

Stonestreet Green Solar Design Approach Document

PINS Ref: EN010135

Doc Ref. 7.4

Version 1

June 2024

APFP Regulation 5(2)(q)
Planning Act 2008
The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

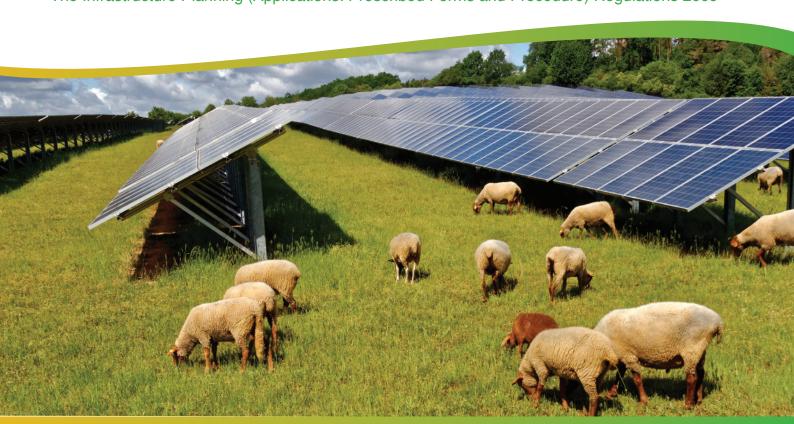




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1 Executive Summary

- 1.1.1 The Stonestreet Green Solar scheme ('the Project') is proposed to help meet the urgent need for renewable energy set out clearly by the Government to tackle climate change.
- 1.1.2 The Project will help the Government directly address the clear and urgent need for additional solar infrastructure, delivering a number of national benefits. In addition, the Project will also result in a range of benefits for the local area, such as a significant biodiversity net gain ('BNG'), an enhanced network of footpaths (through amended Public Rights of Way ('PRoW')) and new jobs and their associated benefits.
- 1.1.3 The Project has evolved over time through a fully collaborative approach involving community engagement, public consultation and ongoing discussions with key stakeholders and authorities.
- 1.1.4 The Applicant has a long-term design vision for the Project which is to achieve a quality scheme that makes a meaningful contribution to the UK's urgent need for new renewable energy infrastructure, whilst respecting the surroundings and community, and taking advantage of opportunities to enhance elements such as biodiversity and connectivity.
- 1.1.5 The Applicant has sought to create a scheme that minimises the impacts on the surrounding environment whilst delivering substantial public benefits.
- 1.1.6 The delivery of a sensitive, well-designed scheme is central to the strategic approach to the design of the Project.
- 1.1.7 The Applicant will deliver this vision for the Project by achieving a series of Design Objectives. This Design Approach Document ('DAD') describes the Design Objectives, how they have been identified and how they will be achieved and secured. The DAD also identifies how the design of the Project aligns itself with policy and guidance, including the Government's requirement to achieve good design.



2 Introduction and Purpose of the Design Approach Document

- 2.1.1 The Applicant is applying for a Development Consent Order ('DCO') for the Project. The Project comprises the construction, operation and maintenance, and decommissioning of solar PV arrays and energy storage, together with associated infrastructure and an underground cable connection to the existing National Grid Sellindge Substation.
- 2.1.2 The Project will include a generating station (incorporating solar arrays) with a total capacity exceeding 50 megawatts ('MW'). The agreed grid connection for the Project will allow the export and import of up to 99.9 MW of electricity to the grid. The Project will connect to the existing National Grid Sellindge Substation via a new 132 kilovolt ('kV') substation constructed as part of the Project and cable connection under the Network Rail and High Speed 1 ('HS1') railway.
- 2.1.3 The location of the Project is shown on **ES Volume 3, Figure 1.1 (Doc Ref. 5.3)**. The Project will be located within the Order limits (the land shown on the **Works Plans (Doc Ref. 2.3)** within which the Project can be carried out). The Order limits plan is provided as **ES Volume 3, Figure 1.2 (Doc Ref. 5.3)**. Land within the Order limits is known as the 'Site'.
- 2.1.4 The application being submitted for development consent for the Project (the 'DCO Application') will be determined by the Secretary of State for Energy Security and Net Zero given the Project is classified as a Nationally Significant Infrastructure Project ('NSIP') under the Planning Act 2008 ('PA 2008'), with a total generating capacity exceeding 50 MW.
- 2.1.5 The purpose of this DAD is to describe the design of the Project and to explain how it has responded to its context and how it has been shaped through consultation to meet the design vision and the Design Objectives.
- 2.1.6 The DCO Application is founded on clear development principles which together directly address the clear and urgent need for increased solar infrastructure in the UK, as clearly set out in adopted Government policy.
- 2.1.7 Good design has been a key consideration from the outset. This DAD sets out how good design has been embedded in the Design Objectives, and how these have influenced the overall siting and aesthetics of the Project as a whole.
- 2.1.8 The design evolution has been an iterative process, with the final design evolving as constraints and opportunities have emerged over time, following the stages of assessment work and consultation. This process has been truly collaborative and has enabled the Applicant to present a scheme which is appropriate bearing in mind the context of the Site and the Government's overarching requirements for new solar infrastructure.



- 2.1.9 This DAD is a key document within the suite of documents which support the DCO Application. Together, the full suite of documentation describes, assesses and justifies the Project.
- 2.1.10 Relevant supporting assessment and justification, regarding the design approach, can also be found throughout the DCO Application, including within ES Volume 2, Chapter 3: Project Description (Doc Ref. 5.2) and ES Volume 2, Chapter 5: Alternatives and Design Evolution (Doc Ref. 5.2). Other relevant documents are referred to in subsequent sections of this DAD.



3 Policy and Guidance Context

3.1 Policy and Guidance Context

- 3.1.1 The Applicant's proposals are founded on the principles of 'good design'. This section of the DAD considers relevant policy and guidance on the design of major energy infrastructure. Both the national and local position is summarised where it relates to matters of design.
- 3.1.2 Pursuant to the PA 2008, in deciding a DCO application to which a national policy statement ('NPS') has effect, the Secretary of State must have regard to any relevant NPS, any local impact report, and any other matters considered both "important and relevant" to the decision.
- 3.1.3 On 17 January 2024, the revised Overarching National Policy Statement for Energy (EN-1) ('NPS EN-1')¹, National Policy Statement for Renewable Energy Infrastructure (EN-3) ('NPS EN-3')² and National Policy Statement for Electricity Networks Infrastructure (EN-5) ('NPS EN-5')³ came into force. These NPSs are the relevant NPSs that have effect in relation to the development to which the DCO Application relates. The main documents that may be considered important and relevant to the Secretary of State's decision also include:
 - Policies from the adopted development plan and other relevant planning policy documents; and
 - National Planning Policy Framework.
- 3.1.4 Paragraph 4.1.15 of NPS EN-1 states that in the event of a conflict between these documents and an NPS, the NPS prevails for the purpose of Secretary of State decision making given the national significance of the infrastructure.

3.2 National Policy Statements

- 3.2.1 NPS EN-1 sets out the Government's policy for the delivery of major energy infrastructure.
- 3.2.2 The overarching need case for each type of energy infrastructure and the substantial weight which should be given to this need in assessing applications, as set out in paragraphs 3.2.6 to 3.2.8 of NPS EN-1, is the starting point for all assessments of energy infrastructure applications.
- 3.2.3 NPS EN-1 states that "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." (paragraph 4.7.2).



- 3.2.4 NPS EN-1 acknowledges 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" (paragraph 4.7.2).
- 3.2.5 NPS EN-1 recognises the typical location of NSIPs and states that "Virtually all nationally significant energy infrastructure projects will have adverse effects on the landscape" (paragraph 5.10.5) and that "All proposed energy infrastructure is likely to have visual effects for many receptors around proposed sites" (paragraph 5.10.13).
- 3.2.6 Paragraph 5.10.6 of NPS EN-1 states that "Projects need to be designed carefully, taking account of the potential impact on the landscape. Having regard to siting, operational and other relevant constraints the aim should be to minimise harm to the landscape, providing reasonable mitigation where possible and appropriate".
- 3.2.7 NPS EN-3 recognises the role that good design should play in the context of achieving the Government's urgent and overriding need for solar energy infrastructure. Paragraph 2.10.25 states 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 grid export capacity". NPS EN-3 also states (at paragraph 2.10.61) that for a "solar farm to generate electricity efficiently the panel array spacing should seek to maximise the potential power output of the Site".
- 3.2.8 In terms of scheme design and evolution, NPS EN-3 (at paragraph 2.10.59) sets out that applicants should consider the criteria for good design set out in NPS EN-1 (Section 4.7) at an early stage when developing projects.
- 3.2.9 NPS EN-5 is the primary basis for decisions on transmission and distribution system NSIPs and associated infrastructure (and therefore the relevance of NPS EN-5 is limited to the underground cables and the Project Substation). NPS EN-5 confirms that applicants should consider the criteria for good design as set out in NPS EN-1 at an early stage when developing projects (paragraph 2.4.2). However, it also recognises that the Secretary of State should bear in mind that the functional design constraints of safety and security "may limit an applicant's ability to influence the aesthetic appearance" of the infrastructure (paragraph 2.4.3).

3.3 National Planning Policy Framework

3.3.1 The National Planning Policy Framework ('NPPF'), most recently updated in December 2023, sets out the Government's planning policies for England and how these should be applied. Paragraph 5 of the NPPF recognises that the NPPF "does not contain specific policies for nationally significant infrastructure projects" and confirms that "These are determined in accordance with the decision-making framework in the Planning Act 2008 (as amended) and relevant national policy statements for major infrastructure, as well as any other matters that are relevant (which may include the National Planning Policy Framework)." Nevertheless, the NPPF may be considered important and relevant to the Secretary of State's decision on a DCO application.



- 3.3.2 Good design is described in paragraph 131. It explains that "The creation of high quality, beautiful and sustainable buildings and places is fundamental to what the planning and development process should achieve. Good design is a key aspect of sustainable development, creates better places in which to live and work and helps make development acceptable to communities."
- 3.3.3 In summary, the aspiration for good design is central to Government policy, however, importantly, the Government does recognise that the contribution that energy infrastructure development is able to make to the enhancement of the quality of an area is limited by the nature of the development.

3.4 Local Plan

3.4.1 The Ashford Local Plan 2030 (adopted 2019) contains general policies on design. In particular, Policy SP6 (Promoting High Quality Design) sets out that development proposals must be of high-quality design and demonstrate a careful consideration of and a positive response to a number of factors, including character of place, ease of movement, and flexibility. The policy explains how development proposals should show how they have responded positively to design policy and guidance, including national design guidance. Policy ENV3a (Landscape Character and Design) sets out that all development proposals in the Borough should demonstrate regard to landscape characteristics proportionately, according to the landscape significance of the site in question.

3.5 Guidance

3.5.1 There are a number of other documents which provide further guidance on design.

Kent Downs National Landscape Management Plan (2021-2026)

3.5.2 The Kent Downs National Landscape Management Plan (2021-2026) identifies the key issues, opportunities and threats facing the landscape and sets out aims and principles for the positive conservation and enhancement of the Kent Downs. The goal of the Management Plan is to ensure that the natural beauty and special character of the landscape and vitality of the communities are recognised, valued, enhanced and strengthened well into the future. The document sets out that a "landscape led approach to design, resource management and development" is required, which starts with an understanding of the landscape as a framework for evidence (page 26).

Design Principles for National Infrastructure, National Infrastructure Commission Design Group (February 2020)

3.5.3 The National Infrastructure Commission's Design Group has published its own Design Principles for National Infrastructure to guide the projects which will upgrade and renew the UK's infrastructure system. The document sets out four design principles which infrastructure projects should consider at their design stage, namely: (i) climate: mitigate greenhouse gas emissions and adapt to climate change; (ii) people: reflect what society wants and share benefits widely; (iii) places: provide a sense of identity and improve the environment; and (iv) value: achieve



multiple benefits and solve problems. The guide explains how everyone involved should appreciate the wider context, engage meaningfully and continually measure and improve when considering the four design principles.

Project Level Design Principles, National Infrastructure Commission Design Group (May 2024)

- 3.5.4 The National Infrastructure Commission's Design Group has recently published Project Level Design Principles⁴. This provides guidance on developing and implementing design principles for major infrastructure projects and builds on the high level design principles (climate; people; places; and value) outlined above.
- 3.5.5 The guidance recommends project leaders:
 - Make sure there is a genuine commitment from the most senior levels of the project to using a structured design process from the earliest stages.
 - Put principles in place before taking any decisions and once in place, ensure they become a key part of the governance framework, informing all decision making.
 - Make sure that principles support the widest range of outcomes (not just operational functions) and that they are used to directly inform each design iteration
 - Keep revising the principles as new information comes to light and use them to manage an evolving project effectively.

IEMA and the Landscape Institute's Guidelines for Landscape and Visual Impact Assessment (third edition, 2013) ('GLVIA3')

- 3.5.6 GLVIA3 describes the design process as being integral to environmental impact assessment ('EIA'). It recommends "an iterative process, the stages of which feed into the planning and design of the project.... Site planning and detailed design, as well as initial appraisal of a development project in the screening and scoping stages, are informed by and respond to the ongoing assessment as the environmental constraints and opportunities are revealed in progressively greater detail and influence each stage of decision making" (paragraph 4.6).
- 3.5.7 GLVIA3 also notes that practitioners should consider whether mitigation measures are realistic, taking into account "financial, operational, political, programme, or societal constraints".



4 Existing Character Analysis

4.1 Introduction

- 4.1.1 The specific characteristics of the Order limits and the surrounding area has been carefully considered to ensure that the design of the Project can respond appropriately.
- 4.1.2 The Applicant has undertaken a detailed review of the baseline conditions, together with a review of opportunities and constraints.

4.2 Planning Designations

- 4.2.1 A number of key designations have been central to the character analysis. These include:
 - The Site is not subject to any national or local landscape designations.
 - There are no Scheduled Monuments, World Heritage Sites, Registered Battlefields, or Registered Parks and Gardens within the Site. The closest Scheduled Monument is the Scheduled Romano-British building of S of Burch's Rough which is 1.6km east of the Site boundary at its closest point.
 - There are no designated built heritage assets within the Site. The Site has certain areas that hold the potential for archaeology as defined by the ABC Local Plan⁵. Within the boundary of the Site, there is a Protected Military Remains ('PMR') crash Site of a Messerschmitt Bf109E-4 from World War II; the Applicant was granted a licence by the Ministry of Defence to excavate the crash site under the Protection of Military Remains Act 1986⁶.
 - Designated heritage assets recorded within 1km of the Site include two Grade I Listed buildings, six Grade II* Listed buildings, seventy Grade II Listed buildings, two Conservation Areas and three further PMR sites. The Site is not subject to any statutory designations for nature conservation.
 - There is one statutory designated site of national importance for its ecological interest within 2km of the Site, namely Hatch Park Site of Special Scientific Interest which is located approximately 1.8km to the north of the Site.
 - There are several non-statutory designated sites within 1km of the Site, including Backhouse Wood Local Wildlife Site ('LWS') (adjacent to the Northern Area), Aldington Sand Pit LWS (approximately 55m south east of the Site), Aldington Woods LWS (approximately 370m south of the Site), and Bilsington Woods and Pasture LWS (approximately 720m south west of the Site).
 - The majority of the Site lies within Flood Zone 1 (identified as having less than 1 in 1,000 annual probability of river (fluvial) flooding) (i.e., low risk of flooding). Most of the Northern Area (Fields 26 to 29) and Fields 19 and 23



to 25 of the Central Area of the Site are classified by the Environment Agency as in Flood Zone 2 (identified as land having between a 1 in 100 and 1 in 1,000 annual probability of river flooding, which is defined as 'medium' probability) and Flood Zone 3 (identified as land having a 1 in 100 or greater annual probability of river flooding, which is defined as 'high' probability). Parts of the Cable Route Corridor and Sellindge Substation are also located within Flood Zones 2 and 3.

4.3 Baseline Analysis

- 4.3.1 Extensive desk-based surveys and field work has been undertaken throughout an iterative design process leading up to the submission of the DCO Application.
- 4.3.2 This process has helped the Applicant to gain a detailed understanding of the conditions within and near to the Order limits which has in turn helped inform the Design Objectives.
- 4.3.3 A detailed appraisal of the baseline conditions in the context of design issues is presented in the **Environmental Statement (Doc Ref. 5.1 5.4)** which includes the following topics:
 - Cultural heritage (detail provided in ES Volume 2, Chapter 7: Cultural Heritage (Doc Ref. 5.2));
 - Landscape and views (detail provided in ES Volume 2, Chapter 8: Landscape and Views (Doc Ref. 5.2));
 - Biodiversity (detail provided in ES Volume 2, Chapter 9: Biodiversity (Doc Ref. 5.2));
 - Water environment (detail provided in ES Volume 2, Chapter 10: Water Environment (Doc Ref. 5.2));
 - Land contamination (detail provided in ES Volume 2, Chapter 11: Land Contamination (Doc Ref. 5.2));
 - Socio economics (detail provided in ES Volume 2, Chapter 12: Socio Economics (Doc Ref. 5.2));
 - Traffic and access (detail provided in ES Volume 2, Chapter 13: Traffic and Access (Doc Ref. 5.2)).
 - Noise (detail provided in ES Volume 2, Chapter 14: Noise (Doc Ref. 5.2));
 - Climate change (detail provided in ES Volume 2, Chapter 15: Climate Change (Doc Ref. 5.2)).



5 Design Objectives and Response

5.1 Introduction

- 5.1.1 Through carefully developing the design in response to the baseline analysis and the opportunities identified, the Applicant has achieved a design that responds positively to its location, delivers substantial benefits, keeps negative impacts to the minimum and makes valuable enhancements to the local area.
- 5.1.2 The design of the Project has evolved in the context of the urgent need for additional solar infrastructure which is clearly set out in the NPSs.

5.2 Overall Design Vision

5.2.1 The Project has a vision to deliver a high quality and innovative solar project. It has been carefully sited and designed, taking account of nearby receptors. To achieve this vision, the Applicant has established a series of Design Objectives which have collectively informed the design.

5.3 Design Objectives

- 5.3.1 The Applicant has encapsulated the design vision in nine key Design Objectives which inform the design of the Project. These objectives have been informed by the consultation process.
- 5.3.2 These Design Objectives are different to the Project requirements set out in the Environmental Statement (specifically within ES Volume 2, Chapter 5: Alternatives and Design Evolution (Doc Ref. 5.2)).

Objective 1: Design the Project to optimise the amount of renewable energy that can be generated in the Site area to help decarbonise electricity generation and achieving net zero carbon emissions, in line with the Government's commitments.

Design Response:

- The design of the Project has sought to generate a substantial amount of renewable energy, whilst carefully managing impacts on receptors, and delivering other benefits where opportunities are identified.
- Over the lifetime of the Project, the effect is to save nearly two million tonnes of CO2e compared to generation of that electricity from natural gas using Combined Cycle Gas Turbines.
- The design of the whole Project ensures that the amount of energy generated is maximised.
- The Project retains flexibility to select the most efficient technology.



Objective 2: Sensitively locate the Project within the landscape.

Design Response:

- The layout of the Project has undergone extensive review in order to respond to the landscape character baseline. This includes the reestablishment of historic hedgerows, retention of open views, reinforcement of woodlands and existing field pattern, and creation of new wetland habitats and tree planting along the East Stour River.
- The Grid Connection Cable utilises below ground cables, as opposed to overhead lines. This approach ensures the avoidance of larger above ground structures in the landscape.
- The Order limits includes areas of both openness and enclosure. The proposed planting design has responded to this varied character.
- The Project has been sited and designed in such a way to maximise the amount of existing vegetation that can be retained within the Order limits.
- The layout of the Project has been designed to avoid impacts on valuable landscape features through the incorporation of appropriate offsets from woodland, hedgerows, watercourses and PRoW.
- The final design includes removal of four fields from previous iterations of the Project, representing an improvement in terms of potential impact.

Objective 3: Minimise impacts on views from people's homes and other viewpoints. A bespoke approach has been taken to the arrangement of the proposed panels close to residential properties.

Design Response:

- Buffers have been incorporated to reduce the impact on individual properties.
- Utilising existing vegetation to reduce the visual impact of the Project on people's views.
- The inclusion of extensive new planting to screen the Project from people's views.
- Proposed planting that responds to the existing character by allowing views to remain open where tall screening planting would not be appropriate.
- Proposed fencing that has been designed to reduce its visual prominence.
- Land between PRoW and PV Arrays that will incorporate hedgerows and trees where possible in order to screen views of the Solar farm or ancillary infrastructure. Open areas will be incorporated into the PRoW network at strategic locations to enable more distant views.
- A bespoke approach to be taken to the arrangement of the PV Arrays close to residential properties. This includes the retention of key view corridors free from PV Arrays and Solar farm and associated infrastructure. The landscape mitigation strategy has evolved to include more extensive buffers and more robust proposed planting to assist in mitigating visual impact from adjacent residential properties.



Objective 4: Enhance the local green infrastructure network.

Design Response:

- The Project provides the opportunity to address the issues with the existing green infrastructure.
- The Project incorporates the enhancement of the local green infrastructure network, improving ecological and recreational connectivity across the Order limits. In addition, the Project includes new green infrastructure which is at the heart of the overall design. This facilitates an improvement in terms of both the ecological and recreational connectivity both across the Site, and between the Site and adjacent lands.

Objective 5: Enhance local biodiversity.

Design Response:

- In addition to the green infrastructure enhancement improvements outlined above, the Project presents the opportunity to enhance the biodiversity value of the Site.
- The Project will result in a biodiversity net gain of at least 100% for habitat units and at least 10% for hedgerow and river units.

Objective 6: Avoid harm to heritage assets and their setting.

Design Response:

- The design of the Project suitably respects cultural heritage, and potential cultural heritage.
- For instance, the siting of Inverter Stations and BESS Units has been considered so that they are located outside areas of potential archaeological significance in a number of locations (specifically Fields 8, 14 and 17).

Objective 7: Safeguard the water environment, be safe from flooding and ensure that flood risk is not increased elsewhere, taking account of the impacts of climate change.

Design Response:

- The overall design of the Project will ensure that the Project is safe from flooding, and does not increase the risk of flooding elsewhere, taking account of the impacts of climate change.
- The DCO Application is supported by ES Volume 4, Appendix 10.2: Flood Risk Assessment (Doc Ref. 5.4), which provides further detail alongside the Environmental Statement (Doc Ref. 5.1 - 5.4).
- Except for Sellindge Substation, which is already within Flood Zone 3, no hardstanding or sensitive infrastructure is proposed within areas located in Flood Zone 2 or 3.
- Where the Grid Connection Cable is required to cross a watercourse, this
 will be buried below the watercourse and be constructed by directional
 drilling. Proposals for new culverts have been avoided.



An Outline Operational Surface Water Drainage Strategy ('OSWDS')
(Doc Ref. 7.14) has been prepared (which supports the DCO Application) to
ensure that there is no increased risk of surface water flooding, on or off
Site as a result of the Project.

Objective 8: Retain existing PRoW and connectivity where possible and seek opportunities to enhance the local network.

Design Response:

- During the construction phase, some of the PRoW that interact with the Site will experience change related to diversions and interactions with construction traffic where PRoWs are crossed/impacted intermittently by construction vehicles.
- All PRoW provided as diversions, replacements or alternatives to PRoW that are diverted or extinguished during the construction phase, as well as new PRoW to be provided, will be fully established and accessible during the operational phase ensuring no break in connectivity across the network.
- The PRoW diversions have been carefully considered to ensure that users will gain the most amount of benefit from the route. For instance, the route of PRoW AE370 has been revised to take walkers through the open field to the west of Field 12, where existing views to the North Downs can be enjoyed from the Aldington Ridge.
- New PRoW have been provided in Fields 26-29 to create a continuous route along the East Stour River through the Site.

Objective 9: Provide safe access to the Site and avoid adverse impacts to the local highway network and its users (including pedestrians, cyclists and horse riders).

Design Response:

The final design response arrives at the most appropriate design. The use of the local road network for construction purposes was considered, however, this was discounted in favour of an internal haulage road which connects the primary construction compounds with the majority of the PV Array fields. The use of the local highway network (without the internal haulage road) would lead to significantly more disruption to local road users and residents, therefore impacting upon design overall.



6 Design Evolution

6.1 Introduction

- 6.1.1 The design of the Project has evolved since 2021 as part of an iterative, mitigation by design process, in accordance with the NPSs and other relevant policy and guidance, including the Design Principles for National Infrastructure, National Infrastructure Commission Design Group (2020)⁷ and the National Infrastructure Commission Design Group. Project Level Design Principles (May 2024).
- 6.1.2 This iterative design process has identified a robust, proportional and deliverable landscape mitigation strategy as part of the Project.
- 6.1.3 Mitigation measures have been developed in response to policy requirements, published landscape character guidance, the physical characteristics of the Site and views to and from the Site from the wider landscape.

6.2 Landscape Design

- 6.2.1 The design iteration process adopted has landscaping at its heart.
- 6.2.2 In considering the overall purposes and aims of the landscape strategy five broad objectives have been identified. The extent to which these objectives have been met is a measure of the success of the landscape strategy in mitigating the potential impact of the Project as a whole. However, as recognised by NPS EN-1, virtually all nationally significant energy infrastructure projects will have adverse effects on the landscape (paragraph 5.10.5).
- 6.2.3 The five objectives of landscape strategy are as follows:
 - To minimise the physical impact of the Project on the Site's landscape features including vegetation, landform, and wet features;
 - To maximise opportunities to enhance the landscape of the Site by reinforcing and reinstating pattern, by extensive new planting that is characteristic to the receiving environment, by introduction of new valuable habitats, and by improved management and custodianship of the landscape resource;
 - To visually and physically integrate the Project into the landscape as much as possible using a variety of natural features;
 - To retain and where possible enhance the existing use of the Site for quiet recreation; and
 - To minimise the visual impact of the Project on visual receptors, including views from residential properties, and the Kent Downs National Landscape.



6.3 Design Evolution

- 6.3.1 The Project has evolved through consultation building upon the Site analysis.
- 6.3.2 A detailed description of the design stages and the changes made to the design of the evolving scheme at each stage is set out in **ES Volume 2, Chapter 5: Alternatives and Design Evolution (Doc Ref. 5.2)**. This includes details of the changes to the emerging Project both in terms of the extent of the Order limits and the layout of the land within the Order limits.
- 6.3.3 The key stages are as follows:
 - Initial Design Concept / Feasibility Stage (December 2021);
 - 2022 Non-Statutory Consultation (March to April 2022);
 - 2022 Statutory Consultation (October to November 2022);
 - 2023 Statutory Consultation (June to July 2023);
 - 2023 Targeted Consultation (November December 2023); and
 - 2024 Targeted Consultation (February to March 2024).



7 The Design Approach

- 7.1.1 The design represents the culmination of all of the contributory design elements at this stage of the development of the Project.
- 7.1.2 It has shown particular regard to commentary made during statutory and non-statutory consultation and engagement throughout the development of the Project design. The Applicant has looked to develop a scheme that shows due sensitivity to its surroundings and to the community that will host it. This has included building in key benefits to the Project that local people can take advantage of from the outset and to mitigate impacts as far as reasonably possible.
- 7.1.3 As set out in the **Planning Statement (Doc Ref. 7.6)**, the Project is expected to deliver the following benefits:
 - A meaningful contribution to the UK's legally binding net zero commitment.
 - An additional source of domestic energy security that is not impacted by gas prices.
 - Provision of battery energy storage, co-located with the solar generation, which maximises the efficiency of land use and grid capacity and allows the Project to maximise the usable output from intermittent generation which will reduce the overall amount of generation capacity required whilst also providing the opportunity to deliver grid balancing to the local electricity network.
 - A range of ecological enhancement measures that will result in a BNG of at least 100% for habitat units and at least 10% for hedgerow and river units.
 - Significant additional tree planting.
 - A reduction in nitrate emissions to the East Stour River.
 - New PRoW will be created to provide new facilities for active travel, recreation and links between communities and developments. The Project will provide new access routes that will support wider connections between Ashford and the Otterpool Park development on attractive and safe, well-maintained paths.
 - An average of 132 direct full time equivalent ('FTE') jobs could be supported over the 12-month construction period.
 - It is anticipated that the decommissioning phase would require a similar level of employment and generate a similar scale and character of workforce spending and supply chain effects as the construction phase.
 - The operational phase of the Project would support four direct FTE jobs consisting of operational and maintenance roles for the Project's PV panels and other structures, where relevant.
- 7.1.4 The final design has incorporated a number of changes following the pre-application consultation, which are set out in ES Volume 2, Chapter 5: Alternatives and Design Evolution (Doc Ref. 5.2).



8 Design Commitments and Controls

8.1 Approach to the Application

- 8.1.1 The detailed design for the Project will be developed following the grant of the DCO and is subject to approval by the local planning authority. As the technologies proposed are rapidly evolving, flexibility is sought at the application stage to allow the Project to utilise the best technology available at the time of future construction to maximise the benefits the Project will deliver. The need for flexibility in design, layout and technology use in DCO applications is recognised in national policy.
- 8.1.2 Parameters are set for elements such as buffers, heights and size and are secured by the **Design Principles (Doc Ref. 7.5)**. The layout and distribution of the Project are secured by the **Works Plans (Doc Ref. 2.3)**.
- 8.1.3 The Illustrative Project Drawings Not for Approval (Doc Ref. 2.6) include an Illustrative Project Layout which shows how the Project could be delivered within the parameters defined by the Work Plans and Design Principles. The Illustrative Project layout may inform the future detailed design stage, but all detailed design must primarily align with the Works Plans (Doc Ref. 2.3) and Design Principles (Doc Ref. 7.5).
- 8.1.4 The **Illustrative Landscape Drawings Not for Approval (Doc Ref. 2.7)** include an **Illustrative Landscape Masterplan** which shows how the Project landscaping could be delivered.
- 8.1.5 Further details on construction, operation and decommissioning are provided within ES Volume 2, Chapter 3: Project Description (Doc Ref. 5.2).
- 8.2 The Draft DCO and the Design Controls
- 8.2.1 The DCO defines the Project, including what is allowed to be built. Once granted, the DCO provides the powers and authority to deliver the Project. **Schedule 1 Authorised Development** of the **Draft Development Consent Order (Doc Ref. 3.1)** defines the physical components of the Project in a series of Work Nos., whilst Schedule 2 sets out a series of Requirements, which function similarly to planning conditions, to secure further detail on design and technical matters following granting of the DCO.
- 8.2.2 Alongside the **Draft Development Consent Order (Doc Ref. 3.1)**, the DCO Application is supported by a suite of Control Documents to ensure that the design is appropriately considered and controlled. The **Guide to the Application (Doc Ref. 1.5)** provides a list of the Control Documents and explains their purpose within the DCO Application. Some Control Documents are compliance documents and must be complied with when certain activities are carried out, whereas others provide a framework for further detailed strategies.



8.3 Detailed Design Approval

- 8.3.1 The detailed design of the Project will be developed following the granting of the DCO through further engagement with the local planning authority. This allows the design to be informed by available technology, an understanding of construction phases and by any further survey and site evaluation work undertaken.
- 8.3.2 The **Draft Development Consent Order (Doc Ref. 3.1)** includes a Requirement in relation to detailed design which states that no phase of the authorised development may be commenced until written details of the following for that phase have been submitted to an approved by the local planning authority:
 - Layout
 - Scale
 - Proposed finished ground levels
 - External appearance
 - Hard surfacing materials
 - Vehicular and pedestrian access, parking and circulation areas
 - Refuse or other storage units, signs and lighting
 - Power and communication cables and pipelines
 - Fencing and other means of enclosure
 - Security measures
 - Acoustic barriers
- 8.3.3 The Requirement also sets out that these details must accord with the **Design Principles (Doc Ref. 7.5)** and that the authorised development must be carried out in accordance with the approved details.



References

- Department of Energy Security & Net Zero (2023). Overarching National Policy Statement for Energy (EN-1). Accessed January 2024. https://assets.publishing.service.gov.uk/media/65a7864e96a5ec0013731a93/overarching-nps-for-energy-en1.pdf
- Department of Energy Security & Net Zero (2023). National Policy Statement for Renewable Energy Infrastructure (EN-3). Accessed January 2024. https://assets.publishing.service.gov.uk/media/65a7889996a5ec000d731aba/nps-renewable-energy-infrastructure-en3.pdf
- Department of Energy Security & Net Zero (2023). National Policy Statement for Electricity Networks Infrastructure (EN-5). Accessed January 2024. https://assets.publishing.service.gov.uk/media/65a78a5496a5ec000d731abb/nps-electricity-networks-infrastructure-en5.pdf
- National Infrastructure Commission Design Group. Project Level Design Principles (May 2024). Accessed May 2024.
- Ashford Borough Council, (2019). Ashford Local Plan 2030. February 2019. Accessed October 2023. https://www.ashford.gov.uk/media/jw3nbvq1/adopted-ashford-local-plan-2030.pdf
- ⁶ His Majesty's Stationary Office, (1986). Protection of Military Remains Act 1986. Accessed October 2023.
- National Infrastructure Commission Design Group. Design Principles for National Infrastructure (2020). Accessed January 2024.