



Fendyke Solar Farm

Planning, Design and Access Statement

On behalf of **Enray Power Ltd**

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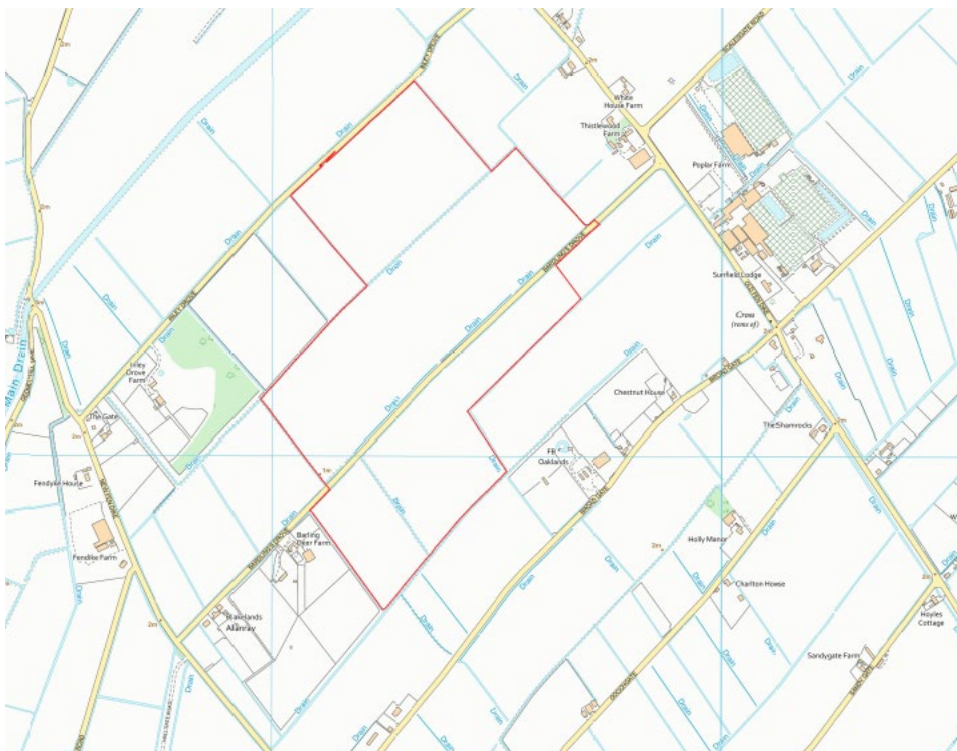
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1 Introduction

1.1 Overview

- 1.1.1 This Planning, Design and Access Statement has been prepared by Stantec on behalf of Integrum SPV 21004 Limited (the 'Applicant') in support of a planning application for the development of a solar photovoltaic (PV) farm and battery energy storage system (BESS) (the 'Development') at land at Fendyke Farm, Old Fendyke, Sutton St James, Spalding (the 'Site') (see Figure 1.1).
- 1.1.2 The Site is located in South Holland District Council (SHDC) who are Local Planning Authority (LPA) for the Site.

Figure 1.1: Site Location Plan



- 1.1.3 Planning permission is being sought for the following description of Development:

'Construction and operation of a solar farm and battery energy storage system (BESS), vehicular access, internal access tracks, landscaping, boundary treatment, cabling and associated infrastructure.'

- 1.1.4 The Development comprises the construction, operation, management and decommissioning of a solar farm and BESS with associated infrastructure to provide a reliable source of clean renewable energy. It has been agreed with the Distribution Network Operator (DNO) that connection to the national electricity grid will be via the South Holland Substation (on Jiggle's Gate) approximately 2km north of the Site. The DNO is expected to carry out the connection works to the substation under their permitted development rights. It is expected all associated cabling to the substation will be underground and along public highways.
- 1.1.5 The Development will contribute to local and national net zero targets with an export capacity of up to 20 Megawatts (MW) of renewable energy and 10 MW of BESS helping to make the national grid more

resilient. It will generate enough clean electricity which could meet the annual electricity demand of up to **12,015 dwellings** and save **7,212 tonnes of carbon dioxide** emissions per annum.

- 1.1.6 The UK Government's 'Powering Up Britain: Energy Security Plan' policy paper¹ recognises solar energy as a crucial part of the UK's clean energy transition and sets a target of 70 Gigawatts (GW) of solar energy by 2035. This amounts to a **five-fold increase** on current installed capacity. Ground-mounted solar is one of the cheapest forms of electricity generation and is readily deployable at scale. Grid-scale battery storage will also need to increase to around 970 GW by 2030 to achieve net zero targets. The National Grid Electricity System Operator (NESO) states that there is currently only 1.6 GW of operational battery storage capacity in the UK² with a significant way to go still to reach the 2030 target. On this basis, there is a pressing need for this Development.
- 1.1.7 The Government has expressed strong support for this increase of solar developments within National Planning Policy Framework (NPPF) and National Policy Statements EN-1 and EN-3, which are material planning considerations for this application, as detailed later in this report. More recently, the proposed changes to the NPPF lean heavily towards supporting renewable development.

1.2 About the Applicant

- 1.2.1 The applicant is Integrum SPV 21004 Limited. The parent company is Enray Power Ltd (Enray). Enray recently changed its name from Integrum Renewable Energy Ltd in October 2024. On this basis, there are references to 'Integrum' throughout the application.
- 1.2.2 Enray is a specialist in renewable energy development in the UK. Enray's main goal is to support the UK to deliver on the national commitments to net zero and help address climate change. In addition to this, Enray differs from other developers in that they are owner operators, meaning they seek consent, oversee construction and maintain their developments for the consented period. Consequently, Enray have a long term commitment to their projects, building beneficial relationships with the local area in terms of the local economy and communities.

1.3 Structure

- 1.3.1 This Planning Design and Access Statement (PDAS) provides the background to the Development and provides a clear rationale for the grant of planning permission for the Development. The remainder of this PDAS is structured as follows:
- Section 2 – The Application Site and Development
 - Section 3 – Planning Policy Context
 - Section 4 – Design and Access Statement
 - Section 5 – Planning Assessment
 - Section 6 – Summary and Conclusions
- 1.3.2 Whilst the PDAS is set out to be read as a standalone document, it should be read in the context of the entire submission documentation in order to fully understand the Development, its potential impacts and planning merits. Tables 1.1 and 1.2 outline the accompanying documents and drawings to this planning application.

¹ <https://www.gov.uk/government/publications/powering-up-britain/powering-up-britain-energy-security->

² www.nationalgridso.com/document/273166/download

Table 1.1: Submission Reports and Documents

Supporting Document	Author	Date
Planning Application Forms and Certificates	Stantec	November 2024
Planning & Design and Access Statement	Stantec	November 2024
Alternative Site Assessment and Site Justification Statement	Stantec	November 2024
Landscape & Visual Appraisal	Huskisson Brown Associates	September 2024
Flood Risk Assessment and Drainage Strategy	Andrew Moseley Associates	October 2024
Flood Evacuation and Emergency Plan	Andrew Moseley Associates	October 2024
Noise Impact Assessment	InAcoustic	October 2024
Agricultural Land Classification Report	Soil Environment Services Ltd	October 2024
Transport Statement	Andrew Moseley Associates	October 2024
Construction Traffic Management Plan	Andrew Moseley Associates	October 2024
Arboricultural Impact Assessment	Oakfield Arboricultural Services	November 2024
Preliminary Ecological Appraisal	MKA Ecology	November 2024
Water Vole and Otter Survey Report	MKA Ecology	December 2023
Ecological Impact Assessment (EclA)	MKA Ecology	October 2024
Breeding Bird Survey	MKA Ecology	October 2024
Skylark Technical Note	MKA Ecology	October 2024
Biodiversity Net Gain Plan Statutory Metric	MKA Ecology	October 2024
Outline Battery Storage System Management Plan	Greenfire Solutions	October 2024
(National Fire Chief's Council (NFCC) Guidance) Verification and Compliance Report	Greenfire Solutions	October 2024
Glint and Glare Report	Neo Environmental	October 2024
Geophysical Survey Report	Magnitude Surveys	September 2023
Historic Environmental Desk-Based Assessment	Orion	October 2024
Geotechnical Phase 1 Report	CGL	October 2024
Statement of Community Involvement	Stantec	October 2024
Topographical Survey	Carter Jonas	November 2023

Table 1.2: Submission Drawings

Drawings	Author	Ref:
Contextual Elevation Plan	CADmando	IRE004-EL-01_rev11
Existing Site Layout Plan	CADmando	IRE004-PL-00_rev07
Proposed Site Layout Plan	CADmando	IRE004-PL-03_rev13
Site Layout Plan Detail	CADmando	IRE004-PL-02_rev16
Site Location Plan	CADmando	IRE004-SP-01_rev01
Noise Mitigation Plan	CADmando	IRE004-PL-42_rev06
Water Tank	CADmando	IRE004-SD-02_rev04
Project Control Room	CADmando	IRE004-SD-04_rev04
LV Aux Transformer	CADmando	IRE004-SD-04_rev04
Battery Unit	CADmando	IRE004-SD-05_rev04
Battery Interface Cabinet	CADmando	IRE004-SD-06_rev04
BESS Inverter	CADmando	IRE004-SD-07_rev04
Twin Skid	CADmando	IRE004-SD-08_rev04
CCTV	CADmando	IRE004-SD-10_rev03
Access Track	CADmando	IRE004-SD-11_rev04
DNO Control Room	CADmando	IRE004-SD-12_rev03
PV Cross Section	CADmando	IRE004-SD-13_rev04
Deer Fencing & Gate	CADmando	IRE004-SD-14_rev02
Solar Inverter	CADmando	IRE004-SD-15_rev01
Drainage Layout	Andrew Moseley Associates	AMA-22709-DS-002
Landscape Strategy Plan	Huskisson Brown Associates	HBA-943-001 Rev J

2 Application Site and Development

2.1 Site and Surroundings

- 2.1.1 The Site extends to 44.2 hectares (ha) and comprises primarily agricultural land. The Site is almost entirely bordered by drains and subdivided into four separate fields by virtue of the existing drainage system and Bardling's Drove running east-west through the Site. Four of these drains are unnamed and South Holland Main Drain is located 250m north of the Site.
- 2.1.2 The local area is characterised by several farms and businesses, as well as sporadic residences. Several large farm buildings, yards and commercial greenhouses are located along New Fen Dike, Bardling's Drove, Broad Gate and Old Fen Dike. The most notable of these are the large glasshouses at Poplar Farm Flowers Ltd on Old Fen Dyke to the east of the Site, the 'Lift and Shift' shipping container storage area immediately to the south on Broad Gate and the storage barns to the west at Wright R J Ltd, on New Fen Dike.
- 2.1.3 The settlement of Holbeach St Johns is 2.17km northwest of the Site, Sutton St Edmund is 3km southwest and the centre of Sutton St James is located 1.5km east.
- 2.1.4 The submitted topographic survey (ref: J0074609-23-01_Issue01) shows that ground levels at the Site are in the region of 0.7 to 2.3m Above Ordnance Datum (m AoD). Site levels are lowest in the centre and highest along the northern boundary with a slight fall in gradient from north to south.
- 2.1.5 The Site falls within Flood Zone 3 similar to much of the wider surrounding district.
- 2.1.6 No statutorily or non-statutorily designated ecological sites are present within 2km of the Site.
- 2.1.7 The following Public Rights of Way (PRoW) are located nearby the Site:
- Public bridleway (Flee/8/1);
 - Public bridleway (SuSJ/2/3);
 - Public bridleway (Gedy/20/1); and
 - Public bridleway (SuSJ/1/1).

2.2 Planning History and Potential Cumulative Developments

- 2.2.1 Planning permission (ref. H20-0764-14) was granted in 2014 but not implemented for a solar farm on part of the Site (19.2ha) (representing approximately 44% of the of application site) comprising the rectangular-shaped field between Bardling's Drove and Broad Gate. This included solar PV modules, CCTV and a substation.
- 2.2.2 Prior to the above permission, an application for a 33ha solar farm (ref. H20-0017-14) was refused for three reasons, including: (1) lack of justification for the loss of Best and Most Versatile agricultural land (Grades 1, 2 and 3a); (2) significant impact on landscape character; and (3) overbearing, obtrusive and dominating impact on the amenities of 'Fearnley' and 'Chestnut House' on Broadgate.
- 2.2.3 An explanation of how the Development has responded to its spatial context and key design drivers is set out in Section 4 of this document. Notwithstanding this, the Development is materially different than H20-0017-14 for the following reasons:
- There is significant strengthened national policy support for delivery of renewable energy developments;

- The Development does not include the use of any Grade 1 land;
- This application is supported by a robust Alternative Site Assessment concluding the location of the Site is justified and that the Site uses lesser grade agricultural land than the surrounds;
- The site is comparatively further set back from the properties noted in the decision notice of application H20-0017-14; and
- The application is supported by a full Landscape and Visual Assessment, which suggests a robust level of screening and an overall acceptable impact on the landscape.

2.2.4 Planning permission was refused in 2014 for the erection of a wind turbine with a 50m high hub with a 78m turbine tip height.

2.2.5 In terms of potential for cumulative impacts arising from nearby development, there are two of note:

- *Tydd Solar Farm, Land East of Guanockgate Road, Sutton St Edmund, Spalding (South Holland District Council Planning Application Ref: H19-0329-24)*. This is an undetermined application for a “Temporary ground mounted solar photovoltaic (PV) farm with battery storage, substation and associated works” located to the east of the village of Sutton St Edmund and west of Gorefield, just over 3.1km to the southwest of the Site. It is considered that the potential for cumulative landscape and visual effect from the Development on the Site is very limited. This is on account of the distance between the Site and the Tydd Solar Farm application site, which lies just over 3.1km southwest of the Site. The sites are also separated by an expanse of agricultural land including built forms and vegetation belts and there is a lack of elevated landform that means that there are no views across both sites or wider intervisibility.
- *Meridian Solar Farm*. This is a proposed NSIP scale (750 MW) solar farm located to the south of Spalding and Holbeach. Whilst an EIA scoping opinion was issued on this project in July 2024, the application is not due to be submitted until Q2 2025, and there is little information about the potential effects of this NSIP project. No fixed details have been released into the public domain to accurately understand the development’s extent, height and impacts. Whilst the proposed Meridian Solar Farm appears to lie predominantly within the same Peaty Fens Landscape Character Type as the Site and Tydd Solar Farm, which would therefore contribute to an increase in solar development, the design of the Meridian solar farm is unknown at this stage and considerations of cumulative landscape and visual effects beyond the land use change cannot be determined.

2.3 Pre-Application Discussions

2.3.1 Pre-application discussions were held with South Holland District Council (SHDC) planning officers in June 2022 with consultee responses received in relation to archaeology, heritage, drainage, environmental health, transport, and ecology.

2.3.2 General discussions around the principle of development were held with particular reference to the requirements of Part B of Policy 31 ‘Climate Change and Renewable and Low Carbon Energy’. No concerns were raised in relation to the principle of development subject to mitigation in relation to construction activities and landscaping. Due to the Site’s location in an area of high flood risk, officers advised that demonstration of the Sequential and Exception test will be required in the application along with other supporting information such as a glint and glare assessment, biodiversity net gain assessment and geophysical survey.

2.3.3 Overall, the discussions regarding the Development were positive and agreement was reached on the technical information necessary to support the application.

- 2.3.4 The Applicant has also undertaken pre-application discussions with wider stakeholders and the public. For a full analysis of this engagement, please view the accompanying Statement of Community Involvement.

2.4 The Development

- 2.4.1 The Applicant is seeking planning permission for the construction, operation and decommissioning of a 20 MW solar PV farm and 10 MW BESS, together with associated infrastructure such as equipment including inverters, transformer stations, substation, fencing, CCTV and cabling.
- 2.4.2 The proposal will include the following components to facilitate the Development:
- Series of PV modules mounted on a piled metal framework (array) which will pivot on an axis at 1.5m so that the modules can tilt and follow the sun. At maximum tilt the array will have a total height up to 2.9m;
 - 6 Battery modules;
 - 1 Distribution Network Operator Control Room;
 - 1 Aux Transformer;
 - 2 Twin Skid;
 - 3 Battery Interface Cabinet;
 - 3 PCSK (BESS) Inverters;
 - 5 Solar Inverters;
 - 1 Project Control Room (Switchgear);
 - 1 Water tank to support fire suppression;
 - Gravel access roads to provide field access and connecting the substation and transformer stations;
 - Deer fencing (height 2m);
 - CCTV cameras, facing inwards on 3m high columns; and
 - Landscape mitigation through additional vernacular planting.
- 2.4.3 Given that the Site comprises a series of fields, there are multiple existing accesses to the Site. The Development will be accessed via three access points along Bardling's Drove and one on Inley Dove. All four access points are existing.
- 2.4.4 The solar farm will have an operational lifespan of 40 years, after which it will be decommissioned leaving the land to be farmed again.
- 2.4.5 The Applicant has secured a grid connection from the DNO at South Holland Substation (on Jiggles Gate). The cabling route will be determined by the DNO who has permitted development rights to install the grid connection cable. It is intended the route will be along existing highway and therefore the principal environmental effects from any cable routing would not be significant and relate to those typically associated with utilities works, a short duration and limited effects.

- 2.4.6 Whilst the provision of the cable route / cable connection to the grid, will be delivered through the application of permitted development rights, we have shown an indicative connection route in Figure 2.1 below. This cable route, which extends 2.8km from the site to the substation (the point of connection to the grid), as shown in Figure 2.1, is considered the most likely route running along Broad Gate, Old Fen Dike and Jiggles Gate all of which are public highways. Table 2.1 considers whether there would be likely significant environmental effects from the installation of the cable.

Figure 2.1: Indicative Cable Route



Table 2.1: Environmental Considerations of Cable Route

Environmental Topic	Cable Route Impacts
Ecology	The intention is the cable will be installed within the carriageway or highway verge where there is either no or limited ecological interest. Notwithstanding this, the statutory undertaker will be obliged to comply with any relevant wildlife legislation that sits outside of the planning process, which is still a consideration for development delivered under permitted development rights.
Landscape and Visual	As the cable will be installed underground, there will be no landscape or visual effects once the cable has been installed. Where possible the cable route will avoid trees and hedgerows.
Transport	As noted above, the cable route will run along the highway. There is a potential for transport impacts during the construction phase of the cable installation, however these impacts on traffic will be temporary, can be managed through

	an appropriate construction traffic management regime, and effects will not be significant. Control remains is the process of granting permits for such work.
Flood Risk	The grid connection cable will not increase the risk of flooding or the amount of surface water runoff, as it is to be installed underground.
Agricultural Land	It is the intention the grid connection cable will be installed within the carriageway or verge, and therefore will not have an impact on agricultural land.

3 Planning Policy Context

3.1 Overview

- 3.1.1 This section of the PDAS sets out the adopted Development Plan policies that are relevant to the determination of the planning application.
- 3.1.2 Section 70 (2) of the Town and Country Planning Act and 38(6) of the Planning and Compulsory Purchase Act 2004 together require that planning decisions be made in accordance with the Development Plan unless material considerations indicate otherwise. This is reinforced at paragraph 47 of the NPPF, which states:

“Planning law requires that applications for planning permission be determined in accordance with the development plan, unless material considerations indicate otherwise.”

South East Lincolnshire Local Plan 2011-2036 (March 2019)

- 3.1.3 The statutory Development Plan, insofar as it relates to the application Site and the Development comprises the South East Lincolnshire Local Plan (SELP) 2011-2036 (March 2019). The relevant local planning policy for the assessment of renewable energy development is Policy 31(b), which supports renewable energy facilities where there would be no significant harm to:
- a) visual amenity, landscape character or quality, or skyline considerations;
 - b) residential amenity in respect of: noise, fumes, odour, vibration, shadow flicker, sunlight reflection, broadcast interference, traffic;
 - c) highway safety (including public rights of way);
 - d) agricultural land take;
 - e) aviation and radar safety;
 - f) heritage assets including their setting; and
- the natural environment.
- 3.1.4 The policy goes on to say that provision should be made post-construction monitoring and the removal of the facility and reinstatement of the site if the development ceases to be operational.
- 3.1.5 Other policies within the SELP considered relevant to the application include:
- Policy 1: Spatial Strategy
 - Policy 2: Development Management;
 - Policy 3: Design New Development;
 - Policy 4: Approach to Flood Risk;
 - Policy 5: Meeting Physical Infrastructure and Service Needs;
 - Policy 28: The Natural Environment;
 - Policy 29: The Historic Environment;

- Policy 30: Pollution; and
 - Policy 32: Community Health and Well Being.
- 3.1.6 On the 1 July 2024 the South East Lincolnshire Joint Strategic Planning Committee met to consider and approve recommendations for the review of the Local Plan.
- 3.1.7 The report to the committee, with regards to Policy 31 Climate Change and Renewable and Low Carbon Energy, on the current SELP stated:

“The current policy appears to be suitable, however there appears to be changing guidance and emphasis in terms of on-shore wind and other issues. Application of the policy will require careful consideration of the most recent and up to date guidance available. However, this does not require that the Plan should be amended in whole or in part at present.”

Climate Change Strategy (March 2022)

- 3.1.8 Lincolnshire County Council has recognised the imperative nature of the radical changes required to tackle climate change by implementing a Green Masterplan. The first phase of the Green Masterplan is the ‘Initial Action Plan 2020-2025’. As part of the plan, the Council announced:

“As part of a global effort to help tackle climate change, the Government has set a target for the UK to be “net zero carbon” by 2050 – this means that by 2050 we will have to take more greenhouse gases (such as carbon dioxide and methane) out of the atmosphere than we put into them. Achieving this will require big changes in the way we generate power, the way we travel and how we heat our homes.

The council, other public bodies, businesses, and the general population in Lincolnshire all need to play their part in helping the country to meet these challenges. If we are to achieve “net zero carbon” by 2050 we will need to work in close partnership with other groups. As a response to climate change and the 2050 target we have developed a Green Masterplan that sets out the guiding principles of how we will meet this challenge.”

- 3.1.9 In response to climate change and to achieve net zero by 2050, the South and East Lincolnshire Councils Partnership has developed a Climate Change Strategy (SELP CCS) which sets out the guiding principles for meeting this challenge. The SELP CCS acknowledges that small-scale and large-scale renewable solutions are ‘essential’ to achieving its net zero aspirations and with it upskilling and retraining local people, providing a range of employment opportunities. Education providers from schools through to colleges and universities will all have a role to play in helping people to explore the opportunities and to ensure availability of training provision locally to ensure a correctly skilled workforce to meet future demands and support the local economy.
- 3.1.10 There are several other material considerations which are considered to carry weight in the decision-making process. These include:
- National Planning Policy Framework 2023 (NPPF) - There are currently proposed reforms to the NPPF and other changes to the planning system. This consultation began on the 30 July 2024 and closed on the 24 September. Changes relevant to the Development include proposed amendments to existing paragraph 163 to direct decision makers to give significant weight to the benefits associated with renewables and low carbon energy generation, and proposals’ contributing to meeting a net zero future. In doing so, this aims to increase the likelihood of local planning authorities granting permission to renewable energy schemes and contribute to reaching zero carbon electricity generated by 2023. It goes on to say that development may be proposed in sensitive areas. While these changes seek to promote the delivery of renewable energy schemes, proposals would still be subject to the policy requirements set out in the framework alongside other environmental safeguards.
 - National Planning Practice Guidance (PPG)

- UN Framework Convention on Climate Change: The Paris Agreement (2015)
- Climate Change Act (2008)
- IPCC Special Report on Global Warming of 1.5°C (2018)
- Net Zero Strategy: Build Back Greener (October 2021)
- British Energy Security Strategy (April 2022)
- Energy Security Bill (July 2022)
- Climate Emergency Declaration (June 2019)
- National Policy Statements for Energy and Renewable Energy Infrastructure (January 2024)
- Powering Up Britain: Energy Security Plan' policy paper (April 2023)

3.1.11 For a full summary of the relevant policies and material considerations listed above, please see Appendix A of this report.

Summary

- 3.1.12 This section of the PDAS demonstrates that there is clear policy support for renewable energy generation at national and local levels.
- 3.1.13 A principle Local Plan policy in the management of renewable energy applications is Policy 31 of the SELP has been reviewed and reported that its 'application of the policy will require careful consideration of the most recent and up to date guidance available'.
- 3.1.14 At a national level, the application attracts support from the current NPPF and in addition, the proposed changes in the NPPF demonstrate shift towards greater support for renewables and rebalancing of applicable weight to material considerations.
- 3.1.15 There is a significant drive and urgency to achieving net zero targets, which should be acknowledged in the balancing of this application.
- 3.1.16 The Development will make an important contribution towards achieving this goal and has been carefully sited to mitigate its impact on the environment and surrounding residents to accord with local and national planning policy. The policy context has been taken into account in the design considerations of the scheme and it is considered that this policy context provides clear and favourable support for the Development.

4 Design and Access Statement

4.1 Context and Analysis

- 4.1.1 The proposed design has been informed by the Site's opportunities and constraints, pre-application consultation undertaken with SHDC, including EIA screening, and public consultation.
- 4.1.2 The characteristics of the land are optimal for the generation of renewable energy by solar PV: it has good levels of irradiation and large areas of flat land. Solar development is ideal on flat land because it helps to reduce visual intrusion as panels can be screened easily due to the land not being elevated and there being fewer areas surrounding it that are elevated. Flat land which is not located close to woodland also limits the shading on solar PV arrays which can reduce energy production.
- 4.1.3 The local area is characterised by several farms as well as sporadic residences. Several large farm buildings, yards and commercial greenhouses are located along New Fen Dike, Bardling's Drove, Broad Gate and Old Fen Dike. The most notable of these are the large glasshouses at Poplar Farm Flowers Ltd to the east of the Site on Old Fen Dike, the 'Lift and Shift' shipping container storage area immediately to the south on Broad Gate and the storage barns to the west at Wright R J Ltd on New Fen Dike. The collective impact that these existing buildings and uses portrays is that of a rural working landscape which in several locations interrupts the rural landscape and distinguishes it apart from any natural, undeveloped countryside.
- 4.1.4 The lack of visual screening to some of these commercial farm buildings provides a transparency to the industrial built forms that form part of the landscape in which the Site is situated. At the same time there is an element of visual mitigation to this working landscape in the form of small woodland blocks, hedging and scrubland. The Development has been informed by existing screening and the potential to enhance it, particularly along the Site's boundaries. The proposal has also been influenced by the existing field systems and series of ditches which have subdivided the land and created a patchwork of arable fields.

4.2 The Design Response

- 4.2.1 In response to the spatial context, relevant policies, consultation with the SHDC and public, the design response has been to:
- 4.2.2 Integrate the scheme into the existing landscape pattern as far as practicable by retaining and following existing features:

The proposed layout of the solar farm is subdivided into four separate fields by virtue of the existing drains and Bardling's Drove intersecting the Site.

- 4.2.3 Retain all existing boundary vegetation:

Except for a slight widening of an existing access into the site from Bardling's Drove. The removal of the vegetation will enhance the access point. The loss of the vegetation is mitigated for with the significant planting of hedgerow and trees across the site providing significant biodiversity net gain of 195.03% to hedgerow habitats.

- 4.2.4 Protect and enhance the drains given their ecological and operational value:

the Development sets back a minimum of 5m from these features. This provides a benefit to the drains in ecological terms and supports the overall approach to integrate the scheme into the existing landscape pattern. Where the drains are assets under the control of the South Holland Internal Drainage Board (SHIDB), a 9m offset has been provided by the layout to all for access and maintenance which is supported by the SHIDB. This again provides an ecological benefit to the drains.

4.2.5 Set the Development back from sensitive visual receptors:

The South Holland Drain PRow (SuSJ/2/3) runs to the north of the site. The Development has been refined following consultation comments to step back from this receptor. The Development is located 250m south of the SuSJ/2/3, and the design capitalises on existing hedging and woodland screening to the east near Inley Drove Farm. There will be further planting to the northern boundary of this field is proposed to mitigate its visual impacts of the Development when viewed from the PRow.

4.2.6 Locate the batteries away from views and residences:

The BESS is located in the middle field to the north of Bardling's Drove. This location has been carefully considered to ensure safe access to the public highway and screening afforded by an existing mature hedge alongside Bardling's Drove and running north-south to the rear of Thistlewood Farm. Further screening to the eastern boundary was requested by nearby neighbours during the consultation exercise and has been put forward in the layout.

4.2.7 Minimise views of the Development:

- The site has existing screening from nearby residences and additional screening has been provided protecting visual amenity from these receptors.
- The northernmost is set away from the PRow by 250m as set out above and by 250m to the closest dwelling located to the east along Old Fen Dike.
- The southernmost two fields within the site to the south of Bardling's Drove are screened by hedging to the west boundary that adjoins Barling Deer Farm. The dwelling on the Lift and Shift site is 150m from the development. Wider residences to the south are 300m away.
- The solar arrays have been set back from all boundaries by a minimum of 5m. They have been set back from Bardling's Drove and deer stock fencing selected to maintain openness along this public route as far as reasonably practicable, noting the principal function of this road as access to fields used primarily by farming vehicles.

4.2.8 Overall, the layout has been designed to ensure that the solar arrays and BESS are contained within a compact area, whilst allowing for sufficient space for native landscape and significant biodiversity improvements across all habitats on site.

4.2.9 The arrays comprise several solar panels, mounted on a frame (array) with a tracker system to tilt the angle of the panels throughout the day to maximise generation. The panels are covered by high transparency solar glass with an anti-reflective coating which minimises glint and glare, whilst also ensuring the maximum absorption of the available sunlight. The arrays will be fixed into the ground by piled metal posts. They will pivot around a point at 1.5m from the ground. At maximum tilt they will be 2.9m high, albeit this will be limited to the extremities of sunlight hours, and there will be a minimum of 500mm ground clearance so as not to impede surface water.

4.2.10 In the event of a flood, the arrays will revert to horizontal at 1.5m from the ground (the stow position), again so as not to impede flood waters. There is no increase in flood risk from the Development.

4.2.11 The Development will also provide battery units and ancillary equipment, a project control room, water storage tank and DNO control room. These have been located in an area already screened by existing vegetation as noted above. There will be solar inverters located around the Development which are needed for the operation of the solar panels and transmission of energy. These are also sensitively located and screened.

4.2.12 The Development will be accessed via three access points along Bardling's Drove and one on Inley Dove. All four access points are existing. They will be enhanced to ensure safe access from construction and maintained to allow suitable maintenance access during operation. This work can be undertaken on land within the control of the Applicant and/or on the adopted highway.

- 4.2.13 The construction period will be short, limiting the impact of HGV construction traffic, none of which will be routed through Sutton St James. The operational phase of the project will generate minimal traffic.
- 4.2.14 During construction the Development will apply the Department of Environment, Food and Rural Affairs (DEFRA): Construction Code of Practice for the Sustainable Use of Soils on Construction Sites (DEFRA Soil Guidance) to ensure the soil resource is protected, which is in line with the PPG Paragraph 002 Reference ID: 8-002-20190721.
- 4.2.15 Following the construction period, the site will be unmanned and visited occasionally for maintenance purposes. There is sufficient space in the compound area for maintenance vehicles and fire tender to manoeuvre and egress in a forward gear. There is no lighting on the site except for on the DNO control room which has a motion activated lights located above the door for safety and which is a requirement of the DNO.
- 4.2.16 The Development will have a lifespan of 40 years. After this period, it will be decommissioned, and all the associated equipment will be removed. The land will then be easily reverted to agricultural use with the benefit of the soil having been rested from intensive agriculture.

5 Planning Assessment

5.1 Overview

- 5.1.1 This section provides a planning assessment which discusses the principle of development, topic-specific considerations, and provides a robust case for why and how the scheme represents a form of sustainable development.
- 5.1.2 This section assesses the Development against the following topics:
- The Principle of Development Outside the Settlement Boundary;
 - Use of Agricultural Land;
 - Farm Diversification and Economic Benefits;
 - Landscape and Visual;
 - Heritage;
 - Hydrological Impacts
 - Arboriculture
 - Biodiversity and Ecology;
 - Transport and Access;
 - Noise;
 - Glint and Glare;
 - Battery Fire Safety;
 - Developer Contributions; and
 - Wider Public Benefits.

The Principle of the Development Outside the Settlement Boundary

- 5.1.3 The Development will deliver well needed renewable energy for a temporary period of 40 years after which the site can return to agriculture.
- 5.1.4 The Glossary of the NPPF defines renewable energy as those energy flows that occur naturally and repeatedly in the environment, including from the sun. The Development is for solar energy generation and storage, and therefore meets the definition of renewable energy as defined in national planning policy.
- 5.1.5 National policy including paragraph 160 of the NPPF is strongly supportive of renewable energy as a means of meeting increasing energy demands, tackling climate change, addressing supply security, and transitioning to a sustainable low carbon economy.
- 5.1.6 Privately funded, large scale solar developments are recognised as being not just necessary but central to meeting an urgent need. The importance of this runs through the NPPF, even within Green Belt policy where at paragraph 156 it specifically singles out *“the wider environmental benefits*

associated with the increased production of energy from renewable sources” as a potential very special circumstance in the Green Belt. This is indicative of the importance to be attached to renewable energy, borne out by the Net Zero Strategy: Build Back Greener (October 2021) and subsequent government publications.

5.1.7 There is not a requirement within national or local policy to demonstrate the need for renewable energy and paragraph 163 of the NPPF states that local planning authorities should “approve the application if its impacts are (or can be made) acceptable.” The urgency of the need for substantially greater quantities of renewable energy (including large scale solar) is self-evident given the dramatic step change in government energy policy driven by its declared Climate Emergency³ to achieve a 100% reduction in greenhouse gas emissions by 2050. This is a legally binding target as set out in the Climate Change Act 2008 (2050 Target Amendment) Order 2019.

5.1.8 The Government published an updated draft National Planning Policy Framework on the 30 July 2024, which is currently undergoing consultation. The Applicant considers the Governments proposed amendments (while in draft), would further strengthen national policy support for renewable energy generation developments. Of relevance, Paragraph 164 has been amended to state:

‘Local planning authorities should support planning applications for all forms of renewable and low carbon development. When determining planning applications for these developments, local planning authorities should:

- a) Not require applicants to demonstrate the overall need for renewable or low carbon energy and give significant weight to the proposal’s contribution to renewable energy generation and a net zero future; . . .’*

5.1.9 As pointed out recently by the Government’s climate watchdog (Committee on Climate Change ‘CCC’), the new Labour government must oversee a massive ramping up of renewable energy generation in this parliament or the UK will breach its international obligations under the Paris Agreement which requires cutting carbon by 68% by 2030. Currently, the UK has only made about a **third** of the emissions cuts necessary to meet this target according to the CCC⁴. In response to the CCC’s latest progress report, Ed Miliband, the energy secretary said:

- *“This report lays bare the failures of the previous government. On a vast range of policy areas it says we are off track to meet our targets – and our country is paying the price with higher bills and energy insecurity. The good news is that this report confirms that a clean energy future is the best way to make Britain energy independent, cut bills, create good jobs and tackle the climate crisis. That is why the Government is wasting no time in delivering our mission ... to make Britain a clean energy superpower.”⁵*

5.1.10 The national drive and urgency to meet net zero targets is therefore clear and carries with it significant weight in decision making.

5.1.11 This is mirrored in the South East Lincolnshire Councils Partnership Climate Change Strategy (SELP CCS) (March 2022) which is material in this decision. The document states that energy production in the region will need to be significantly changed. The strategy goes on to affirm the need for small- and large-scale renewable solutions to achieve net zero aspirations but also recognises that a large barrier to this strategy is the available network capacity. The Development has an agreed point of connection into the national grid addressing this barrier. Aligned to this strategy is SELP Policy 31, which supports renewable energy facilities subject to several criteria taken in turn below:

³ <https://www.bbc.co.uk/news/uk-politics-48126677>

⁴ <https://www.theccc.org.uk/publication/progress-in-reducing-emissions-2024-report-to-parliament/>

⁵ <https://www.theguardian.com/environment/article/2024/jul/18/labour-must-ramp-up-renewable-energy-to-meet-2030-climate-vows-says-watchdog>

- 5.1.12 Visual amenity, landscape character -
The Site has been selected due to the absence of significant landscape or visual constraints and the ability to mitigate visual impacts through existing and proposed soft landscaping.
- 5.1.13 Residential amenity -
The Development will have minimal impacts on residential amenity by virtue of its low height and non-intrusive nature as well as the separation distance afforded to neighbouring properties.
- 5.1.14 Highway safety -
Access to and from the Site will be safe and highway impacts limited in nature and duration as demonstrated in the accompanying Transport Assessment by Andrew Mosley Associates.
- 5.1.15 Agricultural land take -
The application is supported an Alternative Site Assessment and Site Justification Statement. This document explains the rationale for the chosen location and the limited overall impact this will have on agricultural land and food production in the area. It shows the use of agricultural land to be necessary and poorer quality land is used in preference to higher. Additionally, the land can continue to contribute to agriculture purposes, such as sheep grazing, during the 40-year operational life. The use is also temporary and reversible.
- 5.1.16 Aviation and radar safety -
No impacts are anticipated on aviation or radar safety.
- 5.1.17 Heritage assets including their setting
No adverse impacts are anticipated towards the setting of heritage assets as concluded in the accompanying Historic Environment Desk Based Assessment by Orion.
- 5.1.18 The natural environment
The proposal will result in net gain of 53.67% in area biodiversity, a net gain of 195.03% in hedgerow biodiversity and a net gain of 16.75% in watercourse biodiversity, and the Development will also enable the soil to rest from intensive arable farming practices and chemical/pesticide use, and regenerate.
- 5.1.19 The key benefits of the Development are:
- 5.1.20 The contribution of 20 MW of clean renewable electricity generation to help meet both national and local renewable energy targets. This provides a carbon dioxide displacement of 7,212 tonnes per annum compared to the same energy generated from fossil fuel sources. This is being provided at a time of a Climate Emergency.
- 5.1.21 The storage of 10 MW of energy helping to support the resilience of the National Grid; delivering power at peak times, maximising the impact of the renewable energy created.
- 5.1.22 The generation of clean renewable energy exported to the local electricity distribution network providing the equivalent electricity every year as used by 12,015 average households per annum.
- 5.1.23 The Development would be for a period of 40 years. The impacts of the Development are reversible and following the consented period, the land can return to arable farming. The Development will apply the best practice DEFRA Soil Guidance and allow the land to rest from monoculture arable farming. This will protect the soil and maintain its suitability for arable farming for future generations.
- 5.1.24 Whilst removed from arable farming for the consented period, the land would be readily available for grazing and pasture for livestock farming. This is a common approach used on solar developments in order to manage the grassed areas around solar panels. The Development is suitable for grazing by livestock maintaining its value to food production and agriculture. This approach results in dual use of the land for both ongoing agriculture and creation of renewable energy.

- 5.1.25 The benefits set out above would not be realised if the site was developed for housing or other such permanent development, and the land is not permanently 'lost' through consenting the Development.
- 5.1.26 The site, in part, has been approved via application ref. H20-0764-14 for the development of a solar farm. This establishes the 'in principle' acceptability for this development and is material here. Since this decision, the national and local policy, as well as wider material considerations have only strengthened the balance in favour of solar development on this site.
- 5.1.27 In terms of other material considerations, given the SELP as Local Plan was adopted in 2019 it has recently been reviewed by both South Holland and Boston, as required by planning regulations.
- 5.1.28 This review was reported to the joint committee on the 1st July 2024 and this report stated: "The Council, within its planning decision making process will need to take account of any emerging guidance that is not addressed within the Plan or may supersede the guidance within it".
- 5.1.29 And specifically, regarding Policy 31: "application of the policy will require careful consideration of the most recent and up to date guidance available".
- 5.1.30 In summary, there is clear and strong national policy support for renewable energy development, which has been strengthened following the recent change in government who set out climate change as the primary threat to food security.
- 5.1.31 At local level: the SELP CCS is a clear indication of the need and commitment to support solar development in South Holland; SELP Policy 31 is fully addressed; should be applied with the national stance in mind; and, this application sets out the most compelling evidence in support of the Development's location.
- 5.1.32 There are significant material benefits of arising from the Development which should be given substantial weight in the determination, the Development remains suitable for grazing and is reversible and the site has previously been approved a solar farm.
- 5.1.33 On this basis, the Development is acceptable in principle.

Outside the Settlement Boundary

- 5.1.34 The site is located outside of defined settlement boundaries as defined by the SELP. Policy 1 of the SELP seeks to allow development outside of settlement boundaries where it is necessary and/or where it can be demonstrated that it meets the sustainable development needs of the area in terms of economic, community or environmental benefits.
- 5.1.35 An Alternative Site Assessment and Site Justification Statement has been submitted in support of this application which outlines principally that the location is dictated by the agreed point of connection at South Holland Substation (Jiggle's Gate), but also there are no suitable sites within settlement boundaries, and several environmental and operational reasons why the Development is more suitably located in the countryside. It is therefore necessary to locate the development outside of settlement boundaries in line with the NPPF and PPG.
- 5.1.36 In terms of environmental benefits, this is addressed by the provision of the solar farm addressing climate change. At local level the Development supports the Council in addressing its Climate Change Strategy 2022. As well as providing renewable energy, the Development will also retain and buffer the hedgerows and drain (watercourse) habitats, and in respect of Biodiversity Net Gain (BNG), deliver Habitat units of 53.67%; Hedgerow units of 195.03%; and Watercourse units of 16.75%, along with Skylark Mitigation agreed with Lincolnshire Wildlife Trust. These are district-wide and local environmental benefits.
- 5.1.37 In terms of community benefits, the Development will supply low carbon energy that will help reduce emissions from fossil fuels, improving air quality and fighting climate change.

- 5.1.38 In terms of economic benefits, the Development is also seeking to provide a training and employment management plan via a condition (discussed further below), aiming to promote training and employment opportunities for local people and social benefits, with links to education establishments. This follows the SELP and SELP CCS.
- 5.1.39 The above represent environmental, community and economic benefits, all of which have been given weight in previous precedent applications (ref.H04-0849-22).
- 5.1.40 On this basis, the application is considered to address national spatial policy and guidance, and SELP Policy 1.

Use of Agricultural Land

- 5.1.41 For reference, agricultural land quality is graded by the Agricultural Land Classification (ALC) system which divides land into five grades (from Grade 1 'Excellent' to Grade 5 'Very Poor'), with Grade 3 subdivided into Sub-grade 3a 'Good' and Subgrade 3b 'Moderate'. 'Best and Most Versatile' (BMV) agricultural land is classified as Grades 1, 2 and 3a.
- 5.1.42 It is important to outline that the ALC alone does not deliver the yield for food production or determine its monetary value. It also does not take account of invasive species that can undermine crops and their yields. Food production is the result of the effort and inputs of the farmer and wider farm enterprise. The Development represents a diversification of the farm which helps support and sustain it. This point is expanded on below.
- 5.1.43 NPPF (paragraph 180) requires planning decisions to recognise the wider benefits from natural capital including the economic and other benefits of the BMV agricultural land. Footnote 62 of the NPPF goes on to say that the availability of agricultural land used for food production should be considered, alongside the other policies in the Framework, when deciding what sites are most appropriate for development and that areas of poorer quality land should be preferred to those of a higher quality.
- 5.1.44 However, since the adoption of paragraph 180 and Footnote 62, more recently there has been national shift on the consideration of BMV and more specifically food security. In his statement to the Commons Chamber on 18 July 2024⁶, the Secretary of State for Energy Secretary and net zero highlighted a key misconception brought up in debates on ground mounted solar and its threat to farmland:

"Credible external estimates suggest that ground-mounted solar used just 0.1% of our land in 2022. The biggest threat to nature and food security and to our rural communities is not solar panels or onshore wind; it is the climate crisis, which threatens our best farmland, food production and the livelihoods of farmers."

- 5.1.45 This threat had already been laid out in the UK Food Security Report back in 2021⁷ where it found that:

"...climate change impacts under a medium emissions scenario could reduce the proportion of 'best and most versatile' arable farmland (ALC 1, 2, and 3a) from 38.1% of agricultural land on a 1961 to 1990 baseline to 11.4% by 2050, with consequences for food production and meeting net zero. Under a high emissions scenario it could reduce to 9.2% of agricultural land."

- 5.1.46 Consequently, footnote 62 of the NPPF which states ".....The availability of agricultural land used for food production should be considered, alongside the other policies in this Framework, when deciding what sites are most appropriate for development." is proposed for removal in the latest consultation version (2024).

⁶ Clean Energy Superpower Mission - Hansard - UK Parliament

⁷ United Kingdom Food Security Report 2021: Theme 2: UK Food Supply Sources - GOV.UK (www.gov.uk)

- 5.1.47 In line with this, paragraph 2.10.29 of National Policy Statement (NPS) for Renewable Energy Infrastructure (EN-3) (2023) states that land type should not be a predominating factor in determining the suitability of a site but applicants should, where possible, utilise previously developed land, brownfield land, contaminated land and industrial land. EN-3 recognises that larger scale solar farms will use some agricultural land and advises that applicants explain their choice of site, noting the preference for development to be on suitable brownfield, industrial and low and medium grade agricultural land. Paragraph 2.10.30 makes clear that the use of Grade 1, 2 and 3a land for solar development is not prohibited.
- 5.1.48 Put another way, rather than resisting development of BMV, national policy indicates that it is acceptable subject to justification given for the use of BMV.
- 5.1.49 The Development land has been assessed by Soil Environment Services Ltd and comprises the following ALC grades:
- 2ha of Grade 2 (4.84%)
 - 25.6ha of Grade 3a (61.98%)
 - 13.7ha of Grade 3b (33.18% non-BMV).
- 5.1.50 The wider area is predominantly Grade 1 and Grade 2 agricultural land. The site contains circa 95% 3a, and 3b (non-BMV), medium grade land. This approach is in clear compliance with national and local policy in that the Development is located on land which is sequentially preferable to the use of Grades 1 and 2 land within the study area.
- 5.1.51 Further explanation and justification for the location of the Development is set out in the accompanying Alternative Site Assessment and Site Justification Statement, which outlines the factors leading to its selection with agricultural land quality being just one of the planning considerations required by the Planning Practice Guidance (PPG) (013 Reference ID: 5-013-20150327) and EN-3.
- 5.1.52 Again, as set out above, but material to the use of agricultural land too, is the fact that the Development would be for a time-limited period of 40 years. The impacts of the Development are reversible and following the expiration of the consented, the land can return to arable farming. Notwithstanding this, there is the opportunity to graze livestock during the operation of the solar farm which will maintain the land in agricultural use.
- 5.1.53 Overall, there is no loss of agricultural land and thus there is no 'agricultural land take' associated with the Development. For the reasons set out above, the use of agricultural land for the Development does not amount to significant harm.
- 5.1.54 An important consideration on this matter is that there is no current planning policy requiring landowners of BMV land to use it solely for food production and there are other policy measures such as Sustainable Farming Initiatives, which could take the land out of food production in favour of alternative uses.
- 5.1.55 This point was clearly articulated by an Inspector in the recent Scruton appeal (APP/G2713/W/23/3315877) where the determining authority refused the scheme based on the impact on agricultural land. However, the Inspector noted in their consideration that:
- *"the specific way agricultural land is used is not a matter that is subject to planning controls... Given this, the fact that the proposal would limit the ability to carry out any arable farming does not, in my opinion, mean that it results in the loss of agricultural land when it can still be used for other agricultural uses. Furthermore, current government schemes actually encourage farmers to take land out of production and put it to grass, meadows, or trees for carbon capture."*

- 5.1.56 A further important material consideration is that South Holland District Council previously approved a solar farm on part of the Site (ref.H20-0764-14) and accepted that the land was sequentially preferable for the siting of a temporary solar farm. The assessment area for the previous permission was much smaller at 3km whereas the assessment accompanying this application includes a wider 6km search area. There is no formal requirement set out in planning policy to submit an Alternative Site Assessment or Site Justification Statement, so the search area and criteria are based on typical considerations for solar farm projects, that includes viability and environmental constraints. The methodology adopted by this application demonstrates a thorough and extensive assessment of alternative sites has been undertaken, and that the chosen site is justified with regard to the PPG's consideration of BMV and SELP Policy 1 and 31, given that the Development will be essential to delivering on energy security and meeting net zero targets.
- 5.1.57 Overall, there is a robust assessment of alternative sites which follows PPG guidance, and the Development is sited on land in the countryside out of necessity and on comparatively lower agricultural land grade in line with national and local policy. There is no loss of agricultural land and the land can continue to be grazed. Suitable conditions can be applied to ensure the land is returned to its original condition at the end of the 40-year consent and that best practice for the sustainable use of soils on construction sites will be complied with to preserve soil quality.
- 5.1.58 Consequently, there is no conflict with national policy, the application is supported by compelling evidence for its location, and it is in line with the objectives of SELP Policy 31, particularly when considering the fact that the Site represents a very small proportion (0.0006%) of the total farmland in the district.

Farm Diversification and Economic Benefits

- 5.1.59 As mentioned previously, farmers are responsible for producing food. This requires them to manage farms which are rural businesses that, like any other, are subject to market volatility. To ensure continued food production, farms must be maintained and be resilient in the face of these challenges.
- 5.1.60 UK farms have faced unprecedented challenges in recent years due to increased production costs exacerbated by the war in Ukraine, extreme weather and changes to the subsidy framework. A smaller proportion of farm income now comes from subsidies, and this has led many farmers to ask for a universal basic income.
- 5.1.61 Due to these difficult conditions, many farmers have had to diversify to secure multiple income streams to support the long-term viability of their farms and the continued investment needed to maintain them.
- 5.1.62 The SELP notes there is a need to provide 13,800 jobs in South Holland (para 4.2.1) setting out in the Vision statement that this will be provided through diversification of the economic base. Farms are key economic drivers in the rural economy for South Lincolnshire and South Holland. They constitute an intrinsic part of this 'economic base' which has wider lateral connections to associated businesses. The loss or scaling back of farming businesses would impact this economic base.
- 5.1.63 At a national level, paragraph 88 of the NPPF sets out that planning decisions should enable (b) the development and diversification of agricultural and other land-based rural businesses.
- 5.1.64 The landowner, R J Wright Ltd, farms some 230ha of land in total. The Site represents the least productive land, by virtue of it being subject to an ongoing and persistent blackgrass problem.
- 5.1.65 Blackgrass is a native annual grass weed that occurs throughout the UK but is found mainly in the cereal growing areas of southern and eastern England. It is one of the most problematic and damaging agricultural weeds in Western Europe. It thrives on heavy land, particularly where drainage is poor. It undermines crops by occurring at high densities and competing with the crop. It has developed resistance to a range of herbicides used to control it.
- 5.1.66 In 2024 alone despite trying to manage blackgrass with herbicides (which is an example of added costs discussed above), R J Wright Ltd lost a significant amount (45 - 50%) of its wheat yield due to

blackgrass. This indicates that despite the land grade, the productivity of the Site is limited and can be readily undermined by other factors.

- 5.1.67 Overall, the Site represents only 18% of the total farm landholding which is undermined by invasive species impacting crop yields. As set out above, the land could be diversified to grow energy crops, animal feed or entered into the Government's Sustainable Farming Incentive – all of which would use the land for non-food production purposes and such a change would not be subject to planning control.
- 5.1.68 The Development in this application would provide a guaranteed income to the farm at a time of significant uncertainty for the farming industry, and would do so in a sustainable way, creating renewable energy and allowing the soil to rest from intensive agricultural practices and significantly boost local biodiversity at the same time.
- 5.1.69 There would also be wider economic benefits during construction to the local supply chain, and sustaining the farm business would protect existing jobs, enable investment into the farm which in turn will support food production, further benefiting the local economy.
- 5.1.70 The SELP CCS acknowledges that small-scale and large-scale renewable solutions are 'essential' to achieving its net zero aspirations and with it upskilling and retraining local people, providing a range of employment opportunities.
- 5.1.71 The Applicant is committed to realising these wider economic benefits and the education and training of the local workforce; addressing the SELP Vision, SELP CCS and supporting the diversification of the economic base.
- 5.1.72 The Development will be supported by a Training and Employment Plan, aiming to promote training and employment opportunities at all stages of the construction and operation of the Development for local people including activities such as:
- Measures to seek that the Applicant and contractors work directly with the local supply chain and workforce;
 - Targets for employing local labour;
 - Targets for work experience opportunities and apprenticeships;
 - Measures to provide training opportunities in respect of any new jobs created; and
 - An Educational Strategy/Plan, which sets out opportunities and measures for education benefits in connection with local schools and colleges.
- 5.1.73 The Training and Employment Plan is expected to be subject to condition.
- 5.1.74 In summary, at national level the Government is clear the main risk to food security is climate change not the development of solar farms. The proposal helps address climate change. Both national and local policy seek to support the diversification of farms, with the SELP noting the significance of farming in the local economy, setting specific targets for job creation and policies seeking economic benefits. The Development represents a clear diversification of the farm which will lead to job creation and economic benefits in South Holland. The diversification secures sustainable income to support the long-term operation of the farm business and by virtue of this ongoing food production elsewhere on the farm. These benefits will be delivered by the Development on a site which is undermined by blackgrass and represents only 18% of the wider 230ha farm landholding.
- 5.1.75 Overall, there is no impact to food security, jobs will be created, the farm business will be diversified and continue to produce food on the wider landholding, Blackgrass will be addressed helping the soil for future generations and community benefits in terms of labour and educational opportunities will be provided.

- 5.1.76 On this basis, it is considered the application is in line with national and local policies, specifically the vision of the SELP and policies 1 and 31 and it delivers material benefits to the environment, community and economy.

Landscape and Visual

- 5.1.77 SELP Policy 31b states that *"With the exception of wind energy the development of renewable energy facilities, associated infrastructure and the integration of decentralised technologies on existing or proposed structures will be permitted* provided, individually, or cumulatively, there would be no significant harm to - visual amenity, landscape character or quality, or skyline considerations;"
- 5.1.78 The NPPF (Paragraph 174 a) requires that development has a minimum impact on the open countryside and the character of the landscape. Paragraph 013 of the PPG also advises that the visual impact of a solar farm can be properly addressed within the landscape if sensitively planned.
- 5.1.79 The site it has a landscape value, and its characteristics and appearance make a contribution to the character of the area. However, the site does not fall within any 'designated landscapes' nor is it a 'valued landscape'; the protecting and enhancing of which are sought by Paragraph 180 a) of the NPPF.
- 5.1.80 In order to assess the impact on the area, a Landscape Visual Appraisal (LVA) including verified viewpoints has been produced by Huskisson Brown Associates.
- 5.1.81 The LVA finds that the landscape and visual effects predicted to arise during the construction phase would be short in duration and temporary and would be typical of any construction works.
- 5.1.82 In terms of the landscape effects of the Development during operation, it is pertinent that no statutorily protected landscapes, heritage or nature conservation features or 'valued landscape' (under NPPF) would be adversely affected by the Development.
- 5.1.83 Within the Site, there would be a direct loss of arable landcover and replacement with solar arrays and site infrastructure set in neutral grassland which would not be out of character and deliver ecological enhancements and biodiversity net gain.
- 5.1.84 The physical field pattern of the Site would be retained overall with PV arrays and infrastructure located within the field boundaries and drainage ditch network. The underlying topography on site would remain intact and there would still be a perception of the flat landform on Site. Existing boundary vegetation would be retained and the proposed compound located within an area that is partly enclosed by existing hedgerows. Additional planting would be implemented across the Site including new hedgerows and tree planting. By Year 15 new planting would have established resulting in increased tree cover in the local landscape and helping to embed the Development into the surrounding landscape character whilst also respecting the more open characteristics of the Site itself and the drove roads through and adjoining it.
- 5.1.85 The character and immediate setting of Bardling's Drove and Inley Drove would be adversely altered to differing degrees. However, receptors here would be transitional, and users of these roads would be primarily dedicated to travel not appreciation of the landscape. Nonetheless, new fencing would be set back from the drove roads by at least 20m and the gap planted with scattered tree groups and sections of native hedge and shrubs at the eastern and western ends (where there is already planting and built development addressing the drove) with PV panels located a further 5m beyond the fencing. This would help to retain a wide-open edge to the drove roads and soften the edge of the Development without enclosing the drives such that their character would be permanently altered in the long term i.e. beyond decommissioning of the Development.
- 5.1.86 The Ecological Impact Assessment (EclA) and BNG Plan prepared by MKA Ecology conclude that the new planting and habitat enhancements within the Development would lead to a net gain of 53.67% in area biodiversity, a net gain of 195.03% in hedgerow biodiversity and a net gain of 16.75% in watercourse biodiversity. New areas of neutral grassland, hedgerow and tree planting delivered as

part of the Development would contribute positively to the character, function and natural heritage of the local area in the longer term and its landscape value.

- 5.1.87 The Site would remain a 'working' landscape albeit its use and character would have changed and there would be increased elements of built form located across what is currently undeveloped land (albeit with noticeable built form and human influences around it). New built forms would be relatively low level and would be muted in colour to help minimise their perception in the landscape.
- 5.1.88 The Development would sit below the treed skyline to the wide-open vistas that are available with the perception of an open foreground with a low tree lined horizon set against big skies retained; this being a key characteristic of the landscape. New planting on the Site would in time further contribute to the tree skyline without enclosing this part of the landscape.
- 5.1.89 In the wider landscape, the Development is not considered to affect the perception of the Peaty Fen LCT or the nearby Settled Fens LCT. The Site has limited interaction with the wider landscape which would remain unaltered. The contained garden and agricultural setting to the listed building 'Sandy Gate Farmhouse' on Sandy Gate circa 890m south, would not be impacted by the Development.
- 5.1.90 The overall magnitude of effect of the Development on the landscape of the Site in its immediate context is considered to be Medium Adverse at Day 1. When considered alongside the Medium Low landscape sensitivity of the landscape, this results in an importance of landscape effect ranked as Slight to Moderate Adverse at Day 1 and confined to the Site in its immediate context. The effects would be expected to reduce over time such that by Year 15 when planting and seeding has established, the importance of landscape effect is judged to be Slight Adverse.
- 5.1.91 The wider Peaty Fen LCT is judged to be subject to minimal change in terms of magnitude of landscape effect, resulting in No/minimal importance of landscape effects at Day 1 and Year 15. No wider landscape character effects are identified.
- 5.1.92 Users of the public bridleways, notably bridleway SuSJ/8/2 along South Holland Main Drain to the north of the Site are considered to have high visual sensitivity and are assessed as having a Slight to Moderate adverse importance of effect at Day 1 with the effects of the new planting generally reducing the visual effects of the scheme to Slight adverse or less by Year 15
- 5.1.93 The highest degree of visual effect would be experienced by those people travelling through and adjacent to the Site on Bardling's Drove and Inley Drove which due to the scale of change to the currently open views would result in a Moderate/Substantial adverse and Moderate adverse importance of visual effect at Day 1 respectively, both becoming Moderate adverse at Year 15. However, given these would primarily be road users, their appreciation of the landscape is likely to be secondary to the primary purpose of the route, which is local vehicular traffic.
- 5.1.94 Elsewhere the visual effects arising from the Development would be no more than Slight Adverse (in importance of visual effect) at both Day 1 and Year 15. In the majority of long and very long-distance views, the visual effects of the Development would be generally only experienced as glimpsed and oblique, transient views of solar arrays at full tilt in the distance. Changes to the overall composition and the magnitude and importance of visual effect to the long-distance views would mostly be minimal. The characteristic treed skyline and big skies would remain a key component of local views whilst the open character has been sought to be retained through avoiding solar panels in fields adjoining PRow's and the more open views of visual receptors on Old Fen Dike and Broad Gate as well as though the strategic use of offsets and planting.
- 5.1.95 It is important to remember that the solar panels would not be at full tilt for the majority of the day and the Day 1 visual effects considered in this LVA are therefore a precautionary 'worst-case' consideration as is best practice.
- 5.1.96 The Development would be operational for 40 years and therefore the landscape and visual effects would be long-term but partially reversible as the solar panels and site infrastructure would be dismantled and removed from the Site beyond this time. New planting and biodiversity enhancements

delivered as part of the Development are intended to be permanent and would be maintained for at least 30 years to achieve the stated BNG. Planting has been designed to avoid obstructing open views to retain an open character to the Site beyond the decommissioning period. In the longer term, once the Development is decommissioned, landscape and visual effects could be expected to be slight beneficial when compared to the baseline on account of the enhancement to landscape features and their function including biodiversity value, if not required to be removed.

- 5.1.97 Overall, and subject to the successful implementation of the Landscape Strategy and as described in this LVA, and with appropriate long-term management to secure plant establishment and the calculated BNG, it is considered that the identified effects could be mitigated to a degree that would help to embed the scheme into its local setting and character in accordance with published character guidance and policy.
- 5.1.98 In view of the above findings, it is considered that the Development would therefore accord with the relevant provisions of the NPPF and SELP Policy 31b as the Site is considered to have the capacity to accommodate the Development without undue or unacceptable effects on the landscape character and visual amenity.

Heritage

- 5.1.99 SELP Policy 29 (The Historic Environment) states that developments should conserve and enhance the character of designated and non-designated heritage assets, such as listed buildings, conservation areas, archaeology and scheduled monuments and registered parks and gardens. The submitted Historic Environment Desk-Based Assessment (HEDBA) by Orion reviewed designated and non-designated built heritage assets within a 1km buffer of the Site and has identified one designated asset which has the potential to be impacted by the Development.
- 5.1.100 The Site forms part of the wider agricultural setting to Sandy Gate Farmhouse on Sandy Gate but the Site does not contribute to the asset's significance.
- 5.1.101 Boundary Cross, Old Fen Dike is a Grade II listed asset and scheduled monument and is located c.285m to the southeast of the Site. The assessment did not identify any historical or functional links between the cross and the Site and the cross is not visible from within the Site.
- 5.1.102 The HEDBA concludes the following matters:
- Based on the available evidence, below ground heritage assets are unlikely to represent a design constraint to development of the Site.
 - The site forms part of the wider agricultural setting to Sandy Gate Farmhouse and that the site does not contribute to the asset's significance. Therefore, there is no impact, and it is concluded that no further works or mitigation are required in relation to Sandy Gate Farmhouse.
 - The Development should endeavour to retain the historic field boundaries and roadways to maintain the historic illustrative value of these features within the site.
- 5.1.103 Overall, the effects of the Development are not considered to give rise to any *substantial harm* on heritage assets. If it is determined that there is *less than substantial harm* this is considered to be outweighed by the public benefits of the Development in providing renewable energy and addressing the climate change, in line with SELP Policy 2, 29 and 31. with SELP Policy 2, 29 and 31.

Hydrological Impacts

- 5.1.104 Under SELP Policy 4, development within Flood Zones 2 and 3 will be permitted where it can be demonstrated that there are no other sites available at a lower risk of flooding, the development is essential infrastructure, and the application is supported with a Flood Risk Assessment (FRA) which includes allowances made for climate change.

- Sequential Test

5.1.105 As mentioned above, a site sequential test has been undertaken by Stantec to confirm that there are no sequentially preferable sites at lower risk of flooding compared to the chosen site. This assessment demonstrates that the sequential test has been met and therefore the exception test must also be applied in accordance with paragraph 169 of the NPPF, as covered in the site-specific FRA by Andrew Mosley Associates.

- Exception Test

5.1.106 The FRA assesses the potential risks involving flooding and drainage at the Site. It provides an effective assessment of the hydrological conditions, the impact of a solar farm in this location and the mitigation of risk that has been designed into the scheme. As the flood depths at the site are up to 1.0m, it is considered unviable and unnecessary to raise all panels above this point due to other factors including the site visuals and risk from high winds. The panels are designed to tilt to follow the sun in order to maximise their operation and as such, when at full tilt the panels sit 0.50m above the adjacent ground level. However, in the event of adverse weather conditions, which are monitored on site, a safety feature will be triggered, and the panels will return to their default horizontal position. This allows the panels to sit 1.50m above the adjacent ground level.

5.1.107 The BESS facility has been located in the east of the site, in an area at lower risk of flooding, where there is a risk of a maximum flood depth of 0.25m. It is proposed that the BESS, including the power station conversion unit, battery interface units, project control room, transformers and DNO control room will all be raised above the maximum level of flooding for the area they are located in, with allowance for 0.300m freeboard.

5.1.108 The Solar Inverters have been located within areas of the site that are at lower risk of flooding, where there is a risk of a maximum flood depth of 0.25m. It is proposed that the inverters will be raised above the maximum level of flooding for the area they are located in, with allowance for 0.30m of freeboard. Raising the Solar Inverters allows for the free passing of flood waters beneath the structures and means that flows will not be impeded or altered post-development

5.1.109 A Flood Emergency and Evacuation Plan has been provided within the FRA detailing the steps that should be taken in the event of a flood to minimise the risk to life in accordance with local and national planning policy.

- Surface Water

5.1.110 The drainage hierarchy has been followed within the drainage strategy produced. A substantial amount of green space will remain within the solar array areas and will comprise green space corridors and landscaped areas in and around the solar arrays. As the ground conditions at the site are to remain largely unaltered and retain its greenfield state, any additional run-off from the solar arrays would be expected to infiltrate directly into the surrounding ground, or flow into a watercourse as would occur pre-development.

5.1.111 In order to ensure that all surface water run-off from the additional wholly impermeable areas is managed within the Site's boundary, a surface water drainage strategy has been prepared for the development. Surface water from the compound area will be attenuated on site and discharged at a restricted discharge rate of 1.0 l/s via an outfall to a non-IDB watercourse to the south of Bardling's Drove.

5.1.112 The accompanying FRA concludes that the Development is compliant with national and local planning policy and that on implementation of the strategy, the Development will remain safe from flood risk and can be suitably drained for the operational lifetime.

Arboriculture

5.1.113 The layout of the Development has been informed by an Arboricultural Impact Assessment (AIA) by Oakfield, which shows that there will be very little impact on existing trees and hedgerows apart from a small section of hedge that needs to be removed from the existing access into the site from Bardling's Drove for construction access. The proposal will result in an overall net gain in hedgerow and tree planting on the Site. This will therefore result in betterment to local wildlife through enhancement of natural habitats and provision of new landscaping, delivering ecological enhancements in accordance with SELP Policy 2, 3 and 28. The tree protection measures recommended in the AIA can be secured by planning condition to ensure the Development protects the natural environment in accordance with SELP Policies 30 and 31.

Biodiversity and Ecology

5.1.114 The application is supported by a Preliminary Ecological Appraisal (PEA), Breeding Bird Survey (BBS), Otter and Water Vole Survey and Ecological Impact Assessment (EclA) prepared by MKA Ecology. These confirm there are no statutory or non-statutory designated sites present within 2km of the site, nor is it within any SSSI Impact Risk Zones. The principal habitats in this location are found along South Holland Main Drain, which the Development has been set back from by 250m. Onsite the vegetation along the drains is of highest habitat value so the layout provides a minimum of 5m buffer from these areas. There is no impact to otters or water voles, and subject to construction mitigation, badgers.

5.1.115 The Applicant has worked closely with Lincolnshire Wildlife Trust (LWT) at pre-application stage to optimise the approach towards skylark mitigation and enhancement including provision of additional foraging habitat from the proposed grassland under the solar panels. LWT requested ongoing monitoring of the results of the off-site skylark plots and noted that this monitoring data will be very valuable for its research and advice on other skylark projects in the county.

5.1.116 The Development has been designed to avoid/mitigate ecological effects. These include:

- Reduction in size to allow an offset from South Holland Main Drain and the ecology this supports; All drains will be retained and buffers within the design are between 5m to 9m delivering beyond 10% BNG for this habitat and reflecting their status as priority habitat in the Lincolnshire Biodiversity Plan 2011-2020;
- Circa 40 ha of species rich grassland will be created within and around the solar arrays which will deliver significant BNG and increased foraging for wildlife in the area and improve habitat for invertebrates;
- Planting of over 40 new individual trees and seven species rich native hedgerows delivering significant BNG and improved habitats along wildlife corridors at the margins of the Development;
- A pre-commencement badger survey will be undertaken to determine the current location of badger setts. Active setts will then be subject to an appropriate buffer including removing the planned location of arrays and other infrastructure from the design;
- Vegetation clearance is likely to include crop harvesting before construction commences. Additional vegetation clearance will be minimal and comprise removal of a four-metre-long section of hedgerow to widen the existing access into the 'middle field' from Bardling's Drove for construction purposes. This will take place outside of the breeding season to avoid impacts to breeding birds and losses will be mitigated by additional planting across the site; and
- Skylark plots will be provided within 34 ha of adjacent farmland, under a strategy that has been discussed prior to submission with LWT.

5.1.117 Both national and local policy require development proposals to achieve a net gain in biodiversity, which is now mandated under Schedule 7a of the Town and Country Planning Act 1990 (as inserted

by Schedule 14 of the Environmental Act 2021). Applicants must therefore deliver a BNG of 10% as part of their development proposals, with habitat management and monitoring secured for at least 30 years. The gains must be calculated using the statutory (official) biodiversity metric. The BNG metrics are used to calculate the total biodiversity units for each habitat category present, and the required gain must be achieved for each.

- 5.1.118 As noted above, the Development will lead to a net gain of 53.67% in area biodiversity, a net gain of 195.03% in hedgerow biodiversity and a net gain of 16.75% in watercourse biodiversity. The overall score is taken from the lowest of these measures and is therefore a net gain on 16.75%.
- 5.1.119 The vast majority of the area biodiversity net gain is derived from the creation of the meadow grassland, classified in the metric as modified grassland, which is anticipated to reach moderate condition. The hedgerow net gain is derived largely from the planting of seven new lengths of species-rich native hedgerow with trees. Watercourse units are derived from a reduction in encroachment in the riparian zone and removal of intensive farming, which will be achieved via the implementation of buffers in all instances where drains are within or immediately adjacent to the Site boundary.
- 5.1.120 Overall, the installation of a solar farm on the Site will have impacts on biodiversity and ecology during the construction phase, albeit impacts that can be adequately controlled through construction management measures. However, the Development will not lead to significant adverse effects in the operational phase accounting for designed-in mitigation and it delivers significant beneficial effects on habitats (including BNG)..
- 5.1.121 Therefore, the Development is compliant with both national and local policy relating to biodiversity and ecology.

Transport and Access

- 5.1.122 A Transport Statement (TS) has been prepared by Andrew Mosley Associates (AMA) in support of this application. This considers the suitability of the surrounding highway network and impact from construction traffic, occasional operational traffic and the site access arrangements.
- 5.1.123 Following engagement with the local community, the proposal has undergone extensive optioneering and modelling to provide the most efficient and safe routing strategies that avoid concentrating impacts on any one settlement or route. No HGV construction traffic will be routed through Sutton St James.
- 5.1.124 The primary traffic generation periods associated with the proposals would be those during construction. A total of 8 two-way movements per day within a 22-week period from Monday to Friday are estimated during this period as a worst-case scenario. During the operational phase, vehicle movements will be very low, with a maximum of four vehicle trips (eight two-way trips) per month.
- 5.1.125 An indicative Construction Traffic Management Plan (CTMP) has been submitted alongside the application which sets out possible routeing, access arrangements, limitations and standards applicable to ensure that during construction no major impact upon the safety, operation, environment or character of the highway network. The hours of construction would be controlled by environmental health and noise pollution legislation which would limit impacts upon local amenity. The applicant welcomes a condition on this matter so a detailed CTMP can be provided prior to construction.
- 5.1.126 The level of traffic generation expected during the operational phase of the Development will have no major impact upon the safety, operation, environment or character of the highway network.
- 5.1.127 Overall, the TS, with the indicative CTMP, clearly outlines that the Development can be accommodated on the adjacent highway network without any significant negative impact and therefore there are no highway capacity or safety reasons why this development should not be granted planning approval.

Noise

- 5.1.128 A Noise Impact Assessment has been produced by InAcoustic to support the application. The assessment considers the potential noise generation from the plant and equipment associated with the Development taking into account existing sound levels in the area.
- 5.1.129 The report concludes that subject to the erection of a 4m high metallic noise barrier along the north, east and southern side of the BESS units in the compound, the Development will give rise to rating levels that are below the measured background sound level in the area, thus giving rise to a 'Low Impact' on surrounding noise sensitive receptors. The final detail of the acoustic screening can be secured by a planning condition.
- 5.1.130 Overall, subject to a condition, the Development conforms to SELP Policies 30 and 31.

Glint & Glare

- 5.1.131 A Glint & Glare Study has been undertaken by Neo Environmental to assess the impacts of glint and glare on surrounding road users, dwellings, rail and aviation receptors.
- 5.1.132 Geometric analysis was conducted for 44 individual residential receptors, including one residential area, and 79 road receptors as well as four runway approach paths and one air traffic control tower (ATCT). No impacts were reported to the residential, rail or aviation receptors.
- 5.1.133 Mitigation is required in order to screen the impacts on road receptors 25 and 54. This includes native hedgerows to be planted/infilled along the southwest boundary of Array 1 in the Development and maintained to a height of at least 3m. This has been accounted for in the proposed planting drawings by Huskisson Brown Associates and can be conditioned.
- 5.1.134 As such, the Development will not result in any adverse glint and glare impacts in accordance with the requirements of national and local policy.

Battery Fire Safety

- 5.1.135 The Applicant recognises that the storage of electricity can present a manageable risk, and they are committed to that risk being 'as low as reasonably practicable' (ALARP).
- 5.1.136 The renewable and low carbon energy section of the PPG outlines that applicants are encouraged to engage with the relevant local Fire and Rescue Service (FRS) before submitting an application for BESS to the LPA. Further to this, the National Fire Chiefs Council (NFCC) have provided advice titled 'Grid Scale Battery Energy Storage System Planning – Guidance for FRS' (2023). This document also encourages developers to engage with the local FRS. The PPG states that applicants and LPAs are encouraged to consider this guidance produced by the NFCC.
- 5.1.137 The NFCC guidance states that the guidelines are only a 'starting point and cannot cover every eventuality or design', and the 'ultimate responsibility for the safe design and running' of a BESS rests with the operator.
- 5.1.138 In response, the application is accompanied by an outline Battery Storage Safety Management Plan (BSSMP) and a Verification and Compliance Report by Greenfire Solutions who are fire specialists made up of ex-fire fighters. These reports detail the key fire safety provisions for the BESS and a framework against which a full evaluation of the fire risks can be undertaken once the detailed design and procurement processes are completed.
- 5.1.139 The proposed design and approach to fire risk set out in these documents have been discussed and consulted on with Lincolnshire Fire and Rescue Service, who have raised no concerns, accept that the Development applies National Fire Chief Committee (NFCC) guidance on the matter as far as reasonably practicable at this time and welcome the proposed further Detailed Battery Storage Safety

Management Plan (DBSSMP) as a process to provide the further detail on the batteries and safety at the relevant time.

- 5.1.140 In summary, the Development design has been laid out in accordance with the NFCC guidance, reflecting standards and spacing. The design will minimise fire risk using leading safety features that are becoming well established within the industry, and these features will be applied and maintained throughout the scheme's lifecycle. Battery cabinets include a sophisticated Battery Management System (BMS) designed to monitor the cells and ensure they are kept within safe operational limits, with the addition of cooling fans embedded within the battery cabinet design. The battery cabinets will be monitored 24/7 to detect if there is any fault within the battery resulting in the battery being immediately shutdown to mitigate risk of a thermal runaway event.
- 5.1.141 In the unlikely event of a fire, the affected unit [battery cabinet] will be left to burn out, whilst water may be used for boundary cooling to ensure any fire does not spread further. This operational stance is now commonplace within the industry and is supported by many fire and rescue services. Any runoff used for boundary cooling will be initially intercepted by the gravel surfacing from where it will be conveyed by gravity to the attenuation tank and held for testing via a penstock or similar prior to release or tanking off site for treatment.
- 5.1.142 The detailed design phase will determine the best approach to finalising the above considerations, and to suitably control this a detailed BSSMP that can be conditioned prior to operation of the batteries, is welcomed by the Applicant.
- 5.1.143 This approach ensures the potential impacts of fire have been consulted on at every stage of the design with the Lincolnshire Fire and Rescue Service so that such will be of a sufficiently low (acceptable) level of risk and any potential risk of pollutants from the BESS will be appropriately managed to avoid harm to the natural environment and human health.
- 5.1.144 This approach then results in accordance with the PPG and Local Plan SELP Policies 30 and 31.

Developer Contributions

- 5.1.145 In terms of financial contributions to the community, Policy 6 of the SELP states where these are applicable. The application does not include the creation of dwellings or floorspace, furthermore, no unacceptable impacts upon infrastructure, services or the environment will arise needing mitigation that justifies a financial contribution. Seeking such or providing such as part of the consideration of this application which do not meet the statutory tests set out in regulation 122 of the Community Infrastructure Levy Regulations 2010 (as amended by the 2011 and 2019 Regulations) and the NPPF is unlawful.
- 5.1.146 On this basis, the applicant has instead sought to provide material public benefits and outlines these below.

Wider Public Benefits

- 5.1.147 Climate change is a recognised phenomenon of international and global significance. The scientific evidence is overwhelming and identifies that climate change, as a result of rising greenhouse gas emissions, threatens the stability of the global climate. The continuing production of greenhouse gases and carbon dioxide in particular is considered to be a significant contributor to the rapidly increasing rate of climate change.
- 5.1.148 The latest round of UN climate talks (COP28) held in Dubai was the largest of its kind with approximately 85,000 participants. COP 28 was particularly momentous as it marked the conclusion of the first 'global of the world's efforts to address climate change under the Paris Agreement. Having shown that progress was too slow across all areas of climate action - from reducing greenhouse gas emission, to strengthening resilience to a changing climate, to getting the financial and technological support to vulnerable nations – countries responded with a decision on how to accelerate action across all areas by 2023.

- 5.1.149 At the time of writing, COP29 is currently underway in Baku.
- 5.1.150 In the UK, the main strategy for tackling climate change is to significantly reduce greenhouse gas emissions by creating a low carbon economy. As more than two thirds of the world's carbon dioxide emissions arise from the way we produce and use energy, energy policy plays a key role in meeting the climate change challenge.
- 5.1.151 The Development will provide 20MW of renewable energy and 10MW of BESS. This will provide the generation of clean electricity which reflects the annual electricity demand of up to 12,015 dwellings per annum and which would reduce carbon dioxide emissions by circa 7,212 tonnes each year.
- 5.1.152 It is clear that the Development will make an important contribution towards achieving these targets and other associated policy objectives at national and local levels, including the South East Lincolnshire Councils Partnership Climate Change Strategy (SELP CCS) (March 2022). At local level the reduction of emissions from fossil fuels will improve the long-term air quality and mitigate climate change to local communities.
- 5.1.153 These are the principal benefits which should be afforded significant weight in the determination. Application of SELP 31 (by Officer or Decision Maker) should allow for the strengthened support at national level as per the SELPs own review.
- 5.1.154 There is no loss of agricultural land. The Development would be for a period of 40 years. The impacts of the Development are reversible and following the consented period, the land can return to arable farming. Whilst removed from arable farming for the consented period, the land would be readily available for grazing and pasture for livestock farming. This is a common approach used on solar developments in order to manage the grassed areas around solar panels. The Development is suitable for grazing by livestock maintaining its value to food production and agriculture. This approach results in dual use of the land for both ongoing agriculture and creation of renewable energy.
- 5.1.155 The benefits set out above would not be realised if the site was development for housing or other such permanent development and the land is not permanently 'lost' through consenting the Development.
- 5.1.156 The Site represents only 18% of the total holding which is undermined by invasive species impacting its yield. The Development in this application would provide a guaranteed income to the farm at a time of significant uncertainty for the farming industry. There would be wider economic benefits during construction to the local supply chain, and sustaining the farm business would protect existing jobs, enable investment into the farm supporting food production and again benefiting the local economy.
- 5.1.157 The Applicant is committed to delivering economic and social benefits. On this basis an Employment and Training Plan (ETP) provided subject to condition will ensure local benefits are captured with:
- targets for employing local labour;
 - targets for work experience opportunities and apprenticeships;
 - measures to seek that the developer and contractors work directly with the local workforce ;
 - training opportunities in respect of any new jobs created; and
 - an Educational Strategy/Plan, which sets out opportunities and measures for education benefits in connection with local schools and colleges.
- 5.1.158 There are significant economic and social benefits, which do not come at the expense of the agricultural land but maintain it. These are in line with the SELP Vision for the local economy, SELP CSS and principal policies 1 and 31.
- 5.1.159 From an environmental perspective, the landscape and ecological enhancements to be included within the Development will provide a substantial net gain in biodiversity (a BNG uplift of 53.67% in area

biodiversity, 16.75% for watercourses and 195.03% for hedgerows on the Site). The delivery of renewable energy also enables the wider removal of carbon dioxide from the environment improving air quality.

- 5.1.160 The Development is not within 2km of any designated ecological sites and is set back 250m from South Holland Main Drain to help support the habitats it maintains. Minimum 5m buffers have been applied to all drains within the Site which will improve and support these habitats as quantified by the BNG uplift.
- 5.1.161 The Applicant has worked closely with LWT at pre-application stage to optimise the approach towards skylark mitigation and enhancement, which includes provision of additional foraging habitat associated with the grassland planting under the solar panels. LWT requested ongoing monitoring of the results of the off-site skylark plots and noted that this monitoring data will be very valuable for its research and advice on other skylark projects in the county. LWT also acknowledged the benefits of the scheme to local watercourses through reduced riparian encroachment and removal of intensive agricultural farming practices in these areas.
- 5.1.162 These are local and district-wide environmental benefits.
- 5.1.163 It is considered there is no harm to heritage assets, increase in flood risk or unacceptable impact on the highway network.
- 5.1.164 Overall, there are therefore clear and significant wider public benefits associated with the Development and throughout the application process we will continue to engage with South Holland District Council Officers and consultees on the scope of benefits that can be realised through the delivery of the proposals.

6 Summary and Conclusions

- 6.1.0 The PDAS supports a planning application submitted on behalf of Enray Power Ltd for the construction, operation and decommissioning of a solar PV farm and BESS. The Development comprises ground mounted photovoltaic arrays with an export capacity of 20 MW and BESS with a capacity of 10 MW.
- 6.1.1 As demonstrated in this report and the accompanying SCI, the design of the proposal has been developed iteratively and positively in response to consultation input from several key stakeholders including South Holland District Council as Local Planning Authority, the Environment Agency, Lincolnshire Wildlife Trust, South Holland Internal Drainage Board, and the local community.
- 6.1.2 The planning drawings and technical assessments submitted within this application demonstrate the Development will not unacceptably impact agricultural land, the landscape or the natural environment.
- 6.1.3 The application of local policy should follow the conclusions of the SELP review, and any remaining harm should be weighed against the substantial public benefits namely, addressing the significant and pressing need to reduce greenhouse emissions and meet the carbon net zero target set at national and local level via the SELP CCS.
- 6.1.4 It will also deliver the public benefits which need to be weighed in the balance as summarised in Table 6.1 below.

Table 6.1: Summary of Public Benefits

Environmental	1	Generation of clean electricity to meet the equivalent annual electricity demand of up to 12,015 dwellings per annum and reducing carbon dioxide emissions by circa 7,212 tonnes each year, to support national and local net zero targets.
	2	The proposal is temporary , it will allow the soil to rest from intensive agricultural practices and the proposed grassland planting will help tackle the current blackgrass problem helping improve future productive use of the land.
Social/ Economic Benefits	3	Delivery of significant BNG as follows: 53.67% net gain for area habitats 16.75% net gain for watercourse habitats; and, 195.03% for hedgerows habitats Enhancement of the drains via minimum buffers and delivery of meadow grassland on site improving foraging for wildlife, and skylark mitigation and monitoring supported by Lincolnshire Wildlife Trust.
	4	Provision of a guaranteed income to a local farm, business and employer, contributing to the local rural economy and boosting its resilience. The proposal represents 18% of the wider farm landholding on an area with current blackgrass infestation, retaining and sustaining the wider landholding for food production.

	5	Benefits to the local economy through the award of construction contracts and associated sub-contracts through the proposed Employment and Training Plan (ETP)
	6	Educational opportunities with local schools and colleges
	7	There is no harm to heritage assets, increase in flood risk or unacceptable impact on the highway network.

- 6.1.5 A further material consideration in this application is the previous granting of planning permission for a solar farm in this location in 2014 (ref. H20-0764-14). Since this approval, the need for renewable energy has continued to grow and is supported by SELP Policy 31 and Chapter 14 of the NPPF.
- 6.1.6 The Development is in accordance with local and national planning policy and will make a significant contribution to the transition from fossil fuels to renewable energy to help mitigate the damaging effects of climate change and deliver net zero. The Applicant has extensively consulted with local stakeholders and has iteratively designed the Development to take account of local concerns.
- 6.1.7 In conclusion, it is considered that the Development complies with the adopted development plan and NPPF and should be approved without delay.

Appendix A Planning Policies and Other Material Considerations

South East Lincolnshire Local Plan 2011-2036 (March 2019)⁸

South Holland District Council has produced a Local Plan with Boston Borough Council and Lincolnshire County Council, known as the South East Lincolnshire Local Plan (SELP). The Plan identifies land and allocates sites for development, as well as protects areas from development for historic or environmental importance. The following policies are relevant to the Development and Alternative Site Assessment:

Policy 1 Spatial Strategy: The policy sets out the development hierarchy for the district. Part D allows for development to be permitted where it meets the sustainable development needs of the area in terms of economic, community or environmental benefits.

Policy 2 Development Management: Developments should be sustainable in relation to size, design, material and resource usage, vehicle generation levels, drainage and flood risk, and enhancement of natural habitats and historical assets.

Policy 3 Design of New Development: Developments should not be inappropriately designed in comparison to the local area. Developments should consider mitigation of flood risk, using locally sourced building materials, and protecting best and most versatile soils. Hedgerows and trees should be incorporated and enhanced.

Policy 4 Approach to Flood Risk: Developments within Flood Zones 2 and 3 will be permitted if there are available areas at a lower risk of flooding, the infrastructure is essential, and the application can be supported with a flood risk assessment which includes allowances made for climate change.

Policy 28 The Natural Environment: Internationally designated sites should not be harmed by developments, unless there are no alternative sites that could cause less or no harm, the benefits of the development outweigh the adverse impacts and suitable mitigation is implemented. Development proposals should provide a net gain in biodiversity.

Policy 29 The Historic Environment: Developments should conserve and enhance the character of designated and non-designated heritage assets, such as listed building, conservation areas, archaeology and scheduled monuments and registered parks and gardens.

Policy 30 Pollution: No adverse impacts to health and safety of the public, amenities of the area, and the natural or historic environment from air, noise, light, land or water pollution.

Policy 31 Climate Change and Renewable and Low Carbon Energy: For renewable developments, excluding wind energy, there should be no significant harm to:

- Visual amenity, landscape character or skyline;
- Residential amenity in respect of noise, fumes, odour, vibration, shadow flicker, sunlight reflection, broadcast interference and traffic;
- Highway safety;
- Agricultural land take;
- Aviation and radar safety;
- Heritage assets; and
- The natural environment

⁸ South East Lincolnshire Local Plan 2011-2036. Available from: <https://www.southeastlincslocalplan.org/wp-content/uploads/2019/02/Local-Plan-text-March-2019.pdf>

Following decommission, infrastructure should be removed and the site should be reinstated.

South East Lincolnshire Councils Partnership Climate Change Strategy (March 2022)ⁱ

The purpose of the Climate Change Strategy is to provide a mechanism for achieving sustainability and meet net zero greenhouse gas emissions by 2050. The Strategy highlights that the largest contributors of emissions in South Holland are transport, domestic properties, land use, land use change and forestry. In regard to renewable energy, it is stated that energy production will need to be significantly changed. South Holland has a higher percentage of households in fuel poverty than the national average, which demonstrates a need for renewable energy.

The strategy highlights the need for small and large scale renewable solutions to achieve net zero aspirations but also recognises that a large barrier to this strategy is the available network capacity.

National Planning Policy Framework (NPPF December 2023)

The revised National Planning Policy Framework (NPPF) was published in September 2023. It sets out the Government's planning policies for England and explains how these should be applied to development proposals. While the NPPF does not form part of the development plan, it is a Material Consideration in the determination of planning applications.

NPPF states that "the purpose of the planning system is to contribute to the achievement of sustainable development" (paragraph 7). It adds that proposals must meet the economic, social and environmental objectives set out in Paragraph 8 – these three objectives are interdependent and are described below:

- a. *"an economic objective – to help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right types is available in the right places and at the right time, to support growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure;*
- b. *a social objective – to support strong, vibrant and healthy communities, by ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations; and by fostering well-designed, beautiful and safe places, with accessible services and open spaces that reflect current and future needs and support communities' health, social and cultural well-being; and*
- c. *an environmental objective – to protect and enhance our natural, built and historic environment; including making effective use of land, improving biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy."*

Paragraph 10 states that "**a presumption in favour of sustainable development**" lies at the heart of the NPPF. For decision-taking the presumption in favour means "**approving development proposals that accord with an up-to-date development plan without delay**" (paragraph 11). The NPPF highlights that the presumption in favour of sustainable development does not change the statutory status of the development plan as the starting point for decision-making (paragraph 12), which is also reiterated in paragraph 47.

Chapter 4 of the NPPF relates specifically to the decision-making process and the determination of planning applications. Paragraph 38 sets out that "**local planning authorities should approach decisions on proposed development in a positive and creative way**". It also states that "decision-makers at every level should seek to approve applications for sustainable development where possible".

Paragraph 55 sets out how LPAs should consider whether otherwise unacceptable development could be made acceptable through the use of conditions or planning obligations.

The NPPF policies of specific relevance to the Development are summarised in turn below.

Chapter 14 relates to meeting the challenges of climate change. Paragraph 157 states that the transition to a low carbon future in a changing climate is supported, "**it should help to shape places in ways that**

contribute to radical reductions in greenhouse emissions, minimise vulnerability and improve resilience; encourage the reuse of existing resources, including the conversion of existing buildings; and support renewable and low carbon energy and associated infrastructure.” This application is for a solar array development which will contribute to the transition towards a low carbon future.

More specifically relating to renewable infrastructure, paragraph 163 a) confirms that local planning authorities **“should not require applicants to demonstrate the overall need for renewable or low carbon energy and recognises that even small-scale projects provide a valuable contribution to cutting greenhouse gas emissions”**. Furthermore, permission should be granted for renewable and low carbon development if the impacts are (or can be made) acceptable.”

Paragraph 165 states that **“inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at highest risk (whether existing or future). Where development is necessary in such areas, the development should be made safe for its lifetime without increasing flood risk elsewhere.”** However, as stated with the FRA and Drainage Strategy and owing to the nature of the Development, the Site is considered suitable in terms of flood risk.

Chapter 15 discusses conserving and enhancing the natural environment. Paragraph 180 states that **“Planning Policies and decisions should contribute to and enhance the natural and local environment by:**

- a. *Protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);*
- b. *Recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;*
- c. *maintaining the character of the undeveloped coast, while improving public access to it where appropriate;*
- d. *minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;*
- e. *preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans;*
- f. *remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.”*

Chapter 16 discusses conserving and enhancing the historic environment. Regarding impacts of developments on heritage assets, Paragraph 208 states **“where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal including, where appropriate, securing its optimum viable use.”**

Chapter 6, ‘Building a strong, competitive economy’ seeks to support a prosperous rural economy. Paragraph 88 (b) sets out that planning policies should enable development and diversification of agricultural and other land-based rural businesses.

Paragraph 124 identifies how planning policies and decisions should encourage multiple benefits from both urban and rural land and take opportunities to achieve net environmental gains such as developments that, amongst other things, would enable new habitat creation.

Consultation on Revised NPPF (Summer 2024)

At the time of writing, the new Labour Government are consulting on amendments to the NPPF. Whilst these changes are not formally adopted yet, they show the general direction of travel in terms of the Government's stance on renewable energy projects. At Paragraph 164 for instance, the changes show a greater level of upfront support for renewable energy projects:

"In determining planning applications Local planning authorities should support planning applications for all forms of renewable and low carbon development. When determining planning applications for renewable and low carbon these developments, local planning authorities should:

- a) not require applicants to demonstrate the overall need for renewable or low carbon energy, and give significant weight to the proposal's contribution to renewable energy generation and a net zero future;*
- b) recognise that even small-scale and community-led projects provide a valuable contribution to significant cutting greenhouse gas emissions;*
- c) in the case of applications for the repowering and life-extension of existing renewable sites, give significant weight to the benefits of utilising an established site.; and approve the application if its impacts are (or can be made) acceptable."*

Planning Practice Guidance

Planning Practice Guidance (PPG) (launched in March 2014) is a web – based resource, which brings together planning guidance on various topics together. In June 2015ⁱⁱ, guidance was published on renewable and low carbon energy. The guidance sets out why planning for renewable and low carbon energy is important explains that,

"increasing the amount of energy from renewable and low carbon technologies will help to make sure the UK has a secure energy supply, reduce greenhouse gas emissions to slow down climate change and stimulate investment in new jobs and businesses. Planning has an important role in the delivery of new renewable and low carbon energy infrastructure in locations where the local environment impact is acceptable" (paragraph: 001 Reference ID: 5-001-20140306).

PPG paragraph 031 (reference ID: 7-031-20220825 refers to the Exception Test. The PPG identifies when the Exception Test should be applied and is reproduced in Table 2 of the PPGⁱⁱⁱ. As this development qualifies as "Essential Infrastructure", and will be located in a Flood Zone 3, the Sequential Test will need to be passed and the Exception Test applied.

PPG paragraph 013 (reference ID: 5-013-20150327) states that the deployment of large-scale solar farms can have a negative impact on the rural environment, particularly in undulating landscapes. It does not define what 'large-scale' is and one could assume the concern here applies more to the 50MW threshold for National Significant Infrastructure Projects. However, the guidance does go on to describe the factors that an LPA should consider with well-planned and well-screened solar farms, as follows:

Encouraging the effective use of land by focussing large scale solar parks on previously developed and non agricultural land, if it is not of high environmental value;

Where a proposal involves greenfield land, whether

- the proposed use of any agricultural land has been shown to be necessary and poorer quality land has been used in preference to higher quality land; and
- the proposal allows for continued agricultural use where applicable and/or encourages biodiversity improvements around arrays;

That solar parks are normally temporary structures and planning conditions can be used to ensure that the installations are removed when no longer in use and the land is restored to its previous use;

The proposal's visual impact, the effect on landscape of glint and glare and on neighbouring uses and aircraft safety;

The extent to which there may be additional impacts if solar arrays follow the daily movement of the sun;

The need for, and impact of, security measures such as lights and fencing;

Great care should be taken to ensure heritage assets are conserved in a manner appropriate to their significance, including the impact of proposals on views important to their setting. As the significance of a heritage asset derives not only from its physical presence, but also from its setting, careful consideration should be given to the impact of large-scale solar parks on such assets. Depending on their scale, design and prominence, a large-scale solar park within the setting of a heritage asset may cause substantial harm to the significance of the asset;

The potential to mitigate landscape and visual impacts through, for example, screening with native hedges;

The energy generating potential, which can vary for several reasons including, latitude and aspect.

Paragraph: 013 goes on to state,

'the approach to assessing cumulative landscape and visual impact of largescale solar parks is likely to be the same as assessing the impact of wind turbines. However, in the case of ground mounted solar panels it should be noted that with effective screening and appropriate land topography the area of a zone of visual influence could be zero.'

UN Framework Convention on Climate Change: The Paris Agreement (2015)

The central aim of the Paris Agreement is to strengthen the global response to the threat of climate change by keeping a global temperature rise below 2 degrees and to pursue efforts to limit the temperature increase even further to 1.5 degrees. Additionally, it aims to strengthen the ability of countries to deal with the impacts of climate change. To reach these ambitious goals appropriate financial flows, a new technology framework, and an enhanced capacity building framework will be put in place, thus supporting action by developing countries and the most vulnerable countries, in line with their own national objectives. The Agreement also provides for enhanced transparency of action and support through a more robust framework.

IPCC Special Report on Global Warming of 1.5°C (2018)

An IPCC Special Report was prepared discussing the potential impacts of global warming of 1.5°C above pre-industrial levels and related global GHG emission pathways in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty. The report sets out that pathways limiting global warming to 1.5°C with no or limited overshoot requires rapid and far-reaching transitions in energy, land, and infrastructure, and deep emissions reductions in all sectors. A 'wide portfolio' of mitigation options and a significant upscaling of investments in those mitigation options is needed.

Climate Change Act (2008) – Net Zero 2050 (2019)

The Climate Change Act (2008) (2050 Target Amendment) Order 2019 sets a legally binding target for reducing greenhouse gas (GHG) emissions, in particular carbon dioxide. As originally enacted, these targets include a reduction of GHG by 100% (on 1990 levels) by 2050, and a requirement that domestic emissions are reduced by no less than 3% each year. In setting these targets, the Act established the Committee for Climate Change (CCC), which is responsible for setting interim binding targets over five-year periods.

Chapter 6 of CCC's report 'Net Zero – The UK's Contribution to stopping global warming' (May 2019) refers to delivering a net zero emissions target. It sets out actions, including the transition to a net zero economy and

what is needed to underpin net zero delivery. 'Part B' sets out key near term actions to put the UK on track and recommends that more rapid electrification must be accompanied by greater build rates of low carbon generation capacity, accompanied by measures to enhance the flexibility of the electricity system.

In the report, the CCC recommend a new emissions target for the UK: a 100% reduction ('net zero') of emissions by 2050. This change in legislation mandating a 100% reduction in carbon dioxide emissions by 2050 was approved by the House of Commons on 24th June 2019 and the House of Lords on 26th June 2019 and is now the Government's statutory carbon reduction obligation, as per the 2019 Order.

Climate Emergency Declaration (June 2019)

In June 2019 the United Kingdom (UK) became the first country to declare a climate emergency and legislate long term climate targets. The resultant legislation amended the Climate Change Act 2008 (c.27) and introduced a legally binding target to achieve 'net zero' by 2050. Paragraph 1 of the Climate Change Act (as amended) sets out the target to 2050 and states that:

"it is the duty of the Secretary of State to ensure that the net UK carbon account for the year 2050 is at least 100% lower than the 1990 baseline (which means the aggregate amount of net UK emissions of carbon dioxide for that year and net UK emissions of each of the other targeted greenhouse gases for the year that is the base year for that gas)".

Kent County Council (KCC) recognised the UK Climate Emergency at a county council meeting on the 23rd of May 2019. This established a target for the KCC estate and corporate activities to be net zero by 2030. This declaration also committed to reducing greenhouse gas emissions from the whole county to net-zero by 2050, in alignment with the national target.

KCC published the Kent and Medway Energy and Low Emissions Strategy to outline the principles and strategy to respond to the UK climate emergency. It recognises that net-zero action is currently focused on direct emission reductions from the County. However, KCC will also be able to offset emissions with significant renewable energy generation.

Net Zero Strategy: Build Back Greener (October 2021)^{iv}

The Net Zero Strategy sets out policies and proposals which ensure the UK is in accordance with upcoming carbon budgets and Nationally Determined Contributions ('NDC'). NDCs provide a mechanism for countries to voluntarily impose national emission limits under the Paris Agreement. The strategy seeks to realise a decarbonised economy by 2050.

British Energy Security Strategy (April 2022)^v

The British Energy Security Strategy (BESS) sets out how the UK intends to secure clean and affordable energy for the 'long-term'. Realising the strategy requires 70GW of solar generation capacity by 2035. This is a significant increase from the 13.7GW of solar as of February 2022.

Over the last five-year period, the UK increased its solar capacity by only an estimated 1.8GW, highlighting the extraordinary need for a significant increase in the deployment of decentralised solar energy schemes of the Development's scale if the BESS targets are to be met. The Strategy offers clear support for solar development that is co-located with other functions to maximise the efficiency of land use – this includes dual solar and agricultural land use.

Energy Security Bill (July 2022)^{vi}

The Energy Security Bill builds upon the British Energy Security Strategy to invest in homegrown energy and maintain the diversity and resilience of the UK's energy supply. The Bill establishes the need to accelerate the growth of low carbon technologies. The Bill started in the House of Lords and is currently on its third reading in the House of Commons.

National Policy Statements

NPPF Paragraph 5 states that National Policy Statements (NPS) 'form part of the overall framework of national planning policy, and may be a material consideration in preparing plans and making decisions on planning applications.' As such, NPS for Energy (EN-1) and the NPS for Renewable Energy Infrastructure (EN-3) are part of national planning policy and are material considerations in the determination of this application.

Overarching National Policy Statement for Energy (NPS EN-1) (January 2024)

NPS EN-1 recognises that meeting energy objectives necessitates the development of large-scale renewable energy infrastructure. Paragraph 3.2.1 outlines that this type of development is required to *"ensure our supply of energy always remains secure, reliable, affordable, and consistent with net zero emissions in 2050"*.

In terms of the proposed on-site energy storage within the Development, paragraph 3.3.4 of NPS EN-1 acknowledges the need for different types of electricity infrastructure, including electricity storage, which are needed to deliver our energy objectives. Paragraph 3.3.6 outlines the need for these different types of electricity infrastructure, *"Storage and interconnection can provide flexibility, meaning that less of the output of plant is wasted as it can either be stored or exported when there is excess production. They can also supply electricity when domestic demand is higher than generation, supporting security of supply. This means that the total amount of generating plant capacity required to meet peak demand is reduced, bringing significant system savings alongside demand side response (up to £12bn per year by 2050). Storage can also reduce the need for new network infrastructure."* However, Paragraph 3.3.6 continues to acknowledge that these technologies are insufficient to meet the anticipated increase in total demand alone and therefore cannot fully replace the need for new generating capacity.

Paragraph 3.3.20 sets out the expectation that a secure, reliable, affordable, net zero consistent system in 2050 is likely to be composed primarily of wind and solar. As well as additional generating plants, new storage and interconnectors are required to provide increased flexibility.

Paragraph 3.3.57 states that based on the Net Zero Strategy and the Government's commitment to a 78% reduction in GHG emissions by 2035, all of our electricity needs to come from low carbon sources by 2035, while meeting a 40-60% increase in demand. Paragraph 3.3.58 therefore recognises that *"there is an urgent need for new (and particularly low carbon) electricity NSIPs to be brought forward as soon as possible"*. The Government has concluded that there is a critical national priority for the provision of nationally significant low carbon infrastructure, as set out in paragraph 3.3.62.

Part 4 of NPS EN-1 provides guidance on the general policies for the submission and assessment of applications relating to energy infrastructure. Overall, Part 4 of NPS EN-1 acknowledges the urgent need for renewable energy infrastructure and indicates a presumption in favour of granting consent unless any more specific and relevant policies set out in the relevant NPSs clearly indicate that consent should be refused.

NPS EN-1 also provides new guidance on the potential impacts to health and well-being in Section 4.4. This primarily relates to the release of pollutants and environmental impact. Section 4.6 relates to Environmental and Biodiversity Net Gain (BNG). This section states that the Development should consider opportunities for enhancements and that projects should seek to incorporate improvements in natural capital, ecosystem services and the benefits they deliver when planning how to deliver BNG.

Section 4.7 underscores the importance of good design in energy projects and how factors such as functionality and siting significantly influence their effectiveness. NPS EN-1 highlights the importance of energy projects harmonising with their surroundings and acknowledges that large-scale energy projects may have landscape and visual impacts. Paragraph 5.10.5 acknowledges that *'virtually all nationally significant infrastructure projects will have adverse effects on the landscape, but there may also be beneficial landscape character impacts arising from mitigation'*. Paragraph 5.10.6 sets out the expectation for projects to be *'designed carefully, taking account of potential impacts on the landscape'*. Whilst locally designated landscapes should be paid attention, Paragraph 5.10.12 states that *'locally valued landscapes*

should not be used in themselves to refuse consent, as this may unduly restrict acceptable development'. At Paragraph 5.10.36, NPS EN-1 advises that it is relevant to consider whether any adverse impact on the landscape is temporary and capable of being reversed.

National Policy Statement for Renewable Energy Infrastructure (NPS EN-3) (January 2024)

NPS EN-3 (January 2024) provides national planning policy in respect of renewable energy infrastructure. Paragraph 1.1.2 summarises the central role that renewables play in meeting our energy objectives, *'Electricity generation from renewable sources is an essential element of the transition to net zero and meeting our statutory targets for the sixth carbon budget (CB6). Our analysis suggests that demand for electricity is likely to increase significantly over the coming years and could more than double by 2050. This could require a fourfold increase in low carbon electricity generation, with most of this likely to come from renewables'*. NPS EN-3 provides assessment and technology-specific information on renewable energy technologies including solar photovoltaic generation.

As stated within the Net Zero Strategy (October 2021), by 2035, all our electricity should come from low carbon sources, subject to security of supply, whilst meeting a 40-60% increase in demand. This must be achieved while ensuring a secure energy supply at the lowest possible cost for both industrial and domestic consumers. Given that solar power is regarded as one of the cleanest and most cost-effective energy sources, it is imperative to provide support for the development of utility-scale solar PV projects to meet the targets of decarbonisation.

Section 2.10 explores the need for solar PV generation in greater detail and specific policies. Paragraph 2.10.9 states that *'solar is a key part of the Government's strategy for low-cost decarbonisation of the energy sector'* and *'the Government expects a five-fold increase in solar deployment by 2035 (up to 75GW)'*. Paragraph 2.10.10 states that *'Solar also has an important role in delivering the Government's goals for greater energy independence. The British Energy Security Strategy states that Government expects a five-fold increase in combined ground and rooftop solar deployment by 2035 (up to 70GW)'*. The Powering Up Britain: Energy Security Plan further emphasises the need for large scale ground-mount solar deployment across the UK, as set out in Paragraph 2.10.11.

Paragraph 2.4.11 states that solar PV generating sites may be proposed in low lying exposed sites and should assess the application's resilience to increased risk of flooding and the impact of higher temperatures.

Paragraph 2.10.17 acknowledges that the scale of solar farms means that they will *'inevitably have impacts, particularly if sited in rural areas'*.

NPS EN-3 provides policy on site selection in Paragraphs 2.10.18 to 2.10.48. Paragraphs 2.10.18 to 2.10.27 state that site selection needs to consider irradiance, site topography, network connection, and proximity to dwellings. Paragraph 2.10.24 acknowledges that the financial feasibility of ground mounted solar developments is often dependent on the distance from the transmission network, connection voltage and available network capacity. 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 available grid export capacity'*.

Paragraphs 2.10.28 to 2.10.35 provide policy on site selection with regards to agricultural land. 2.10.29 states *'where the proposed use of any agricultural land has been shown to be necessary, poorer quality land should be preferred to higher quality land avoiding the use of "Best and Most Versatile" agricultural land where possible'*. Paragraph 2.10.30 continues and states that *'whilst development of ground mounted solar arrays is not prohibited on Best and Most Versatile agricultural land ... the impacts of such are expected to be considered'*. Paragraph 2.10.31 recognises that *'at this scale, it is likely that applicants' developments will use some agricultural land. Applicants should explain their choice of site, noting the preference for development to be on suitable brownfield, industrial and low and medium grade agricultural land'*. Paragraph 2.10.32 states that *'where sited on agricultural land, consideration may be given as to whether the proposal allows for continued agricultural use and/or can be co-located with other functions'*.

Paragraphs 2.10.35 to 2.10.39 and 2.10.40 to 2.10.45 discuss the need and potential difficulty for accessing ground mounted solar sites due to their rural location and provides policy on PRow respectively.

NPS-EN3 provides general policies on environmental impacts and mitigation in Paragraphs 2.10.73 to 2.10.144. These policies expand on the information contained within NPS-EN1 with a focus on matters pertaining to ground mounted solar PV developments.

Importantly, paragraph 2.10.29 states that land type should not be a predominating factor in determining the suitability of a site but applicants should, where possible, utilise previously developed land, brownfield land, contaminated land and industrial land. NPS-3 recognises that solar farms will use some agricultural land and advises that applicants explain their choice of site, noting the preference for development to be on suitable brownfield, industrial and low and medium grade agricultural land.

Powering Up Britain: Energy Security Plan' policy paper (April 2023)

The Powering Up Britain paper outlines the UK government's strategy for energy security and achieving net zero emissions. It combines the Energy Security Plan and the Net Zero Growth Plan and explains how Britain will diversify, decarbonise and domesticate energy production by investing in renewables and nuclear. The paper highlights the significant role of solar power and how the Government aims to quintuple solar power up to 70GW by 2035, enough to power around 20 million homes. It recognises ground-mounted solar as one of the cheapest forms of electricity generation and is readily deployable at scale. The Government is therefore seeking large scale solar deployment across the UK mainly on brownfield, industrial and low/medium grade agricultural land. The Government confirms that it will not be making changes to categories of agricultural land in ways that might constrain solar deployment.
