arboricultural surveys, additional landscape and visual impact assessment</p>	<p>Following the Statutory Consultation, the Stage 2 masterplan has been reviewed in light of the comments received from stakeholders and further analysis of baseline information. The following changes have been made to the Proposed Development:</p> <ul style="list-style-type: none"> <li>- PV Arrays have been removed from the eastern extents of Field 3. The</li> </ul>

Stage	Proposed Order limits / Layout	Consultation and surveys which influenced the proposed layout at this stage	Design Evolution
			<p>removal of this area of PV Arrays is in response to further site visits as part of the visual and residential amenity assessments</p> <ul style="list-style-type: none"> <li>- PV Arrays have been removed from the western extents of Fields 27 and 29. The boundary of the PV Arrays is defined by the underground utility that runs broadly in a north/south direction through this field. A new hedgerow is proposed along the western extents of the PV Arrays, which is located further west and on higher topography, increasing the effectiveness of the visual screening. The removal of panels in this location has sought to reduce the visual and amenity impact from Essendine and those travelling along the A6121.</li> <li>- PV Arrays have been removed from the eastern extent of Field 18 to increase the set back from the permissive path and reduce the impact of users of the permissive path.</li> <li>- PV Arrays have been removed from the northern extents of Field 12. The removal of panels within this location was to reduce the impact on users of the PRow network by increasing the area of Green Infrastructure.</li> </ul>

Stage	Proposed Order limits / Layout	Consultation and surveys which influenced the proposed layout at this stage	Design Evolution
			<ul style="list-style-type: none"> <li>- PV Arrays have been removed from Field 23 as there is an overhead utility line located within this field. The removal of PV Arrays within this Field also reduces the residential amenity impact on the two residential properties located to the south and reduce the direct frontage of PV Arrays onto Uffington Lane.</li> <li>- The network of permissive paths within the Order limits has been extended as follows; <ul style="list-style-type: none"> <li>- a new circular route to the east of Essendine that doesn't require users to travel along Carlby Road;</li> <li>- an extension of the permissive path along the western bank of the West Glen River within Field 7 to the north of Essendine;</li> <li>- New section of permissive path within Field 9, to provide an offroad connection to the Drift.</li> <li>- Two new east-west Green Infrastructure corridors have been incorporated within Fields 31 and 35, to provide greater connectivity across the Order Limits and remove any potential cul-de-sacs which may constrain the movement of deer.</li> <li>- Additional tree belts and hedgerows have been incorporated into the Green Infrastructure Strategy including:</li> </ul> </li> </ul>

Stage	Proposed Order limits / Layout	Consultation and surveys which influenced the proposed layout at this stage	Design Evolution
			<ul style="list-style-type: none"> <li>- A tree belt along the northern boundary of Field 18 to reduce the visual impacts of the PV Arrays and Onsite Substation from Essendine;</li> <li>- A tree belt along the south-eastern boundary of Field 50 to improve connectivity between the tree belt along the southern boundary of Field 50 and the existing block of trees; and</li> <li>- A new hedgerow along the western extents of Field 45 to reduce the impact on the users of local PROWs.</li> <li>- Field 38 has been removed from the Order Limits as it is not suitable for skylark mitigation.</li> <li>- The majority of The Drift has been removed from the Order Limits, avoiding direct impacts on the Local Wildlife Site, as this is no longer being considered for site access or cable routing.</li> <li>- Areas of Ryhall Pasture and Little Warren Verges SSSI have been removed from the Order Limits in order to avoid direct impacts as cable routing or site access works and no longer being considered in this location. Areas of the SSSI that remain within the Order Limits are for vegetation only, and will be managed in</li> </ul>

Stage	Proposed Order limits / Layout	Consultation and surveys which influenced the proposed layout at this stage	Design Evolution
			<p>accordance with the SSSI management regime.</p> <ul style="list-style-type: none"> <li>- An alternative vehicular crossing between Fields 25 and 49 has been included to provide optionality with regards to internal construction and operational vehicular routing. The vehicular crossing will reduce the volume of construction and operational traffic along the length of Uffington Lane between the Primary Construction Compound and the site access points into Fields 48 and 49.</li> <li>- Sections of the A6121 and Ryhall Road have been removed from the Order Limits, avoiding direct impacts on the Tolethorpe Verges SSSI as it has been agreed with the Local Highway Authority that localised road improvements are not required to facilitate the movement of construction vehicles, with the exception of the A6121/B1176 and the Ryhall Road/Old Great North Road Junction.</li> <li>- Where passing places are proposed, these are temporary for the construction phase only, and will be reinstated following completion of construction.</li> <li>- A number of local roads have been removed from the Order Limits as they</li> </ul>

Stage	Proposed Order limits / Layout	Consultation and surveys which influenced the proposed layout at this stage	Design Evolution
			<p>are no longer required for access or cable routing.</p> <ul style="list-style-type: none"> <li>- The height has been reduced of a number of elements of the Onsite Substation, reducing the visual impact on receptors located at Essendine.</li> <li>- The Primary Construction Compound has been co-located with the Onsite Substation.</li> <li>- Temporary construction compounds have been located within the Solar PV Site at or close to access points within the Order limits, to minimise the extent of ground disturbance outside of the Solar PV Site.</li> </ul>

#### 4.4. References

Ref 4-1 National Infrastructure Strategy, 2020



