

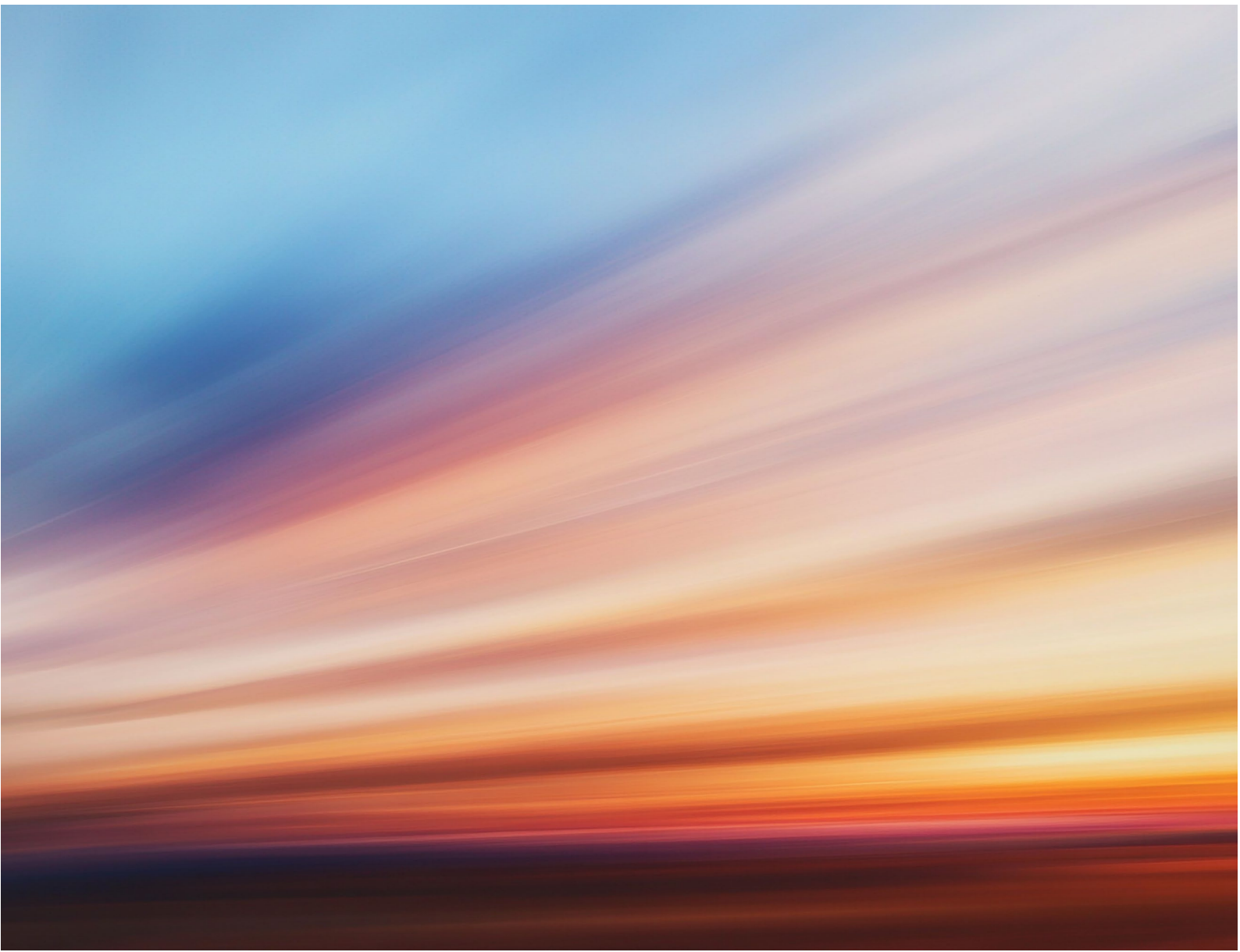
Mysten Leah Solar Farm

Preliminary Environmental Information Report (PEIR)

Volume 1

Chapters 1 to 5

April 2026



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Acronyms

Acronyms	Definition
ALC	Agricultural Land Classification
BMV	Best and Most Versatile
CEMP	Construction Environmental Management Plan
CIEEM	Chartered Institute of Ecology and Environmental Management
CTMP	Construction Traffic Management Plan
DCO	Development Consent Order
Defra	Department for Environment, Food and Rural Affairs
DEMP	Decommissioning Environmental Management Plan
EIA	Environmental Impact Assessment
ERYC	East Riding of Yorkshire Council
ES	Environmental Statement
FRA	Flood Risk Assessment
GHG	Greenhouse gases
GW	gigawatt
HDD	Horizontal Direction Drilling
HGV	Heavy goods vehicle
HRA	Habitats Regulations Assessment
IAQM	Institute of Air Quality Management
IEMA	Institute of Environmental Management and Assessment
ISEP	Institute of Sustainability and Environmental Professionals
kV	kilovolt
LCA	Landscape Character Area
LCT	Landscape Character Type
LEMP	Landscape and Ecological Management Plan
LNR	Local Nature Reserve
LWS	Local Wildlife Site
MW	megawatt
NCA	National Character Area
NCN	National Cycle Network
NNR	National Nature Reserve
NPPF	National Planning Policy Framework
NPS	National Policy Statement
NSIP	Nationally Significant Infrastructure Project
OEMP	Operational Environmental Management Plan
PEIR	Preliminary Environmental Information Report
PRoW	Public right of way
PV	photovoltaic
SAC	Special Area of Conservation
SMP	Soil Management Plan
SPA	Special Protection Areas
SSSI	Site of Special Scientific Interest
SWMP	Site Waste Management Plan
tCO₂e	tonnes of carbon dioxide equivalent
UK	United Kingdom
WFD	Water Framework Directive

Acronyms	Definition
Zol	Zone of Influence
ZTV	Zone of Theoretical Visibility

1. Introducing Mylen Leah Solar Farm

1.1 What is Mylen Leah Solar Farm?

- 1.1.1 Mylen Leah Solar Farm is a proposed solar photovoltaic (PV) electricity generating facility with an export capacity of approximately 500 megawatts (MW) and associated infrastructure, located in East Riding of Yorkshire.
- 1.1.2 Mylen Leah Solar Farm comprises several areas of land ('Land Parcels A to E'), with the areas being connected by a series of underground cables. Mylen Leah Solar Farm would establish a grid connection via underground cabling to the National Grid Thornton Substation, which would transfer the electricity to the national electricity network.
- 1.1.3 Mylen Leah Solar Farm comprises the following main elements that are shown on **Figure 3.1: Indicative Construction Layout and Access Plan** and **Figure 3.2: Indicative Operational Layout Plan in Volume 2**:
- Ground mounted solar PV generating station, incorporating solar photovoltaic modules, mounting structures, inverters, transformers and switchgear and cabling;
 - Mounting structures to carry the solar PV modules;
 - Associated equipment with the solar PV modules to include inverters, transformers and switchgear and cabling;
 - On-Site Substations;
 - Inverters connecting to medium voltage (MV) stations;
 - MV stations connecting to each other and then to Substation(s);
 - Cabling to connect the MV stations to the On-Site Substations, and then onwards to the National Grid Thornton Substation;
 - Ancillary infrastructure works including cables, Closed-Circuit Television and security equipment, fencing, landscaping, tracks, vehicle parking, earthworks, surface water management, temporary footpath diversions and any other works identified as necessary to enable Mylen Leah Solar Farm;
 - Storage containers;
 - Welfare facilities;
 - Works to lay electrical cables and associated infrastructure, including cable trenches;
 - Temporary construction compounds, with associated parking for construction team, welfare facilities, temporary construction laydown areas and access tracks;
 - Areas for habitat management and biodiversity enhancement; and
 - Highways works to facilitate access for construction vehicles.
- 1.1.4 As the export capacity of Mylen Leah Solar Farm would exceed 100 MW, Mylen Leah Solar Farm is classified as a Nationally Significant Infrastructure

Project (NSIP) and will require a Development Consent Order (DCO) under the Planning Act 2008¹.

- 1.1.5 Mylen Leah Solar Farm also falls within the definition of ‘Environmental Impact Assessment (EIA) development’ as defined within the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (hereafter, ‘EIA Regulations’)² meaning that before consent is granted for Mylen Leah Solar Farm, an EIA must be undertaken.
- 1.1.6 The Site (Land Parcels A to E and the underground grid connection corridor) comprises approximately 1,398 hectares (ha) of land, presented in **Figure 2.2: Draft Order Limits in Volume 2**. The draft Order Limits are the anticipated maximum area of land that would be required to facilitate the construction, operation and decommissioning of the Mylen Leah Solar Farm. The draft Order Limits may be subject to change in response to the statutory consultation process and as the design of the Mylen Leah Solar Farm progresses ahead of the Environmental Statement (ES) and submission of the DCO application.
- 1.1.7 A detailed description of what Mylen Leah Solar Farm comprises is presented in **Chapter 3: What will Mylen Leah Solar Farm Comprise?** in **Volume 1**.

1.2 Why is Mylen Leah Solar Farm needed?

- 1.2.1 Low carbon solar generation is an essential step to meeting the UK Government’s objectives to enable decarbonisation.
- 1.2.2 The Overarching National Policy Statement (NPS) for Energy (EN-1)³, (December 2025, published January 2026), states that “*a secure, reliable, affordable, net zero consistent system in 2050 is likely to be composed predominantly of wind and solar*”.
- 1.2.3 Mylen Leah Solar Farm would contribute towards the achievement of UK Government net zero targets, for example to achieve 70GW of solar capacity by 2035, and would help to secure a UK energy supply that is low carbon and low cost.

1.3 Who is proposing Mylen Leah Solar Farm?

- 1.3.1 The Applicant is Mylen Leah Solar Limited, a company wholly owned by Statkraft UK Limited.
- 1.3.2 Since 2006 in the UK, Statkraft has experience across wind, solar, hydro, storage, grid stability, EV charging, green hydrogen sectors and a markets business. Statkraft is a global company in energy market operations, with more than 7,000 employees in 20 countries.
- 1.3.3 The company have invested over £1.8 billion in the UK’s renewable energy infrastructure and facilitated over 4.5 GW of new-build renewable energy generation through Power Purchase Agreements. Across Statkraft’s UK businesses, the company employs more than 550 staff in England, Scotland and Wales.
- 1.3.4 Near to Mylen Leah Solar Farm, Statkraft are constructing Soay Solar Farm and Thornton Greener Grid Park.

1.4 What is the legislation and planning policy context for Mylen Leah Solar Farm?

Planning Act 2008

- 1.4.1 Mylen Leah Solar Farm is defined as a NSIP under Sections 14(1)(a) and 15(2) of the Planning Act 2008, as it comprises:
- The construction or extension of an electricity generating station (Part 3, Section 14(1)(a)); and
 - Its capacity is more than 100 MW (Part 3, Section 15(2)(c)).
- 1.4.2 Therefore, an application for DCO pursuant to the Planning Act 2008 is required and will be submitted to the Planning Inspectorate as the examining authority on behalf of the Secretary of State. If granted, the DCO will provide development consent alongside any additional consents and authorisation, where specified, removing the need for some consents (such as planning permission).
- 1.4.3 Section 104 of the Planning Act 2008 applies where a relevant NPS has effect. In accordance with Section 104(2) of the Planning Act 2008, the Secretary of State is required to have regard to any relevant NPS amongst other matters, when deciding whether or not to grant a DCO.
- 1.4.4 The primary basis for deciding whether or not to grant the DCO for Mylen Leah Solar Farm are the NPS for Renewable Energy Infrastructure (EN-3)⁴ (December 2025, published January 2026) and the NPS for Electricity Networks Infrastructure (EN-5)⁵ (December 2025, published January 2026), alongside NPS EN-1 (December 2025, published January 2026). NPS EN-3 provides the specific consideration for renewable energy infrastructure (Mylen Leah Solar Farm's energy generating technology). These are discussed further below.

National Policy Statements

- 1.4.5 NPS EN-1 sets out the national policy for delivering major energy infrastructure in England and Wales. For renewable energy projects, NPS EN-1 has effect in combination with the relevant technology-specific NPS, which for Mylen Leah Solar Farm are NPS EN-3 and NPS EN-5, and together they provide the primary basis for decisions made by the examining authority.
- 1.4.6 Strategic UK Government policy has a focus on delivering the change in energy generation and usage that will ensure that the UK meets its legally binding target of net zero by 2050. NPS EN-1 emphasises the importance of solar in the UK's future energy mix and the benefits of the rapidity of its deployment in helping the UK meet net zero and increase energy security of supply.
- 1.4.7 In a planning-specific context, NPS EN-3 states the need for the timely delivery of new renewable energy sources. Paragraph 2.10.2 of NPS EN-3 stresses the importance of solar in delivering the UK Government's goals to boost growth across the country, create thousands of high-skill, future-proofed jobs and tackle the climate crisis. Paragraph 2.10.3 references the Clean Power 2030 Action Plan, which "*sets out a deployment range for solar PV of between 45 – 47GW by 2030*".

- 1.4.8 Part 3 of NPS EN-1 identifies the need for nationally significant energy infrastructure. With regards to decision making, paragraphs 3.2.1 and 3.2.2 of NPS EN-1 state how the *“government’s objectives for the energy system are to decarbonise power generation to meet the Clean Power 2030 Mission, ensuring our supply of energy always remains secure, reliable, affordable, and consistent with net zero emissions in 2050 for a wide range of future scenarios, including delivery of our carbon budgets and Nationally Determined Contributions... we need a range of different types of energy infrastructure to deliver these objectives. .”*
- 1.4.9 NPS EN-1 also includes solar as a critical national priority alongside all other low-carbon energy infrastructure. Paragraph 4.1.7 emphasises that *“for projects which qualify as CNP [critical national priority] infrastructure, it is likely that the need case will outweigh the residual effects not capable of being addressed by application of the mitigation hierarchy, in all but the most exceptional cases”*.

National Planning Policy Framework

- 1.4.10 Under Section 104 of the Planning Act 2008, the Secretary of State must have regard to other matters that the Secretary of State considers are important and relevant, which will include national and local planning policy, for example the National Planning Policy Framework (NPPF)⁶.
- 1.4.11 Whilst NPS EN-1, NPS EN-3 and NPS EN-5 are the primary decision making policy documents for Mylen Leah Solar Farm, the NPPF can provide additional guidance for the assessment of NPS policy and provides relevant context for individual factor assessments to the extent that it is relevant to Mylen Leah Solar Farm.
- 1.4.12 The NPPF was published by the Ministry of Housing, Communities & Local Government in 2024. The NPPF sets out the UK Government’s planning policies and how these are expected to be applied in England.
- 1.4.13 The NPPF does not contain specific policies for NSIPs; however, Chapter 2 of the NPPF, ‘Achieving sustainable development’ sets out that the planning system should contribute to the achievement of sustainable development, considering economic, social and environmental roles.

Local planning policy

- 1.4.14 Local development plans do not carry the same weight under the Planning Act 2008 in respect of decision-making for NSIPs as they do with determining planning applications made pursuant to the Town and Country Planning Act 1990 (as amended)⁷. The aforementioned NPSs are the primary policy consideration for NSIP applications. Nevertheless, a local development plan is still a matter that can be an important material consideration when determining an application for an NSIP. However, in the event of any conflict, the relevant NPS prevails.
- 1.4.15 Mylen Leah Solar Farm lies within the area for which East Riding of Yorkshire Council (ERYC) is the responsible relevant local planning authority (the ‘host’ planning authority). Therefore, the relevant local planning policies of the adopted local development plan for ERYC will be considered as part of the assessment. The local planning document that is relevant to Mylen Leah

Solar Farm is the East Riding Local Plan Update 2020-2039 (adopted April 2025)⁸.

EIA Regulations

- 1.4.16 Mylen Leah Solar Farm is considered to be 'EIA development', as defined by the EIA Regulations 2017⁹ meaning that before consent is granted for Mylen Leah Solar Farm, an EIA must be undertaken.
- 1.4.17 The EIA Regulations set out the types of development which must be subject to an EIA (referred to as Schedule 1 development) and other developments, which must only be subject to an EIA if the development is considered "*likely to have significant effects on the environment by virtue of factors such as its nature, size or location*" (referred to as Schedule 2 development).
- 1.4.18 Mylen Leah Solar Farm does not fall under any of the types of development set out in Schedule 1 of the EIA Regulations. However, Mylen Leah Solar Farm is of a type and scale described in Schedule 2 paragraph 3(a) of the EIA Regulations as follows:
- "Energy industry
industrial installations for the production of electricity, steam and hot water (projects not included in Schedule 1 to these Regulations)"*
- 1.4.19 It is considered that due to Mylen Leah Solar Farm's nature, size, or location, it has the potential to have significant effects on the environment. Therefore, the Applicant notified the Secretary of State under Regulation 8(1)(b) of the EIA Regulations that it proposes to provide an ES in respect of Mylen Leah Solar Farm.
- 1.4.20 Regulation 12 of the EIA Regulations requires the Applicant to set out in its Statement of Community Consultation how it intends to publicise and consult on preliminary environmental information relating to Mylen Leah Solar Farm.
- 1.4.21 Regulation 12(2) of the EIA Regulations states that the purpose of preliminary environmental information is to provide information reasonably required to enable consultees to develop an informed view of the likely significant environmental effects of the development being proposed.
- 1.4.22 Following the completion of the surveys, assessments, consultation and engagement as detailed in this Preliminary Environmental Information Report (PEIR), a DCO application will be made to the Secretary of State for determination in accordance with the Planning Act 2008. The DCO application will be accompanied by an ES, in accordance with Regulation 5(2)a) of the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009¹⁰. The ES will set out the methods and findings of a comprehensive EIA undertaken in line with the EIA Regulations.

Consideration of planning policy in EIA

- 1.4.23 Within the ES, each environmental factor chapter will reference the national and local planning policies relevant to that topic of assessment. This PEIR does not consider the planning balance of Mylen Leah Solar Farm in line with the planning policy. This will be undertaken and set out in a Planning Statement, which will be submitted as a stand-alone document in support of the DCO application.

1.5 What is the purpose of a Preliminary Environmental Information Report?

- 1.5.1 In accordance with the Planning Act 2008, guidance on the pre-application process¹¹, the EIA Regulations (Regulation 12) and the Planning Inspectorate's Advice Note Seven, this PEIR has been prepared to enable interested parties (including members of the public, local planning authorities and statutory bodies) to develop an informed view of the likely significant environmental effects of Mylen Leah Solar Farm and to help inform their consultation responses on Mylen Leah Solar Farm during this pre-application stage.
- 1.5.2 This PEIR outlines the environmental assessment work undertaken to date, likely significant environmental effects identified to date, proposed 'embedded' and 'additional' mitigation and likely residual significant environmental effects (taking on board any additional mitigation proposed) based on the environmental baseline information currently available and the current design of Mylen Leah Solar Farm. This PEIR also details the further work that is required to inform the ES, which will be submitted as part of the DCO application.
- 1.5.3 The preliminary design of Mylen Leah Solar Farm, as presented in this PEIR, has been informed by the ongoing environmental assessment process and consultation and engagement responses. It does not represent the final design. Further survey and design work is currently being undertaken to further inform the design of Mylen Leah Solar Farm. The feedback received from this statutory consultation process will also inform further development of the design. The refined design of Mylen Leah Solar Farm will be reported and assessed within the ES.

1.6 What does this Preliminary Environmental Information Report include?

Volume 1: PEIR (main volume)

- 1.6.1 Provides details on the location and description of Mylen Leah Solar Farm, together with a preliminary account of the likely significant environmental effects that have been identified to date as a result of the construction, operation and decommissioning of Mylen Leah Solar Farm.

Volume 2: Supporting Figures

- 1.6.2 Comprises figures to support the information detailed in **Volume 1**. The supporting figures are provided in a separate volume to enable the figures to be shown at a suitable scale to aid access and interpretation.

Volume 3: Supporting Reports

- 1.6.3 Comprises a set of supporting appendices, which include technical survey reports and survey data, to support the environmental information detailed in **Volume 1**.

Volume 4: Landscape Visualisations

- 1.6.4 Comprises annotated photo sheets for the landscape and visual viewpoints to support the information detailed in **Chapter 11: Landscape and Visual** in **Volume 1**.

2. Where is Mylen Leah Solar Farm Located?

2.1 Where are the nearest settlements?

2.1.1 The location of Mylen Leah Solar Farm (the 'Site') is shown on **Figure 2.1: Location Plan** in **Volume 2**. The Site is located within the administrative boundary of East Riding of Yorkshire Council (ERYC). The most northern part of the Site is located southwest of Melbourne, with the remainder of Mylen Leah Solar Farm located on land between the settlements of Laytham, Seaton Ross, Foggathorpe, East Cottingwith and Ellerton.

2.2 What is the current use of the land?

2.2.1 The land within the draft Order Limits predominantly consists of a disused airfield (Melbourne Raceway - presently used for recreational and commercial use (motor racing and commercial motor vehicle use)), agricultural fields (mostly arable, some grassland and some grazing) interspersed with hedgerows, ditches, small woodland blocks and farm access tracks. The hedgerows within the draft Order Limits range from dense tall vegetation (shrub and tree species) to thin lines of vegetation with sporadic shrubs and trees present. The fields are bordered by a mix of hedgerows, wet ditches and some of the many major named drains and dikes in the area.

2.2.2 There is some variation in the features immediately surrounding and within each of the Land Parcels and underground grid connection corridor, as presented below and in **Figure 2.3: Land Parcel and Interconnecting Cables with Field Numbering** in **Volume 2**:

- **Land Parcel A: Land west of the B1228.** This is the northernmost section of the Site. It is located between East Cottingwith to the west and Melbourne to the east, and is surrounded by agricultural fields and small areas of surface water, which will be taken into consideration as part of the design.
- **Land Parcel B: Land east of Ellerton.** This area is the westernmost section of the Site, bounded by the B1228 to the north west. Bottoms Drain and Charity Drain run through the central portion of the area, and there are three separate areas of deciduous woodland located within the Land Parcel boundary. Various ponds and ditches are located to the east of the Site.
- **Land Parcel C: Land southwest of Melbourne.** This area lies between Land Parcels B and D and is approximately 600m southwest of Melbourne. The area is bounded by agricultural fields, with the Lord's Drain running directly through the southern portion of the area.
- **Land Parcel D: Land west of Seaton Ross.** This is the easternmost section of the Site. It is located approximately 500m from Seaton Ross and is bounded by agricultural fields with two areas of surface water to the north. This Land Parcel includes Melbourne Raceway, formerly known as RAF Melbourne.

- **Land Parcel E: Land north of Foggathorpe.** This is the southernmost section of the Site and is located approximately 550m north and east of Foggathorpe at its closest point. The area is bound by agricultural fields and the A163 to the south, as well as Breckstreet Lane to the north. There is a Scheduled Monument located within the Land Parcel as well as two separate areas of woodland.

2.2.3 Further details on designated natural and historic assets which are present within the Site are provided in the environmental factor chapters within this PEIR (**Chapters 6 to 17 in Volume 1**).

3. What will Mylen Leah Solar Farm Comprise?

3.1 What are the main elements of Mylen Leah Solar Farm?

3.1.1 The main elements of Mylen Leah Solar Farm comprise:

- Ground mounted solar photovoltaic (PV) generating station, incorporating solar PV modules, mounting structures, inverters, transformers, switchgear and cabling;
- On-Site Substation compound(s), including storage room, permanent welfare facilities, site office and control room, monitoring, control, voltage transformation;
- Safety equipment and parking for operation and maintenance team;
- Storage containers;
- Welfare facilities;
- Works to lay electrical cables and associated infrastructure, including cable trenches and protection, jointing pits;
- Temporary construction compounds, with associated parking for construction team, welfare facilities, temporary construction laydown areas and access tracks;
- Works to facilitate access including, where necessary, culverts for any crossings of ditches and streams;
- Areas for habitat management and biodiversity enhancement;
- Ancillary infrastructure works including cables, Closed Circuit Television (CCTV) and security equipment, fencing, landscaping, tracks, vehicle parking, earthworks, surface water management, temporary footpath diversions and any other works identified as necessary to enable Mylen Leah Solar Farm;
- Inverters connecting to medium voltage (MV) stations;
- MV stations connecting to each other and then to On-Site Substations; and,
- Highways works to facilitate access for construction vehicles.

3.1.2 A Battery Energy Storage System is not proposed as part of Mylen Leah Solar Farm.

3.2 What are the principles guiding the development of the design?

Policy context

3.2.1 Design should be considered as a process and an outcome, and the importance of good design for Nationally Significant Infrastructure Projects (NSIPs) is championed in the Overarching National Policy Statement for energy (NPS EN-1) (December 2025, published January 2026)¹² and National Policy Statement for renewable energy infrastructure (NPS EN-3) (December 2025, published January 2026)¹³ which set out criteria for achieving good design.

- 3.2.2 NPS EN-1 also requires that projects achieve good design. Paragraph 4.7.2 states:

*“Applying good design to energy projects should produce sustainable infrastructure **sensitive to place**, including impacts on heritage, **efficient in the use of natural resources**, including land-use, and energy used in their construction and operation, **matched by an appearance that demonstrates good aesthetic as far as possible**. It is acknowledged, however that the nature of energy infrastructure development will often limit the extent to which it can contribute to the enhancement of the quality of the area.” (emphasis added)*

- 3.2.3 This statement links to footnote 102, which states:

“Design principles should take into account any national guidance on infrastructure design, this could include for example the Design Principles for National Infrastructure published by the National Infrastructure Commission, the National Design Guide and National Model Design Code, as well as any local design policies and standards.”

- 3.2.4 Paragraph 2.5.2 of NPS EN-3 expands on good design for renewable energy projects:

*“Proposals for renewable energy infrastructure should demonstrate good design, particularly in respect of **landscape and visual amenity, opportunities for co-existence/co-location** with other marine and terrestrial uses, and in the design of the project to **mitigate impacts such as noise and effects on ecology and heritage**.” (emphasis added)*

Project objectives

- 3.2.5 Supporting consideration of good design for infrastructure projects, and as referred to in NPS EN-1, the National Infrastructure Commission’s ‘Design Principles for National Infrastructure’¹⁴ identified the purposes of the design process is to bring together engineering, environmental and creative expertise to shape and deliver a development project. The document notes that:

“Design is as much about process as it is product. Imaginative thinking about design should be embedded at every step of planning and delivery. The principles ensure a good process leads to a good design outcome.”

- 3.2.6 The document sets out four thematic principles to share the design of NSIPs. These are:

- Climate – Mitigate greenhouse gas emissions and adapt to climate change;
- People – Reflect what society wants and share benefits widely;
- Places – Provide a sense of identity and improve our environment; and
- Value – achieve multiple benefits and solve problems well.

- 3.2.7 The National Design Guide, which is a material consideration for this scheme, identifies ten components of Good Design:

- Context.

- Identity.
- Built form.
- Movement.
- Nature.
- Public spaces.
- Uses.
- Homes and buildings.
- Resources.
- Lifespan.

3.2.8 These thematic principles have informed the development of a series of overarching Project Objectives, with supporting overarching Design Principles developed to help achieve the objectives. The Project Objectives are centred on the following four themes, as set out in **Table 3.1** below.

Table 3.1: Project objectives

Objective	Supporting text
Climate action	To maximise the potential to generate clean energy and positively contribute to Net Zero.
Environment	Contribute to the restoration of wildlife and regeneration of landscape on a large scale.
Place	Recognise the strong sense of local identity and design with respect for our neighbours.
Shared value	Bring wider benefits beyond the draft Order Limits.

Design principles

3.2.9 The Planning Inspectorate’s Nationally Significant Infrastructure Projects: Advice on Good Design¹⁵, published in October 2024, further explains why good design is important for achieving sustainable, well-designed, and inclusive infrastructure projects. This guidance sets out the process for achieving good design and the factors that Applicants should consider throughout the design process, including following an iterative and structured approach. It sets out what is involved in achieving good design outcomes, and the importance of the Environmental Impact Assessment (EIA) process in the decision-making process.

3.2.10 Using the Project Objectives and the Planning Inspectorate’s guidance as guidelines, the overarching Design Principles set out in **Table 3.2** below are designed to deliver the objectives in a manner suited to the Site.

Table 3.2: Design principles

Objective	Design principle
Climate action	<ul style="list-style-type: none"> • Maximise the potential to efficiently generate clean, secure and affordable energy. • Take steps to decarbonise the development throughout its project lifecycle.

Objective	Design principle
	<ul style="list-style-type: none"> • Design for resilience against the effects of climate change.
Environment	<ul style="list-style-type: none"> • Retain and protect existing trees and woodlands from built development. • Retain and protect existing hedgerows and ditches where feasible. • Create new habitats to support farmland birds and other animals to help regenerate ecosystems that integrate with the landscape. • Respect the setting of historic and cultural sites. • Protect and enhance the local environment. • Retain and enhance green infrastructure corridors to improve connectivity for wildlife through the site and into the surrounding landscape. • Reinforce the existing landscape structure and sequential experience for users.
Place	<ul style="list-style-type: none"> • Protect the amenity of homes and villages, with buffers and setbacks from built development. • Retain and enhance existing Public Rights of Way and create new permissive footpaths.
Shared value	<ul style="list-style-type: none"> • Create jobs and contribute to the local economy. • Provide resource for research and development. • Provide a positive legacy for local communities.

3.3 How will we maintain flexibility in the design for Mylen Leah Solar Farm?

3.3.1 The design of Mylen Leah Solar Farm is an iterative process informed by ongoing environmental assessment and consultation and engagement with statutory and non-statutory consultees.

3.3.2 To maintain flexibility in the design but to appropriately inform the environmental assessments undertaken, it is the Applicant’s intention to use development parameter ranges. The Planning Inspectorate’s Advice Note Nine ‘Rochdale Envelope’¹⁶ provides specific guidance to applicants on the degree of flexibility that could be considered appropriate under the Planning Act 2008¹⁷ regime.

3.3.3 The Rochdale Envelope is an established approach to address an application comprising EIA development where details of a project have not been fully resolved by the time the application is submitted. The term is used to describe those elements of a scheme that have not yet been finalised, but can be accommodated within certain limits and parameters, allowing the

likely significant environmental effects of a project to be presented in the Environmental Statement (ES) as a ‘worst case’. It also provides the opportunity to assess aspects of a development where the detailed design is to be developed by the Applicant and approved by the determining authority under a Development Consent Order (DCO) requirement, after the DCO is made.

- 3.3.4 Such flexibility may be useful where a slight change in the design or capacity of Mylen Leah Solar Farm is anticipated, but not yet certain. It may be possible that a particular element of the design will be subject to ongoing technological advancements. It will be important that a lack of flexibility in the DCO application does not unduly hinder the Applicant’s ability to consider and adopt such future technological advancements. This is of particular importance due to the rapid pace of change in solar PV technologies.
- 3.3.5 At the point when the application is made, the description of Mylen Leah Solar Farm will be sufficiently detailed to include the:
 - Design;
 - Size;
 - Technology used; and
 - Locations of different elements of Mylen Leah Solar Farm.
- 3.3.6 Where details are not yet known, assumptions applied to the assessment in relation to these aspects will be set out. This will include the footprint and heights of the structures (relevant to existing ground levels), as well as land-use requirements for all elements and phases of Mylen Leah Solar Farm. The description will be supported (as necessary) by figures, cross-sections, and drawings which will be clearly and appropriately referenced.
- 3.3.7 Where flexibility is sought, the ES will clearly set out and justify the maximum design parameters that would apply for each option assessed and how these have been used to inform an adequate assessment in the ES.

3.4 What are the design parameters for Mylen Leah Solar Farm?

3.4.1 The development parameters were outlined in Table 2.1 of the EIA Scoping Report submitted to the Secretary of State on 08 January 2025.¹⁸ As part of the design evolution of Mylen Leah Solar Farm, refinement of these parameters has taken place. **Table 3.3** below sets out the parameters used in the Scoping Report and where these have been refined since.

Table 3.3: Preliminary design parameters

Mylen Leah Solar Farm component	Detail supplied at EIA scoping			Detail for PEIR
Solar panels	Solar PV modules with maximum dimensions of 3 x 2 x 0.5m			No change
Solar Module Mounting Structures				
Type of structure:	Fixed Tilt	Fixed Tilt	Sun Tracking	No change

Mysten Leah Solar Farm component	Detail supplied at EIA scoping			Detail for PEIR
Row alignment:	East-West	North-South	North-South	No change
Solar Module Orientation:	South	East-West	Tracking East-West	No change
Tilt Angle:	10° to 40°	10° to 20°	+/- 60°	Fixed tilt (south) 10° to 20°
Maximum/Minimum Height: (Assuming level ground topology)	4.5m / 0.5m	4.5m / 0.5m	5.5m / 0.5m	Fixed (both types): up to 3.5m Tracker: up to 3.5m
Inter row Separation:	2.5-12m	2.5-12m	3-12m	2m to 12m
Foundations:	Mounting structures will be fixed via piled metal profiles, driven to a depth of 1-4m (dependent upon ground conditions), except in areas where ground penetration needs to be avoided when a concrete ballast will be used.			No change
Inverters				
Inverter	String inverters would be sited on piled structures and located in the shade of the solar array. Typical dimensions: Height: 1.5m Length: 1m Width: 0.5m Central inverters would be typically containerised solutions typically Height: 3.5m Length: 13.0m Width: 3m			No change
MV Station (Transformer and switchgear)				
MV Transformer Stations	Height: 3.5m Length: 13m Width: 3m			No change
MV Collector Stations	Height: 3.5m Length: 13m Width: 3m			No change
On-Site Substations				
On-Site substations	Height (comms. tower and switchgear): 15m Height (electrical equipment and buildings): 8m			4 locations considered for the siting of up to 2 substations

Mylen Leah Solar Farm component	Detail supplied at EIA scoping	Detail for PEIR
	Approx. 1.7ha with a typical maximum height of 15m Palisade perimeter fence up to 3m high 2 locations considered	
Security and boundary treatments		
Site fencing (post and wire)	Height: Up to 3m with gap at the base to allow small animals to pass and badger gates/cut out at appropriate locations	Height: 3m Post depth: 0.6m
CCTV poles	Height: 5m	Height: 5m Foundations: 0.8m x 0.8m x 0.7m deep
Access gates	Height: Up to 3m, Width: 4-7m	Height: Up to 3m, Width 5 - 8m
Cables		
Buried cables (PV Site)	Trench Width: 0.5-3m, Depth: 0.5-1.5m	No change
Area of search for underground grid connection cable		
Area of search for underground grid connection cable	Average Working Width: 50m total Trench width up to 5m Depth: 1-5m Horizontal directional drilling (HDD) may need to be completed in areas where cable trenching is not suitable (e.g. below watercourses), and in the event of this the depth of the HDD may be greater than 5m. This will be fully assessed in the ES.	Average working width: 30m Depth: 1-5m, minimum 2m in flood zones
Ancillary infrastructure		
Internal roads	Width: 3-7m, made of crushed stone and installed on a membrane	No change
Weather Stations	Up to 5m high	No change
Maintenance warehouse	Length 25m, Width 15m, Height 10m	No change
Operation and Maintenance Storage containers	Height: 3.5m Length: 13m, Width: 3m	No change
Monitoring stations (portacabins)	Not included at Scoping	Length: 13m Width: 3.5m Height: 3m

- 3.4.2 These design parameters have been used to inform the preliminary assessment detailed within this PEIR. The refined design will be presented in the ES in support of the DCO application.
- 3.4.3 The operational layout of Mylen Leah Solar Farm, in line with the parameters in **Table 3.3** and the Design Principles presented in **Table 3.1**, is shown on **Figure 3.3: Heights Parameters Plan** in **Volume 2**.
- 3.4.4 The following sections provide a description of the different elements of Mylen Leah Solar Farm along with aspects of the design that have been assessed within this PEIR. Each environmental factor/topic has assessed the design considered to be the likely worst-case scenario for that discipline to determine the potential for significant effects and identify suitable mitigation measures. The ES will follow the same approach.

3.5 What are the main elements of Mylen Leah Solar Farm?

Ground mounted solar PV generating station

- 3.5.1 Solar panels convert sunlight into direct current (DC) electricity. Individual solar PV modules contain several interconnected PV cells encapsulated behind tempered glass. The encapsulation ensures a weatherproof seal and an aluminium frame enables fixation to the mounting structure.
- 3.5.2 As solar PV modules are rapidly developing due to innovation in technology and processing techniques for the PV cells, the dimensions of the solar PV modules available at the time of construction may vary. The ES will therefore consider a maximum height parameter which represents the reasonable worst-case scenario in terms of identifying likely significant environmental effects.
- 3.5.3 Solar PV modules are fixed to mounting structures and connected together electrically in groups known as 'strings'. The exact number and arrangement of modules depend on a range of factors including the size of the system, its location, and the direction in which the solar panels are installed. As technology and equipment are evolving, some flexibility in design would be required to accommodate technological advances. The solar PV modules would be installed either as fixed arrays or as tracking arrays (which adjust the orientation of the solar PV modules to track the sun throughout the day).

Mounting structures

- 3.5.4 The Solar PV modules would be mounted on a metal structure, supported by piled vertical posts, which is known as the 'mounting structure'. Ground conditions will determine the appropriate anchoring system and depth of posts. There is also the potential option for some mounting structures to be supported by concrete footings or shallow tripod footings for example and if required to reduce impacts on areas of archaeological sensitivity.
- 3.5.5 The mounting structure carrying the Solar PV modules will either be designed to face southwards or east-west on a fixed platform, or will sit within a 'tracker' structure, which adjusts the position of the Solar PV module to track the sun throughout the day.

- 3.5.6 The height for each Solar PV module can be influenced by several design factors including: flood risk, local topography, visual receptors, land use practices, and the Solar PV module type and configuration.
- 3.5.7 The preliminary solar PV and mounting structure parameters that have been assumed for the purposes of the preliminary assessment are set out in **Table 3.4** below.

Table 3.4: Preliminary Solar PV and mounting structure parameters

Mylen Leah Solar Farm component	Proposed parameter		
Solar PV panels			
Solar panels	Solar PV modules with maximum dimensions of 3 x 2 x 0.5m		
Mounting Structures			
Type of structure:	Fixed Tilt	Fixed Tilt	Sun Tracking
Row alignment:	East-West	North-South	North-South
Solar Module Orientation:	South	East-West	Tracking East-West
Tilt Angle:	10° to 40°	10° to 20°	+/- 60°
Maximum/ Minimum Height: (Assuming level ground topology)	3.5m / 0.5m	3.5m / 0.5m	3.5m / 0.5m
Inter row Separation:	2-12m	2-12m	3-12m
Foundations:	Mounting structures will be fixed via piled metal profiles, driven to a depth of 1-4m (dependent upon ground conditions), except in areas where ground penetration needs to be avoided when a concrete ballast will be used.		

Associated equipment - inverters, transformers and switchgear and cabling

3.5.8 A range of equipment is required to convert the solar power generated, manage the power and export energy to the National Grid. The DC electrical output generated by the solar PV modules would feed into an inverter and subsequently to a transformer. At this stage it is not known whether central or string inverters will be used. The function of each of these elements are as follows:

- Inverters convert the DC current generated by the solar PV modules into alternating current (AC) MV stations use transformers to increase the AC voltage generated by the inverters to a higher voltage to reduce losses of the electricity produced before it reaches the on-site high voltage (HV) substation. The MV stations would be installed across the Site and housed in shipping-style containers together with MV switchgear which control, protect and isolate electrical currents and equipment. These allow parts of the solar PV module system to be de-

energised safely, allowing routine maintenance or faults to be identified and work undertaken. **Table 3.5** below sets out the preliminary parameters for the Inverters and MV stations.

Table 3.5: Preliminary inverter and MV station parameters

Mysten Leah Solar Farm component	Proposed parameter
Inverters	
Inverters	String inverters would be sited on piled structures and located in the shade of the solar array. Typical dimensions: Height: 1.5m Length: 1m Width: 0.5m Central inverters would be typically containerised solutions with typical dimensions of: Height: 3.5m Length: 13.0m Width: 3m
MV Stations	
Dimensions of MV Transformer Stations and MV Collector Stations	Height: 3.5m Length: 13m Width: 3m

On-Site Substations

- 3.5.9 Up to two On-Site Substations will be required to connect Mylen Leah Solar Farm to the transmission network. The On-Site Substations will incorporate the transformer(s) as well as other electrical equipment such as switchgear, protection, telecommunication, metering and control equipment. Currently, four locations for the siting of the On-Site Substations are under consideration. These are shown on **Figure 3.2: Indicative Operational Layout Plan** in **Volume 2**.
- 3.5.10 The On-Site Substations convert the voltage from the MV stations to 400kV to allow connection to the electricity grid at National Grid Thornton Substation.
- 3.5.11 The On-Site Substations would cover an area of up to 1.7 hectares each. The equipment within would have a maximum height of 15m, where the 15m height relates to 400kV switchgear supported on tubular steel structures and a lattice steel communications tower.
- 3.5.12 **Table 3.6** below sets out the preliminary parameters for the On-Site Substations.

Table 3.6: Preliminary On-Site Substations parameters

Mysten Leah Solar Farm component	Proposed parameter
On-Site substations	Height (comms. tower and switchgear): 15m

Mylon Leah Solar Farm component	Proposed parameter
	Height (electrical equipment and buildings): 8m Approx. 1.7ha with a typical maximum height of 15m Palisade perimeter fence up to 3m high

Security and boundary treatments

3.5.13 The following security and boundary treatments are proposed as part of Mylon Leah Solar Farm:

- Fencing and gates – A perimeter security fence would be installed to enclose the operational areas of Mylon Leah Solar Farm. The fence will be either a wire-mesh or deer fence up to 3m in height. The fence would be designed in such a way as to allow small animals to pass through the operational site and would also be gated to allow access to and from the operational site.
- CCTV – Pole-mounted, security detection cameras would be mounted on poles of up to 5m in height around the perimeter of operational areas
- Access gates – access gates within the fencing will be provided to facilitate access to the individual fields.

3.5.14 **Table 3.7** below sets out the preliminary parameters for these components.

Table 3.7: Preliminary security and boundary treatments parameters

Mylon Leah Solar Farm component	Proposed parameter
Site fencing (post and wire)	Height: Up to 3m with gap at the base to allow small animals to pass and badger gates/cut out at appropriate locations. Post depth of 0.6m
CCTV poles	Height: 5m Foundations: 0.8m x 0.8m x 0.7m deep
Access gates	Height: Up to 3m, Width: 5 - 8m

Cabling

3.5.15 Underground cables would be required to connect the MV stations to the On-Site Substations, and then onwards to the National Grid Thornton Substation.

Underground cabling between the land parcels

3.5.16 DC cabling from the solar PV modules to the inverters would be installed above ground and fixed to the mounting structure of the modules. Where strings are split between two module rows, DC cabling will pass between rows in buried ducting.

3.5.17 Underground AC cabling would be required to connect the inverters to the MV stations, which are transformer stations that typically include an AC distribution transformer and MV switchgear. Here, the voltage is transformed from a lower voltage to 33kV. Medium voltage cables (33kV) connect the MV stations via MV collector stations to the on-site HV substation. The

dimensions of the trenches vary depending on the number of cables or ducts they contain, as referred to in **Table 3.8**.

- 3.5.18 Data cables (typically fibre optic) would be installed, typically alongside electrical cables in order to allow for monitoring of all aspects of the Site during operation and maintenance.
- 3.5.19 At this stage, it is anticipated that underground cables would be installed using open cut trenching.
- 3.5.20 In instances where open cut trenching cannot be used, for example when crossing a river or public road, alternative methods, such as HDD, will be considered and assessed within the ES.

Underground cabling to National Grid Thornton Substation

- 3.5.21 Mylen Leah Solar Farm On site HV substation will connect by underground 400kV cable to the existing 400kV busbar at a privately-owned (a standalone Statkraft UK Ltd SPV) Point of Connection located adjacent to the existing National Grid Thornton Substation. A new 400kV switchgear bay, protection, metering and control will be installed at National Thornton Grid Substation to allow this connection. The National Grid Thornton Substation is located approximately 3km north-east of the Site.
- 3.5.22 The underground cabling would comprise a three-phase 400kV cable. The maximum dimension of the cable trench required to install the cabling is referred to in **Table 3.8** As a worst-case, it is anticipated that open-cut trenching would be used to install the 400kV cable, but it is likely that some HDD would be required in more constrained locations such as under the Pocklington Canal Site of Special Scientific Interest (SSSI) and under existing highways. The method of cable installation will be fully assessed with regards to their location, context and particular features, i.e. SSSI or watercourse, as part of the ES.
- 3.5.23 The underground grid connection corridor set out at Scoping stage has since been further refined for the purposes of the PEIR based on the findings of further investigations, EIA studies, landowner agreement and other relevant investigations. The internationally designated Lower Derwent Valley Special Protection Area (SPA), Special Area of Conservation (SAC), and Ramsar, which also includes the nationally designated Melbourne and Thornton Ings SSSI, have been excluded from the underground grid connection corridor to avoid direct impacts as far as possible. Whilst there are a small number of residential properties and settlements shown within and adjacent to the underground grid connection corridor, no cables would be installed under residential properties or within residential gardens. A crossing under Pocklington Canal using HDD is being considered as part of the ongoing cable route investigations.
- 3.5.24 A single cable corridor will be required to connect the Solar PV module areas via a 400kV cable to the National Grid Thornton Substation. The route of this cable corridor will be optimised and fixed as the design progresses.
- 3.5.25 **Table 3.8** below sets out the preliminary parameters for the cabling works.

Table 3.8: Preliminary cabling works parameters

Mylen Leah Solar Farm component	Proposed parameter
Onsite cabling	
Interconnecting underground cable(s)	Trench Width: 0.5-3m, Depth: 0.5-1.5m
Grid connection cable	
Underground grid connection corridor	Average Installation Working Width: 30m total Trench width up to 5m Depth: 1-5m HDD may need to be completed in areas where cable trenching is not suitable (e.g. below watercourses and highways), and in the event of this the minimum depth of HDD will be 5m. Minimum cable depth in flood zones: 2m

Modifications and connections to the national electricity network

3.5.26 There would be no further construction works required at National Grid Thornton Substation as Mylen Leah Solar Farm would benefit from the connection to the privately-owned Point of Connection. The works (which are currently under construction) have been undertaken by National Grid under a Construction Agreement.

Ancillary infrastructure works

3.5.27 Additional infrastructure would be required to support the operation of Mylen Leah Solar Farm. The following equipment is expected to be installed across the Site, as part of the DCO:

- Fencing and gates – A perimeter security fence would be installed to enclose the operational areas of Mylen Leah Solar Farm. The fence is likely to be either a wire-mesh or deer fence up to 3m in height. The fence would be designed in such a way as to allow small animals to pass through the operational site and would also be gated to allow access to and from the operational site.
- CCTV – Pole-mounted, security detection cameras would be mounted on poles of up to 5m in height around the perimeter of operational areas,
- Lighting – In general, it is anticipated that Mylen Leah Solar Farm would not be lit; however, manually operated lighting would be required around key electrical infrastructure;
- Internal access tracks – Access to and within Mylen Leah Solar Farm would be required during construction and operation. A series of access tracks are proposed within the Site;
- Drainage – The detailed operational drainage design for Mylen Leah Solar Farm will be undertaken prior to construction. The overarching principle of the drainage strategy for Mylen Leah Solar Farm is to

provide Sustainable Drainage Systems at source, ensuring that surface water run-off mimics existing site conditions as far as is reasonably practicable. The design of new drainage systems would be based on the Flood Risk Assessment (FRA) and hydrological assessment to be undertaken in support of the DCO application. This will be appended to the ES. If feasible or relevant, infiltration drainage design would be in accordance with Building Research Establishment (BRE) Digest 365: Soakaway Design (2016)19. Otherwise, an attenuation system with restricted discharge to existing watercourses will be proposed. Other than discharge pipes, drainage infrastructure will be placed at least 10m away from watercourses.

- Storage – It is anticipated that storage would be installed on-site to contain extra equipment to support maintenance activities.
- Operation & Maintenance office(s) would be required to house the maintenance staff as well as providing 24-hour monitoring for the Site.
- Weather stations housing sensors to measure irradiance, wind and rain would be located across the Site, which would be up to 5m in height.

3.5.28 The preliminary parameters for the ancillary infrastructure are set out in **Table 3.9** below.

Table 3.9: Preliminary ancillary infrastructure parameters

Mylen Leah Solar Farm component	Proposed parameter
Internal roads	Width: 3-7m, made of crushed stone and installed on a membrane
Warehouses	Length: 25m Width: 15m Height: 10m
Operation and Maintenance Storage containers	Height: 3.5m Width: 3m Length: 13m
Monitoring stations (portacabins)	Length: 13m Width: 3.5m Height: 3m

Landscaping and biodiversity mitigation and enhancement

3.5.29 Mylen Leah Solar Farm includes both embedded mitigation measures and enhancements for landscaping and biodiversity. The embedded mitigation measures inherent in Mylen Leah Solar Farm’s design serve to avoid, reduce or offset adverse environmental effects and include measures detailed in **Chapters 6 to 17** in **Volume 1**.

3.5.30 Where possible, the Applicant will seek to identify opportunities for enhancement, as set out by NPS EN-1. Enhancement opportunities will not be accounted for within the environmental assessments, as these are additional measures to deliver additional environmental benefits beyond what is required to mitigate impacts. Enhancements are not dependent on significant adverse effects being present; instead, they aim to strengthen

positive outcomes, such as increasing biodiversity, improving landscape quality, or delivering net environmental gains.

- 3.5.31 Mylen Leah Solar Farm has been designed to ensure that existing woodlands will be retained. Efforts have been and will continue to be made to ensure existing hedgerows, individual trees and field margins are retained as far as practicable. Some minor removal may be necessary for the provision of access, visibility at turning points and the installation of cabling. The use of existing agricultural tracks, where practically possible, is anticipated to minimise the number and width of any instances of hedgerow loss.
- 3.5.32 Mylen Leah Solar Farm would incorporate field boundary enhancement, including enhancing existing and planting new hedgerows and planting of meadow grass and wildflower seed mixes within the Site. Planting would also be used to soften and screen views of Mylen Leah Solar Farm where necessary and feasible. The enhancements and planting would increase biodiversity within the Site and contribute to Mylen Leah Solar Farm achieving Biodiversity Net Gain (BNG) in accordance with the requirements of the Environment Act 2021²⁰, NPS EN-1 (December 2025, published January 2026) and local planning policy. It is anticipated that BNG could be achieved within the draft Order Limits but, if not possible, off-site solutions would be considered.
- 3.5.33 Although the requirement for a minimum 10% gain in biodiversity is not anticipated to become mandatory for NSIPs until later in 2026. As set out in the Scoping Report submitted to the Secretary of State on 08 January 2025 and in line with best practice, Mylen Leah Solar Farm design would aim to achieve BNG levels greater than the minimum 10% set out in the Environment Act 2021²⁰. It is noted that similar solar schemes developed by the Applicant have typically delivered BNG well in excess of this figure.

Recreation and amenity improvements

- 3.5.34 Mylen Leah Solar Farm will include the creation of two new permissive paths to provide improved links and permeability within the Site and to better integrate existing routes into the local recreational network. These are considered components of the Proposed Development rather than enhancements.
- 3.5.35 The first permissive path route seeks to provide offroad connectivity between PRow numbers MELBF01, MELBF02, MELBF04 and MELBF05 running parallel to Ash Lane. The second route seeks to provide a connection between the existing PRow network at Melbourne and at Seaton Ross by providing a connection between PRow numbers MELBF03 and SROSF03. This second route also offers the possibility of providing information boards explaining heritage assets along the route relating to Melbourne Airfield's role in the World War II. Existing PRow and permissive path routes within the wider Site also offer the opportunity to provide information boards explaining the various ecological features and enhancements proposed as part of Mylen Leah Solar Farm.

3.6 How would Mylen Leah Solar Farm be built?

How long would it take to build Mylen Leah Solar Farm?

3.6.1 Subject to obtaining development consent, the earliest construction could start is 2030. The whole construction programme is estimated to last 36 months. The assumed peak of construction traffic will occur in the early phases of construction (Month 11).

3.6.2 2032 is the earliest date that Mylen Leah Solar Farm could be connected to the national electricity network to commence operation (generation of electricity).

What main activities would the construction phase involve?

3.6.3 The ES will provide further details of the proposed construction activities, their assumed duration, along with an assumed programme of each phase of works. The anticipated types of construction activities are identified below.

Preparatory works

3.6.4 Preparatory works would be the first phase of construction and include activities to enable and prepare the Site for the construction of Mylen Leah Solar Farm. At this stage in design, it is anticipated that works undertaken during this phase are likely to include:

- Establishment of, and/or works to site access point(s);
- Installation of any temporary/permanent culverts under watercourses/ditches;
- Site clearance activities such as stripping of topsoil, trenching (if required), storage and capping of soil;
- Site investigation and survey activities;
- Erection of security fencing around the Site perimeter, as well as access gates;
- Installation of security measures such as CCTV at strategic locations;
- Delivery of plant and machinery to the Site; and
- Delivery of materials to enable first phases of construction.

3.6.5 There are multiple utilities crossing the Site, including high pressure gas mains, water pipes, telecoms cables, electrical cables and drainage. Prior to construction, the appointed principal designer and principal contractor will review the utility plans and use them to inform the plans for the proposed works to ensure all known utilities are avoided or diverted. Necessary offsets to known assets have been taken into account within the current design.

Construction of Mylen Leah Solar Farm infrastructure

3.6.6 Following the preparatory works, construction of Mylen Leah Solar Farm would commence. At this stage in design development, it is anticipated that the following types of construction activities may be required:

- Installation of solar PV module support structures;
- Mounting of solar PV modules;

- Installation of supporting infrastructure, such as inverters, transformers and switchgear;
- Installation of temporary (construction) and permanent drainage scheme;
- Installation of cabling across the solar PV module areas and connection to the inverters;
- Installation of cables between inverter platforms, MV stations and MV switchgear and onto the point of connection and the National Grid Thornton Substation;
- Construction of the On-Site Substations;
- Installation of permanent site offices and storage facilities;
- Construction of internal roads for construction and maintenance activities
- Landscaping and biodiversity planting; and
- Installation of storage facilities.

Cable installation

3.6.7 The following activities would be required to install the underground cables:

- Stripping and storing of topsoil in sections;
- Trenching/ducting and installation of electric cabling;
- Cable joint installation (including cable joint pits);
- Implementation of crossing methodologies for watercourses, roads and railway (e.g. HDD, cable bridging, etc.); and
- Reinstatement works, where necessary.

Testing and commissioning

3.6.8 Further works will be undertaken to test and commission the main components of the installed infrastructure prior to commencement of the operational phase. Testing will be undertaken for components including the On-Site Substations and the MV stations. Once the testing and commissioning phase is complete, Mylen Leah Solar Farm will be able to enter its operational phase.

How would the Site be accessed during construction?

3.6.9 Location of construction accesses to the Site is yet to be finalised. It is expected that construction accesses will be taken from existing field accesses where possible, to minimise the amount of potential vegetation removal required. Further detail on the location of construction accesses is provided in **Figure 3.1: Indicative Construction Layout and Access Plan** in **Volume 2**.

3.6.10 Final construction accesses will be confirmed as the Mylen Leah Solar Farm design progresses and in consultation with the relevant stakeholders and authorities, including landowners and East Riding of Yorkshire Council as the Local Highway Authority.

How would construction traffic be managed?

3.6.11 A Construction Traffic Management Plan (CTMP) would be secured pursuant to the DCO as a requirement, and in accordance with the Outline Construction Traffic Management Plan (Outline CTMP) that will be submitted in support of the DCO application. The Outline CTMP is expected to include the following types of measures to control the delivery of materials and staff onto the Site during the construction phase of Mylen Leah Solar Farm:

- Access and parking arrangements for site personnel, contractors and visitor arrangements for delivery and removal of materials;
- Arrangements for loading, unloading and storage of plant and materials;
- A scheme for routing and control of traffic associated with the construction and temporary signage during the construction phase;
- Implementation programme including the proposed construction period and hours of operation; and,
- Details of any additional management measures, including details of wheel washing facilities and condition surveys.

Would temporary construction compounds be required?

3.6.12 Temporary construction compound locations are yet to be identified, though it is anticipated that at least one compound would be located in each of Land Parcels B, C and D. The construction compounds would be removed at the end of the construction period.

3.6.13 The temporary construction compounds would typically contain construction worker welfare facilities, site offices, parking, wheel wash area, plant and machinery storage, HGV/delivery turning area, refuelling areas and waste storage.

3.6.14 For security and safety purposes, the construction areas would be closed to the public throughout the construction phase. Site security staff would patrol the Site, in addition to hazard warning signs and CCTV at strategic locations around the Site.

How would effects on the environment be minimised during construction?

3.6.15 An Outline Construction Environmental Management Plan (Outline CEMP) will be submitted in support of the DCO application, to describe the framework of mitigation measures identified in the ES to be followed. This would be carried forward via a Construction Environmental Management Plan prior to and during the construction of Mylen Leah Solar Farm. The aim of the Construction Environmental Management Plan is to reduce construction impacts from:

- Use of land for temporary laydown areas, accommodation etc.;
- Construction traffic (including parking and access requirements) and changes to access and temporary road or footpath closure (if required);
- Noise;
- Construction lighting;

- Utilities diversion;
 - Dust generation;
 - Soil management;
 - Run off and drainage; and
 - Waste generation.
- 3.6.16 The Construction Environmental Management Plan would be secured by a DCO Requirement and should be substantially in accordance with the Outline CEMP. It would be produced by the appointed principal contractor and approved by East Riding of Yorkshire Council following granting of the DCO and prior to the start of construction.
- 3.6.17 This would identify the procedures to be adhered to and managed by the principal contractor throughout construction. Contracts with companies involved in the construction works would incorporate environmental control, health and safety regulations, and current guidance and ensure that construction activities are appropriately controlled and that all appointed construction contractors involved in the construction of Mylen Leah Solar Farm are committed to agreed best practice and meet all relevant environmental legislation including:
- Control of Pollution Act 1974²¹;
 - Environment Act 2021²²;
 - Hazardous Waste Regulations 2005 (as amended)²³; and
 - Waste (England and Wales) Regulations 2011²⁴.
- 3.6.18 An Outline Soil Management Plan will be prepared and submitted in support of the DCO application, and be applicable across all three phases: construction, operation, and decommissioning. The Outline Soil Management Plan will follow the principles of best practice to maintain the physical properties of the soil, with the aim of restoring the land to its pre-construction condition at the end of the lifetime of Mylen Leah Solar Farm after decommissioning.
- 3.6.19 The Soil Management Plan would be secured by a DCO Requirement and should be prepared substantially in accordance with the Outline Soil Management Plan.
- How would public rights of way be managed during construction?**
- 3.6.20 In accordance with Reg 5(2)(k) of the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (the APFP Regulations)²⁵, the DCO application will be supported by a plan identifying any proposed new or altered means of access, stopping up of streets or roads or any diversions, extinguishments or creation of rights of way or public rights of navigation. An Outline Public Rights of Way and Access Management Plan will also be submitted in support of the DCO application.
- 3.6.21 The Outline Public Rights of Way and Access Management Plan will include a schedule of PRow within the draft Order Limits and outline the proposed

measures to manage any requirements to temporarily 'stop up' PRoW within the Site during construction with a suitable diversion in place.

- 3.6.22 It is currently proposed at PEIR stage that PRoW FOGGF11 will be diverted around the edge of field 5.c rather than its existing route through the middle to allow for a more defined route and also to ensure this part of route is not enclosed by solar PV modules on both sides of the PRoW.

How would water and waste be managed during construction?

- 3.6.23 Mylen Leah Solar Farm is expected to generate waste during the construction phase including general construction waste, comprising packaging waste from materials delivered to the Site, construction materials from enabling works and general waste from the construction worker welfare facilities.
- 3.6.24 The DCO application will require a Site Waste Management Plan to be prepared, which would include measures to manage construction waste. The Site Waste Management Plan and Construction Environmental Management Plan would be managed by the principal contractor to manage the waste arisings and implement the waste hierarchy to ensure as much construction waste is avoided, reused and recycled to reduce the amount of waste that would require disposal.
- 3.6.25 All waste to be removed from the Site would be undertaken by fully licenced waste carriers and licenced waste facilities.

How many construction staff will there be, and what will their working hours be?

- 3.6.26 It is anticipated that the working hours on-site would be from 07:00 until 19:00 Monday to Friday and 07:00 until 12:00 on Saturday. No working would take place on Sundays or Bank Holidays unless necessary. The construction working hours will be set out in the Construction Environmental Management Plan and will be approved by East Riding of Yorkshire Council.
- 3.6.27 It is anticipated that a maximum of 500 workers would be on-site during the peak construction period. For the purposes of the preliminary assessment, it has been assumed, that at any given compound or time, it is anticipated that 500 workers would be required as the worst-case scenario.
- 3.6.28 An Outline CTMP will be submitted with the DCO application which will set out strategies to encourage the use of sustainable transport for the construction workforce. This will include details on initiatives to increase car sharing, while other measures will be explored for the preparation of the ES such as shuttle services to/from temporary compounds and provision of staff parking facilities, as well as other measures to encourage mode shift away from private car use.

3.7 How would Mylen Leah Solar Farm be operated and maintained?

How long would Mylen Leah Solar Farm be operational for?

- 3.7.1 The operational life of Mylen Leah Solar Farm is expected to be up to 50 years. For the purposes of this preliminary assessment, this is assumed to be the maximum design life of Mylen Leah Solar Farm.

What main activities would the operational phase involve?

3.7.2 During the operational phase of Mylen Leah Solar Farm, on-site activities would be limited and restricted to maintenance activities and grazing. Maintenance activities are likely to include:

- Regular visual inspection of all infrastructure;
- Regular scheduled inspections and testing of equipment;
- Replacement of consumable items (e.g., inverter fans, cable connectors);
- Cleaning of solar PV modules;
- If damaged, repair or replacement of solar modules or other components,
- Delivery of spare parts, replacement equipment items and consumables;
- Water management (e.g., clearing of drainage ditches); and
- Vegetation management (e.g., cut back of grass, hedges, trees, grazing).

How would the Site be accessed during operation?

- 3.7.3 Access during the operational phase will be taken from the construction access points that will remain permanent for the lifetime of the project.
- 3.7.4 Internal site access tracks, established during construction, would be used by operational staff, where reasonably practicable, to cross the Land Parcels.
- 3.7.5 More detail will be provided as the Proposed Development design progresses and in consultation with the relevant authorities and stakeholders, including landowners and East Riding of Yorkshire Council as the Local Highway Authority. This will be provided and assessed within the ES.

How would effects on the environment be minimised during operation?

- 3.7.6 An Outline Operational Environmental Management Plan (Outline OEMP) will be submitted in support of the DCO application, which will set out the principles and key measures that will be employed during the operation of Mylen Leah Solar Farm to control and minimise impacts on the environment. The Operational Environmental Management Plan would be secured by a DCO Requirement and should be prepared substantially in accordance with the Outline OEMP and will be approved by East Riding of Yorkshire Council prior to the operational phase.

How would the environment be enhanced during operation?

- 3.7.7 The management requirements of the landscape and ecological features will be set out in the Outline Landscape and Ecological Management Plan (Outline LEMP) that will be submitted in support of the DCO application. The Outline LEMP will also outline mitigation and enhancement that will support Biodiversity Net Gain (BNG).
- 3.7.8 A Landscape and Ecological Management Plan would be produced following grant of the DCO and prior to the start of construction (secured by a DCO

Requirement) and would be substantially in accordance with the Outline LEMP to be approved by East Riding of Yorkshire Council. The landscape and ecological specification and management requirements would then be undertaken in accordance with the Landscape and Ecological Management Plan to ensure the successful establishment of all proposed planting, landscape and ecological features. This would include monitoring, maintenance, and remedial requirements.

How would public rights of way be managed during operation?

- 3.7.9 The Outline Rights of Way and Access Management Plan as described above will include a schedule of PRow within the Site and outline the proposed measures to manage any requirements during operation.

How would water and waste be managed during operation?

- 3.7.10 It is anticipated that potable drinking water for the purposes of the operational facilities would be delivered to Mylen Leah Solar Farm by bowser or provided by a mains water supply.
- 3.7.11 Raw water for the wider operational activities is expected to be brought to Mylen Leah Solar Farm by bowser or may be provided from an existing private irrigation network or using mains water supplies. However, the exact approach is to be determined and agreed with the relevant consultees. In any case, a reasonable worst-case scenario has been assessed for the purposes of the preliminary assessment.
- 3.7.12 Effluent from the operational substation facilities is anticipated to be routed to septic tanks, which would in turn feed into a filtration system that could be discharged to watercourses. This is to be determined following the production of the Outline Drainage Strategy for Mylen Leah Solar Farm and agreed with the relevant consultees.

How many operational staff will there be, and what will their working hours be?

- 3.7.13 During operation, the Site will be subject to daily operational and maintenance visits, with up to 24 staff travelling to Site via cars or Light Goods Vehicle. Regular visits would also be made by one to two operational workers to complete equipment inspection checks as well as several workers regularly attending to undertake environmental mitigation and enhancement management and monitoring.
- 3.7.14 Other operational workers undertaking maintenance would be based within the region and would attend Mylen Leah Solar Farm periodically, making use of the staff welfare and office facilities within the substation compounds.
- 3.7.15 In the event that there may be a requirement to replace faulty or degraded equipment, there may be a small number of HGV movements. Such movements are anticipated to be low in frequency and on an ad-hoc basis.
- 3.7.16 It is anticipated that the working hours on-site would be from 07:00 until 19:00 Monday to Friday and typically 07:00 to 12:00 on Saturdays. No work would be undertaken on Sundays or Bank Holidays.

3.8 How would Mysten Leah Solar Farm be decommissioned at the end of its operational life?

How long would it take to decommission Mysten Leah Solar Farm?

3.8.1 Mysten Leah Solar Farm is assumed to be operational for a period of 50 years. Following the operational phase, Mysten Leah Solar Farm would be required to be decommissioned. This is expected to take a maximum of 24 months and could be undertaken in phases.

What main activities would the decommissioning phase involve?

3.8.2 The process of decommissioning would involve the removal of all solar infrastructure, including the solar PV modules and on-site supporting equipment to be recycled or disposed of in accordance with industry best practices at that time. Any requirements to leave certain infrastructure, for example access tracks, would be discussed and agreed with landowners as part of the decommissioning process. It is anticipated at this stage that underground cabling would be left in-situ to avoid unnecessary ground disturbance.

How would effects on the environment be minimised during decommissioning?

3.8.3 At the time that decommissioning would take place, the regulatory framework, good industry practices and the future baseline could have altered. An Outline Decommissioning Environmental Management Plan (Outline DEMP), which will set out the general principles to be followed in the decommissioning of Mysten Leah Solar Farm, will be submitted in support of the DCO application. These measures, commitments, and actions would be carried forward to a Decommissioning Environmental Management Plan, taking account of good industry practice, its obligations to landowners under the relevant agreements and all relevant statutory requirements.

3.8.4 It is expected that the Outline DEMP would likely include details regarding:

- Arboricultural management;
- Traffic management within a Decommissioning Traffic Management Plan;
- Materials management; and,
- Waste management.

3.8.5 The Decommissioning Environmental Management Plan would be prepared at the time of decommissioning, in advance of the commencement of decommissioning works and would include timescales and methods for transportation of materials. This would be secured through a DCO Requirement and should be prepared substantially in accordance with the Outline DEMP.

What would happen to the infrastructure?

3.8.6 The use of decommissioned materials would follow the waste hierarchy such that they would be reused where reasonably practicable before recycling and disposal were considered.

3.9 Which management plans are anticipated?

3.9.1 A number of outline management plans would be submitted as part of the DCO application. **Table 3.10** below sets out the management plans currently anticipated to be submitted, and the phases of Mylen Leah Solar Farm to which they would relate.

Table 3.10: Anticipated management plans to support the DCO application

Management Plan	Applicable phase of Mylen Leah Solar Farm
Outline CEMP	Construction
Site Waste Management Plan	Construction
Outline OEMP	Operation
Outline DEMP	Decommissioning
Outline LEMP, to include a Habitat Management Plan	Construction and operation
Outline CTMP, to include: A Staff Travel Plan	Construction
Outline Soil Management Plan	Construction, operation and decommissioning
Outline Rights of Way and Access Management Plan	Construction, operation and decommissioning
Outline Archaeological Management Strategy	Construction
Outline Drainage Strategy	Operation

4. What Reasonable Alternatives have been Considered?

4.1 Why do we need to consider alternatives?

- 4.1.1 This section provides a summary of the reasonable alternative options that have been considered by the Applicant for Mylen Leah Solar Farm to date, including the initial selection of the Site and through to the development of the current design.
- 4.1.2 This section also details how the assessment of sites and design alternatives has been undertaken and details the matters that have been considered and the main reasons for discounting alternative design options.
- 4.1.3 The following alternatives have been considered during the design evolution process to date:
- Alternative sites;
 - Alternative solar technologies; and
 - Alternative layouts including for the solar PV modules, substations and associated cable routes.
- 4.1.4 Planning Inspectorate Advice Note Seven²⁶ sets out that the Planning Inspectorate considers that a good ES is one that “*explains the reasonable alternatives considered and the reasons for the chosen option taking into account the effects of Mylen Leah Solar Farm on the environment*”.
- 4.1.5 NPS EN-1 (December 2025, published January 2026) paragraph 4.3.9 notes that NPS EN-1 does not contain any general requirement to consider alternatives or to establish whether a development represents the best option. It explains there are specific requirements in relation to compulsory acquisition and habitats sites, but that the NPS does not change the requirements in relation to compulsory acquisition and habitats sites. Paragraphs 4.3.15 to 4.3.17 set out in relation to alternatives the following:
- “*Applicants are obliged 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*”;
 - “*In some circumstances the NPSs may impose a policy requirement to consider alternatives*”; and
 - “*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 NPS EN-1 at paragraphs 4.3.27 and 4.3.38 also sets out that:
- “*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.*”

- *Alternative proposals which are vague or immature can be excluded on the grounds that they are not important and relevant to the Secretary of State's decision.*

4.1.7 The Applicant's focus was on the land suitable for solar and available for development, excluding alternatives that would not be commercially viable, physically suitable, or which are vague or immature, which is in accordance with NPS EN-1 (paragraphs 4.3.27 and 4.3.28). The Applicant's view is that the Site is suitable for solar in both planning and environmental terms.

4.1.8 Regulation 18(2)(d) of the EIA Regulations requires "*a description of the reasonable alternatives studied by the developer, which are relevant to the proposed development and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the development on the environment*" to be presented in the ES. A description of the alternatives considered to date is therefore presented in this section of the PEIR and a full description of the alternatives will be provided in the ES.

4.1.9 A 'no development' alternative would not deliver the additional electricity generation capacity associated with Mylen Leah Solar Farm and would not satisfy the policy need and was therefore not considered further.

4.2 What alternative sites have been considered?

Why have we chosen this site?

4.2.1 There is no standard methodology for the site selection of solar farms. The site selection methodology has therefore been informed by following an in-depth site selection process in accordance with the key site selection factors outlined in NPS EN-3.

4.2.2 The Applicant did not consider sites that could deliver smaller scale projects due to the urgent need to deliver as much solar as possible to meet Government targets of up to 70 GW by 2035, as set out within NPS EN-3 and the British Energy Security Strategy²⁷. Given the limited availability of connections into the National Electricity Transmission System (that utility scale solar is required to use), it is important that any connection is used as efficiently as possible. This approach is supported in NPS EN-1:

- Paragraph 4.3.22 states that only alternatives that can meet the same objectives of the proposed development need to be considered; and
- Paragraph 4.3.23 states that the Secretary of State should be guided in considering alternative proposals by whether there is a realistic prospect of the alternative delivery of the same infrastructure capacity in the same timescale as the proposed development.

4.2.3 Smaller scale alternatives that would not meet the objective of meeting the same urgent need as Mylen Leah Solar Farm are not considered reasonable alternatives for the purposes of paragraphs 4.3.22 and 4.3.23 of NPS EN-1.

4.2.4 The site selection process considered the key site selection factors outlined in NPS EN-3:

- **Irradiance and site topography** – preference was given to sites with a south facing aspect and flatter topography;

- **Network connection** – the site selection focused on the area around National Grid Thornton Substation where there was an available connection with preference given to sites in close proximity to the point of connection;
- **Proximity of site to dwellings** – the site selection sought to avoid sites in close proximity to residential dwellings or where it would not be possible to appropriately mitigate visual amenity and glint and glare;
- **Agricultural land classification and land type** – the site selection sought to minimise the impact on best and most versatile agricultural land (land classified as Grade 3a and above);
- **Accessibility** – the site selection considered the suitability of the access routes to the proposed sites, during construction, operation and decommissioning;
- **Public rights of way** – the site selection process sought to avoid and minimise the visual impact from PRoW, and to avoid impacts on recreation and access through closures where possible; and
- **Security and lighting** – the site selection considered the security of the Site and sought to minimise the impact on the landscape and the visual impact of security measures.

4.2.5 The Site was selected following an assessment against the above considerations as well as against other wider effects on the environment in accordance with the EIA Regulations, such as traffic and noise. This consideration also factored in spatial constraints, site size and land assembly, and the availability of previously developed land and land availability. Some of these matters are more definitive in terms of the ability to proceed, such as grid connection and the physical suitability of the land to accommodate panels, while others are matters balanced and weighed against alternative options.

How have daylight, sunlight and terrain influenced the choice of site?

4.2.6 NPS EN-3 notes that irradiance is a key consideration for site selection as the amount of electricity generated on-site is directly affected by the irradiance levels. It sets out that site topography is a key input to the site selection process, under paragraph 2.10.11, which states:

“Irradiance of a site will, in turn, be affected by surrounding topography, with an uncovered or exposed site of good elevation and favourable south-facing aspect more likely to increase year-round irradiance levels. This in turn affects the carbon emission savings and the Site’s commercial viability.”

4.2.7 Irradiance in East Riding of Yorkshire is sufficiently high to support solar development, see **Plate 4.1: Average photovoltaic power (UK)** below.

4.2.8 The topography of the area surrounding the National Grid Thornton Substation is generally flat and therefore particularly suitable for solar. In combination with the other factors discussed below, the Site was considered an appropriate location for development.

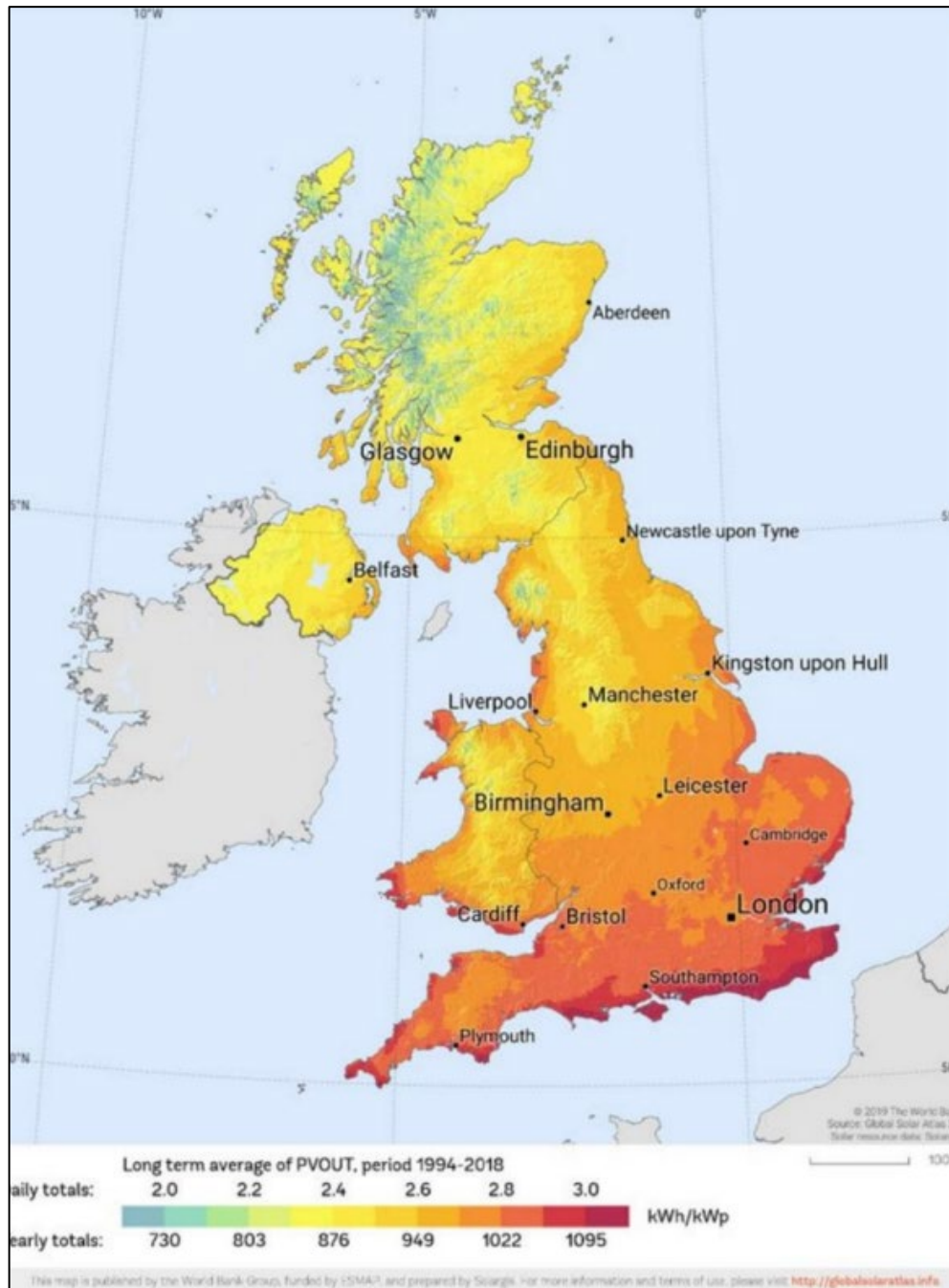


Plate 4.1: Average photovoltaic power (UK)

How has grid connection and grid capacity influenced the choice of site?

- 4.2.9 A viable grid connection is an essential material consideration for proceeding with a solar development and is instrumental in defining the search area.
- 4.2.10 NPS EN-3 paragraph 2.10.16 sets out that 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.*” Paragraph 2.10.17 goes on to state that “*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.*”

- 4.2.11 The Applicant has secured a grid connection at the National Grid Thornton Substation. Utilising existing connections should be preferred to building new connections, for maximising existing grid infrastructure, cost, timely delivery and environmental reasons. The site selection process focused on determining opportunities and constraints within an initial search area surrounding the point of connection at the National Grid Thornton Substation.
- 4.2.12 Mylen Leah Solar Farm would contribute significantly to the need to supply low-carbon energy, in order for the Government to meet its objectives and legally-binding net zero commitments. Paragraph 2.10.53 of NPS EN-3 sets out that:
- “for a solar farm to generate electricity efficiently the panel array spacing should seek to maximise the potential power output of the Site. The type, spacing and aspect of panel arrays will depend on the physical characteristics of the Site such as site elevation.”*
- 4.2.13 As this is included as a factor influencing site selection, it is taken to mean that the Site needs to be able to accommodate a sufficient megawatt capacity to deliver a viable solar farm of greater than 100MW and also that the power output from the available land should maximise the available grid connection.
- 4.2.14 A 10km search area from the National Grid Thornton Substation was therefore selected on the basis of finding a site that could enable the delivery of parameters that would maximise generation from the Site, cognisant of the defined transmission entry capacity previously mentioned, whilst also accounting for the environmental baseline and the mitigation and enhancement measures that may be necessary. The Applicant sought to be as close to the point of connection as possible, in order to minimise the risk of environmental impacts, disruption to multiple landowners, greater challenges with cable crossings and MW loss, and the cost and potential ramifications of a longer cable route.
- 4.2.15 In this way, Mylen Leah Solar Farm would contribute substantially to the need to supply low-carbon energy, in order for the Government to meet its objectives and commitments as mentioned above.

How have local homes and businesses influenced the choice of site?

- 4.2.16 NPS EN-3 paragraph 2.10.19 states that:
- “utility-scale solar farms are large sites that may have a significant zone of visual influence. The two main impact issues that determine distances to sensitive receptors are therefore likely to be visual amenity and glint and glare.”*
- 4.2.17 The search area surrounding the National Grid Thornton Substation is characterised by small, dispersed settlements.
- 4.2.18 Land within the built-up area of York, where there is a higher density of dwellings, was discounted as it was considered there was sufficient space outside of this major settlement to support a solar development of this scale without resulting in adverse visual amenity impacts.

- 4.2.19 The land selected for development is located away from major settlements in the search area to ensure there is sufficient separation between the Site and surrounding residential properties to avoid adverse impacts, including on visual amenity, noise and glint and glare.
- 4.2.20 There are some scattered dwellings in proximity to the draft Order Limits, alongside the smaller settlements of Melbourne, Seaton Ross, Laytham and Foggathorpe. However, it is considered that the visual amenity impacts to these dwellings can be appropriately managed through a combination of setting back development from these properties, natural topography, detailed design and landscaping. Further details in respect of these measures will be provided in the ES.

How has the local environment influenced the choice of site?

- 4.2.21 A key principle in the Site search was to seek to avoid areas of particular environmental and landscape sensitivity in order to minimise potential impacts. This is both from a natural and built environment perspective, including matters such as ecology and biodiversity, landscape, water resources and cultural heritage.
- 4.2.22 The 10km search area around the National Grid Thornton Substation is not subject to any protected landscape designations such as National Landscapes or National Parks. Whilst it is a countryside location, it is recognised in NPS EN-3 paragraph 2.10.23 that schemes of this type and scale will often need to be located in a rural location, provided that the planning and environmental effects are acceptable.
- 4.2.23 The site selection process for the main solar array area considered the following environmental and planning policy factors:
- **Designated international and national ecological and geological sites:** A number of designated sites were identified in the 10km search area from the National Grid Thornton Substation, including SSSIs, NNR, SPA, SAC and Ramsar sites. These areas were discounted from the Site selection process so as to reduce impacts on these sites;
 - **Historic designations:** A number of Listed Buildings and Scheduled Monuments are located in the search area from the National Grid Thornton Substation. The site selection process discounted these areas from development so as to avoid directly impacting on these sites;
 - **Nationally designated landscapes:** The presence of any National Landscapes or National Parks was considered and excluded from the area of search;
 - **Planning policy designations:** parts of the western edge of the search area fall within the York Green Belt, and so were discounted; and
 - **Flooding:** Small parts of the search area are located within Flood Zone 2 or Flood Zone 3. However, built infrastructure is not proposed in these locations.

How has existing land use influenced the choice of site?

- 4.2.24 Planning policy seeks to minimise impacts on the best and most versatile (BMV) agricultural land (defined as Grades 1, 2 and 3a²⁸). Paragraphs

2.10.28 to 2.10.34 of NPS EN-3 set out that, whilst not being a predominating factor, applicants for solar NSIPs should take account of agricultural land classification (ALC). The NPS states that applicants should seek in the first instance to locate their development on previously developed land, brownfield land, contaminated land, industrial land or lower grade agricultural land (classified as grade 3b, 4 or 5), where possible.

- 4.2.25 A study of the agricultural land in the surrounding area was undertaken to inform the site selection. Land within the urban boundary of Pocklington was discounted due to the proximity to residential properties. The land towards the west of the search area was identified as provisional grade 2 agricultural land on the Natural England Provisional ALC mapping²⁹ and as such was discounted so as to avoid large areas of BMV land. Much of the rest of the search area was provisional grade 3 (this map does not show subdivisions of grade 3 which are normally mapped by more detailed survey work). The search therefore focused on the land to the south west of the National Grid Thornton Substation, which was identified as provisional ALC grade 3 and a substantial proportion of grade 4.
- 4.2.26 The draft Order Limits contains land associated with a former airfield, which is classified as previously developed land. No other previously developed land of a comparable scale was identified to accommodate a large-scale solar project, either individually or in combination with other sites.
- 4.2.27 Since selecting the Site, some ALC surveys have been carried out by the Applicant and further surveys are ongoing. The results of the surveys undertaken to date are presented in **Appendix 17.1: Detailed Agricultural Land Classification Report in Volume 3**. The results of these further surveys will inform the ES.

How has accessibility influenced the choice of site?

- 4.2.28 In accordance with paragraph 2.10.35 of NPS EN-3, consideration has been given in the site selection process to the suitability of the access routes to the Site for both construction and operation. Paragraph 2.10.36 emphasises the importance of accessibility, *“Given that potential solar farm sites are largely in rural areas, access for the delivery of solar arrays and associated infrastructure during construction can be a significant consideration for solar farm siting”*.
- 4.2.29 The Site is well serviced by A roads and the rural road network. Areas which cannot be accessed by the existing road network or via connections from adjacent fields accessible by the rural road network were discounted from the site selection process.

How has land ownership influenced the choice of site?

- 4.2.30 Land ownership and size directly influence the economic viability of Mylen Leah Solar Farm and as such were considered as part of the site selection process.
- 4.2.31 Following the identification of available capacity and recognising the irradiance, topography and relationship to environmental features of the areas in and around the National Grid Thornton Substation, the Applicant started initial discussions with land agents regarding potentially willing

landowners within the area as well as approaching landowners directly. The availability of willing landowners is an important consideration. It is desirable to locate a site across as few land ownerships as possible to minimise legal complexities and project costs. For this reason, and due to the land take required for Mylen Leah Solar Farm, land agents used their professional knowledge to provide details of potentially willing landowners with sufficiently sized land holdings within the area.

4.2.32 In summary, the main reasons for selecting the Site are that the land:

- Is at a suitable distance from the point of connection to be able to export the electricity generated efficiently;
- Is not located within international or national sites designated for their biodiversity interest (the underground grid connection corridor passes under the Pocklington Canal SSSI but does not interact with the above ground designation);
- Is not located within designated Green Belt;
- Utilises larger amounts of low grade, non-BMV agricultural land as well as previously developed land;
- Avoids direct physical impact on designated heritage assets;
- Has good transport access for construction being in close proximity to the A163;
- Has topography that meets the requirements of Mylen Leah Solar Farm to efficiently generate significant amounts of electricity;
- Has no land use conflicts that would see the displacement of existing non-agricultural businesses; and
- Is available to the Applicant during the period of construction, operation and decommissioning of Mylen Leah Solar Farm.

4.3 What alternative solar technologies have been considered?

4.3.1 As noted in **Chapter 3: What will Mylen Leah Solar Farm Comprise?** in **Volume 1**, to date the Applicant has kept different solar technologies under review and consideration for Mylen Leah Solar Farm. In doing so, a worst-case scenario has formed the basis of the assessment. The primary options available for solar technologies are a fixed panel or a tracking panel system. The Applicant intends to further assess these options to finalise the design ahead of the DCO submission.

4.4 What alternative layouts have been considered?

4.4.1 The design and layout of Mylen Leah Solar Farm is an iterative process that has been informed by the ongoing environmental assessment process, site selection assessment, and consideration of the emerging Design Principles and controls, non-statutory consultation feedback and engagement with stakeholders and consultees. The iterative design process assessed the suitability of each field within the draft Order Limits for solar PV development against environmental considerations including ecology, highways and access, ground conditions, flood risk, landscape and heritage. Where a field

was considered unsuitable for solar PV development based on these assessments, it was discounted from development.

- 4.4.2 Engagement has included a series of internal technical design workshops, technical meetings with statutory consultees, the local community (including co-design workshops) and meetings with East Riding of Yorkshire Council officers. The feedback from the engagement held to date has informed the ongoing design layout.
- 4.4.3 The layout of Mylen Leah Solar Farm will continue to be developed as part of the environmental assessment process and will have regard to outputs from engagement with stakeholders and consultees and feedback from statutory consultation.
- 4.4.4 A Consultation Report will be submitted in support of the DCO application to provide a summary of consultation feedback and demonstrate how the Applicant has had regard to the feedback in developing the design. A Design Approach Document will also be prepared and submitted in support of the DCO application which will set out the guiding principles for the evolution of the Mylen Leah Solar Farm design.
- 4.4.5 The layout and extent of Mylen Leah Solar Farm has been through two stages of design iterations to date (see further below). The first stage of design (Stage 1) was held prior to the public launch of Mylen Leah Solar Farm for non-statutory consultation and is presented on **Figure 4.1: Stage 1 Layout** in **Volume 2**. The second stage of design (Stage 2) relates to the design that has been presented within this PEIR to inform statutory consultation (see **Chapter 3: What will Mylen Leah Solar Farm Comprise?** in **Volume 1**).

Stage 1 design

- 4.4.6 Following identification of the Site as outlined above in this section, the land was subject to an initial field-level assessment to identify within the Site land suitable for Solar PV development and potentially suitable locations for the Transformer Stations and On-Site Substations. The assessment focused on the suitability of land parcels based on environmental, social and economic factors. Minimum offsets to environmental features and sensitive human receptors were agreed by the design team to inform the design process.

Solar PV development

- 4.4.7 Following the initial assessment, which included desktop assessments and visits to the Site, the design team identified fields that were considered unsuitable for accommodating solar PV development and were therefore discounted. The reasoning for discounting these fields during Stage 1 of the design is detailed within **Table 4.1**.

Table 4.1: Reasons for discounting fields from solar PV development in Stage 1

Location	Reason for removal
Fields 3.g, 3.i, 3.j, 11.a – 11.c, 19.a – 19.c	Removed due to isolated location and nature of parcel.
Fields 6.a – 6.d	Removed due to location in flood zone.
Field 18.a	Removed due to proximity to residential property and isolated nature of parcel.

Location	Reason for removal
Fields 21.a – 21.c	Removed due to proximity to residential property.
Fields 22.a – 22.d and 23.a	Removed due to land no longer being available.

4.4.8 The areas that were removed for development were not retained within the Site boundary presented in the EIA Scoping Report.

On-Site Substations

4.4.9 At Stage 1, locations for the On-Site Substations were still under consideration, with the following factors informing the potential locations of this infrastructure:

- Proximity and visual impact on residential settlements;
- Impacts on nearby environmental features;
- Located outside of Flood Zones 2 or 3;
- Potential landscape and visual and noise impacts; and
- Proximity and location of Public Rights of Way.

4.4.10 At Stage 1, it was acknowledged that the Site would include two on-site substations and that these would not be located within 250m of residential properties or designated environmental features. It was further acknowledged that the proposed locations of these would be informed by further environmental assessment and technical requirements.

Areas for offset or mitigation

4.4.11 There are areas within the Site boundary that have not been considered as potential locations for Solar PV or On-Site substation development. These areas were made available by landowners either solely for the purposes of offsets or mitigation, or in some cases were identified solely to facilitate access or cabling between areas of solar PV development.

Grid connection cable route options

4.4.12 During Stage 1, the design team also carried out an assessment to identify potential underground cabling corridors to the National Grid Thornton Substation. This identified a potential swathe of land within which the indicative underground grid connection could be located.

Stage 2 design

4.4.13 Following the non-statutory consultation held in October to November 2024, the Stage 1 design was reviewed and revised to take account of the consultation feedback and the emerging results from various environmental surveys. This process involved progressing the EIA, targeted engagement with statutory consultees and stakeholders, alongside several internal technical design workshops.

Solar PV development

4.4.14 Following the Stage 2 design process, a number of fields and partial fields have been discounted from the area of solar PV development. **Table 4.2**

provides a summary of the fields that have been discounted and the reasons for removal.

- 4.4.15 The areas that were discounted for solar PV development have been retained within the Site for potential mitigation, enhancement or retained agricultural use.
- 4.4.16 The design will continue to be refined prior to submitting the DCO application in order to give regard to feedback from statutory consultation, further stakeholder engagement, and the findings of further environmental and technical assessments.

Table 4.2: Reasons for discounting fields from solar PV development in Stage 2

Location	Reason for removal
Fields 3.a, 3.b, 11.g, 11.h, 11.i, 16.a – 16.f, 17.a – 17.j	Removed due to land no longer being available.
Field 3.f	Removed as field contains Scheduled Monument, and to reduce the southern extent of the Proposed Development close to Foggathorpe.
Field 3.g	Removed due to proximity to Scheduled Monument, and to reduce the southern extent of the Proposed Development close to Foggathorpe.
Field 11.d	Parcel comprises established woodland. Design development did not require rights to be sought over this area so inclusion in site boundary not required.
Field 18.b	Parcel removed to provide offset to nearby residential properties.
Field 18.r	Parcel comprises established woodland. Design development does not require rights to be sought over this area so inclusion in site boundary not required.

On-Site Substations

- 4.4.17 At Stage 2, four substation locations were identified using the initial assessment of environmental constraints from Stage 1. These are detailed in **Figure 3.2: Indicative Operational Layout Plan** in **Volume 2**.

Grid connection cable route options

- 4.4.18 The broad area identified at Stage 1 for the potential location for the underground grid connection cable has been refined and reduced following a review of environmental constraints. It is intended that further refinement will be made prior to submission of the DCO application following discussions with relevant landowners.

5. How have we Approached this Preliminary Assessment?

5.1 What is Environmental Impact Assessment (EIA)?

- 5.1.1 EIA is a systematic process that examines the likely significant effects (beneficial or adverse) on the environment resulting from the construction, operation, and decommissioning of a proposed development. The process is shown on **Plate 5.1: Main stages of the EIA process**.

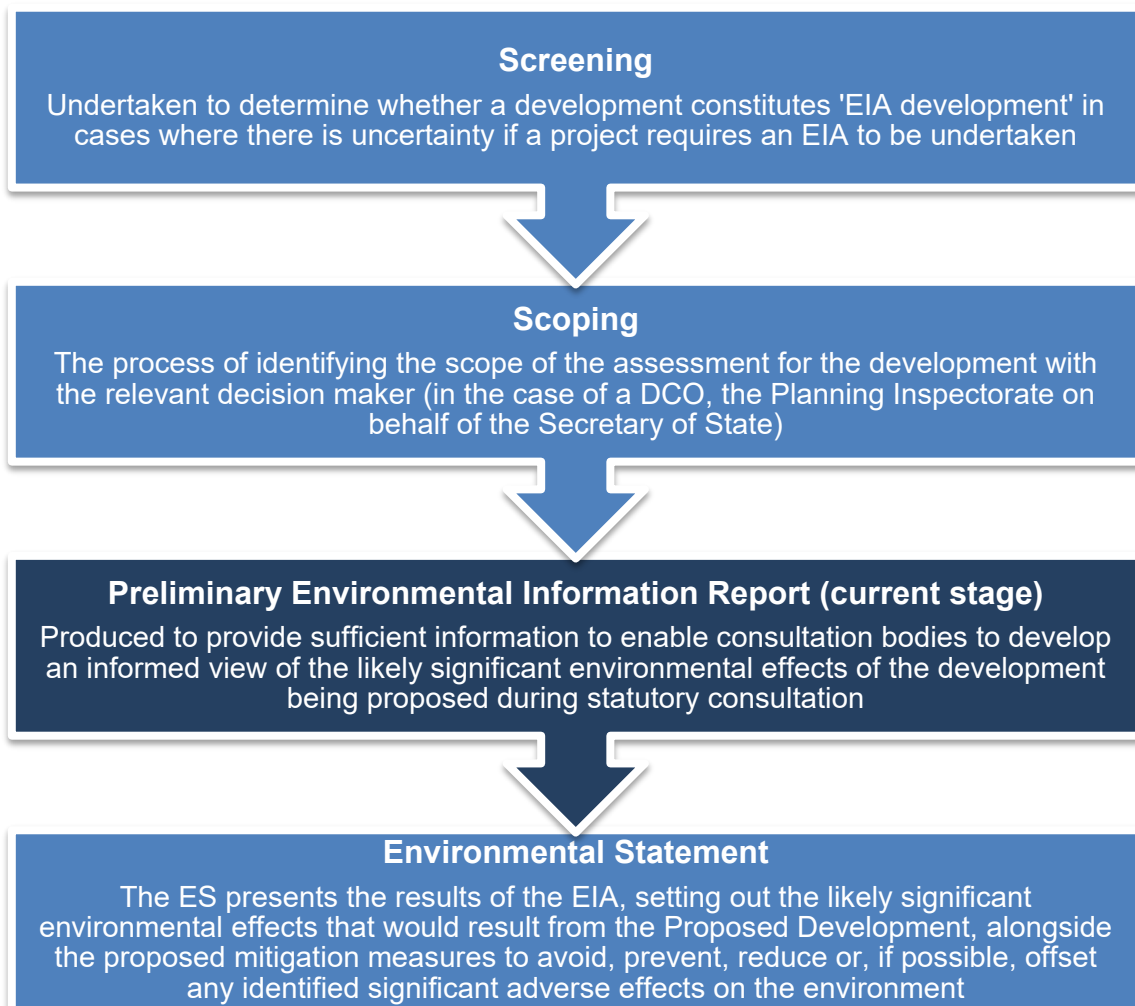


Plate 5.1: Main stages of the EIA process

- 5.1.2 An ES will be submitted in support of the DCO application. An ES is used to report to decision makers, consultees and stakeholders on the likely significant environmental effects of a development and helps the decision maker (in the case of a DCO, the Secretary of State) determine the application for consent.

5.2 What engagement and consultation has been undertaken to date?

- 5.2.1 Consultation and engagement alongside the EIA process is critical to the development of a comprehensive and proportionate ES. The views of statutory and non-statutory consultees are important to ensure that from the

outset the EIA focuses on specific issues where significant environmental effects are likely, and where further investigation is required.

- 5.2.2 Early engagement with consultees has been important in influencing the design process of Mylen Leah Solar Farm to date. Consultation and engagement, as an ongoing process, enables design evolution in addition to embedded and additional mitigation measures to be incorporated into Mylen Leah Solar Farm, limiting adverse environmental effects and optimising environmental benefits. This PEIR forms an important part of this process. The consultation responses will be recorded in a Consultation Report and design development detailed within the Design Approach Document, both of which will be submitted in support of the DCO application.
- 5.2.3 The Applicant has undertaken targeted engagement with statutory consultees and a variety of representative local groups to gather views to help develop the design of Mylen Leah Solar Farm at an early stage to enable the sharing and consideration of local knowledge. These stakeholders have included ERYC, local parish councils, statutory environmental consultees and local interest groups.
- 5.2.4 Non-statutory consultation was held from 13 November 2024 to 6 March 2025 and comprised:
- April 2024: An introductory meeting with ERYC;
 - September 2024: Introductory letters were sent to local community members, inviting them to meet and discuss Mylen Leah Solar Farm;
 - September 2024: Near-neighbour and grid search area landowner letters were dispatched;
 - September 2024: The Mylen Leah Solar Farm website was launched, and the concept masterplan was published;
 - October 2024: An introductory meeting with local Ward Members;
 - In-person co-design workshops held in Melbourne and Bubwith (13 and 14 November 2024) and attendance to scheduled Parish Council meetings in Seaton Ross, Melbourne and East Cottingwith and Storwood;
 - Online webinars to present the findings from the co-design workshops were held on 5 and 6 March 2025; and
 - A report presenting the key findings and themes from the co-design workshops was published on 5 March 2025.
- 5.2.5 The aims of the non-statutory consultation were:
- Early engagement: introduce Mylen Leah Solar Farm to local communities, stakeholders and elected representatives at an early stage in the design process;
 - Inform and involve: share the initial concept masterplan and project information, allow stakeholders to provide feedback;

- Understand local context: gather local knowledge on stakeholder concerns as well as environmental, social and technical constraints to inform the evolving design;
- Build awareness and transparency: begin to build understanding and trust in the development process by setting clear expectations for future engagement; and,
- Shape the early design: use insights gathered during this phase to refine proposals ahead of statutory consultation and the submission of the DCO application.

5.2.6 The Consultation Report will summarise the feedback received during the non-statutory consultation and explain how this input has informed the development of the design and proposed mitigation measures presented at statutory consultation.

5.2.7 As part of the EIA process, consultation and engagement is ongoing with a range of statutory and non-statutory consultees to help inform the design of Mylen Leah Solar Farm.

5.2.8 Several meetings have been held with consultees to provide further information on Mylen Leah Solar Farm design and survey progress and to agree the approach to the methodology for environmental surveys and assessment. Details of the consultation and engagement undertaken for each of the environmental factor assessments are provided in **Chapters 6 to 17** in **Volume 1**.

5.3 How have we established current environmental conditions?

5.3.1 The baseline environment comprises the existing environmental characteristics and conditions, based upon desk-based studies and field surveys undertaken and information available at the time of undertaking this PEIR.

5.3.2 The establishment of the environmental baseline is essential to assist with the comparison against future changes as a result of Mylen Leah Solar Farm and to assess the likely significant environmental effects of Mylen Leah Solar Farm.

5.3.3 Specific details of the approach taken to establishing preliminary baseline conditions are provided within **Chapters 6 to 17** in **Volume 1**. Typically, baseline conditions have been established by:

- Desk-based studies;
- Site visits and surveys; and
- Modelling.

5.3.4 This PEIR provides an overview of the current environmental baseline for the purposes of the preliminary assessment, as set out within **Chapters 6 to 17** in **Volume 1**. **Chapters 6 to 17** in **Volume 1** also outline where further studies or survey work will be undertaken as part of the ongoing EIA. The reports detailing the results of further baseline studies or surveys will be provided within the ES.

5.4 How have we predicted future environmental conditions, assuming no Mylen Leah Solar Farm?

- 5.4.1 Schedule 4(3) of the EIA Regulations requires consideration of the likely evolution of the current state of the environment (baseline scenario) in the absence of Mylen Leah Solar Farm, as far as natural changes from the baseline scenario can be assessed with reasonable effort on the basis of the availability of environmental information and scientific knowledge (the 'future baseline').
- 5.4.2 In this PEIR, consideration has been given (in descriptive terms) within each relevant assessment chapter to likely significant environmental effects arising from Mylen Leah Solar Farm in relation to the future baseline. Due to limitations and lack of evidence associated with the future baseline (i.e., it cannot be accurately measured), we have not been able to undertake detailed consideration of the effects of Mylen Leah Solar Farm against the future baseline; however, we have been able to make reasonable assumptions on what the general baseline conditions at a future point in time, using a combination of recognised projections and professional judgement.
- 5.4.3 Each individual assessment chapter (**Chapters 6 to 17 in Volume 1**) provides a description of the future baseline scenario and the data sources that have informed it, where relevant.

5.5 What assessment scenarios have been considered?

- 5.5.1 The assessment scenarios considered for Mylen Leah Solar Farm are as follows:
- Existing environmental baseline (without Mylen Leah Solar Farm) - reported at the time that the baseline data have been collected;
 - Future environmental baseline (without Mylen Leah Solar Farm) – for comparison with the construction, operation and decommissioning phases;
 - Construction of Mylen Leah Solar Farm - as presented in **Chapter 3: What will Mylen Leah Solar Farm Comprise?** in **Volume 1**, the earliest construction could start is 2030 and is estimated to last 36 months. Where relevant, each individual assessment chapter has assessed the relevant 'worst case' construction scenario and where necessary, the relevant period or 'peak' of activity within the construction programme;
 - Operation of Mylen Leah Solar Farm – as presented in **Chapter 3: What will Mylen Leah Solar Farm Comprise?** in **Volume 1**, it is assumed that Mylen Leah Solar Farm will be operational and maintained for a duration of 50 years; and
 - Decommissioning of Mylen Leah Solar Farm (where appropriate) - as presented in **Chapter 3: What will Mylen Leah Solar Farm Comprise?** in **Volume 1**, decommissioning activities will begin following the cessation of the operational phase of Mylen Leah Solar Farm and will take a maximum of 24 months.

5.6 What flexibility to choose between design options in the future has been considered in this preliminary assessment?

- 5.6.1 The design of Mylen Leah Solar Farm is ongoing and this PEIR provides a preliminary environmental assessment of the design to date.
- 5.6.2 As highlighted in **Chapter 3: What will Mylen Leah Solar Farm Comprise?** in **Volume 1**, in order to maintain flexibility in the design, a ‘Rochdale Envelope’ approach within parameter ranges is being taken, in accordance with the specific guidance provided by the Planning Inspectorate’s Advice Note Nine ‘Rochdale Envelope’³⁰.
- 5.6.3 The preliminary design parameters for Mylen Leah Solar Farm for the purpose of the preliminary assessment of likely significant environmental effects are as set out in **Table 3.3** in **Chapter 3: What will Mylen Leah Solar Farm Comprise?** in **Volume 1**.
- 5.6.4 As the design of Mylen Leah Solar Farm evolves, further information will become available and key elements of the design will be refined and further defined. However, it is likely that flexibility will need to be maintained for some aspects of Mylen Leah Solar Farm for the DCO application. Where flexibility is to be retained in the DCO application, the parameters will form the likely worst-case envelope for Mylen Leah Solar Farm to be reported within the ES.

5.7 What methods have been used to assess likely significant environmental effects?

- 5.7.1 The EIA process requires the identification of the likely significant environmental effects of Mylen Leah Solar Farm.
- 5.7.2 Where relevant, this PEIR reports on the preliminary likely significant environmental effects for the construction (including site preparation and earthworks), operational (i.e. once completed and open to use and including maintenance) and decommissioning phases of Mylen Leah Solar Farm, based on information available to date.
- 5.7.3 The following criteria have been taken into account when determining significance:
- The receptors/resources (natural and human) which would be affected and the pathways for such effects;
 - The geographic importance, sensitivity or value of receptors/resources;
 - The duration (short-term, medium-term or long-term); permanence (permanent or temporary) and changes in significance (increase or decrease);
 - Reversibility - e.g., whether the change is reversible or irreversible, permanent or temporary;
 - Environmental and health standards (e.g., local air quality standards) being threatened; and

- Feasibility and mechanisms for delivering mitigating measures e.g., is there evidence of the ability to legally deliver the environmental assumptions which are the basis for the assessment?
- 5.7.4 The method for assessing significance of effects varies between environmental factors but, in principle, will be based on the environmental sensitivity (or value/importance) of a receptor/resource and the magnitude of change (impact) from the baseline conditions. The approach to assessing the significance of effects for each individual environmental factor assessment is outlined within **Chapters 6 to 17 in Volume 1**.
- 5.7.5 Summary of effect tables that summarise the likely significant environmental effects associated with each of the environmental factors will be provided in the ES at the end of each environmental factor assessment chapter. These tables will outline sensitive receptors, additional mitigation measures and residual effects. A distinction will be made between direct, indirect, secondary, short-term, medium-term and long-term, permanent and temporary, positive and negative effects. Cumulative effects will be considered as a single coordinated assessment.
- 5.7.6 The approach taken to the preliminary assessment of cumulative effects is reported in **Chapter 19: Cumulative Effects in Volume 1**.
- 5.8 What approach has been taken to avoid, prevent, reduce or offset likely significant environmental effects?**
- 5.8.1 Mitigation can be relied on to reduce any potential significant environmental effects from Mylen Leah Solar Farm. The sequential steps of the mitigation hierarchy are as follows:
- Avoidance – take measures to avoid creating impacts from the outset;
 - Minimisation – measures taken to reduce the duration, intensity and extent of the impact if they cannot be avoided;
 - Restoration – measures taken to improve ecosystems following exposure to unavoidable impacts; and
 - Offset – measures taken to compensate for any residual impacts.
- 5.8.2 The Institute of Environmental Management and Assessment's (IEMA) 'Environmental Impact Assessment Guide to Shaping Quality Development'³¹ refers to three distinct forms of mitigation:
- Primary – an intrinsic part of the project design;
 - Secondary – typically described within the factor chapters of the ES, but often are secured through planning conditions and/or management plans; and
 - Tertiary – required regardless of any EIA, as it is imposed, for example, as a result of legislative requirements and/or standard sectoral practices.
- 5.8.3 For the purposes of this PEIR and the ES, embedded 'primary' mitigation measures will form part of Mylen Leah Solar Farm for which consent is sought. The embedded (primary) environmental mitigation measures that are

considered to be an inherent part of Mylen Leah Solar Farm i.e., the design principles adopted to avoid or prevent adverse environmental effects based on the design of Mylen Leah Solar Farm to date are described in **Chapters 6 to 17** in **Volume 1** for each environmental factor. It should be noted that these will likely evolve over the course of the design evolution, up to submission of the DCO application.

- 5.8.4 These embedded (primary) environmental mitigation measures should not be confused with additional (secondary and tertiary) mitigation measures which avoid, prevent or reduce and, if possible, offset likely significant adverse effects on the environment, which are described within each environmental factor assessment (**Chapters 6 to 17** in **Volume 1**).
- 5.8.5 Mitigation will be secured through the DCO process, for example as requirements in the DCO, to ensure that it is delivered as part of Mylen Leah Solar Farm.

5.9 What difficulties and uncertainties have been encountered in this preliminary assessment?

- 5.9.1 Factor-specific difficulties and uncertainties are set out in the individual assessments (**Chapters 6 to 17** in **Volume 1**). The following key general difficulties and uncertainties apply to a number of environmental factor assessments:
- The detailed design of Mylen Leah Solar Farm is still developing, as are the environmental surveys and assessments required to support the planning and EIA process. This PEIR is prepared based on the preliminary information available at the time of writing. Each environmental factor chapter clearly sets out the additional work, including any surveys, that is required to inform the ES.
 - The preliminary information presented in this PEIR is based on construction information available at the time of writing and based on reasonable worst-case assumptions, where this information is not available.
 - As the location and area of the components that Mylen Leah Solar Farm comprises are not yet defined or fixed, there is potential for uncertainty regarding the scope of assessment for each factor. However, the description of Mylen Leah Solar Farm presented in **Chapter 3: What will Mylen Leah Solar Farm Comprise?** in **Volume 1** details the maximum parameters of Mylen Leah Solar Farm components as they are currently known. The preliminary assessment within this PEIR is based on a reasonable 'worst-case scenario', based on the maximum parameters presented.
 - Data from third parties relied upon for the baseline against which any effects have been assessed could potentially be out of date or inaccurate. However, any such data have been sourced and secured from reputable and industry standard sources. It has been reviewed and used by competent and experienced professional experts. The combination of appropriate data sources being used by competent and experienced experts ensures that the data is suitable for its purpose

and therefore provides an appropriate evidence base from which the existing environmental baseline (as it is currently known) has been informed.

- Surveys at this stage are ongoing and are subject to access being granted as well as ground conditions at the Site. Whilst every effort has been made by the Applicant to obtain access to all areas of the draft Order Limits, some areas were not able to be surveyed.

¹ Planning Act 2008. Available online: [Planning Act 2008](#)

² The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017. Available online: [The Infrastructure Planning \(Environmental Impact Assessment\) Regulations 2017](#)

³ Department for Energy Security and Net Zero (December 2025, published January 2026) Overarching National Policy Statement for Energy (EN-1). Available online: [Overarching National Policy Statement for energy \(EN-1\), 2025 - GOV.UK](#)

⁴ Department for Energy Security and Net Zero (December 2025, published January 2026) National Policy Statement for Renewable Energy Infrastructure (EN-3). Available online: [National Policy Statement for renewable energy infrastructure \(EN-3\), 2025 - GOV.UK](#)

⁵ Department for Energy Security and Net Zero (December 2025, published January 2026) National Policy Statement for Electricity Networks Infrastructure (EN-5). Available online: [National Policy Statement for electricity networks infrastructure \(EN-5\), 2025 - GOV.UK](#)

⁶ Ministry of Housing, Communities & Local Government (2024) National Planning Policy Framework. Available online: [National Planning Policy Framework - GOV.UK](#)

⁷ Town and Country Planning Act 1990. Available online: [Town and Country Planning Act 1990](#)

⁸ East Riding of Yorkshire Council (2025) East Riding Local Plan Update 2020-2039. Available online: [East Riding Local Plan Update](#)

⁹ The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017. Available online: [The Infrastructure Planning \(Environmental Impact Assessment\) Regulations 2017](#)

¹⁰ Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009. Available online: [The Infrastructure Planning \(Applications: Prescribed Forms and Procedure\) Regulations 2009](#)

¹¹ Ministry of Housing, Communities & Local Government and Department for Levelling Up, Housing and Communities (2024) Planning Act 2008: Guidance on the pre-application process. Available online: [Planning Act 2008: Pre-application stage for Nationally Significant Infrastructure Projects - GOV.UK](#)

¹² Department for Energy Security and Net Zero (December 2025, published January 2026). Overarching National Policy Statement for energy (EN-1), 2025. Available online: [Overarching National Policy Statement for energy \(EN-1\), 2025 - GOV.UK](#)

¹³ Department for Energy Security and Net Zero (December 2025, published January 2026). National Policy Statement for renewable energy infrastructure (EN-3), 2025. Available online: [National Policy Statement for renewable energy infrastructure \(EN-3\), 2025 - GOV.UK](#)

¹⁴ National Infrastructure Commission (2020) Design Principles for National Infrastructure. Available online: [NIC-Design-Principles.pdf](#)

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- ¹⁵ Planning Inspectorate (2024). Nationally Significant Infrastructure Projects: Advice on Good Design. Available online: [Nationally Significant Infrastructure Projects: Advice on Good Design - GOV.UK](#)
- ¹⁶ Planning Inspectorate (2025). Nationally Significant Infrastructure Projects - Advice Note Nine: Rochdale Envelope. Available online: [Nationally Significant Infrastructure Projects - Advice Note Nine: Rochdale Envelope - GOV.UK](#)
- ¹⁷ Planning Act 2008. Available online: [Planning Act 2008](#)
- ¹⁸ Scoping Report submitted to the Secretary of State on 08 January 2025. Available online: [EN0110002-000004-Mysten Leah Solar Farm Scoping Report.pdf](#)
- ¹⁹ Building Research Establishment (BRE) Digest 365: Soakaway Design (2016). Available online: [DG365webV2-Feb-2016.pdf](#)
- ²⁰ Environment Act 2021. Available online: [Environment Act 2021](#)
- ²¹ Control of Pollution Act 1974. Available online: [Control of Pollution Act 1974](#)
- ²² Environment Act 2021. Available online: [Environment Act 2021](#)
- ²³ The Hazardous Waste (England and Wales) Regulations 2005. Available online: [The Hazardous Waste \(England and Wales\) Regulations 2005](#)
- ²⁴ The Waste (England and Wales) Regulations 2011. Available online: [The Waste \(England and Wales\) Regulations 2011](#)
- ²⁵ The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009. Available online: [The Infrastructure Planning \(Applications: Prescribed Forms and Procedure\) Regulations 2009](#)
- ²⁶ Planning Inspectorate (2020) Advice Note Seven: Environmental Impact Assessment: Process, Preliminary Environment Information and Environmental Statements (Version 7). Available online: [Nationally Significant Infrastructure Projects - Advice Note Seven: Environmental Impact Assessment: process, preliminary environmental information and environmental statements - GOV.UK](#)
- ²⁷ British Energy Security Strategy (2022). Available online: [British energy security strategy - GOV.UK](#)
- ²⁸ Agricultural Land Classification for England and Wales: Revised Guidelines and Criteria for Grading the Quality of Agricultural Land (1988). Ministry of Agriculture, Fisheries and Food. Available online: [Agricultural Land Classification of England and Wales: Guidelines for grading the quality of agricultural land - JP069](#)
- ²⁹ Available online: [Natural England Access to Evidence - Regional Agricultural Land Classification Maps](#)
- ³⁰ Planning Inspectorate (2018) Advice Note Nine: Rochdale Envelope (Version 3). Available online: [Nationally Significant Infrastructure Projects - Advice Note Nine: Rochdale Envelope - GOV.UK](#)
- ³¹ Institute of Environmental Management and Assessment (2015) Environmental Impact Assessment Guide to Shaping Quality Development. Available online: [Delivering-Quality-Development.pdf](#)