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Local Impact Report

Prepared in Accordance with Section 60(3) of the Planning Act 2008

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June 2023

1. Introduction.....	3
2. Description of site and surroundings	4
3. Planning History	5
4. Policy Context.....	6
5. Local Context.....	19
6. Local Impacts.....	21
7. Conclusions	26

1 Introduction

- 1.1 The Mallard Pass Solar Farm was accepted for examination on the 21st of December 2022 by the Planning Inspectorate and is now in the examination phase for this Nationally Significant Infrastructure Project (NSIP). South Kesteven District Council (SKDC) have been invited by the Examining Authority to submit a Local Impact Report (LIR). This LIR is presented below and has been prepared with regard to Section 60(3) of the Planning Act 2008 (as amended), the DCLG (as referred to at that point) Planning Act 2008: Guidance on the pre-application process, and the Planning Inspectorate (PINS) Advice Note one: Local Impact Reports.
- 1.2 A LIR is defined under Section 60 (3) of the Planning Act 2008 Section (PA 2008) as a 'report in writing giving details of the likely impact of the proposed development on the authority's area (or any part of that area).' Upon the conclusion of the current examination of the project, the Secretary of State must have regard to any LIRs produced by the stated deadline. A LIR is designed to assist the ExA in the consideration of an application, by local authorities identifying issues from their local knowledge and understanding of site context.
- 1.3 The LIR is a means by which the impacts and their significance is presented, with the ExA undertaking a balancing exercise, in the consideration of such impacts. A local authority may also separately make written representations on their views of the scheme.
- 1.4 The Mallard Pass Solar Farm is a significant energy infrastructure project, with wide ranging potential impacts, during both the construction and operational phases of development. As such, the complexity of this project means, the extent of these impacts is difficult to quantify at this stage.
- 1.5 The examination of the project, will seek to consider in detail the significance of these impacts and associated resulting effects. This LIR sets out the likely impacts of the proposed development, based on the current understanding of the issues and considering both potential positive and negative impacts.

2 Description of site and surroundings

2.1 The application site includes the following main areas:

- The Solar PV Site - Areas within the site that are being considered for solar development, the primary onsite substation and associated infrastructure.
- Mitigation and Enhancement Areas;
- Potential Highway Works Site - areas beyond the Solar PV site which are being considered for cable route connections and temporary/permanent improvements to existing highways to facilitate the construction and decommissioning of the Proposed Development.
- Grid Connection Corridor – Area within the Site that is being considered for the Grid Connection Cable between the Primary Onsite Substation and the National Grid Ryhall Substation and the new connection at National Grid Ryhall Substation.

2.2 The total site covers approximately 852 hectares. Approximately 327 hectares of the site falls within SKDC's administrative boundary and the remaining balance of the site falls within Rutland County Council's (RCC's) administrative boundary.

2.3 The Grantham - Peterborough (East Coast Main Line) railway line dissects the Solar PV site on a north-west to south-east alignment. The Solar PV site is located to the immediate south, east and west of Essendine and approximately 900m south of Carlby. The north-eastern most edge of Stamford is located approximately 1.4km south-west of the Solar PV site at its nearest point.

2.4 Mallard Pass Solar Farm is a proposed Solar Farm which would allow for the generation and export of electricity exceeding 50 megawatts (stated to be 350 megawatt capacity). The principal components of the Proposed Development comprise the following:

- PV Arrays;
- Mounting structures;
- Inverters;
- Transformers;
- Switchgears;
- Primary Onsite Substation and Ancillary Buildings;
- Low Voltage Distribution Cabling;

- Grid Connection Cables;
- Fencing, security, and ancillary infrastructure;
- Access Tracks; and
- Green infrastructure (GI)

2.5 It is noted that the proposal no longer includes an element of battery storage.

3 Planning History

3.1 The application site (order limits) lies within a predominantly rural area on agricultural land and therefore there are no notable major projects, that lie within the area of the order limits, that are likely to come into conflict with the proposed project. There are also no pending major applications lodged with SKDC as Local Planning Authority (LPA) at the time of this LIR being produced.

4 Policy Context

4.1 National Policy Statements

4.1.1 In accordance with Section 104(2) of the Planning Act 2008, the Secretary of State is required to have regard to any relevant national policy statement (NPS), amongst other matters, when deciding whether or not to grant a Development Consent Order (DCO). However, as the Proposed Development is not specifically referenced by a NPS, the DCO is required to be determined in accordance with Section 105 of the Planning Act 2008.

4.1.2 Section 105(2) of the Planning Act 2008 provides the legal basis for determining the DCO Application and the Secretary of State must have regard to the provisions set out in this section of the Planning Act 2008. This includes the local impact report and any matters which the Secretary of State thinks are both important and relevant to its decision. In terms of relevance, the following NPSs are important and related to the Proposed Development:

- Overarching NPS for Energy (EN-1);
- NPS on Renewable Energy Infrastructure (EN-3); and
- NPS for Electricity Networks Infrastructure (EN-5).

4.1.3 NPS EN-1 (the Overarching National Policy Statement for Energy) was published in July 2011. The NPS confirms the Government's commitment to the legally binding target to cut greenhouse gas emissions by 80% by 2050, compared to 1990 levels. It also identifies the need to increase dramatically the amount of renewable electricity generation capacity in order to meet the commitments under the EU Renewable Energy Directive and to improve energy security by reducing dependence on imported fossil fuels, decrease greenhouse gas emissions and providing economic opportunities. Solar is noted within the document as being an intermittent renewable technology.

4.1.4 Paragraph 4.1.3 of EN-1 states that in considering any proposed development, and in particular when weighing its adverse impacts against its benefits, the examining authority should take into account:

- Its potential benefits including its contribution to meeting the need for energy infrastructure, job creation and any long-term or wider benefits; and
 - Its potential adverse impacts, including any long-term and cumulative adverse impacts, as well as any measures to avoid, reduce or compensate for any adverse impacts.
- 4.1.5 Section 4.2 of the EN-1 is related to the requirement for assessment of likely significant environmental effects and reporting within an Environmental Statement.
- 4.1.6 Paragraph 4.2.2 of EN-1 states that: “To consider the potential effects, including benefits, of a proposal for a project, the IPC [now PINS] will find it helpful if the applicant sets out information on the likely significant social and economic effects of the development, and shows how any likely significant negative effects would be avoided or mitigated. This information could include matters such as employment, equality, community cohesion and well-being.”
- 4.1.7 Paragraph 4.3.2 states: *“For the purposes of this NPS and the technology-specific NPSs the ES should cover the environmental, social and economic effects arising from pre-construction, construction, operation and decommissioning of the project.”*
- 4.1.8 Paragraph 4.2.4 states that when considering a proposal, the examining authority should: *“Satisfy itself that likely significant effects including any significant residual effects taking account of any proposed mitigation measures or any adverse effects of those measures, have been adequately assessed. In doing so the IPC [now PINS] should also examine whether the assessment distinguishes between the project stages and identifies any mitigation measures at those stages. The IPC [now PINS] should request further information where necessary to ensure compliance with the EIA Directive.”*
- 4.1.9 NPS EN-3 (the National Policy Statement for Renewable Energy Infrastructure) does not include solar power or electricity storage within its scope. NPS EN-3 suggests that, at the time of designation in 2011, other types of onshore renewable energy generation were not technically viable at a scale of more than 50MW, and that the Government would consider revisions to NPS EN-3 or separate NPSs to cover such technologies should the situation change.
- 4.1.10 NPS EN-5 is relevant to the Proposed Development as the policy recognises electricity networks as *“transmission systems (the long distance transfer of electricity through 400kV and 275kV lines), and distribution systems (lower voltage lines from 132kV to 230V from transmission substations to the end-user) which can either be carried on towers/poles or undergrounded”* and *“associated infrastructure, e.g. substations (the essential link between generation, transmission, and the distribution systems that also allows circuits to be switched or voltage transformed to a useable level for the*

consumer) and converter stations to convert DC power to AC power and vice versa.”

4.2 Draft National Policy Statements

- 4.2.1 In light of the commitment to reduce reliance on fossil fuels in favour of cleaner energy sources set out in the Energy White Paper (2020), Government determined that NPS documents EN-1 to EN-5 required updating. In September 2021, draft NPS’s for Energy were laid before Parliament. The House of Commons Report, with recommendations to Government, was published in February 2022. The report welcomed the intention to update the NPS for energy in line with Government policy commitments. The report recommended that the revised NPS’s needed to place greater emphasis on the impact of climate change and the speed at which new infrastructure will need to be built to meet the Government’s net zero target.
- 4.2.2 The Draft NPS EN-1, published by the Department for Business, Energy and Industrial Strategy (BEIS) in September 2021, makes specific reference to the generation of solar energy and recognises that there is an urgent need for new electricity generating capacity to meet UK objectives.
- 4.2.3 Paragraph 3.2.1 of the Draft NPS EN-1 states that: “wind and solar are the lowest cost ways of generating electricity, helping reduce costs and providing a clean and secure source of electricity supply (as they are not reliant on fuel for generation). Our analysis shows that a secure, reliable, affordable, net zero consistent system in 2050 is likely to be composed predominantly of wind and solar.”
- 4.2.4 The Draft NPS EN-3, published by the BEIS in September 2021, introduces a new section (Section 2.47) on solar photovoltaic generation, recognising that Solar Farms are ones of the most established renewable electricity technologies in the UK and the cheapest form of electricity generation worldwide. Paragraph 2.47.1 states that the government has committed to sustained growth in solar capacity to ensure that the UK is on the pathway to meet net zero emissions by 2050, and as such, solar is a key part of Government’s strategy for low-cost decarbonisation of the energy sector.
- 4.2.5 Section 2.48 of the Draft NPS EN-3 sets out key influences that developers should consider when selecting sites for solar development, including the following factors:
- Irradiance and site topography;
 - Proximity of a site to dwellings;
 - Capacity of a site;
 - Grid connection;
 - Agricultural Land Classification and land type; and

- Accessibility.
- 4.2.6 Sections 2.50 – 2.54 of the Draft NPS EN-3 provides topic-specific requirements of how applicants should consider impacts within technical assessments, development of proposed mitigation measures and decision-making for solar development, for the following topics:
- Biodiversity and nature conservation;
 - Landscape, visual and residential amenity;
 - Glint and Glare;
 - Cultural heritage; and
 - Construction including traffic and transport noise and vibration.
- 4.2.7 The Draft NPS EN-5 was published in 2021 and recognises that new electricity networks required for electricity generation, storage and interconnection infrastructure are vital to achieving the nation’s transition to net zero. Draft NPS EN-5 includes a new section on ‘Environmental and Biodiversity Net Gain’ at Section 2.8, which states that when planning and evaluating a projects contribution to environmental and biodiversity net gain, it will be important, for both the Applicant and examining Authority, to recognise that *“the linear nature of electricity networks infrastructure allows excellent opportunities to: i) reconnect important habitats via green corridors, biodiversity stepping zones, and re-establishment of appropriate hedgerows; and/or ii) connect people to the environment, for instance via footpaths and cycleways constructed in tandem with biodiversity enhancements.”*
- 4.2.8 Finally, the revised draft National Policy Statements, are currently subject to a targeted consultation on proposed further changes, which seeks views on the following:
- clarifying that offshore wind is now a critical national priority, including the related onshore and offshore network infrastructure
 - to deliver the 50GW of offshore wind including 5GW of floating wind, we need to cut the process time by over half. The government therefore announced it was introducing the offshore wind environmental improvement package to help accelerate deployment of offshore wind, whilst protecting and enhancing the marine environment
 - strengthening the electricity networks NPS to include more detail on the role of strategic planning of networks, which considers the network as a whole, rather than just individual transmission projects
 - updating the civil and military aviation and defence interests to reflect the status of energy developments, including offshore wind, and how impacts to civil and military aviation, meteorological radars and other types of defence interests should be managed.
- 4.2.9 The consultation will conclude on the 23rd June 2023.

4.3 NPPF, Development Plan and other relevant policy guidance

4.3.1 Whilst not determinative under the Planning Act 2008, PINS as the Examining Authority can consider other important and relevant matters, including national and local planning policy. As such, the policies in the South Kesteven Local Plan (January 2020) and the National Planning Policy Framework (2021) are relevant to the determination of the application.

4.3.2 Local Plan Policy SD1 (The Principles of Sustainable Development in South Kesteven) sets out the overarching obligation for development proposals to minimise its impact on climate change and contribute towards a strong, stable, and more diverse economy. In relation to the proposed development scheme, the following policy requirements are considered to be particularly pertinent:

4.3.3 *“Development proposals shall consider how they can proactively minimise:*

- *The effects of climate change and include measures to take account of future changes in the climate.*
- *The use of resources, and meet high environmental standards in terms of design and construction with particular regard to energy and water efficiency; and*
- *The production of waste both during construction and occupation.*

4.3.4 Development proposals shall consider how they can proactively avoid:

- *Developing land at risk of flooding or where development would exacerbate the risk of flooding elsewhere*
- *The pollution of air, land, water, noise, and light.*

4.3.5 Development proposals shall consider how they can proactively encourage, as appropriate:

- *The use of previously developed land, conversions, or the redevelopment of vacant or underutilised land or buildings within settlements; and*
- *The use of sustainable construction materials.*

4.3.6 Development proposals shall consider how they can proactively enhance the District's:

- *Character*
- *Natural environment; and*

- *Services and infrastructure, as needed to support development and growth proposals”:*

4.3.7 Policy SP1 (Spatial Strategy) outlines the overall spatial development strategy for the District during the plan period. It identifies that the overall strategy of the Local Plan is to deliver sustainable growth, including new housing and job creation, in order to facilitate growth in the local economy and support local residents. Decisions on the location and scale of new development are to be taken on the basis of the settlement hierarchy established within Policy SP2, and all development proposals are required to protect the best and most versatile agricultural land to protect opportunities for food production and the continuance of the agricultural economy. Development affecting best and most versatile agricultural land will only be permitted if:

- *There is insufficient lower grade land available at that settlement (unless development of such lower grade land would be inconsistent with other sustainability considerations); and*
- *Where feasible, once any development which is permitted has ceased its useful life, the land will be restored to its former use and will be of at least equal quality to that which existed prior to the development taking place (this requirement will be secured by planning condition where appropriate).*

4.3.8 Policy SP5 (Development in the Open Countryside) is the principal spatial policy of the Development Plan in respect of development in such locations. It identifies that development within the Open Countryside will be limited to that which has an essential need to be located outside of the existing built form of a settlement. The policy goes on to identify a series of exceptions, whereby development in the Countryside is considered to be acceptable in principle, including:

- (a) *Agriculture, forestry, or equine development*
- (b) *Rural diversification projects*
- (c) *Replacement dwellings (on a one for one basis); or*
- (d) *Conversion of buildings provided that the existing building(s) contributes to the character of appearance of the local area by virtue of their historic, traditional, or vernacular form; and*
- (e) *Are in sound structural condition; and*
- (f) *Are suitable for conversion without substantial alteration, extension, or rebuilding, and that the works to be undertaken do not detract from the character of the building(s) or their setting.*

4.3.9 The proposed development scheme would involve the diversification of existing farmland and, therefore, falls within the “rural diversification project” exception identified above.

4.3.10 Policy RE1 (Renewable Energy Generation) states that proposals for renewable energy generation will be supported subject to meeting the detailed criteria set out in the accompanying Renewable Energy Appendix 3, and provided that:

- (a) The proposal does not negatively impact the District's agricultural land asset*
- (b) The proposal can demonstrate the support of affected local communities*
- (c) The proposal includes details for the transmission of power produced*
- (d) The proposal details that all apparatus related to renewable energy production will be removed from the site when power production ceases; and*
- (e) That the proposal complies with any other relevant Local Plan policies and national planning policy.*

4.3.11 Paragraph 152 of the NPPF identifies that the planning system should support the transition to a low carbon future, and it should help to support renewable and low carbon energy and associated infrastructure. Similarly, Paragraph 158 of the Framework states that when determining planning applications for renewable and low carbon development, local planning authorities should:

- (a) Not require applicants to demonstrate the overall need for renewable or low carbon energy, and recognise that even small-scale projects provide a valuable contribution to cutting greenhouse gas emissions; and*
- (b) Approve the application if its impacts are (or can be made) acceptable. Once suitable areas for renewable and low carbon energy have been identified in plans, local planning authorities should expect subsequent applications for commercial scale projects outside these areas to demonstrate the proposed location meets the criteria used in identifying suitable areas.*

4.3.12 As referenced above, Local Plan Policy RE1 supports proposals for renewable energy generation, subject to the detailed policy criteria, and subject to meeting the identified material considerations set out in the accompanying Renewable Energy Appendix 3.

4.3.13 Similarly, Paragraph 7 of the Planning Practice Guidance for Renewable and Low Carbon Energy is clear that, in considering planning applications:

- The need for renewable or low carbon energy does not automatically override environmental protections*
- Cumulative impacts require particular attention, especially the increasing impact that wind turbines and large-scale solar farms can have on the landscape and local amenity as the number of turbines and solar arrays in an area increases*

- *Local topography is an important factor in assessing whether wind turbines and large-scale solar farms could have a damaging effect on landscapes and recognise that the impact can be as great in predominantly flat landscapes as in hilly or mountainous areas*
- *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 settings.*
- *Protecting local amenity is an important consideration which should be given proper weight in planning decisions.*

4.3.14 Paragraph 13 of the PPG sets out particular planning considerations for assessing large scale ground-mounted solar farms. It states that such proposals can have a negative impact on the rural environment, particularly in undulating landscapes. However, the visual impact of a well planned and well-screened solar farm can be properly addressed within the landscape if planned sensitively. It goes on to advise that LPAs will need to consider:

- *Encouraging the effective use of land by focussing large scale solar farms on previously developed and non-agricultural land, provided that it is not of high environmental value.*
- *Where a proposal involves greenfield land, whether (i) 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 (ii) the proposal allows for continued agricultural use, where applicable, and / or encourages biodiversity improvements around arrays.*
- *That solar farms are normally temporary structures and planning conditions can be used to ensure that the installations are removed when no longer in use and that 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 manner appropriate to their significance, including the impact of proposals on their setting.*
- *The potential to mitigate landscape and visual impact through, for example, screening with native hedges*
- *The energy generating potential, which can vary for a number of reasons, including latitude and aspect.*

4.3.15 The policy context for the key material considerations for the development are considered further below using the 9 criteria set out in the Renewable Energy Appendix 3 and with references to other local and national policy.

4.4 Impact on Agricultural Land Quality

4.4.1 As referenced above, Policy SD1 (Principles of Sustainable Development in South Kesteven) seeks to enhance the District's natural environment, and likewise, Policy SP1 (Spatial Strategy) identifies that development affecting best and most versatile agricultural land will only be permitted if:

- *There is insufficient lower grade land available at that settlement (unless development of such lower grade land would be inconsistent with other sustainability considerations); and*
- *Where feasible, once any development which is permitted has ceased its useful life, the land will be restored to its former use and will be of at least equal quality to that which existed prior to the development taking place (this requirement will be secured by planning condition where appropriate).*

4.4.2 Criterion 9 of the Renewable Energy Appendix sets out the initial approach that should be taken for any Sequential Assessment, as follows:

- First, be required to carry out an extensive search for derelict or brownfield sites. This test should not necessarily be confined to the District, in line with the Wherstead appeal decision
- Second, be required to carry out a search for poorer agricultural sites i.e., Grade 4 and 5. This test should also not necessarily be confined to the District.
- Third, be required to provide the MAFF agricultural grade classification for the proposed site.
- Fourth, be required to prove why the site has to be located close to a particular power grid line and that there is spare capacity on that grid line.

4.4.3 Criterion 9 also provides guidance in relation to the layout of any solar development on such sites:

- Solar technology should be sited at the periphery of fields rather than in central positions.*
- Where it is not possible to locate on the periphery due to physical constraints or another material consideration rendering such positioning unviable, the development should be sited in a strategic position which avoids unnecessary disruption to agricultural operations.*
- At the end of the operational life of the installation, all equipment should be removed in its entirety and the land restored to its former use.*

4.5 Flood Risk and Drainage

4.5.1 Policy EN5 (Water Environment and Flood Risk Management) of the Local Plan states that "Development should be located in the lowest areas of flood risk, in accordance with the South Kesteven Strategic Flood Risk

Assessment [SRFA]. Where this is not possible the sequential approach to development will be applied. Where the requirements of the sequential test are met, the exception test will be applied where necessary”.

4.5.2 Paragraph 162 of the Framework provides further guidance in respect of the application of the sequential test. It identifies that “The aim of the sequential test is to steer new development to areas with the lowest risk of flooding from any source. Development should not be allocated or permitted if there are reasonably available sites appropriate for the proposed development in areas with a lower risk of flooding”.

4.6 Visual Impact on the Landscape

4.6.1 Local Plan Policy EN1 (Landscape Character) seeks to ensure that development is appropriate to the character and significant natural, historic, and cultural attributes of the features of the landscape within which it is situated, and contribute to its conservation, enhancement, or restoration.

4.6.2 Criterion 1 of the Renewable Energy Appendix identifies that a Landscape and Visual Impact should consider the following matters:

- *Can the site be readily seen in views from heritage assets such as listed buildings and conservation areas?*
- *Can the site be readily seen in views from housing areas?*
- *Can the site be readily seen in long distance views in the landscape especially if the intervening landscape is of special significance?*

4.7 Visual Impact on Dwellings or Communities

4.7.1 Local Plan Policy DE1 (Promoting Good Quality Design) states (amongst other criteria) that to ensure high quality design is achieved throughout the District, all development proposals will be expected to make a positive contribution to local distinctiveness, vernacular, and character of the area. Proposals should reinforce local identity and not have an adverse impact on the streetscene, settlement pattern or landscape / townscape character of the surrounding area. Proposals should be of an appropriate scale, density, massing, height, and material.

4.7.2 In addition, the Rutland, and South Kesteven Design Guidelines SPD (Adopted November 2021) identifies that the detailed design of a proposal should be influenced by its context and should consider the relationship between the site and other buildings, routes and spaces, views and vistas, facilities, architectural details, and the landscape. The appearance and architectural landscape of surrounding buildings should be drawn upon and influence the detailed design.

4.7.3 Furthermore, Criterion 2 of the Renewable Energy Appendix requires a residential visual amenity assessment, covering an area of at least 2km from any proposed solar farm to be undertaken as part of any LVIA that accompanies a formal planning application.

4.8 Cumulative Impacts

4.8.1 Criterion 3 of the Renewable Energy Appendix requires a cumulative impact assessment to be undertaken to consider the impact of any other solar farms that are either visible or will be visible from the site or in views to the site. Such assessment is required to consider solar farm developments that are under construction, consented or the subject of a valid planning application, or formally notified at the scoping stage. The study area for cumulative assessment shall be proportionate to the size of the development and enable the assessment to focus on significant cumulative effects.

4.9 Impact on Heritage Assets

4.9.1 Section 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990 requires Local Planning Authorities to have special regard for the desirability of preserving listed buildings and their settings, or any features of special architectural or historic interest which it possesses.

4.9.2 Similarly, Section 72 of the Act 1990 requires Local Planning Authorities to give special attention to the desirability of preserving or enhance the character or appearance of Conservation Areas.

4.9.3 Local Plan Policy EN6 (The Historic Environment) is the primary mechanism through which the Council exercises its statutory requirements. This policy states that the Council will seek to protect and enhance heritage assets and their settings in keeping with the policies in the National Planning Policy Framework, and proposals will be expected to take Conservation Area Appraisals into account, where these have been adopted by the Council. Development that is likely to cause harm to the significance of a heritage asset or its setting will only be granted permission where the public benefits of the proposal outweigh the potential harm.

4.9.4 Furthermore, in respect of the potential impact of the development on archaeological assets, Policy EN6 identifies that where development affecting archaeological assets is acceptable in principle, the Council will seek to ensure mitigation of impacts through preservation of remains in situ as a preferred solution.

4.10 Access & Highways Infrastructure

4.10.1 Local Plan Policy ID2 (Transport and Strategic Transport Infrastructure) identifies that the Council will support and promote an efficient and safe transport network, which offers a range of transport choices for the movement of people and goods, reduces the need to travel by car, and encourages the use of alternatives, such as walking, cycling or public transport. The policy requires development proposals to not result in any unacceptable highway safety impacts or result in severe cumulative impacts on the highway network. Proposed schemes should also include appropriate provision for vehicle, two-wheeler, and cycle parking.

4.10.2 Furthermore, Criterion 6 of the Renewable Energy Appendix requires proposals for solar farms to consider and incorporate, as appropriate, the following matters:

- *The design and positioning of active solar technology should be carefully considered to avoid the potential nuisance of glint and glare onto high-speed roads. Where vegetation is proposed as a form of mitigation against glint and glare, species which will provide effective screening all year round are preferable.*
- *A construction statement should be prepared by the developer which forecasts the vehicle trips that are likely to be generated during construction and the routes which are likely to be used. The LPA may require further detailed information, such as a Traffic Management Plan, if necessary.*

4.11 Pollution Control

4.11.1 Policy EN4 (Pollution Control) identifies that development should seek to minimise pollution and, where possible, contribute to the protection and improvement of the quality of air, land, and water. Development will only be permitted if potential adverse effects can be mitigated to an acceptable level by other environmental controls, or by measures included in the proposals.

4.11.2 In addition, Criterion 5 of the Renewable Energy Appendix identifies that the Council will require solar farm proposals to:

- *Be strategically sited so as to minimum the noise experienced by nearby residents and occupiers of business premises and important buildings (including, but not limited to hospitals and schools)*
- *In any instance, operate with minimal noise output to avoid undue disturbance to nearby residents, wildlife, and livestock. Where necessary, mitigation measures such as the establishment of vegetation buffers for example, should be used to prevent adverse noise impacts.*

4.12 Nature Conservation Considerations

4.12.1 Local Plan Policy EN2 (Protecting Biodiversity and Geodiversity) identifies that the Council will facilitate the conservation, enhancement and promotion of the District's biodiversity and geological interests of the natural environment. This includes seeking to enhance ecological networks and seeking to deliver a net gain on all proposals.

4.12.2 Furthermore, Criterion 7 of the Renewable Energy Appendix identifies that proposals should demonstrate that due consideration has been given to the potential impacts of the proposal on local, national, and international designated sites, including those outside the District. Where a proposal is likely to have adverse impacts; applicants should demonstrate how these potential impacts have been addressed in the proposal, with proposed mitigation measures being commensurate to the significance of the designation, in relation to the local, national, and international hierarchy. In instances where a proposal would have an adverse impact on a protected habitat or species, the applicant should demonstrate that the need for and public benefits of the development clearly outweigh the harm caused, and that mitigation and / or compensation measures can be secured to offset the harm and achieve, where possible, a net gain for biodiversity.

4.13 Aircraft Movements and Associated Activities

4.13.1 Criterion 8 of the Renewable Energy Appendix requires solar farm proposals to demonstrate that the design and positioning of proposed solar installations have been carefully considered to avoid the potential nuisance of glint and glare to aircraft movement

5 Local Context

5.1 Local Characteristics, site and other environmental constraints and designations

- 5.1.1 In the wider sense, the South Kesteven District covers an area of 365 square miles to the south corner of Lincolnshire. There are four market towns within the District of which Grantham is the largest, Around 65% of the population live in the four market towns, which is the focus for key employment, housing, and other developments of more significant scale. The district contains a significant amount of ancient woodland and supports a number of conservation areas and nationally important sites of Scientific Interest.
- 5.1.2 As such, there is also a large proportion of the population that live within the rural parts of the district and given the concentration of employment opportunities within the District, agriculture remains the major source of employment within such areas. Furthermore, intensive agriculture for the purposes of food production forms a key component of SKDC's extensive rural area, of which there are a variety of food processing and distribution businesses which are heavily reliant upon this key sector of the economy. The following sections of this report consider in more detail how the proposed development interacts with this local context and the likely level of impacts to be brought about, both positive and negative.
- 5.1.3 Section 1 of this report sets out a description of the site context and confirms that the order limits (for which the Development Consent Order will provide the powers for the works to be carried out) comprises 852ha and of this, 327.4ha lies within SKDC's administrative boundary , with the remaining balance lying within Rutland County Council's (RCC's) administrative boundary.
- 5.1.4 The area of land that lies within the SKDC area is to the southern part of the District and encompasses a significant area of land that is located within the open countryside and is largely characterised by and comprises of agricultural (arable) land. The southern most portion of the scheme, (Sheet 4- 5 – Location, Order Limits and Grid Connection Plans PINS Ref: APP - 013) includes a number of farm holdings. The northern most portion within the SKDC district (Sheets, 1 and 3) is similar in its characteristics, albeit that this part of the Order Limits, lies closer to the settlements of Braceborough and Carlby.

5.1.5 There are a variety of environmental constraints and designations that lie within (or within proximity of) the Order Limits that fall within the SKDC part of the proposals that comprise as follows:

- **Local Wildlife Sites**, that include Uffington North Road Verges, Banthorpe Wood, Shillingthorpe Hall Grounds, Braceborough Little Wood, New Plantation, Braceborough, Braceborough Great Wood, and Carlby to Aunby Road Verges.
- **Ancient Woodland** - Braceborough Little Wood and Castle Dike Wood
- **Landscape Character Area (Kesteven Uplands)** which is described as *'The physical and human characteristics combine to create a distinctive and mostly unified and consistent landscape character. This is a mostly harmonious rural landscape, with farmland, woodland, and parkland with small stone-built villages. Where the undulations are more pronounced, with small woodlands and fields, it is a relatively small-scale intimate landscape. The higher land tends to be more open with bigger fields and woodland blocks creating a larger scale yet simple rural landscape.'*
- **A significant amount of agricultural land**, much of which is graded as being Best and Most Versatile land (Grade 3A upwards).
- **A Number of existing Public Rights of Way**, that include a national cycle route, other Public rights of way and a section of the Macmillan Way.

6 Local Impacts

6.1 Principles of Sustainable Development and Renewable energy

- 6.1.1 It is noted that the proposed development would make a significant contribution towards renewable energy generation, providing the electricity to power an equivalent of approximately 92,000.00 homes on an average annual basis. This contribution aligns to key commitments at the national level, within the adopted and emerging National Policy Statements recognising the importance of the Government's commitments to cut greenhouse gases by 80% of 2050 and in the case of emerging policy (Draft NPS EN-1) there is a specific objective to the importance of generating solar energy and a recognition of the urgency for new capacity in electricity generation to meet UK objectives.
- 6.1.2 Policy SD1 of the SKDC Local Plan also recognises the importance of all development minimising impacts on Climate Change, with policy RE1 providing in principle support for renewable energy generation, subject to the consideration of various criteria, to measure the potential impacts. Whilst other sections of this report consider other potential impacts, it is clear that at the overarching level, the proposed development by its nature offers significant positive impacts, in the development of clean renewable energy, aligned to national planning policy and the strategic objectives of the SKDC Local Plan, albeit, that it is not clear from the proposed development how these overarching positive impacts would provide direct benefits at the local level, to affected communities.

6.2 Socio economic and community

- 6.2.1 The size and scale of the proposed project, represents a significant change and potential negative impacts for members of the local community in comparison to the current status quo, with a largely permanent change to the current visual appearance of the area and with significant potential disruption to the local community during the construction phase of the development.
- 6.2.2 Policy RE1 of the local plan and the associated Renewable Energy Appendix 3 sets out the various technical criteria that renewable energy generation should be measured against, but with one of the key criteria being that '*a proposal can demonstrate the support of local communities affected.*'
- 6.2.3 Whilst policy RE1 must be considered in the context of other national policy considerations, SKDC note that there remains significant concern in the local

community, which is directly in conflict with the policy. This includes but is not limited to issues such as the overall scale of the development, its consequential impact on the character and appearance of the landscape and associated recreational impacts from the perspective of Public Rights of Way (PRoW) that pass in and around the order limits and various other potential impacts during both the construction and operational phase of the development. It is clear there is a significant potential negative impact on the local community and questions over whether any significant potential associated benefits to the local community will be secured, beyond those already identified in the application submission.

- 6.2.4 It is noted that there are some wider economic benefits associated with the proposed development, that would include temporary employment during the associated construction phase and some limited potential benefits to the local economy, through provision of accommodation to construction workers, that offer a limited, albeit positive potential impact, again over a temporary period of time.
- 6.2.5 As it is noted in Renewable Energy Appendix 3, the South Kesteven District includes extensive areas of countryside which are popular destinations for walking, cycling, horse riding and fishing. There is an extensive network of public rights of way and bridleways across the District, and National Cycle Network routes through Grantham and Stamford. The impact upon existing public footpaths and their associated recreational value as a result of the development is noted as a key consideration. As such the change in the character of the area, from an attractive rural destination to an urbanised landscape, is a key area of concern. Further, the potential wider negative impacts on the visitor economy as a result of the development require careful consideration.
- 6.2.6 It is further noted that the Environmental Statement confirms that existing PRoWs will be retained during construction, with some temporary diversion due to construction access tracks, noting the need to be managed during the construction phase, requiring temporary forms of separation. This temporary separation is acknowledged for safety reasons, although it does likely impact on their attractiveness for use. Likewise, construction impacts on the existing PRoW network has the potential to be a significant negative impact during this phase.
- 6.2.7 It is recognised that the proposed development includes the provision of new permissive footpaths, which is a potential positive area of mitigation, although the Council has concerns about the mechanism for securing these over the lifetime of the development.
- 6.2.8 Whilst it is acknowledged that ongoing access will be maintained with some temporary diversion, there is nonetheless a significant potential negative impact on the recreational value of various public rights of way as a result of the development, which will likely impinge upon the recreational value of these routes and may impact their usage during both the construction and operational phases of development.

6.3 Land use

- 6.3.1 Policy SP1 of the Local Plan and the Renewable Energy Appendix 3 sets a sequential approach to development and in the latter case solar development that seeks to limit the impacts upon Best and Most Versatile Agricultural Land (BMV). Whilst noting the need to balance BMV against other considerations, it is noted that just over 40% of the land that supports the solar panels is located on BMV land. Whilst a specific breakdown of the land that is located within the SKDC area is not provided, all of the grade 2 land is located within the SKDC area and SKDC would estimate that it also holds a greater proportion of Grade 3a land.
- 6.3.2 The loss of a significant area of BMV land and all grades of agricultural land represents a significant negative impact on arable food production, the associated food production economy within the district and to the farm enterprises involved that may be subject to compulsory purchase of land as a result of the proposed development. SKDC remain concerned on the proliferation of other similar NSIP projects, both within the local area as well as on a wider scale. This increases the potential cumulative negative impacts of the loss of arable agricultural land placing pressure on the function of this important part of the local and wider Lincolnshire rural economy, as well as raising questions more generally regarding food security and the carbon footprint impacts of imported food. SKDC also face similar concerns at the local level for solar projects where it is the decision maker, which adds to the overall significance of this concern.
- 6.3.3 It is noted that whilst the proposed development includes mitigation in other areas, including for example biodiversity and ecological impacts, there is no similar consideration in respect of the direct loss of a significant amount of agricultural land, with the most significant concern being related to the loss of BMV agricultural land. There is currently no proposal or mechanism to secure the large scale replacement of this agricultural land or mitigate its loss, which increases the significance of this negative impact. Whilst SKDC acknowledge proposals for ongoing alternate agricultural use post installation of the solar arrays, e.g. grazing, clarity is also needed on how this use of the land would be secured, over the long term. Without this, there is potential for a permanent and complete loss of a significant amount of agricultural land, of which a high proportion is BMV.

6.4 Landscape and Visual

- 6.4.1 There are a variety of local plan policies that seek to guide new development in respect of landscape and visual impacts. Policy EN1 relates to landscape character and seeks to ensure development is appropriate to its context, taking account of landscape features, with Criterion 1 of the Renewable Energy Appendix 3 seeking consideration of visibility of a site heritage assets, housing areas and long distant views.
- 6.4.2 The proposed development is supported by an LVIA and associated residential amenity assessment, which considers landscape and visual

impacts and the associated effects the proposed development gives rise to. It is clear that the proposed development is of a significant scale, covering a large geographical area of land, which by its nature increases the potential extent of the landscape and visual impacts.

- 6.4.3 Whilst the local plan does not seek to account for a development of this magnitude, the key considerations remain relevant in respect of landscape character, the impact on areas of housing and the extent to which a scheme is visible from distance. It is important to note that this is not limited to just the solar panels, but includes the fencing, any necessary highway improvements, the sub-station area and other associated infrastructure.
 - 6.4.4 SKDC note that the LVIA concludes the potential for significant adverse effects to landscape character. The visual effects are concluded as resulting in major-moderate adverse effects. In the case of landscape character, the conclusion of the LVIA assessment is that wider impacts on landscape character will reduce over distance and in the case of visual effects, these significant effects would reduce over time through vegetation maturing in the case of new planting. The degree to which this mitigation will be effective, particularly in the short to medium term, is questioned.
 - 6.4.5 SKDC do not have the benefit of a specific and full independent review of the LVIA work produced, although they have commissioned an independent compliance review of the applicant's Environmental Statement, jointly with RCC. This review produced by Stantec confirms that the EIA undertaken is considered in compliance with applicable EIA legislation and associated guidance and it comprehensively assesses the likely significant effects of the proposed development.
- 6.5 Ecology and Biodiversity
- 6.5.1 Policy EN2 of the Local Plan seeks to enhance ecological networks and seeks to deliver a net gain on all proposals. Further to this, criterion 7 of the Renewable Energy Appendix 3 identifies the importance of considering how a proposal impacts designated sites.
 - 6.5.2 SKDC note that the ecology and biodiversity assessment concludes that no direct adverse effects are considered likely to designated sites and with impacts on local wildlife sites being mitigated, with reinstatement of existing habitats. The most substantial loss of habitats is noted as relating to the loss of arable agricultural land. As such arable specialist species, such as some ground nesting birds, would be impacted by the conversion of the site from agricultural land to a solar farm. As ground nesting birds such as skylarks and lapwings require open vistas in order to breed, the loss of breeding habitat that would result from the proposed development is unavoidable.
 - 6.5.3 SKDC welcome the proposals from the applicant which suggest a potential Biodiversity Net Gain (BNG) Figure of 71%, which it would conclude to be a significant positive impact if delivered. Notwithstanding this it is noted there is no current delivery mechanism for such a high BNG figure, with requirement 7 as currently presented within the draft DCO only seeking a

minimum of 10%, which would greatly reduce the extent of the positive impact.

- 6.5.4 Robust mechanisms for the protection of existing trees and hedgerows, as well as new planting, in relation to any ecological mitigation and enhancement measures is of paramount importance.

6.6 Local Transport

- 6.6.1 Criterion 6 of the Renewable Energy Appendix 3 notes amongst other points the importance of considering construction traffic routing and vehicle trips. SKDC note that operation phase impacts have been scoped out of the Environmental Statement and that an outline Traffic Management Plan has been prepared in support of the application.
- 6.6.2 SKDC are concerned about the issue of traffic generation, in the event that the proposed development is permitted, noting both the potential impacts on road users and the local community. SKDC would advocate that the highway authority play a leading role on the development of a thorough and robust traffic management strategy and detailed proposals for implementation, are prepared and secured to mitigate for any potential adverse effects.

6.7 Other Impacts

- 6.7.1 SKDC note that there are a number of other impacts that require careful consideration as part of the examination process of the proposed development during construction, operational (including mechanisms for replacement panels and infrastructure) and decommissioning phases. In particular there are significant concerns regarding the potential negative impacts during construction and decommissioning including noise, dust and air quality that would require appropriate mitigation. Also related to decommissioning are concerns in relation to recycling and waste management of redundant materials and equipment.
- 6.7.2 Local concerns in respect of potential flood risk, that may arise as a result of soil compaction and the introduction of hard surfacing are noted. SKDC request these matters are carefully considered, in consultation with appropriate drainage and flood risk authorities, where necessary.
- 6.7.3 It is noted that Lincolnshire County Council are concerned that insufficient evaluation of the extent of archaeological potential across the site has been undertaken and therefore the significance of any impact at this stage is unclear, requiring further consideration.
- 6.7.4 A further significant concern at this stage is the uncertainty of the lifetime of the proposed development, which isn't currently specified. This makes meaningful assessment of the impacts of the proposal, in particular any decommissioning and restoration, extremely difficult which creates further concern and uncertainty amongst the local community.

6.7.5 In addition, there are issues that SKDC may wish to make further representations on as appropriate during the examination and as with all matters highlighted in this report, the means to which mitigation is secured and delivered in relation to all impacts, is a critical consideration, which SKDC will be seeking to advocate throughout the examination.

7 Conclusions

7.1 This LIR has undertaken a consideration of the potential impacts of the Mallard Pass NSIP at the local level in respect of the SKDC administrative area. It has considered both positive and negative impacts, within the context of its knowledge and understanding of the area.

7.2 Whilst it is noted that the delivery of renewable energy of this nature is in accordance with key strategic policies of the SKDC Local Plan, offering in principle support for such development (as does applicable national planning policy) this is subject to a number of detailed considerations and there is uncertainty about how the overarching positive impacts will benefit members of the local community within the SKDC area. SKDC also note the positive impact in the delivery of BNG, although there is a lack of clarity about the extent of this and therefore the level of positive impact and associated benefit that can be attributed.

7.3 SKDC have also identified a number of potential negative impacts, which can be summarised as follows:

- The loss of agricultural land, including high quality Best and Most Versatile Agricultural Land, both in isolation and cumulatively.
- The scale and significance of the impact on the landscape and visual amenity of the area.
- The impacts on Public Rights of Way, their recreational value and consequential negative impacts on the visitor economy.
- The significance of disruption to the community during the construction and decommissioning phases, as well as any significant maintenance/ replacement works during the operational life of the project.
- The impact of the development upon the existing natural environment and the potential to compensate for and mitigate such impacts.

- The uncertainty of the operational lifespan of the project.
- The negative impact on arable specialist species through the loss of a large amount of agricultural land.