Nationally Significant Infrastructure Project

Meridian Solar Farm

Lincolnshire County Council Local Impact Report – September 2026

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1 Terms of Reference

Introduction

1.1 This report is the Local Impact Report (LIR) for Lincolnshire County Council ('the Council'). In preparing this LIR regard has been made to the purpose of LIRs as set out in s60(3) of the Planning Act 2008 (as amended) and Ministry of Housing Communities and Local Government's (MHCLG) Guidance on Planning Act 2008: Guidance on the pre-examination stage of an application (July 2026).

Scope

1.2 This LIR relates to the impacts of the proposed development of Meridian Solar Farm ('the Project') as it affects the administrative area of the Council.

1.3 This is the LIR of the Council as one of the host authorities for the Project. Section 104 of the Planning Act 2008 (the 'Act') requires the Secretary of State (SoS) to have regard to LIRs in deciding applications. The Act defines an LIR 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)" (section 60(3)).

1.4 Provided that the LIR fits within this definition, its structure and content is a matter for the Local Authority. However, guidance on LIR's is provided in the MHCLG Guidance on the pre-examination stage of an application (July 2026) which states that the LIR should, amongst other things, provide an objective evidence-based assessment of the likely impact of the proposed development on the local authority's area and community and drawing on its local knowledge, evidence base, and statutory functions.

1.5 This LIR has, therefore, been prepared in accordance with section 60(3) of the Planning Act 2008 (as amended) and having regard to the guidance produced by MHCLG. Accordingly, it seeks to assist the Examining Authority (ExA) by presenting the Council's assessment of the likely impacts of the Project, based on local information, expert judgement and evidence.

1.6 This LIR appraises the impacts likely to result from the Project and identifies whether the impacts are considered to be negative, positive or neutral, taking into account proposed mitigation measures. It also considers whether further work should be undertaken, including mitigation, to address negative issues identified, and raises any missed opportunities for enhancement measures.

1.7 This LIR appraises the draft Development Consent Order (DCO) documents submitted by the Applicant at the submission stage. Any further submissions will be addressed through subsequent written evidence through the Examination process.

1.8 The topic areas covered in the LIR are set out in section 2 below. The topics covered do not reflect the full remit of those addressed in the Environmental Impact Assessment (EIA) but highlight what are considered by the Council to be the key issues within their remit.

1.9 The Council is the upper-tier local authority for the county of Lincolnshire as a whole and has a range of statutory responsibilities to provide services and discharge regulatory functions, which together affect a number of aspects of the built, natural, and social environment. These functions include acting as Local Highway Authority, Local Transport Authority, Waste Planning Authority, Waste Disposal Authority, Minerals Planning Authority, County Planning Authority, Lead Local Flood Authority, Fire and Rescue Authority, Public Health Authority, Local Education Authority, and Social Services Authority.

1.10 The Council also holds responsibility for maintaining the Definitive Map and the Historic Environment Record (HER).

1.11 This LIR does not reflect the views of South Holland District Council (SHDC). In producing this LIR, the Council has not sought the views of the public or local interest groups as to any particular matters that should be reflected in the LIR.

1.12 The Council has significant experience of the Nationally Significant Infrastructure Project (NSIP) planning regime. The Council is a host authority for a number of projects that have been consented or are at recommendation stage, including Boston Alternative Energy Facility; various solar schemes including Mallard Pass, Gate Burton, Cottam, West Burton, Heckington Fen, Tillbridge, Beacon Fen, One Earth and Springwell; Outer Dowsing Offshore Wind; and Viking Carbon Capture Storage scheme.

2 Purpose of the LIR

2.1 The LIR covers topics where the Council has a statutory function or holds expertise. The Council defers to South Holland District Council (SHDC) on other matters such as noise and air quality where they have in-house technical support.

2.2 The LIR is structured by first identifying the relevant national and local policies, secondly identifying the local impacts, and lastly addressing the extent to which the development proposals accord with these policies. For each topic area, the key issues are identified and assessed on the extent to which the applicant addresses these issues by reference to the application documentation, including the draft DCO articles, requirements and obligations, where relevant.

2.3 This LIR does not seek to duplicate material covered in the Statement of Common Ground (SoCG), which will be progressed through the Examination stage.

3 Overview of the proposed development

3.1 A full description of the proposed development and various ancillary structures themselves is not detailed within this report, as this is set out in the DCO application documents. However, a summary of the proposal is provided below.

3.2 The Project is defined as a NSIP as it consists of the construction of an onshore generating station exceeding 100 megawatts (MW) and the installation of two above ground electric lines greater than 2km in length at 132kV and above.

3.3 The Project would comprise the construction, operation (including maintenance / repair) and decommissioning of a 750MW solar PV electricity generating station with associated infrastructure, including co-located Battery Energy Storage System (BESS), inter-array connections to link the parcels that form the solar development areas, and an up to 13km overhead line grid connection (with one short underground section) which would run north towards a Point of Connection (PoC) at the proposed Weston Marsh B National Grid Electricity Transmission (NGET) substation, to the north of Weston.

3.4 There are four solar development areas proposed (A – D) which would collectively comprise the solar PV panels, associated BESS, on-site substations and other associated infrastructure. The inter-array areas would comprise 132kV connection cables linking the solar development areas, being underground between parcels A and B (the underground inter-array) and an overhead line between parcels C and D (the overground inter-array).

3.5 The total site area is 1,616 hectares (ha). The solar development areas cover 1,067ha, comprising 197ha in solar development area A, 335ha in B, 205ha in C and 330ha in D. The grid connection route covers 510ha, with the remainder of the site area comprising the inter-array areas.

3.6 The on-site 400kV substation and BESS would be co-located within the northern part of land parcel B. For the purposes of the ES, a 350MW BESS system with a discharge time of two hours is proposed, which leads to an energy capacity of up to 700MW. There are three 132kV substation compounds proposed, in land parcels A, C and D, which would feed power to the 400kV substation via underground cabling. In turn, each of the three 132 kV substations would be fed by a number of solar stations positioned across the wider site, which link to the solar arrays, each one comprising inverters, transformers and switchgear enclosed within a contained unit – the exact number and location of solar stations is to be confirmed at detailed design stage.

3.7 The circa 13 km grid connection route links the solar development areas with the proposed National Grid Weston Marsh B substation, within which a 400 kV overhead line would be located. There is one section where the grid connection cable would need to be routed underground to avoid conflict with an existing 132 kV overhead line.

3.8 The grid connection into Weston Marsh B is proposed to be delivered separately by NGET as part of the Grimsby to Walpole project. The exact location and design of the Weston Marsh substation is yet to be confirmed. As detailed in the Grid Connection Statement [APP-270] the Applicant initially received a grid connection offer in November 2022 which confirmed a connection would be facilitated at Weston Marsh A, with a connection date of 2033. However, after the outcome of the connections reform process by the National Energy Systems Operator (NESO) was known in December 2025, the Applicant's offer was varied to a 'Gate 1' offer, meaning the earliest connection date is post-2035. The Applicant states that they will be reapplying through future 'Gate 2' application rounds in order to secure an earlier connection date (between 2031 and 2035). At present, the Grimsby to Walpole NSIP scheme is targeting submission to PINS in the summer of 2027 and, if successful, construction of early phases of the development, including Weston Marsh and East Leicestershire (WMEL), would occur 2028 – 2030, with full operation by 2033.

3.9 The DCO application is seeking a time limited consent, if granted, whereby the proposed development would be operational for a period of 40 years. For the purposes of the Environmental Statement (ES), the assessment is based on a proposed construction period of between 3 – 4 years, commencing in 2029, with the site becoming commercially operational in 2033. Decommissioning is therefore estimated to commence in 2073 and is likely to take up to 24 months. The Applicant is however seeking a seven year implementation period to allow for flexibility in construction commencement, which depends on the outcome and timing of the grid connection offer. The development would also include works to facilitate vehicular access to the site, landscaping, habitat creation, biodiversity enhancements and amenity improvements.

4 Description of Site and Surrounding Areas

4.1 The project area is located within southeast Lincolnshire. The village of Crowland lies approximately 1.5km to the south of land parcel A, while Spalding is situated approximately 1km to the west of the proposed grid connection corridor. The full Order Limits fall within the administrative boundaries of SHDC and LCC. There are no national landscape designations within or adjacent to the site and the project does not lie within Green Belt.

4.2 The proposed development Order Limits cover an area of 1,616ha and primarily comprises agricultural fields in arable use interspersed with pockets of woodland, individual trees, hedgerows, linear tree belts, farm access tracks and local roads. The nature of the landscape is predominantly flat with wide open views, ranging from 0 to 10m Above Ordnance Datum (AOD). The project area is located within National Character Area (NCA) 46 The Fens, characterised by a large, low-lying, flat landscape with drainage ditches, dykes and rivers. On Natural England's Provisional Agricultural Land Classification (ALC) map, the land within the project area is mapped as grades 1 or 2, which places it within the category of Best and Most Versatile (BMV).

4.3 There are several villages and hamlets in close proximity to the Order Limits including; Whaplode Drove, Holbeach Drove and Shepeau Stow (south of the overhead inter-array area between parcels C and D); Moulton Eaugate and Moulton East Fen to the north of parcel C; Gedney Hill to the southeast of parcel D; Crowland, approx. 1.5km to the south of land parcel A; Moulton Chapel and Cowbit, which lie approximately 0.5km to the east and west, respectively, of the grid connection corridor. At the northern end of the grid connection corridor, around the proposed connection point, lie Spalding and Low Fulney, to the west, and the villages of Weston, Moulton and Whaplode to the east. There are scattered farms and individual properties in the immediate surrounding area of the Order Limits.

4.4 The A16, part of the Strategic Road Network from Grimsby to Peterborough, runs roughly north-south to the west of the grid connection corridor and then bisecting Solar Development Areas A and B just northeast of Crowland. The A151 linking Spalding to Holbeach intersects the A16 at the point where the Order Limits of the grid connection corridor widens out to link in with the proposed Weston Marsh substation. Similarly, the B1166 intersects the A16 and runs approximately east to west linking Crowland and Holbeach Drove, to the south of the Solar Development Areas, as does the B1165 further north, cutting across the grid connection corridor between Spalding and Whaplode St Catherine.

4.5 There are 13 Public Rights of Way (PRoW) that are fully or partially within the project area. These PRoWs are either footpaths, bridleways, byways or restricted byways. A further 19 PRoWs fall within 500m of the Order Limits area. In addition, a strip of registered common land runs along the eastern verge of Martins Road and crosses land parcel C in the solar development area, linking Queen's Bank with the B1166 Hull's Drive. As part of the development proposals, a permissive path would be provided connecting PRoWs between Queens Bank and Shepeau Stow, following the boundary of the scheduled monument 'Settlement W of Cate's Cove Corner'.

4.6 The site is located within the Anglian River Basin District, split between the Welland and Nene Management Catchments. The River Welland lies approximately 100m to the west of the site and is the largest watercourse in the surrounding area, with flood defences positioned along either side of its banks. The South Holland Main Drain is situated to the north of the Solar Development Area and intersects the site in two places, at the northern end of land Parcel D and along the northern edge of where the proposed BESS would be sited. The Solar Development Area and Inter Array Connections lie within two Internal Drainage Boards (IDB) areas, the North Level District IDB (NLDIDB) and the South Holland IDB (SHIDB). There are numerous agricultural ditches and drains throughout the site area, with water levels across the site managed through pumping. The majority of the site is located within areas at medium and high risk of fluvial flooding, Flood Zones 2 and 3, respectively. Due to the low-lying and flat landform, the risk from surface water flooding across much of the Site is defined as very low.

4.7 There are no internationally or nationally designated ecological sites within the project area, however, there are three internationally designated sites within 20km, namely: The Wash Special Area of Conservation (SAC), Special Protection Area (SPA) and Ramsar Site; Baston Fen SAC; and Nene Washes SAC, SPA and Ramsar. The nearest nationally designated sites to the Order Limits are Surfleet Lows Site of Special Scientific Interest (SSSI) and Cowbit SSSI. There are 23 Local Wildlife Sites (LWS) within 2km of the Site. Four of these (Sly's Connection; South Holland Main Drain; Lambert Drain to Highstock Grain Connection; and Wheatmere Drain) extend into the Order Limits area.

4.8 There are two scheduled monuments located within land parcel C, namely 'Settlement NE of Whitebread Farm' and 'Settlement W of Cate's Cove Corner'. A third scheduled monument ('Medieval boundary earthworks at Queen's Bank, 100m south-east of Providence House') lies immediately adjacent to the northern boundary of land parcel C. To the far north of the Project area, the 'Wykeham Chapel: a moated monastic grange and retreat house' scheduled monument lies adjacent to the Order Limit area at the proposed grid connection point around Weston Marsh. A further five scheduled monuments lie within 1km of the site, namely 'Settlement in Moulton West Fen' (circa 500m north of Land Parcel C-2; 'Romano-British Settlement 5 (south) of Shell Bridge' (circa 300m west of Land Parcel D and 'St Guthlac's Cross' (circa 650m north-east of land parcel A); 'Settlement between Broadgate Farm and Lower Delgate Farm' and 'Settlement SE of Lower Delgate Farm', both to the southeast of Cowbit. The project area is located within two regional Historic Landscape Character Areas (HLCAs): The Fens (HCLA9); and The Wash (HCLA10).

4.9 Although there are no listed buildings within the Order Limits, there are approximately 276 within 5km of the Project Area. The nearest listed buildings to the solar development areas include St Guthlac's Cross Grade II (1359254) to the northeast of land parcel A; Gedney Hill Mill Grade II (1146795) to immediate south of land parcel D; Church of St John the Baptist Grade II (1147611) south of the Interconnector route C - D at Whaplode Drove; and Windmill Grade II (1147707) at Shepeau Stow, at southeast corner of Parcel C. The Church of St Edmund, Grade II (1064538) and Headstone in Churchyard in Church of St Edmund, Grade II (1204806) lie c. 2km east of land parcel D.

4.10 Similarly, there are no Conservation Areas (CA) within the Order Limits, but five fall within 5km of the Site, the three closest being Spalding CA; Crowland CA; and Moulton CA. There are no registered parks or gardens, registered battlefield or protected wrecks at or within 1km of the site. Ayscoughfee Hall, Grade II registered park and garden, is located 4km to the west of the proposed grid connection corridor.

4.11 A small section in the southwest corner of land parcel A, to the west of Lodge Farm, lies within the Sand and Gravel Minerals Safeguarding Area as identified in the Lincolnshire Minerals and Waste Local Plan (Policy M11).

4.12 There are two airfields located within 5km of the proposed Order Limits boundary, namely Crowland Airfield, adjacent to land parcel A, and Fenland Airfield, approximately 1.5km to the northwest of land parcel D.

5 Policy Context

National Planning Policy

5.1 The SoS is required to have regard to any relevant National Policy Statement (NPS), amongst other matters, when deciding whether to grant a DCO. Where there is a relevant NPS in place DCO applications are determined in line with Section 104 of the Planning Act 2008 (as amended) (PA2008). However, where there is no relevant NPS in place then Section 105 of the PA2008 takes effect and provides the legal basis for determining DCO applications. In addition to any relevant NPS, Section 104 requires the SoS to also have regard to any LIR and any matters which the SoS thinks are both important and relevant to its decision.

5.2 The following NPS's (dated December 2025) came into force January 2026 and are considered the relevant NPS's for the determination of this DCO application.

EN-1 – Overarching National Policy Statement for Energy

5.3 EN-1 (Overarching National Policy Statement for Energy) confirms the Government's 2050 net zero ambitions and sets out that the government's objectives for the energy system to ensure energy supply remains secure, reliable, affordable, and is consistent with meeting the UK net zero target by 2050. It also identifies the need to ensure the UK is more energy independent, resilient and secure and requires the smooth transition to abundant, low-carbon energy. The government has therefore concluded that there is a Critical National Priority (CNP) for the provision of nationally significant low carbon infrastructure. Renewable energy generation, such as solar, is considered to be CNP infrastructure.

5.4 EN-1 sets out the overarching needs case for different types of energy infrastructure and general assessment principles. Solar PV is identified as generation technology within the scope of this NPS.

5.5 Section 3.2 of EN-1 requires the SoS, in decision making, to assess all applications for development of the types of infrastructure covered by this NPS on the basis that the government has demonstrated that there is a need for those types of development which is urgent. The government has concluded that there is a critical national priority for the provision of nationally significant low carbon infrastructure for both energy security and net zero.

EN-3 – National Policy Statement for renewable energy infrastructure

5.6 Solar is a key part of the government's strategy for low-cost decarbonisation of the energy sector and that the government has set a target of 45-47 GW of solar

power deployment by 2030, as identified within the Clean Power 2030 Action Plan. It is also stated that solar farms can be built quickly and coupled with consistent reductions in the cost of materials and improvements in the efficiency of panels, large-scale solar is now viable in some cases to deploy subsidy free.

5.7 NPS EN-3 sets out key considerations and factors that will need to be taken into consideration when selecting sites and these include irradiance and site topography, proximity of site to dwellings, agricultural land classification and land type, accessibility, public rights of way, security and lighting and grid connectivity. The technical considerations are set in the NPS and include capacity of the site, site layout design and appearance, project lifetimes and flexibility. Impacts that will need to be considered are set out and include biodiversity, ecology, geological conservation, water management, landscape, visual and residential amenity, glint and glare, cultural heritage, construction including traffic and transport, noise and vibration.

EN-5 – National Policy Statement for Electricity Networks Infrastructure

5.8 EN-5 is also relevant as it 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/monopoles 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." This is therefore relevant insofar as it relates to the 132kV inter-array connections, the 400kV (mainly) overhead cable route corridor, and the proposed grid connection at Weston Marsh.

5.9 Where applicable, the Council further references the NPSs under the technical chapter sub-headings below insofar as they relate to matters which the Council considers the ExA should have regard to.

Clean Power Action Plan

5.10 The 'Clean Power 2030 Action Plan: A New Era of Clean Electricity' was published in December 2024 and is the UK government's roadmap to transform the nation's electricity system so that 100% of electricity demand is met by clean power by 2030, with at least 95% of generation coming from low-carbon sources and no more than 5% from unabated gas. The connections reform annex to the 'Clean Power Action Plan' was republished in 2025 for the purposes of aligning the NESO connections reform process with '2030 Clean Power', looking specifically at solar capacity allocations and the solar pipeline for 2031 to 2035.

National Planning Policy Framework

5.11 The National Planning Policy Framework (NPPF) was first published in 2012 and updated in 2018, 2019, 2021, 2023,2024 and, most recently, in August 2026. Given that at the time the application was submitted, it was the NPPF from 2024 that was in full force and effect, any further references to the NPPF in this document will also be to that version, for consistency across documents. Paragraph 5 of the NPPF states that the document does not contain specific policies for NSIPs. NSIPs are to be determined in accordance with the decision-making framework set out in the Planning Act 2008 (as amended) and relevant national policy statements, as well as any other matters which are relevant (which may include the NPPF). NPSs 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.

5.12 The National Planning Policy Guidance (NPPG) outlines guidance on the specific planning considerations that relate to large scale ground-mounted solar PV farms. Specifically, it encourages the effective use of land by focussing large scale solar developments on previously developed land and non-agricultural land, subject to its environmental value. If a proposal does involve greenfield land, particular factors to consider include: whether the proposed use of any agricultural land is shown to be necessary and that poorer quality land has been used in preference to higher quality land; and whether the proposal allows for continued agricultural use and/or encourages biodiversity improvements around arrays. It also states that local authorities should consider the effect of glint and glare on landscape, on neighbouring uses and aircraft safety in addition to taking great care to ensure heritage assets are conserved in a manner appropriate to their significance.

Written Ministerial Statements

5.13 The potential impacts of large-scale solar farms were also addressed through a speech by the then Minister for Energy and Climate Change to the solar PV industry on 25 April 2013 and subsequent Written Ministerial Statements (WMS). The speech highlighted the importance of considering the use of low grade agricultural land which works with farmers to allow grazing in parallel with generation, and the WMS (dated 25/3/15 - UIN HCWS488) stressed that meeting our energy goals should not be used to justify the unnecessary use of high quality agricultural land, noting that '*any proposal for a solar farm involving the Best and Most Versatile (BMV) agricultural land would need to be justified by the most compelling evidence*'.

5.14 On 15 May 2024, a WMS (reference HCWS466) was published on solar infrastructure and protecting food security and BMV land, emphasising that the food security is an essential part of national security. The Council notes that the 15 May 2024 WMS captures several elements of the 2024 NPSs. In particular, the 2024 WMS emphasises that when considering whether planning consent should be granted for solar development, the cumulative impacts, where several

proposals come forward in the same locality, are an important consideration (particularly in places like Lincolnshire). This WMS has not been revoked or replaced and remains an important and relevant consideration in the decision making process.

5.15 Notwithstanding, the NPSs provide the predominant policy context.

Development Plan

5.16 For the purpose of Section 38(3) of the Planning and Compulsory Purchase Act 2004, the relevant documents that comprise the development plan in force in the area and of relevance to the DCO application are set out below. Other policy documents that should be considered as a material consideration are also identified.

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

5.17 The South East Lincolnshire Local Plan 2011-2036 (SELLP), produced by the South East Lincolnshire Joint Strategic Planning Committee, was adopted March 2019, replacing the 'saved' policies of the Boston Borough Local Plan (1999) and South Holland Local Plan (2006). The relevant policies from the SELLP are:

- **Policy 1: Spatial Strategy** – Reason: The development would be located in the countryside and across sub-regional centres.

- **Policy 2: Development Management** – Reason: Overall the project is required to consider the quality of design, access and vehicle generation levels, impacts upon neighbouring land uses, visual impacts, flood risk and drainage, habitat enhancement and mineral resources.

- **Policy 3: Design of New Development** – Reason: To consider whether impacts of the proposed design are acceptable. The policy aims to support appropriate development that would create distinctive places through the use of high quality, inclusive design and layout. However, design that is inappropriate the local area, or which fails to maximise opportunities for improving character would not be supported.

- **Policy 4: Approach to Flood Risk** – Reason: Large parts of the proposed development are located within Flood Zones 2 and 3.

- **Policy 28: The Natural Environment** – Reason: The development involves providing a minimum of 10% Biodiversity Net Gain (BNG) to enhance the ecological network and natural assets.

- **Policy 29: The Historic Environment** – Reason: The proposal involves development in close proximity to a number of Scheduled Monuments, Listed Buildings and their settings.

- **Policy 30: Pollution** – Reason: This policy aims to ensure public health is maintained including vibration, air quality, noise, light levels and health and safety of the public.

- **Policy 31: Climate Change and Renewable and Low Carbon Energy** – Reason: To consider if the impacts are acceptable having considered the visual amenity, landscape character, residential amenity, highway safety, agricultural land take, aviation and radar safety, heritage assets and the natural environment.

- **Policy 32: Community, Health and Wellbeing** – Reason: The policy aims to ensure development proposals contribute to the creation of socially-cohesive and inclusive communities; reducing health inequality and improving community's health and wellbeing, including protecting and enhancing public rights of way.

- **Policy 33: Delivering a More Sustainable Transport Network** – Reason: The development will add traffic to the existing highway network.

Neighbourhood Plans

5.18 There are no adopted Neighbourhood Plans (NP) within the proposed development area. The two nearest NP areas are Surfleet, which lies approximately 1km northwest of the far northern tip of the Project area, and Long Sutton NP, which is situated approximately 12km to the northeast of land parcel D.

Lincolnshire Minerals and Waste Local Plan Core Strategy and Development Management Policies (2016) (LMWLP):

5.19 The relevant policies from the LMWLP are:

- **Policy DM1**: **Presumption in favour of sustainable development** – Reason: The County Council will take a positive approach that reflects the presumption in favour of sustainable development contained in the NPPF.

- **Policy DM4: Historic Environment** – Reason: Potential archaeological interest.

- **Policy DM11: Soils** – Reason: Requires that development demonstrate protection and wherever possible enhancement of soils.

- **Policy DM12: Best and Most Versatile Agricultural Land** – Reason: Development proposals that involve significant amounts of BMV agricultural land will only be permitted where the stated criteria are met.

- **Policy M11: Safeguarding of Mineral Resources** – Reason: Parts of the Meridian development lie within a Sand and Gravel Minerals Safeguarding Area (MSA).

- **Policy W1: Future Requirements for New Waste Facilities** – Reason: The proposed development will generate solar infrastructure waste arisings during its lifetime, which impact on waste capacity considerations.

Lincolnshire County Council Energy Infrastructure Position Statement (December 2023)

5.20 The Council's Energy Infrastructure Position Statement[1] from December 2023 notes that NSIP's cover a range of potential developments, including solar farms, cable routes and pylons.

5.21 All new energy sources need to be connected to the grid and this creates risk. The Council's position is that any cabling required should be underground unless connecting to an existing overhead line.

5.22 The statement notes the advice contained in the NPPF that local planning authorities should consider the economic and other benefits of BMV agricultural land. Where significant development of agricultural land is demonstrated to be necessary local planning authorities should require the use of areas of poorer quality land in preference to that of higher quality. Based on this policy, the Council will object to development on Grade 1, 2 and 3a (BMV) land.

5.23 In considering NSIP proposals, the protection of agricultural land is the Council's starting point for projects that involve significant land take, recognising the strategic importance of Lincolnshire's agricultural sector to the County and to the UK's economy. This principle will be cross referenced with other topics of consideration such as local environment, landscape, historic and community impacts to come to a view if there is any justification to override the loss of agricultural land.

5.24 Finally, consideration should be given to the significant cumulative impacts that can arise from several NSIP developments clustered within the same locality and over a similar time period.

6 Assessment of Impacts and Adequacy of Response

6.1 The Meridian Solar Farm project aims to contribute to renewable energy generation, with a generation capacity of up to 750 MW. This aligns with the objectives of the NPS's and key national government commitments. While the project has the potential to deliver positive outcomes through the production of clean, renewable energy, support for the scheme is contingent upon demonstrating that the site selection process has been robust and is consistent with the requirements set out in national policy, and that any significant adverse environmental impacts can be effectively managed or mitigated through the DCO process.

[1] https://lincolnshire.moderngov.co.uk/ieDecisionDetails.aspx?AIId=22771

6.2 The sections below consider the potential impacts of the development on other factors/topics. The ExA will need to balance positive impacts against the negative impacts identified within this LIR alongside representations and comments raised by other host authorities and Interested Parties.

6.3 The following sections identify, for each topic heading listed below, key statements from national planning policy, the relevant local planning policies, the key issues and impacts raised by the proposed development and the extent to which the Applicant has addressed these issues in the application documents.

- Site Selection and Alternatives
- Grid Connection and BESS
- Landscape and Visual
- Ecology
- Traffic and Transport
- PRoW
- Water Resources and Flood Risk
- Cultural Heritage (Built Heritage and Archaeology)
- Soils and Agricultural Land
- Socio-economics
- Public Health
- Minerals and Waste
- Cumulative Effects
- Fire Safety
- Other topics
- Draft DCO

7 Site Selection and Alternatives

Site selection

7.1 Schedule 4, paragraph 2 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 requires an ES to include *"A description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects."*

7.2 NPS EN-1 paragraph 4.3.15 states *"Applicants are obliged to include in their ES, information about the reasonable alternatives they have studied. This should include an indication of the main reasons for the applicant's choice, taking into account the environmental, social and economic effects and including, where relevant, technical and commercial feasibility."*

7.3 Paragraph 4.3.16 states "*In some circumstances, the NPSs may impose a policy requirement to consider alternatives.*" Paragraph 4.3.17 goes on to state "*Where there is a policy or legal requirement to consider alternatives, the applicant should describe the alternatives considered in compliance with these requirements.*"

7.4 General factors influencing site selection and design are set out in Section 2.3 of NPS EN-3. Paragraph 2.3.5 states that "*It is for applicants to decide what applications to bring forward. In general, the government does not seek to direct applicants to particular sites for renewable energy infrastructure.*"

7.5 Section 2.10 of NPS EN-3 sets out factors influencing site selection and design for solar photovoltaic generation and includes irradiance and site topography, proximity to dwellings, agricultural land classification and land type, accessibility, PRoW, security and lighting and network connection.

7.6 The Council would highlight paragraph 2.10.21 as being of particular relevance in the determination of this application: *"While land type should not be a predominating factor in determining the suitability of the site location applicants should, where possible, utilise previously developed land, brownfield land, contaminated land and industrial land. 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. Best and Most Versatile agricultural land is defined as land in grades 1, 2 and 3a of the Agricultural Land Classification (ALC).[2]"*

7.7 Document 7.1 Planning Statement: Appendix D: Site Selection Report (SSR) [APP-264] provides an overview of the site selection process undertaken by the Applicant to identify the location for the scheme. It sets out why the proposal and its Order Limits have been located in the chosen area and identifies the criteria used to help define the potential use of land parcels within the scheme. The consideration of alternatives is addressed specifically within ES Chapter 3: Alternatives and Design Evolution [APP-054].

7.8 In terms of site selection for both the solar development area and grid connection route, the Applicant states [APP-264] that a range of technical, environmental and economic factors were considered when investigating and assessing potential sites for the development. Key factors were split between regional level and localised level, reflecting guidance in NPS EN-3 and EN-5:

Regional factors

- Irradiance and site topography;
- Location of available network connection;
- Availability of land holdings;

[2] https://publications.naturalengland.org.uk/publication/6257050620264448

- Agricultural land classification and land type;
- Flood risk; and
- Planning and environmental designations.

Localised factors

- Proximity to land to dwellings;
- Agricultural land classification and type;
- Flood risk;
- Accessibility;
- Public rights of way; and
- Security and lighting.

7.9 In its Relevant Representation [RR-111], the Council raised several issues in relation to site selection, with reference to

(i) clarity around the initial siting zones selected, timing of discussions with NESO/NGET and proximity to the proposed connection point at Weston Marsh;

(ii) 'smaller land parcels' being discounted as a reasonable alternative in the site selection process; and

(iii) how ALC and land type influenced site selection decisions at a regional and local level. These three matters are expanded on below.

(i) Clarity around the initial siting zones

7.10 Sections 3.3.4 to 3.3.12 of the SSR [APP-264] describe the Applicant's discussions with NESO in 2021, and then NGET, over a potential grid connection point. NGET advised that a new, large-scale substation was planned to be constructed in Lincolnshire near to the existing overhead line between Spalding and Walpole, with a footnote indicating that NGET had not yet indicated the need for two substations at Weston Marsh. At paragraph 3.3.6, it is stated that '*The Applicant and NGET agreed a siting zone for further consideration however the indicative location of the substation was not known at this point in time*'. It is not clear from the text what area the '*agreed siting zone*' refers to or at what '*point in time*' in the site selection process this agreement refers to, therefore clarity from the Applicant on these two points would be welcomed.

7.11 The SSR then describes the offer of a 750MW grid connection following further engagement with NGET (paragraph 3.3.7), with confirmation of availability and confirmed capacity at the PoC enabling that location to be the starting point of an area of search for the scheme. Again, it is not clear what '*location*' is being referred to here. At 3.3.9 the Applicant states that the '*exact location*' of the substation was not yet identified by NGET but does refer to a graduated swathe

search area to the northeast of Spalding used as part of NG's early 2024 consultation[3], reproduced at Figure 3.1 in the SSR.

7.12 Reference is then made at para 3.3.10 to the search area for potential PV sites '*on the basis of connection to a substation which could be located between Spalding in Lincolnshire and Walpole in Norfolk*'. Similarly, at 3.3.15 it states that '*The Applicant did not adopt a rigid search area as the exact location of the Weston Marsh Substation was not confirmed at that point in time but sought to identify available land holdings as close as practicable (approximately 15km) to the anticipated location of the PoC, which was understood to be between Spalding and Walpole*'. Clarification from the Applicant to identify what '*point in time*' this statement at 3.3.15 is referring to would help to aid overall understanding of the sequence of decisions that were taken in identifying the chosen location for solar PV.

7.13 Overall, it is not clear from the explanation given why the search area for potential PV sites repeatedly referred to was not any closer to the proposed Weston Marsh substation, rather than incorporating a large swathe of land approximately 24 km in length between Spalding and Walpole, which lies some distance south / southeast of the Weston Marsh preferred siting zone reproduced at Figure 3.1 in the SSR.

7.14 In combination with the reference to '*suitable land holdings*' in paragraph 3.3.11, and the (rescinded) offer of a 'tee-in' connection onto the planned Grimsby to Walpole scheme in mid-2024, it is reasonable to conclude that the area of search used for PV sites (between Spalding and Walpole, less so the WMSS proposed location) was more a function of landowner willingness and land availability discussions at the time rather than proximity to the grid connection point or consideration of any other environmental constraint of the type listed in 7.8 above.

7.15 Whilst identification of suitable landholdings and landowner willingness is an important factor in determining site location for such developments, the Council considers that, in view of their significant scale and potential impacts of these projects, there must be evidence of a robust preliminary and overarching strategic land use decision framework being employed that fully encompasses assessment of a range of environmental constraints. Such an approach should demonstrate how, for example, the initial search area chosen had sought to avoid areas of high flood risk or areas of higher likelihood of BMV land at the outset in order to demonstrate adherence to relevant land use policies (see comments under (ii) below).

7.16 As raised in its Relevant Representation, the Council suggests that the timeline of decisions with respect to search areas for potential PV sites is somewhat unclear in this section of the SSR, in terms of what areas were identified and when, and

[3] https://www.nationalgrid.com/document/353611/download

what engagement there was with NESO/NGET and landowners at each stage. Whilst paragraph 3.3.12 attempts to describe the sequencing and decision making over this period, the sequence of events remains unclear and further clarity from the Applicant would be welcomed.

(ii) Reference to 'smaller land parcels' being discounted as alternatives

7.17 At paragraph 3.2.2 of the SSR, the applicant references three fundamental attributes for large scale solar, one of which is existence of sufficient land to deliver the scheme and meet the scale of the Scheme's aims. The SSR goes on to state at paragraph 3.3.13: '*Larger land holdings aid mitigating commercial and deliverability risk associated with multi-party negotiations and provide flexibility for design. Large blocks of land within the holdings are beneficial for solar development PV as they can facilitate a large installation. The applicant sought to identify large land holdings (or approximately 300 – 400 acres*'). This range is equivalent to 121 – 161 ha. The Council would firstly seek confirmation from the Applicant that the range quoted is correctly referring to acres, as opposed to ha – given the PV area parcel sizes eventually chosen (197 – 335 ha, or 487 – 828 acres), it would appear that the range should be hectares. Notwithstanding, in the following paragraph it is stated that smaller land parcels are not considered as a reasonable alternative since they would not be able to deliver the scale of energy generation enabled for the grid connection, in this case 750MW.

7.18 No definition is given to the term '*smaller*' in the sentence. LCC has experience in dealing with other solar schemes within the County where conglomerations of smaller land parcels have been shown to allow PV generation at this scale, therefore an explanation as to why this approach was discounted by the Applicant would be beneficial. The Council would highlight that other solar projects in Lincolnshire have successfully combined smaller, non-contiguous sites, and these have been considered viable by their developers. For example, the 600MW Cottam Solar project consists of 4 land parcels, comprising Cottam 1 - a discontinuous ring of sub-sites (totalling 812.1ha), and Cottam 2, 3a and 3b, single sites of 168ha, 132ha and 73ha respectively linked by a number of cable route corridors and connecting to the National Grid substation at Cottam Power Station.

7.19 Paragraph 3.3.18 states that engagement and consultation since initial site selection has not identified any landholdings of suitable size closer to the PoC. With respect to the previous comment on conglomeration of smaller land parcels, whilst the Council appreciates that there is no upper or lower limit in the guidance on parcel size, it assumes that this subsequent engagement and consultation referred to was premised on landholdings above a certain size. However, clarity from the Applicant on this point would be welcomed since, in terms of site selection, by adopting a threshold lower limit, the options for site suitability are immediately reduced, overriding other factors which potentially could have resulted in a more sustainable or policy compliant scheme.

(iii) How Agricultural Land Classification (ALC) and Land Type influenced site selection decisions

7.20 Paragraphs 3.3.19 – 3.3.28 of the SSR address ALC and Land type and how that factored in the site selection process, with reference to paragraph 2.10.21 of NPS EN-3 – i.e. that where possible, previously developed land, brownfield land, contaminated land and industrial land should be used in preference to agricultural land for solar PV, but where any agricultural land has been shown to be necessary, poorer quality land should be preferred to higher quality land, avoiding the use of BMV.

7.21 In this context, with respect to the text at paragraph 3.3.20, it is unclear to the Council what steps were taken by the Applicant in the consideration of previously developed, brownfield, contaminated and industrial land. There is reference to the majority of the land near the PoC being '*undeveloped and agricultural*' (with no brownfield land being reasonably available that is of a size that could accommodate NSIP scale solar development), but this is no different from the location ultimately selected. Further clarity from the Applicant would be welcomed here to demonstrate how compliance with paragraph 2.10.21 of EN-3 has been achieved in respect of site selection.

7.22 In this section, paragraph 3.3.24 refers to the land around the PoC as likely to be in an area of excellent (grade 1 ALC) (darker blue) while land further out, to the south, is mapped as being of 'Very Good' (grade 2) quality, which is where opportunities for land for PV were considered. Whilst the Council can appreciate that the land further south on which the solar PV is proposed is, relatively speaking, not as high a grade as that at the PoC, the land is still provisionally mapped as being high quality, grade 2 BMV agricultural land, which raises immediate tension with policy, as laid out in section 2 (Planning Policy Context) of the document. Grade 2 land remains a significant and important resource to Lincolnshire. This topic is explored in more detail in section 15 of this LIR.

7.23 With reference to para 3.3.26, whilst it is accepted that avoidance of BMV land in and around the PoC is difficult, given the prevalence of high quality agricultural land in the area, if reference is made to figures 3-4 and 3-5 (Predictive Land Assessment), it would appear that no consideration has been given to siting the solar farm on land several kilometres to the west of the PoC, where provisionally the land is mapped as grade 3 and therefore predicted as having lower BMV grade, with only moderate likelihood of being BMV Land (20 – 60%), as opposed to a high likelihood (>60%).

7.24 Utilising a 15km envelope from the Weston Marsh PoC search area (as referenced at 3.3.15), then in a westerly direction there is a higher likelihood of encountering lower grade soils at or about this range. Such an approach would be more consistent with the policy requirement to prioritise poorer quality land and would be appropriate as part of a 'regional-' or 'strategic-' level site selection process which this section of the document deals with (in comparison with the local level

site selection process in section 3.4). Further clarity from the Applicant on why this strategic-level approach to site selection to avoid high grade BMV was not explored would be helpful here.

7.25 Furthermore, although this is covered in more detail under the section on Soils, Agriculture and Food Production, there is a very obvious discrepancy between the results of the ALC survey submitted with the application (which map large tracts of grade 3b (non-BMV) land) within the solar PV area) versus the predictive land assessment mapping data shown at figures 3-4, 3-5 and 3-6, which indicate a high likelihood of BMV occurring and land falling within either grades 1 or 2 (BMV). Detailed questions as to the justification for much of the grade 3b mapping have been posed to the applicant and further discussions on this topic with the applicant are anticipated during the course of the examination.

7.26 The Council's broader concerns over the ALC survey and interpretation feed into its more limited commentary on site-level decisions that have been made by the Applicant predicated on its ALC survey results. With a significant question mark over the extent of mapped ALC subgrade 3b, LCC would wish to seek resolution and agreement in particular on the extent of BMV/non-BMV land, before making detailed comments on the Applicant's infrastructure siting decisions. As highlighted in the Council's RR [RR-111], there is a significant discrepancy between what the predicted land assessment plans show (at figures 3-4 and 3-5 of the SSR) versus what the ALC survey plans show (figs 3-10 and 3-11). Paragraph 3.4.13 states that the amount of BMV within the Order Limits lies somewhere in the range of 35.2% and 39.2%, depending on whether field average or auger point approach is taken, which would appear a very low percentage when judged against the provisional and predicted extent of BMV as presented in Figures 3-4, 3-5 and 3-6.

7.27 In terms of flood risk, section 5.8 of NPS EN-1 sets out the policy requirements to consider alternatives in relation to flood risk. The policy confirms the need to direct development to areas of lowest risk of flooding but where that cannot be achieved and there are no reasonably available sites in areas of lower risk, the sequential test (and exception test, if needed) must be engaged. If no reasonable sites can be delivered in lower flood risk areas, the exception test must confirm that the areas chosen for development will provide wider sustainability benefits to the community that outweigh the flood risk adopted. It must also demonstrate that the site will be safe for its lifetime and where possible reduce flood risk overall. Chapter 3 on Alternatives [APP-054] cross-references to the Flood Risk Assessment (FRA) undertaken [APP-222].

7.28 The majority of the land within the application area lies within Flood Zones 2 and 3 as illustrated on figure 3-7 Flood Risk Planning Map. The Applicant highlights the area 18 – 20km to the west, north of Bourne, where flood risk is mapped as being lower, but cite various constraints to development in this area, including significant areas of woodland, a network of PRoW and substantial areas of crown land which would restrict the availability and deliverability of a scheme.

7.29 Additionally, although there are areas of Flood Zone 1 to the south / southeast of Weston, the Applicant states that these could not fully accommodate an NSIP scale solar development of the scale required, taking into account wider sustainable development objectives. The text cross-references to the application of the sequential test and exception test as detailed in the Planning Statement (APP-260] and Appendix 11-3 to the ES Flood Risk Assessment [APP-222]. Further comments on the application of the sequential and exception tests have been made in section 13 of the LIR.

7.30 On a technical point, with reference to the area to the west of the PoC, figure 3-8 of the SSR (Key planning and environmental designations), it is unclear what the large expanse of land encompassing Bourne and large areas surrounding it, mapped by light green diagonal shading, is representing. The nearest item visually on the key is 'Special Protection Area'(SPA), but there is no SPA covering this area, that being limited to The Wash on the east coast. Clarity from the Applicant on what this shading represents and what constraints it poses to the proposed development would be welcomed.

Alternatives

7.31 ES Chapter 3: Alternatives and Design Evolution [APP-054] addresses alternatives for energy generation, site selection process, alternative scheme technologies and design alternatives and evolution of the scheme considered by the Applicant.

7.32 In NPS EN-3, paragraph 2.8.187, under the heading of mitigation, the policy states that '*At the earliest possible stage, alternative ways of working and use of technology should be employed to avoid environmental impacts*'. The Applicant states at paragraph 3.5.1 of Chapter 3 [APP-054] that the parameters fixed in the draft DCO [AS-012] will maintain a degree of design flexibility to allow the latest technology to be utilised at the time of Scheme construction. For the solar PV panel technology, the Applicant states (paragraph 3.5.2) that at the early stage of design development three types of solar PV panels were considered, notably

(i) fixed south facing;
(ii) east-west single axis tracker solar panels and
(iii) fixed east west panels.

7.33 Fixed south facing panels were selected in preference to tracker panels due to lower land take requirements per solar PV array and requiring less maintenance. Similarly, east west fixed were discounted. Although they can offer an alternative energy generation profile, with increased output during morning and evening periods, because the proposed development also includes a BESS then this battery technology is able to provide the required flexibility in storage and distribution of energy. Fixed south-facing panels were therefore selected as offering the most appropriate balance between energy efficiency, land use and environmental effects.

7.34 One further option which does not appear to have been considered as part of the assessment is the deployment of vertical bifacial panels, which capture sunlight on both sides of the panels and allow for conventional farming practices to take place between panel rows. Potentially, these agrivoltaic systems are able to provide a balance between energy generation and agricultural production, providing dual land use efficiency benefits. It would be useful to understand the Applicant's position with respect to this emerging technology in the context of their application, particularly in view of the location of the proposed development in an area that is demarcated on Natural England's ALC plans of comprising significant amounts of high quality agricultural land.

7.35 The Applicant refers to NPS policy in respect of alternatives with inter array connection and the grid connection route. At 3.5.16, they cite paragraph 2.9.21 of NPS EN-5 which states that '*Although it is the government's position that overhead lines should be the starting presumption for electricity network developments in general, this presumption is reversed when proposed developments will cross part of a nationally designated landscape (i.e. National Park, The Broads, or Areas of Outstanding Natural Beauty)*'. Further, however, paragraph 2.9.24 of NPS EN-5 states that where there is a high potential for widespread and significant adverse landscape and/or visual impacts along certain sections of its route, even in areas outside designations, this may result in recommendations for undergrounding for relevant segments.

7.36 For the project, neither the inter-array areas nor the main grid connection route fall within or intersect with nationally designated landscape areas and therefore the starting presumption was for overhead lines. For the inter-connector between land parcels A and B, however, the option to underground was chosen because of proximity to Crowland Airfield. However, for the inter-array route between land parcels C and D, the Applicant concluded that overhead lines would not result in significant residual environmental effects and therefore selected that option.

7.37 For the main grid connection corridor, both overhead and underground options were assessed. As well as a cost comparison, the environmental impacts of both options were examined, as detailed in Table 3-2 (Comparison of potential environmental effects from the construction of an underground cable and an overhead line for the grid connection) in ES Chapter 3 [APP-054], in particular on aspects such as ecology, historic environment and landscape/visual impacts amongst others. The assessment also included a comparison of engineering and technical feasibility between the two options. Of note is the interaction of the overhead option with existing electricity infrastructure, including approximately 12 11kV and 33kV overhead lines and one 132kV overhead line. Whilst the overhead option was chosen for the grid connection route, the intersection with the existing 132kV line has necessitated a short section being undergrounded.

7.38 The interactions of the proposed grid connection corridor with existing, and importantly, planned electricity infrastructure are considered in the next section. From a landscape and visual impact perspective, the options selected for the inter

array and grid connection routes have been thoroughly assessed as part of the review undertaken by AAH for the Council, as detailed later in this LIR. Particular attention is given to the cumulative impacts of various electricity infrastructure concentrated in a relatively small area.

7.39 Relevant aspects of the consideration of alternatives and the design approach are also addressed in relation to the development's impacts on other matters (aside from landscape and visual) within the subsequent chapters of this LIR, as necessary.

7.40 In summary, the Council raises a number of concerns regarding the Applicant's site selection process, as set out above, primarily the sequencing and timing of decisions around search areas, discussions with NESO / NGET and landowners and the preference for a contiguous site and avoidance of smaller land parcels, and evidence that the site selection process has been thorough in consideration of alternatives that could potentially deliver a site utilising less good quality agricultural land and avoiding high flood risk areas. On the matter of alternatives studied, commentary from the Applicant on the omission of consideration of a bifacial agrivoltaic system, in the specific context of an area with a high proportion of good quality agricultural land, would be welcomed.

7.41 The ExA will need to be satisfied that the site selection process and assessment of alternatives is robust and in line with the EIA Regulations and land use policy requirements, rather than being an exercise driven primarily by the availability of parcels of land above a certain size and willing landowners in a defined location.

8 Grid Connection and BESS

Grid Connection

8.1 The Council are of the view that a crucial aspect of this proposal is ensuring certainty about the 400kV grid connection. There is currently no existing grid connection available to the Applicant for the Meridian Solar Farm Project. The development relies entirely on a connection to a new substation that is being promoted by National Grid at Weston Marsh, as part of its Grimsby to Walpole project, running separately to this DCO application. The Grimsby to Walpole project has not yet been submitted to the Planning Inspectorate for examination.

8.2 With respect to the proposed substation connection, NGET has been working on the design of two new substations at Weston Marsh (A and B). An application for substation A has been made under the Town and Country Planning Act (TCPA), while approval for substation B will remain a component of the Grimsby to Walpole DCO consent being sought.

8.3 An application for substation A was made to SHDC in May 2026 under the TCPA, reference H22 0466-26, to essentially accelerate that development to facilitate a connection for the Outer Dowsing Offshore Wind project, which received its DCO

earlier in 2026. The Council has responded to a consultation from SHDC on the application for substation A, raising concerns around landscape and visual impact, the need for further information in respect of ecological and archaeological interest, and the potential for cumulative and protracted amenity harm to local communities arising from an extended period of construction, with disturbance from development of substation A preceding the wider works associated with the Grimsby to Walpole project. A question has also been raised in respect of EIA screening and whether the original opinion adopted by SHDC takes full account of a parallel Section 37 application (under the Electricity Act) for related infrastructure transmission works, such that they are treated as one project along with the substation A development. The TCPA application for substation A remains undetermined.

8.4 The siting of substation B remains subject to ongoing consultation and design coordination. NGET shared its intended indicative location recently, as part of a targeted consultation for the Grimsby to Walpole project. As stated above, approval will be sought for substation B as part of the wider Grimsby to Walpole DCO application, currently scheduled for submission to PINS in Summer 2027, with an anticipated recommendation and decision in 2028. If approved, National Grid's project website indicates that construction of the earlier phases at Weston March would commence 2028 – 2030, with full operation of the whole project by 2033. The Applicant has based the Meridian Solar Farm project on a grid connection into Weston Marsh substation B.

8.5 In the grid connection statement submitted with the application [APP-270], it is noted that the Applicant initially received a grid connection offer in November 2022 for 750 MW export and 350 MW import BESS capacity, with a connection date of 2033. However, following recent NESO connections reform, the Applicant's offer was varied to a gate 1, meaning a later connection date of post-2035. The Applicant states that an earlier connection date may still be possible in the 2031 – 2035 window if the Applicant is successful in reapplying through future Gate 2 application rounds, which they state they intend to do as soon as possible. The exact dates for future application rounds will be confirmed by NESO once there is greater clarity on the available connection capacity of the relevant grid infrastructure beyond 2030.

8.6 Notwithstanding, there is an acceptance from the Applicant at paragraph 5.2.69 of the Planning Statement [APP-260] that there is uncertainty across the energy industry as to final connection dates and application rounds. At paragraph 5.2.71, the Applicant states that NESO have indicated there will be further opportunities to reapply, indicating that there is potential for spare capacity once initial offers are confirmed and/or there is further certainty in respect of the capacity and timeframes of the upgraded grid infrastructure – but implicit in this NESO statement is that there is still some level of uncertainty in respect of capacity and timeframes.

8.7 NPS EN-1 paragraph 4.11.8 states that *"On some occasions it may not be possible to coordinate applications. For example, different elements of a project may have different lead-in times and be undertaken by different legal entities subject to different commercial and regulatory frameworks (for example grid companies operate within OFGEM controls) making it inefficient from a delivery perspective to submit one application. Applicants may therefore decide to submit separate applications for each element. Where this is the case, the applicant should include information on the other elements and explain the reasons for the separate application confirming that there are no obvious reasons for why other elements are likely to be refused."* footnote 134 of NPS EN-1 acknowledges that different levels of information may be available at different times and as such Applicants should take a proportionate approach to what information should be included.

8.8 Paragraph 4.11.9 of NPS EN-1 further advises Applicant's that if this option is pursued, the Applicant accepts the implicit risks involved in doing so and must ensure they provide sufficient information to comply with the EIA Regulations including the indirect, secondary, and cumulative effects, which will encompass information on grid connections.

8.9 While the Applicant's express desire is to connect into Weston Marsh substation B, they explain in their Grid Statement [APP-270] Executive Summary that should an alternative connection point at Weston Marsh A be put forward by NGET the Applicant would secure additional consents or a material change to the DCO as necessary. Although the Applicant considers that they are a good candidate for the next gate 2 offer round and see no clear reason why a network connection would not be granted, it is evident that the connections reforms process and availability of connections to the grid remains uncertain.

8.10 This uncertainty is initially evident in the consultation report Appendix H: Section 42 Applicant's Response, March 2026 [APP-045], where NGET raise an objection to the Meridian Solar Farm scheme due to a '*significant conflict*' with the Grimsby to Walpole emerging preferred corridor on its approach to the Weston Marsh Substation Siting Zone, which coincides with Meridian's indicative grid connection corridor. NGET highlight the importance of the Grimsby to Walpole project, identifying it as a CNP for the provision of nationally significant low carbon infrastructure. Although they acknowledge that the Meridian Solar Farm is also considered to be of critical national importance, they state that if approved it would obstruct a known emerging alignment for a transmission project which is integral to the country's transition to net zero by 2050. Without it, NGET state the electricity transmission system in the area will lack the capacity to accommodate all the new renewable energy sources coming forward, including the Meridian project itself. They advise that the developer has had multiple opportunities to design their scheme in a way that does not directly overlap with, and present conflict with, the Grimsby to Walpole project.

8.11 This position is further consolidated if reference is made to the Relevant Representations, specifically NGET's response [RR-138]. In their response, NGET

refers to the fact that the separation distances between the two projects is less that the required standoff distance to allow for NG's asset maintenance and general safety, resulting in a residual hazard that NGET would be left to manage for the operational life of its asset. They therefore reiterate that the Meridian Solar Farm project's design must be amended so that it complies with the standoff distances. On the basis of the proposals as submitted therefore, NGET objects to the application.

8.12 A second issue has been raised by NGET in regard to the gate status of the project. As referred to in the Applicant's Grid Connection Statement [APP-270], Meridian now has only a Gate 1 offer, which is a provisional, deferred connection agreement issued to power generation projects that do not meet the readiness or strategic alignment criteria required for immediate connection. The gate 1 status means that the Meridian Solar Project can remain in the connections process, but it does not reserve capacity, a place in the queue, protected status, nor does it guarantee a connection. NGET state that given this status, they will not be progressing any works specifically associated with the connection of the Meridian Solar Project, as they are not considered to be required to support wider connections or other network reinforcements. NGET's priority is directed towards gate 2 projects.

8.13 A third, and fundamental point raised by NGET in their Relevant Representation is that the Meridian application is premised on a presumed connection at Weston Marsh B substation, acknowledging Weston Marsh A as an alternative. However, the original offer made to Meridian prior to the connections reform process was on the basis of an allocated bay at Weston Marsh A and no account has been taken of a possible connection into substation B. Accordingly, NGET state '*even setting aside the Gate 1 issue, the Meridian Solar Project's proposed connection point at Weston Marsh B would not have been accounted for within the design for the Weston Marsh B substation*'.

8.14 The Council considers the delivery of the Weston Marsh substation to be a crucial element to the deliverability of the Meridian Solar Farm proposals. Paragraph 4.11.6 of NPS EN-1 states that Applicants may take a commercial risk where they have not received a formal offer of a grid connection from the relevant network operator, but in that situation they should provide information as part of the application confirming that there is no obvious reason why a network connection would not be possible. In the current situation, the Council would contend that in the face of significant objections from NGET, meeting this requirement is extremely difficult for the Applicant, notwithstanding their stated intention to submit a gate 2 application at the earliest opportunity. Whilst the Council acknowledge the timing and sequencing challenges around submission of an application of this nature, arguably the application is premature given the unresolved issues around the potential conflicts within the grid connection corridor and the actual connection point into Weston Marsh substation.

8.15 With a high degree of uncertainty around siting and approval of substation B, and significant concerns raised by NGET in terms of conflict with the Grimsby to Walpole project and availability of a bay at Weston Marsh B, there is a potential risk for negative environmental impacts to occur from the Meridian development should DCO consent be granted and the project commences without the benefit of a guaranteed connection, which would be relied upon for the delivery of any renewable energy into the grid.

8.16 The Council would suggest that the significant conflicts with the Grimsby to Walpole project need to be examined in further detail, and should the ExA recommend approval of a DCO for Meridian, then robust contingency should be applied to compensate for potential delays to the separate development at Weston Marsh substation. It is recommended that should the SoS be minded to grant consent for Meridian, that a requirement be imposed to restrict the commencement of the development, including any preparatory works, until such time as consent has been secured for a connection into the Weston Marsh substation.

8.17 The Council would draw the ExA's attention to the following DCO's where similar scenarios relating to further consents being required have been considered and restrictions in the DCO have been applied.

- Requirement 20 of the Viking CCS Carbon Dioxide Pipeline Order 2025[4] which imposes a restriction on commencement until evidence that a permit for the offshore pipeline and storage works is in place and of any authorisation required by the Petroleum Act 1998 has been submitted and approved by the SoS;

- Requirement 33 of the Keadby 3 Carbon Capture Equipped Gas Fired Generating Station Order 2022[5] imposes a restriction on commencement until evidence that the following are in place and have been submitted and approved by the relevant planning authority:

  (i) Development Consent for constructing the National Grid Carbon Gathering Network;
  (ii) A Carbon Dioxide Storage Licence for the intended storage site;
  (iii) An Environmental Permit for Work No. 1; and
  (iv) Any pipeline works authorisation required under section 14 of the Petroleum Act 1998 for offshore pipeline works.

- The Springwell Solar DCO application - although no requirement restricting commencement of development was imposed by the SoS in the DCO (issued

[4] https://nsip-documents.planninginspectorate.gov.uk/published-documents/EN070008-001535-Viking%20-%20DCO.pdf
[5] https://nsip-documents.planninginspectorate.gov.uk/published-documents/EN010114-001190-20221207_EN010114_Keadby.pdf

on 8 April 2026), it is of relevance here as the Springwell Solar Farm ExA did seek the inclusion of a requirement to restrict the commencement of development, including preliminary works, until planning permission for the Navenby substation had been granted. The Springwell Solar Farm ExA acknowledged that in terms of commercial reality it was unlikely that the developer would proceed with the construction of the development ahead of securing certainty that the Navenby substation would be delivered. However, the Springwell Solar Farm ExA was also mindful that it would be possible for the developer to undertake site preparation works (such as hedgerow and tree removal) prior to planning permission being granted for the Navenby substation, that would be at limited commercial cost, but which could result in adverse environmental effects, hence the recommendation for the requirement. The Springwell Solar Farm decision is currently subject to an undetermined Judicial Review challenge jointly made by LCC and North Kesteven District Council (NDKC). The Council's do not agree with the SoS's decision to not impose the requirement recommended by the ExA in the Springwell case.

Battery Energy Storage System (BESS)

8.18 The Meridian proposal includes the construction and operation of a BESS as an integrated part of the development. For the purposes of concept design, the BESS system is based upon lithium ion battery technology that the Applicant states is currently used on the majority of UK solar projects in development. The integrated BESS would allow surplus renewable electricity produced by the solar PV panels to be stored and then supplied to the grid when generation elsewhere in the network is lower or demand is higher. It would be positioned in a centralised location at the 400kV substation, in the northern part of Land Parcel B. The engineering drawing [APP-018: Indicative and Illustrative Layout Plans and Sections – Section A Solar Development Area] shows the BESS configuration occupying an area of 255m by 160m, incorporating BESS battery container units (344 shown on the illustrative plan, clustered in groups of 4 units, each unit up to 8m in length, 2m deep and up to 4m high), transformers, inverters, HVAC systems,), a proposed lagoon, offices and monitoring and control systems, drainage, storage area, parking and fire hydrant and fire safety infrastructure. Implications of this part of the development on landscape and visual assessment are dealt with in section 9 of this LIR.

8.19 The original 2022 grid connection offer received by the Applicant was for a 750MW export and a 350MW import BESS capacity that would be charged by 2 hours of peak production. Following the change to Gate 1 status after the NESO reforms, it is assumed that in applying for a Gate 2 connection this requested export/import capacity would remain the same – confirmation from the Applicant on this point would be welcomed.

8.20 NPS EN-3 paragraph 3.10.40 acknowledges that solar farm applications may also include associated infrastructure such as energy storage.

8.21 'Planning Act 2008: Guidance on associated development applications or major infrastructure projects' (April 2013) states that *"Associated development should be proportionate to the nature and scale of the principal development" and "The definition of associated development requires a direct relationship between associated development and the principal development. Associated development should therefore either support the construction or operation of the principal development, or help address its impacts… ii. Associated development should not be an aim in itself but should be subordinate to the principal development."*. In this instance, the Council is satisfied that the BESS and associated infrastructure can be categorised as 'associated development'.

8.22 In reference to the Outline Battery Safety Management Plan (oBSMP) is considered in more detail under Section 20 (Fire Safety) below.

9 Landscape and Visual

9.1 NPS EN-1 at paragraph 5.10.37 states that the SoS should consider whether the project has been designed carefully, taking account of environmental effects on the landscape and siting, operational and other relevant constraints, to minimise harm to the landscape, including by appropriate mitigation.

9.2 Paragraph 5.10.35 of EN-1 states that the 'scale of energy projects means that they will often be visible across a very wide area'. It goes on to stress that the SoS 'should judge whether any adverse impact on the landscape would be so damaging that it is not offset by the benefits (including need) of the project'. Paragraph 5.10.36 then sets out that the SoS should 'consider whether any adverse impact is temporary, such as during construction, and/or whether any adverse impact on the landscape will be capable of being reversed in a timescale that the SoS considers reasonable'.

9.3 Paragraph 5.10.5 of EN-1 states that 'virtually all nationally significant energy infrastructure projects will have adverse effects on the landscape, but there may also be beneficial landscape character impacts arising from mitigation'.

9.4 Paragraph 5.10.6 then goes on to state that 'projects need to be designed carefully, taking account of the potential impact on the landscape. Having regard to siting, operational and other relevant constraints the aim should be to minimise harm to the landscape, providing reasonable mitigation where possible and appropriate'.

9.5 The specific guidance relating to Solar Photovoltaic Generation in section 2.10 of EN-3 at paragraph 2.10.86 notes that 'Solar farms are likely to be in low lying areas of good exposure and as such may have a wider zone of visual influence than other types of onshore energy infrastructure'. Paragraph 2.10.87 states that '*whilst it may be the case that the development covers a significant surface area, 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 appropriately minimised*'.

9.6 **Local Policies:**

- SELLP Policy 3: Design of New Development - SELLP policy 3 (Design of New Development) states that all development will create distinctive places through the use of high quality and inclusive design and layout the landscape character of the location is a key consideration within this design policy.

- SELLP Policy 31: Climate Change and Renewable and Low Carbon Energy - SELLP Policy 31 (Climate Change and Renewable and Low Carbon Energy) Part B: Renewable Energy, states support for renewable energy projects with the exception of onshore wind providing individually or cumulatively there would be no harm to visual amenity, landscape character or quality or skyscape considerations amongst other factors. It goes on to state that provision should be made for post-construction monitoring and the removal of the facility and reinstatement of the site should development cease to be operational.

9.7 The Council commissioned AAH Landscape Consultants to assist in the consideration and review of the landscape and visual elements of the Meridian proposal and have engaged and provided feedback and advice to the Applicant's design team on behalf of the Council throughout the pre-application stage. A full copy of the report prepared by AAH is attached as an Appendix i which has reviewed the DCO application documentation, and the following summary and conclusions is based on those comments and should be read in conjunction with the full document.

9.8 The Landscape and Visual Impact Assessment (LVIA) submitted as part of the DCO application is considered comprehensive, well-presented and generally undertaken in accordance with current best practice, notably Guidelines for Landscape and Visual Assessment (GLVIA)3 and LI TGN-2024-01. The LVIA is proportionate to the scale of the development and has been prepared by competent experts. It identifies potential effects arising from construction, operation (Years 1 and 15) and decommissioning phases.

9.9 By reason of its mass and scale, the development will lead to significant adverse effects on landscape character and visual amenity at all main phases of the scheme (construction, operation year 1, operation year 15, decommissioning). The development has the potential to transform the local landscape by altering its character on a large-scale across an extensive area. This landscape change also has the potential to affect a wider landscape character, at a regional scale, by replacing large areas of agricultural or rural land with solar arrays, substations, pylons and overhead lines (OHL), affecting the current openness, tranquillity and agricultural character that are identified as defining characteristics of the area. We also judge that this is a long-term project in regards to landscape and visual matters, spanning generations.

9.10 Based on the review, it is clear from the LVIA findings that the development is of a scale that would introduce extensive change to the existing agricultural landscape,

permanently altering the character and experience of the site and its immediate context. Significant adverse effects on both landscape character and visual receptors are identified at all stages of the development, even following the establishment of mitigation (Year 15).

9.11 The reliance on planted mitigation in a predominantly open landscape may introduce its own adverse effects, including changes to the perceived openness and rural qualities, and potential enclosure where currently absent. Consequently, the Applicant has adopted a 'no mitigation approach' for some areas of the project. AAH would suggest that more mitigation can be integrated into this landscape where it relates to settlements, rivers, watercourses, existing scattered woodland blocks and existing field boundary vegetation.

9.12 The key areas requiring further attention are summarised below.

9.13 Methodology and assessment

- Provide clearer explanation where professional judgement results in significance conclusions that differ from the indicative sensitivity and magnitude framework.

- Clarify how replacement of panels, batteries and other infrastructure during the 40 year operational life has been considered within the assessment.

9.14 Landscape baseline and assessment

- Clarify the extent of vegetation removal, retention and reinstatement, secure these measures through the Landscape and Ecological Management Plan (LEMP) and DCO requirements, and expand the assessment to include openness, seasonality and agricultural land use as landscape receptors.

- Review the future baseline to better reflect the scale of renewable energy development anticipated across the wider landscape.

9.15 Visual assessment

- Complete the visual assessment by providing Type 3 photomontages/Accurate Visual Representations (AVRs), including the solar arrays, substations, BESS compounds and overhead line infrastructure.

- Review the assessment of substations and other major infrastructure, provide further justification where effects remain unchanged throughout the project life, and explain the conclusion that a Residential Visual Amenity Assessment is not required.

- Strengthen the assessment of Public Rights of Way, National Cycle Routes, bridleways and other recreational routes, including additional viewpoints where appropriate, particularly along South Holland Main Drain.

9.16 Design and mitigation

- Review the layout and setbacks at South Holland Main Drain/Langary Gate Road (Field D) and Martins Road (Fields A and B), and consider targeted mitigation where compatible with landscape character.

- Strengthen the Outline LEMP through long-term management, monitoring and replacement planting commitments.

9.17 Cumulative assessment

- Keep the future baseline and cumulative assessment under review throughout the Examination to reflect emerging renewable energy and grid infrastructure proposals.

9.18 Figures and supporting information

- Provide clearer explanation of key assessment judgements within the main LVIA, reducing reliance on supporting appendices.

- Update Figure 12-3 to identify long-distance recreational routes and improve cumulative mapping by naming schemes rather than application numbers.

9.19 Overall, the LVIA presented is robust with good methodology, clear explanations of assessment values and reasonable conclusions. The LVIA is transparent about the significant effects of the development on landscape character and the visual setting, specifically along the grid connection route, and acknowledges the limitations of mitigation to reduce these effects due to the nature of the existing open landscape. The project has generally been designed with sensitivity to reduce effects on receptors with setbacks and mitigation planting used sparingly to remain in keeping with the existing landscape.

9.20 However, there are a few locations and receptors that are of concern and although it is acknowledged the landscape is open and generally sparsely vegetated, LCC are concerned that this shouldn't mean a minimal approach to mitigation in all cases. Specifically, there may be scope to use localised vegetation for mitigation if it is targeted at sensitive views (e.g. VP3) or used where dwellings already have established vegetation (e.g. at Whaplode Drove). The importance of some PROW including those on South Holland Main Drain seems to have been overlooked. We would suggest that figure 12-3 Public Rights of Way and National Cycle Route is keyed to highlight longer distance routes like the MacMillian Way. The solar array design (field D) at the junction of South Holland Drain and Langary Gate Road does

not have set backs, so the solar arrays will be on both sides of the PROW in this location.

9.21 With regards to landscape character, the impact of the solar arrays seems to be understated by the assessment with impact of the development on 'openness' and 'agricultural land use' not considered with sufficient emphasis. The assessment focuses on landscape character areas which is appropriate, but landscape receptors can include 'constituent elements of the landscape' and 'specific perceptual qualities' P36 – GVLA3.

9.22 With regards to visual amenity, the visual assessment seems to be understating the impact of the substations (possibly because their design is not finalised) and more explanation of their visual impact will be required as their design development progresses. There are also many dwellings in proximity to the development that will require localised mitigation to reduce visual impacts upon them. AAH look forward to reviewing planting designs, visualisations and more detailed proposals when this information becomes available.

9.23 Therefore, the Council concludes that the proposed development would have **negative** landscape and visual impacts.

10 Ecology

10.1 Section 5.4 of NPS EN-1 covers biodiversity and geological conservation. The government's policy for biodiversity in England is set out in the Environmental Improvement Plan 2023, the National Pollinator Strategy and the UK Marine Strategy. The aim is to halt overall biodiversity loss in England by 2030 and then reverse loss by 2042, support healthy well-functioning ecosystems and establish coherent ecological networks, with more and better places for nature for the benefit of wildlife and people. Healthy, naturally functioning ecosystems and coherent ecological networks will be more resilient and adaptable to climate change effects. Failure to address this challenge will result in significant adverse impact on biodiversity and the ecosystem services it provides (paragraph 5.4.2).

10.2 Paragraph 5.4.40 of EN-1 states that the SoS 'should have regard to the aims and goals of the government's Environmental Improvement Plan 2023 and any relevant measures and targets, including statutory targets set under the Environment Act or elsewhere'. Paragraph 5.4.42 goes on to state that 'the benefits of nationally significant low carbon energy infrastructure development may include benefits for biodiversity and geological conservation interests and these benefits may outweigh harm to these interests. The SoS may take account of any such net benefit in cases where it can be demonstrated'. Paragraph 5.4.44 states 'If significant harm to biodiversity resulting from a development cannot be avoided (for example through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then the SoS will give significant weight to any residual harm'.

10.3 Paragraph 5.4.47 advises that development proposals provide many opportunities for building-in beneficial biodiversity or geological features as part of good design and the SoS should give appropriate weight to environmental and biodiversity enhancements, but any weight given to gains provided to meet a legal requirement (for example under the Environment Act 2021) is likely to be limited.

10.4 **Local Policies:**

- SELLP Policy 28 – The Natural Environment

10.5 SELLP Policy 28 (The Natural Environment) states that a high quality, comprehensive ecological network of interconnected designated sites, sites of nature conservation importance and wildlife friendly greenspace will be achieved by protecting, enhancing and managing natural assets. Including internationally designated sites, nationally or locally designated sites and protected or priority habitats and species.

10.6 The Council has reviewed the submitted information concerning the assessment of potential ecological effects of the proposed development. APP-060 (6.1 ES Chapter 9: Ecology and Biodiversity) and associated appendices set out the biodiversity and ecological elements of the Applicant's ES. Subject to specific comments below, the Council considers that information included in (APP-060) and its appendices provides a reasonable summary of ecological interest features and likely significant effects, mitigation, and residual effects of the proposed development.

Statutory Designated Sites

10.7 There are 7 internationally important sites designated for biodiversity within 15km of the proposal. The locations of these sites are set out in APP-098. Whilst there are no nationally important sites designated for biodiversity within 2km of the Order Limits, the Order Limits do fall within the Impact Risk Zones of 5 Sites of SSRI. The locations of these statutory sites are set out in APP-099.

Non-Statutory Designated Sites

10.8 There are also 23 non-statutory sites designated for biodiversity importance either within or within 2km of the Order Limits. The locations of these non-statutory sites are set out in APP-099. Sections of four LWS are potentially directly affected by the proposed works. These are Slys Connection LWS, South Holland Main Drain (West) LWS, Wheatmere Drain LWS and Lambert Drain to Highstock Drain Connection LWS.

10.9 Table 9-14 of APP-060 sets out proposed mitigation for potential impacts which includes establishing fenced standoffs from LWS and employing trenchless techniques to cross watercourses. These mitigation proposals are considered acceptable and are secured in the outline Construction Environmental

Management Plan (oCEMP) (APP-275). Appropriate mitigation measures are also proposed for LWS which lie adjacent to the proposed DCO boundary. When proposed mitigation measures are taken into account, no significant effects on LWS sites are predicted.

Habitats Regulations

10.10 A Habitats Regulation Assessment Report (HRA) (APP-217) has been prepared which assesses potential pathways for likely significant effects on European sites.

10.11 The report identifies the potential for direct indirect effects on interest features of the Wash SPA/Ramsar and the Nene Washes SPA / Ramsar including bird collision risk and potential displacement during the operational phase of the proposal. The potential for indirect effects on The Wash SPA / Ramsar, The Nene Washes SAC / SPA / Ramsar, Baston Fen SAC and The Wash and North Norfolk Coast SAC are also identified but are considered unlikely to have a likely significant effect on the sites or their interest features.

10.12 APP-217 includes details of proposed mitigation for impacts including collision with power lines and disturbance on qualifying passage and wintering bird populations associated with The Wash SPA and Ramsar and Nene Washes Ramsar. Measures such as the installation of line markers and sensitive working practices are proposed, and the report concludes that with the adoption of the proposed mitigation, the project is unlikely to result in an adverse effect on the integrity of the affected sites. mitigation measures are secured in the oCEMP (APP-275) and the outline Operational Environmental Management Plan (oOEMP) (APP-276).

10.13 The Council has no reason to disagree with the conclusions of the Habitats Regulations Assessment Report (APP-217). However, the SoS will need to undertake a HRA and be satisfied that sufficient information has been submitted by the Applicant in relation to potential impacts and proposed mitigation measures, in order to determine that there will be no adverse effect on the conservation status of these species or the sites with which they are associated.

Existing Biodiversity Value

10.14 A range of both desk-based studies and field surveys has been undertaken to establish the suite of habitats present within the DCO site boundary. These are described in APP-060 and associated appendices.

10.15 The Council is of the opinion that additional information / clarification is required to accurately determine the site's existing baseline value.

- Botanical surveys and scarce arable flora: The Council notes that a full botanical survey has not been undertaken (APP-205, 2.5.1). The Council also notes that certain habitats (arable field margins, neutral grassland and modified grassland) have been scoped out of further assessment on the basis

of being species poor or of variable condition (APP-060, 9.6.16 – 9.6.18). The Council questions the scoping out of habitats on this basis if detailed botanical surveys have not been undertaken. The Council considers that clarification is required, particularly in relation to the need for surveys for scarce arable flora.

10.16 Subject to clarification of the above, APP-060 identifies a range of ecological impacts across all phases of the development. These potential impacts include both permanent and temporary or damage to habitats and the potential for causing the introduction or spread of invasive non-native species (INNS). If unmitigated these impacts have the potential to result in significant impacts on various elements of the site's ecological interest.

10.17 The Applicant has prepared an oCEMP (APP-275), oOEMP (APP-276) an Outline Decommissioning Environmental Management Plan (oDEMP) (APP-277) and an Outline Landscape and Ecology Management Plan (oLEMP) (APP-282). An Environmental Mitigation and Commitments Register (APP-272) has been prepared which provides a helpful summary of the how mitigation identified for the project including embedded and additional mitigation measures are secured.

10.18 Overall, the Council agrees with the Applicant's approach and considers that the proposed impact avoidance and mitigation measures for construction, operational and decommissioning phases of the development are appropriate and will need to be appropriately secured in the DCO.

Protected and Priority Species

10.19 A suite of both desk-based studies and field surveys has been undertaken to identify protected and priority species likely to occur within the DCO site boundary. These are described in (APP-060) and associated appendices. The Council has reviewed the application in accordance with Natural England's standing advice for protected species. Having considered (APP-060) the Council is of the opinion that additional information / clarification is required to accurately determine the presence / absence of protected and priority species and the likely effects of the proposed development.

Breeding birds:

- Surveys described in APP-206 show that the proposed development has the potential to result in negative effects on the populations of a number of breeding bird species including five Schedule 1 species. These surveys were undertaken between March and July 2023 meaning that data from these surveys is now three years old. However, given that there has been limited change in the area and that the data was supplemented by further vantage point surveys for common crane in 2025 (APP-216), the data is considered to be generally adequate to identify potential impacts.

- The exception to the above general point relates to species such as barn owl and quail whose main breeding activity occurs around or after dusk and therefore may not be detected in normal breeding bird surveys undertaken in the early morning or during daylight hours. Given that both quail and barn owl are Schedule 1 species, the Council considers that additional surveys are required to identify potential impacts on barn owl and quail and to properly identify mitigation requirements. Barn owl was detected during winter bird surveys indicating that the species is present in the area.

- The proposed development will result in the loss of considerable areas of arable habitats which are of value to ground nesting species such as skylark. Without mitigation the development has the potential to have significant negative effects on populations of ground nesting farmland birds. This is particularly the case given the number of other developments within Lincolnshire that potentially have the same impacts. APP-060, 9.79 and APP-282, 4.3.7 – 4.3.11 confirm that a Farmland Bird Mitigation Strategy will be developed which will include the retention of open areas and the establishment of 'skylark plots' to cater for the species' needs. The Council welcomes this approach but considers that additional information is required to confirm that the proposed mitigation is adequate to effectively mitigate impacts on ground nesting bird populations.

- Subject to the above comments in relation to nocturnal bird surveys and measures relating avoiding vegetation clearance during the nesting season and undertaking pre-commencement ecological surveys set out in the oCEMP (APP-275), the Council agrees that the proposed mitigation measures are appropriate and should ensure that significantly negative effects on breeding birds are avoided.

Non-breeding birds:

- Surveys described in APP-207, APP-208, APP-209 and APP-213 show that the proposed development has the potential to result in negative effects on the populations of a number of wintering bird species including species associated with the Nene Washes (SPA/Ramsar) and The Wash (SPA/Ramsar). Surveys were undertaken over multiple years and included nocturnal vantage point surveys. Data from the surveys were also used to inform a collision risk modelling exercise in relation to the proposed length of overhead power lines (APP-218).

- The Council considers that the data from the surveys is adequate to determine the likely impacts of the proposal on non-breeding birds. Mitigation measures set out in the oCEMP (APP-275) and oOEMP (APP-276) include the installation of line markers and avoidance of night-time working and are considered appropriate to mitigate the potential impacts.

Bats:

- Surveys described in APP-214 have identified the presence of an assemblage of bats which is of national importance. This includes the nationally rare barbastelle. The Council notes the Applicant's intention to avoid impacts to known roosts and to undertake additional pre-construction surveys to update data on bats. The Applicant also makes commitments in the oCEMP (APP-275) to conforming to best practice guidelines in relation to lighting to reduce impacts on bats.

- A recent study (Tinsley et al., 2023) has shown a decrease in levels of bat activity associated with the presence of solar developments, though reasons for this are not yet clearly understood. The Council recommends that monitoring of post-construction bat activity is undertaken to compare activity levels prior to construction and to assess mitigation efficacy in order to increase understanding of the impacts of solar developments on local bat populations.

Badgers:

- APP-211 confirms that badgers are present within the draft DCO boundary. The Council considers proposed mitigation measures including undertaking pre commencement surveys and the establishment of 30m buffer zones around setts during construction are appropriate and are adequately secured in the oCEMP (APP 275).

Riparian mammals:

- APP-210 sets out the results of riparian mammal surveys. Populations of both otter and water vole have been detected within the draft DCO boundary. Due to access difficulties, some ditches could not be surveyed. These will need to be surveyed during planned pre-construction surveys secured in the oCEMP (APP-275) to inform detailed mitigation and licencing requirements.

- The Council consider that proposed mitigation measures set out in Table 3-5 of the oCEMP (APP-275) are appropriate in relation to both species.

- The Council advises that the Greater Lincolnshire Partnership's 'Operation Water Vole' project may offer opportunities to deliver additional water vole mitigation.

- Where protected species will be affected by the proposed development, a licence from Natural England will be sought and mitigation will be secured as part of the licensing process. The Council agrees with this approach.

Biodiversity Net Gain (BNG)

10.20 The delivery of at least 10% BNG is not currently mandatory for NSIPs however it is considered best practice. Given the scale and nature of the proposed development the Council will expect the project to deliver significantly more than 10% BNG.

10.21 The Applicant has set out their approach to BNG in APP-274. This document assesses the likely ability of the scheme to deliver BNG and states that the document will be updated when the design of the scheme is finalised. Based on current plans, the scheme is predicted to result in a net gain of 14.6% for area-based habitat units, 477.94% for hedgerow units and 11.42% for watercourse units. The Council welcomes this level of BNG delivery.

10.22 The Council considers that the following areas of the Applicant's BNG assessment require additional information or clarification:

- **Strategic significance**:

  In advance of the adoption of the Greater Lincolnshire Local Nature Recovery Strategy (LNRS) the LNRS Steering Group has confirmed that the draft LNRS should be used to assign strategic significance. The Applicant should therefore review the assignment of strategic significance in line with the draft LNRS and update the metric calculations where appropriate.

- **Assumed habitat condition**:

  at 2.6.7 of APP-274, the Applicant states that some areas of baseline habitat could not be surveyed in detail due to access difficulties. The Applicant also states that in these instances, habitat condition has been applied conservatively based on the condition of surrounding parcels. The Applicant should clarify which parcels have not been surveyed. The Council considers that where condition has been assumed, the Applicant should adhere to the precautionary principle by assuming the highest possible condition where uncertainty exists.

10.23 The Council also encourages the Applicant to work with other developers and stakeholders in the area to identify opportunities to deliver BNG strategically. The Council welcomes further engagement with the Applicant in relation to BNG.

Cumulative Effects

10.24 The Applicant sets out their approach to the assessment of cumulative effects on sensitive ecological receptors at 9.11 of APP-060. The Applicant's assessment concludes that there will be no significant adverse effects on ecology arising from cumulative impacts, however, as stated above the Council considers that additional details of measures to be taken to avoid negative impacts on

populations of ground nesting birds present within the draft DCO area are required.

Ecological Steering Group

10.25 The Council suggests that consideration is given to the establishment of an Ecological Steering Group or similar for the proposed development. This group should consist of key ecological stakeholders (both statutory and non-statutory). The remit of the group would be to receive updates on project progress and to advise on issues encountered during construction as well as to refine delivery of required mitigation and enhancement measures. Meetings should be held at an appropriate frequency to ensure good communication between both the developer and stakeholders.

10.26 This approach is also likely to yield benefits by assisting with the identification of opportunities for strategic working with other solar NSIP developers in the vicinity. This is particularly the case in relation to the delivery of BNG where strategic delivery could result in significant benefits for species groups such as ground nesting birds.

10.27 Establishing such a group is the Council's preferred approach to ensuring ongoing communication between the Applicant and host Local Authorities on matters relating to ecology and biodiversity post-consent. This approach is consistent with other recent NSIP proposals in the County (Outer Dowsing Offshore Wind, Springwell Solar Farm, One Earth Solar Farm and Beacon Fen Energy Park). The Council would be happy to provide the Applicant with a draft terms of reference for the Ecological Steering Group to be included in the oLEMP.

Overall impacts of the development on ecology and biodiversity

10.28 The Applicant's ES identifies a series of potential impacts on ecology arising from the development. These range from minor adverse impacts to significant adverse impacts depending on the species, habitat or site concerned. Measures to address these impacts are proposed and should be secured in the DCO. If the mitigation measures are secured and delivered as proposed the Council considers that the development would have a minor, temporary, **negative** impact on ecology during the construction phase.

10.29 The Applicant has also stated their intention to deliver BNG. Levels currently being predicted are subject to confirmation of final scheme designs, however, if these levels are delivered, the Council considers that, the development could have a **positive** impact on ecology and biodiversity. Commitments to deliver a minimum of 10% BNG should be secured with a specific requirement in the DCO if BNG is to be given positive weight in the planning balance. The Council notes the wording of Requirement 8 in the draft DCO (APP-028) and considers that this is appropriate to secure the delivery of BNG.

11 Traffic and Transport

11.1 Paragraph 5.14.19 of EN-1 sets out that the SoS should consider the substantial impacts of traffic and therefore should ensure "that the applicant has sought to mitigate these impacts, including during the construction phase of the development and by enhancing active, public and shared transport provision and accessibility". Where the proposed mitigation measures are insufficient to reduce the impact on the transport infrastructure to acceptable levels, the SoS should consider requirements to mitigate adverse impacts on the transport networks arising from the development. Development consent should not be withheld where applicants are willing to enter planning obligations for funding infrastructure or where requirements can be imposed mitigating adverse impacts (paragraph 5.14.21).

11.2 Paragraph 5.14.15 of EN-1 states that the SoS may attach requirements to a consent where there is likely to be substantial HGV traffic that control numbers of HGV movements to and from the site in a specified period during its construction and possibly on the routing of such movements, make sufficient provision for HGV parking including to avoid prolonged queuing on approach roads and ensuring satisfactory arrangements for reasonably foreseeable abnormal disruption.

11.3 Paragraph 5.14.22 of EN-1 states that the SoS "should only consider refusing development on highways grounds if there would be an unacceptable impact on highway safety, residual cumulative impacts on the road network would be severe or it does not show how consideration has been given to the provision of adequate active public or shared transport access and provision."

11.4 The NPPF at paragraph 116 similarly also states that "Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network, following mitigation, would be severe, taking into account all reasonable future scenarios."

11.5 **Local Policies:**

- SELLP Policy 31: Climate Change and Renewable and Low Carbon Energy
- SELLP Policy 33: Delivering a More Sustainable Transport Network

11.6 SELLP Policy 31 (Climate Change and Renewable and Low Carbon Energy) states that development of renewable energy facilities and associated infrastructure will be permitted provided, individually, or cumulatively, there would be no significant harm to highway safety (including public rights of way).

11.7 SELLP Policy 33 (Delivering a More Sustainable Transport Network) states that Local Planning Authorities will work with developers to make the best use of, and seek improvements to, existing transport infrastructure and services within, and connecting to South East Lincolnshire. Development proposals are required to

have regard to the need for better promotion and management of the existing transport network and the provision of sustainable forms of transport. In addition, this policy states that existing footpaths, cycle routes, and particularly public rights of way, will be protected from development.

11.8 The Applicant's assessment of the likely effect of the proposed development on traffic and transport are set out in ES Chapter 15 (Traffic and Access) [APP-066]. This document considers the potential for likely significant effects on traffic and access as a result of the development and identifies and proposes measures to address the potential impacts and significant effects. This includes consideration of severance of communities, pedestrian delay (incorporating delay to all non-motorised users), non-motorised user amenity, fear and intimidation on and by road users, road vehicle driver and passenger delay, road user and pedestrian safety; and large loads. The assessment considers the impact of the proposed development on traffic and transport during the construction, operation, and decommissioning phases, including cumulatively with other development.

11.9 The site would have multiple access points for construction vehicles. The solar development area would be accessed from Barrier Bank/ Spalding Road, Martins Road and Langary Gate Road. Access to the inter-array connections would be from Barrier Bank/ Spalding Road, Back Bank/ Eaugate Road / Chapel Hill and B1168 Holbeach Drove Gate. The grid connection route, access would be from the A16, the B1165 Austendike Road and the A151 High Road. HGV's and abnormal loads would be routed along specific routes and a HGV Routing Plan in (figure 15-3 [APP-161]) and an Abnormal Load Routing Plan (figure 15-4 [APP-162]) are provided in the ES.

11.10 The peak daily number of construction-related traffic movements, excluding workforce vehicles, anticipated for the Scheme is summarised below:

- Solar development area and inter-array connections – 64 HGV deliveries (128 movements per day);
- Grid connection route - 75 HGV deliveries (150 movements per day) and 75 Light Goods Vehicles (LGV) deliveries (150 movements per day).

The construction phase assessment is based on a maximum peak construction workforce of up to 855 workers per day across all work areas, with an average of 184 FTEs over the total construction period.

11.11 The Applicant has incorporated embedded mitigation measures into the design of the scheme, described in Section 15.7 of APP-066 and these measures are primarily set out in the outline Construction Traffic Management Plan (oCTMP) [APP-278-9]. The submission of final CTMP is proposed to be secured through a requirement and would be subject to approval by the County Council. Similar measures are included in an oDEMP to mitigate decommissioning related effects.

11.12 Taking into account the embedded mitigation measures the Applicant's assessment concludes that there would be no residual significant effects of the proposed development on any of the traffic and transport receptors in the construction, operational and decommissioning phase. All effects are assessed to be minor or negligible (not significant).

11.13 The Applicant has also provided an assessment of the potential cumulative effects of traffic and transport with other projects. The traffic and access cumulative assessment in Chapter 15 of the ES considers the potential in combination effects of the scheme with the Grimsby to Walpole, Outer Dowsing Offshore Wind Farm, Eastern Green Link 3 and 4, the Weston Marsh to East Leicestershire Project (WMEL), Ossian Wind Farm and Lincs Gateway, Spalding during the peak construction phase (anticipated to be 2031). The cumulative effects of these schemes combined on traffic flows are predicted to be either minor adverse or negligible. For road safety it is predicted that, at the four receptors, the combined effects would result in moderate effects (significant). The Applicant's assessment considers that these can primarily be attributed to the other cumulative schemes and not the Meridian scheme.

11.14 The Council in its capacity as Local Highway Authority has reviewed the application documents and has been involved in discussions with the Applicant pre-submission of the DCO application. In general, the Council's position on highway matters remains as stated in our relevant representation [RR-111], and for consistency is set out below.

11.15 The ES Chapter 15: Traffic and Access [APP-066] provides most of the highway assessment information, there is also a supporting transport assessment note in ES Appendix 15-4 [APP-251], but this only covers collision data. These documents do not cover the same scope as a standard transport assessment, there are no flow or turning calculations at the proposed key site access junctions and these need to be provided.

11.16 Notwithstanding the short comings identified above, the assessment set out in APP-066 is generally accepted, the trip rates for workers (table 15-13) appears appropriate, although the 55% modal split by shuttle bus seems quite high and needs further justification, especially how shuttle buses will be enforced through construction. The distribution seems appropriate and the link flow impacts are shown in table 15-21.

11.17 Figure 2-5 [APP-077] shows the access points and proposed routeings for HGVs and AILs. The site is proposed to be accessed mainly from key junctions on the A151 and A16, with a further access at Martins Road. There would then be construction roads through the site which cross existing local highways.

11.18 The oCTMP [APP-278-9] outlines mitigations proposed to be controlled by the Contractor (Hours of working, HGV routing, shuttle buses, compound locations etc). Also included are drawings of all the access points with swept path analysis.

11.19 LCC have the following key concerns at this stage:

- Accesses HR-01 and HR-02 - As proposed these two accesses form a crossroads with the A151. Further information on traffic turning flows at this junction is required, it is considered that a ghost island right turn lane will be necessary for these main site accesses. The Applicant should clarify whether there would be straight over movements, and whether a staggered arrangement is being considered.

  When further information is provided and LCC can agree the junction form and type, a Stage 1 Road Safety Audit will be required at this planning stage.

- Access A16-01 - This access is proposed on the A16 near Cowbit. Further information on traffic turning flows at this junction is required. It will also require a ghost island right turn lane and a Stage 1 Road Safety Audit.

  Both the above junctions will need to be delivered through full Section 278 Agreements with LCC.

- Passing Places - The oCTMP [APP-278-9] (7.2.1) suggests that temporary passing places will be provided on Martins Road and Langarry Gate Road. Passing places will need to be to LCC specification which is for permanent works. The number and location of these passing spaces should be identified at this planning stage with indicative location drawings to ensure that these mitigations can be delivered on site and are not constrained by ditches or land ownership. Back Bank is also identified for HGV routing (figure 15-3 [APP-161]) and will therefore also require passing places.

11.20 The CTMP should reference the need for future technical approvals. The Council would wish to see specific wording included in the oCTMP, along the lines of that included in the CTMP for the Tillbridge Solar DCO and the Springwell Solar DCO, as follows:

"5.4. Delivery of Road Modifications

5.4.1. Prior to any construction works being undertaken within the limits of highway adoption, the detailed design of these works must be submitted to the Lincolnshire County Council for approval. These submissions will include:

- *A programme for the works, details of the construction method and traffic management requirements;*

- *A detailed design pack of drawings and specifications detailing the works and any service / utility works that may need to be accommodated;*

- *The necessary health and safety information required under the Construction, (Design & Maintenance) Regulations, or their equivalent at the point of submission;*

Details of the proposed contractor, including their insurance provisions;

- *If required by the local road authorities, a Road Safety Audit (RSA) to a combined Stage 1 and Stage 2 standard;*

- *Details of any necessary road signage and road markings; and*

- *Details of any proposed remediation proposals should the works not be permanent.*

5.4.2. The Applicant will reimburse the highway authorities for the technical approval process at the time the applications are made, in line with costs for similar Section 278 or Section 184 applications made under the Highways Act.

5.4.3. The finalised CTMP will detail the exact process for these technical approvals."[6]

11.21 It is noted that the draft DCO [APP-028] contains a specific Article (10) regarding the application of the Lincolnshire Scheme for Road Works and Street Works. The Council, in its capacity as Highway Authority, has some concerns regarding aspects of the wording of this article, which are set out in section 22 below on DCO matters.

11.22 Regarding cumulative effects, LCC note that the Applicant's assessment expects the cumulative effect during the construction phase with other development on road safety at four junctions to result in moderate effects (significant), however the assessment primarily attributes this to the other development schemes and not the Meridian scheme itself for three of the junctions (L3, L34 and L35) (paragraph 15.11.24). The fourth junction (L25) initially assessed as having a medium magnitude has been downgraded to low on the basis of professional judgement the reasons for which are set out in paragraph 15.11.25. The Applicant is proposing to minimise cumulative effects through measures set out in the oCEMP and oCTMP.

11.23 The Infrastructure EIA Regulations 2017[7] are clear that an ES must assess whether the project, together with other developments, would result in significant environmental effects that would not occur from the project alone. LCC has concerns about the Applicant's assertion that impacts at three junctions are not

[6] Springwell Solar Farm Outline Construction Traffic Management Plan https://nsip-documents.planninginspectorate.gov.uk/published-documents/EN010149-000926-Springwell%20Energy%20Farm%20Limited%20-%20Outline%20Construction%20Traffic%20Management%20Plan%20(Clean).pdf

[7] https://www.legislation.gov.uk/uksi/2017/572/contents

attributable to the Meridian scheme, as this appears dismissive. Nevertheless, LCC notes the mitigation measures outlined in the oCEMP and oCTMP.

11.24 Whilst it is acknowledged that the ES should identify the contribution of the scheme to the effect it should not be used to avoid assessing or addressing the cumulative effect itself. The fact that the road safety assessment for the scheme in isolation against the existing baseline at these junctions concludes a minor (not significant) effect, this does not in LCC's opinion justify the statement that the cumulative effect with the other identified developments would be primarily attributed the other schemes. Even a small contribution can be relevant, particularly if the receptor is already under pressure or there are existing environmental problems that can worsen an already significant situation and potentially push the effect over the significance threshold.

11.25 ES Appendix 15.6 Cumulative Schemes Traffic Flows [APP-253] sets out the 24-hour Total Vehicle and HGV traffic flows associated with each screened-in cumulative schemes and the Meridian scheme. Using junction L35 as an example from these tables Meridian's contribution to the cumulative traffic flows is comparable to some of the other schemes. Meridian would account for approximately 21% of the predicted total vehicle 24-hour traffic flows and 14% of the predicted HGV 24-hour traffic flows. LCC therefore contend the Applicant's assertion that the contribution to the cumulative effect would primarily be as a result of other developments is not justified. It is considered that this requires further examination to determine the materiality of the contribution of the Meridian scheme at these junctions to the cumulative effect.

11.26 It is also noted that the magnitude for receptor L25 in the cumulative assessment was reduced from medium to low (table 15-41) based on professional judgement for the reasons set out under paragraph 15.11.25. The ExA on reaching a recommendation should be satisfied that this downgraded position is adequately justified as if it hadn't been downgraded it would have potentially resulted in a 'major' effect (very significant). It is also noted that the in the Meridian Solar traffic assessment summarised in section 15.8, the magnitude at this receptor was also downgraded from low to very low.

11.27 Additionally it is noted, at paragraph 15.11.8 of APP-066 that traffic flow estimates for National Grid's WMEL scheme (ID13) were not available at the time of writing. The Ossian Wind farm application has now been withdrawn. In terms of WMEL APP-066 is contradictory, despite being identified as a scoped in scheme in table 15.35, paragraph 15.11.8 goes on to screen it out of further cumulative assessment and states:

"The scoping opinions for these cumulative schemes do, however, indicate that traffic flow impacts would be limited to receptors located on the A16 and A151. As set out in Section 15.8, all effects associated with the Scheme are predicted to be negligible on the A16 and A151, meaning that a cumulative assessment of other schemes on these links can be screened out."

11.28 LCC are of the opinion that the Applicant's assertion that traffic flow would be limited and relying on the predicted negligible effects for Meridian in isolation on the A16 and A151 is not acceptable justification for screening it out at this point. Given the overlapping nature of the WMEL and Meridian schemes every effort should be made to consider these schemes cumulatively. LCC are aware that the WMEL project is due to undertake its stage 2 consultation in Autumn 2026 at which point further technical assessments are expected to be available and may enable a more comprehensive assessment of cumulative effects to be undertaken.

11.29 LCC are of the opinion that further information and justification, as set out above, is required in order to fully understand and assess the impact of the Meridian scheme. The Council currently considers that traffic and access impacts of this development would be **negative.**

12 Public Rights of Way (PRoW)

12.1 Section 2.10 of NPS EN-3 makes several recommendations in relation to accessibility and PRoW, noting at 2.10.27 that the suitability of the access routes to the proposed site for both the construction and operation of the solar farm must be considered, with the former likely to raise more issues. EN-3 advises that Applicants should keep, as far as is practicable and safe, all PRoW that cross the proposed development site open during construction and protect users accordingly. They are also encouraged to design the layout and appearance of the site to ensure continued recreational use of PRoW, where possible during construction, and in particular during operation, and to provide enhancements to PRoW and the adoption of new PRoW through the site.

12.2 **Local Policies:**

- SELLP Policy 31: Climate Change and Renewable and Low Carbon Energy
- SELLP Policy 32: Community, Health and Well-being
- SELLP Policy 33: Delivering a More Sustainable Transport Network

12.3 The theme of SELLP policies relates to the protection, maintenance, enhancement and accessibility of public rights of way network improving connectivity as well as providing places for exercise, health, and wellbeing.

12.4 The outline Public Rights of Way Management Plan (PRoW-MP) [APP- 281] identifies 13 PRoW within the DCO Order Limits. There are a number of PRoW within or on the perimeter of the site. Temporary management measures would be implemented, as necessary, for affected PRoW with two routes requiring temporary closure. It is also anticipated that a temporary diversion is required for the common land along Martin's Road. No routes would be permanently diverted or closed.

12.5 The application details have been reviewed by the Council's Public Rights of Way and Access officers, including the draft DCO [APP-028] and the outline PRoW-MP [APP-281]. The Council has a number of concerns regarding the breath of the powers being sought in the DCO, the lack of clarity on PRoW closures and the insufficient detail provided on how PRoW would be managed. The application documents, as currently submitted, do not provide an adequate level of certainty or sufficient safeguards to ensure the continued protection of the public's access to and use of the network.

12.6 The Council consider that the powers being sought in the draft DCO are excessively broad. Article 13 (1) as currently drafted appears to permit the closure of any PRoW for 'any reasonable time' a position that is considered to be insufficiently defined and potentially disproportionate. While the Council acknowledges the limitations at Article 13 (4b) on the broad powers at Article 13 (1), it remains the view that further details and clearer parameters should be included in the outline PRoW-MP to provide greater certainty regarding how these powers would be applied in practice.

12.7 Clarity is considered to be required on the duration of any PRoW closures. Whilst noting paragraph 3.1.1 of PRoWMP states 4 to 6 weeks the Councils PRoW and Access Officers would welcome further dialogue with the Applicant regarding closure duration which should be clearly defined and consistent with the approach under the Road Traffic Regulation Act 1984.

12.8 Having regard to Article 13 (4a) and (b) of the DCO, the Council consider that engagement and consultation with its PRoW team should take place prior to the closure of any PRoW and appropriate advance notification provided before any changes are made on site. This would help to ensure that temporary closures are kept to the minimum time frame necessary for works to be undertaken, that any temporary diversion routes are agreed with the Council, particularly in relation to path surfacing and signage arrangement, and that affected routes are reinstated to a satisfactory condition at the end of the construction works.

12.9 Furthermore the Council has a system in place for ensuring the PRoW closures through the DCO process are fed into OneNetwork and that publicity is undertaken. Advance notification of any closures is therefore essential to facilitate this process. The Councils PRoW team should be consulted on, and agree, the timing and extent of any closures, and routes should be reopened as soon as practicable when works are not actively taking place. The Council therefore recommends that additional provisions are included within the outline PRoW-MP to secure these measures. The inclusion of such requirements would go some way towards addressing the Council's concerns regarding the broad scope of the powers provided under Article 13.

12.10 The proposed use of PRoW by construction or operational vehicles gives rise to a number of concerns, including the potential need for surfacing improvements, on-going maintenance, the legal basis for this use, and the displacement of public

access. The Council considers that the developer should be responsible for funding and undertaking any necessary upgrades and ongoing maintenance related to this use. In addition, the DCO should clearly define the legal status under which this use would be authorised. The DCO, or alternatively the outline PRoW-MP, should confirm that the rights of pedestrians and other legitimate users of the PRoW network take precedence over construction and operational vehicle movements, ensuring that public access is maintained.

12.11 To strengthen the outline PRoW-MP content, purpose and enforceability the Council also suggests revision and clarification in the following areas.

- No new gates or restrictions should be introduced that would limit public use. Gates should be used to control vehicles running over the PRoW. Where crossings are required gates should be provided for vehicles and not the public, to reinforce priority of users.
- Temporary diversions should maintain equivalent public accessibility.

- The communications strategy should include regular meetings with the Council's PRoW team. Programmes and closure schedules should be shared in advance.

- The closure of footpaths Crow/12/1 and Wstn/3/1 should be advertised on site at least 4 weeks in advance. Signage must include clear diversion information.

12.12 Enhancement to the PRoW network is proposed through the creation of a permissive path which is welcomed. Whilst the inclusion of permitted paths is in general supported, they are not protected routes and remain temporary whilst the proposed development is active. It is recommended that the routes are dedicated as PRoW instead, which would allow them to be protected in perpetuity, recorded on Ordnance Survey plans, and provide a permanent betterment as an outcome of the proposal.

12.13 In consideration of the application documents concerning rights of way, the Council maintains that the temporary impacts on footpaths during the construction phase are likely to result in a detrimental impact on the accessibility and functionality of the wider PRoW network. Consequently, the overall effect on PRoW is considered to be **negative**.

13 Flood Risk and Water Resources

13.1 Section 5.16 of NPS EN-1 focuses on water quality and resources, recognising that infrastructure development can have adverse effects on the water environment including groundwater, inland surface waters, transitional waters, coastal and marine waters. In the decision-making process, the SoS should note that activities that discharge to the water environment are subject to pollution control. Moreover, the SoS will '*need to give impacts on the water environment more*

weight where a project would have an adverse effect on the achievement of the environmental objectives established under the Water Framework (Water Framework Directive) (England and Wales) Regulations 2017' (paragraph 5.16.12).

13.2 EN-1 also states that the SoS should consider '*whether appropriate requirements should be attached to any development consent and/or planning obligations are necessary*' to mitigate adverse effects on the water environment (paragraph 5.16.17).

13.3 Section 5.8 of NPS EN-1 is concerned with flood risk. Paragraph 5.8.7 notes that new energy infrastructure should only be permitted by exception in flood risk areas (for example where there are no reasonably available sites in areas at lower risk), and that it should be safe for its lifetime without increasing flood risk elsewhere and, where possible, should reduce flood risk overall. It should also be designed and constructed to remain operational in times of flood.

13.4 Paragraphs 5.8.9 and 5.8.10 confirm the requirement for the flood risk sequential and (where applicable) exception tests to be applied. Development should be designed to ensure there is no increase in flood risk elsewhere, accounting for the predicted impacts of climate change throughout the lifetime of the development (paragraph 5.8.12). Further, paragraph 5.8.23 states that all projects should apply the sequential test to locating development within the site. Vulnerable aspects of the development should be located on parts of the site at lower risk and residual risk of flooding (paragraph 5.8.29). Paragraph 5.8.36 states in determining an application for development consent, the SoS should be satisfied that *inter alia* the sequential test has been applied and satisfied as part of site selection and that a sequential approach has been applied at site level to minimise risk by directing the most vulnerable uses to areas of lowest risk.

13.5 NPS EN-3 sets out that Applicants for solar generating stations will need to consider several factors when considering the design and layout of sites, including *inter alia* the ability to mitigate environmental impacts and flood risk (paragraph 2.10.52). Paragraph 2.10.146 advises that *'Water management is a critical component of site design for ground mount solar plants. Where previous management of the site has involved intensive agricultural practice, solar sites can deliver significant ecosystem services value in the form of drainage, flood attenuation, natural wetland habitat, and water quality management'*.

13.6 Paragraph 2.10.76 of EN-3 notes that where a Flood Risk Assessment has been carried out this must be submitted alongside the Applicant's ES and will need to consider the impact of drainage. It notes that as solar PV panels will drain to the existing ground, the impact will not, in general, be significant.

13.7 **Local Policies:**

- SELLP Policy 2: Development Management
- SELLP Policy 3: Design of New Development

- SELLP Policy 4: Approach to Flood Risk
- SELLP Policy 31: Climate Change and Renewable and Low Carbon Energy

13.8 SELLP Policy 2 (Development Management) states that proposals for development will be permitted provided that sustainable development considerations are met, specifically in relation to a range of matters, including: sustainable drainage and flood risk.

13.9 SELLP Policy 3 (Design of New Development) requires that all development proposals demonstrate how a number of issues will be addressed, including the mitigation of flood risk through flood-resistant and flood-resilient design and Sustainable Drainage Systems (SuDS).

13.10 Part 1 of policy 4 (Approach to Flood Risk) of the SELLP states that development proposed within an area at risk of flooding (Flood Zones (FZ) 2 and 3 of the Environment Agency's flood map or at risk during a breach or overtopping scenario as shown on the flood hazard and depths maps in the Strategic Flood Risk Assessment) will be permitted where it can be demonstrated that there are no other sites available at a lower risk of flooding (i.e. that the sequential test is passed).

13.11 The policy goes on to state that proposals need to demonstrate that essential infrastructure in FZ3a & FZ3b, highly vulnerable development in FZ2 and more vulnerable development in FZ3 provide wider sustainability benefits to the community that outweigh flood risk. Reference to a range of other matters is included in this policy, including the need for SuDS, flood resistance and resilience measures and ensuring that the proposal will not increase flood risk elsewhere.

13.12 SELLP Policy 31 (Climate Change and Renewable and Low Carbon Energy) requires that proposals will need to demonstrate that the consequences of current climate change have been addressed, minimised and mitigated by *inter alia*: the adoption of the sequential approach and exception test to flood-risk and the incorporation of flood mitigation measures in design and construction to reduce the effects of flooding, including SuDS schemes for all 'Major' applications; and the protection of the quality, quantity and availability of water resources.

13.13 References in this section are made to ES Chapter 11 Hydrology and Flood Risk [APP-062; AS-020], the Flood Risk Assessment (FRA) [APP-222], the Outline Drainage Strategy [APP-227], the Planning Statement [APP-260] and accompanying Appendix D: Site Selection Report [APP-264]. Collectively, these documents consider the likely effects generated by the proposed development during construction, operation (including maintenance) and decommissioning in relation to potential impacts of the development on water resources and flood risk and propose a range of mitigation measures.

Baseline flood risk

13.14 The principal watercourses in the area are the River Welland (to the west of the scheme) and the River Nene (to the east), whilst the solar development area is bisected by the South Holland Main Drain and the St. James Drain, along with other small field ditches across the solar development areas. The topography of the area is very flat, with existing ground levels in the region of 0m to 4m AOD. The solar development area and inter array connections lie within two Internal Drainage Boards (IDB), the North Level District IDB and the South Holland IDB.

13.15 Mapping indicates that the flood risk from fluvial flooding to the solar development area and inter array connections is high. The majority of the area is located in Flood Zones (FZ) 2 and 3. The mapping does not take account of flood defences. Land Parcel A is entirely within FZ3, land parcels B and D are predominantly within FZ's 2 and 3. Land Parcel C is also located within FZs 2 and 3, however, the eastern portion of this area lies within FZ1.

13.16 The majority of the site is generally considered to be at low risk of surface water flooding, with small areas of medium to high risk associated with areas of low topography. Residual tidal risk from the River Welland is stated as being low owing to the tidal sluices at Spalding. The Council notes however that the Applicant's statements on tidal flood risk have been questioned by the Environment Agency in their Relevant Representations [RR-047; point EA10].

13.17 The grid connection route generally sits within an area of high fluvial flood risk, within FZs 2 and 3, but is stated by the Applicant not to be at risk of tidal flooding. mapping shows the area to be largely at very low risk of surface water flooding.

Site selection and the application of Sequential and Exception tests

13.18 The Applicant's Site Selection Report (SSR) (Appendix D of the Planning Statement [APP-264] sets out the range of assessment criteria that were used in site selection, referencing guidance provided in NPS EN-3 and EN-5. At a regional level, this included irradiance and topography, network connections, land holdings, ALC grading and land type, planning and environmental designations. Also included in this regional level evaluation was flood risk. However, paragraph 3.3.30 of the SSR emphasises that during the site selection stage, the secured grid connection at Weston Marsh was the starting point for the identification of land suitable for solar development, adding that grid connection points/National Grid substations with available capacity are finite and should be fulfilled wherever possible.

13.19 At the local level of site selection, the following factors were taken into consideration: proximity of land to dwellings; ALC grade and land type; accessibility; public rights of way; security and lighting.

13.20 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 development in areas with a lower risk of flooding.

13.21 If it is not possible for development to be located within areas of lower risk of flooding (taking into account wider sustainable development objectives), the exception test may have to be applied. The need for the exception test will depend on the potential vulnerability of the site and of the development proposed, in line with the Flood Risk Vulnerability Classification set out in Annex 3: "Flood Risk vulnerability classification" of the NPPF. Solar farms sit within the '*Essential infrastructure*' category. For such development, the national Planning Practice Guidance (PPG) (Table 2: Flood Risk Vulnerability and Flood Zone Incompatibility) (paragraph 079) requires the exception test to be applied where development falls within Flood Zones 3a and 3b.

13.22 Where it is engaged, for the exception test to be met, both of the following points need to be satisfied for the development to be allocated or permitted:

(i) The development would provide wider sustainability benefits to the community that outweigh the flood risk; and

(ii) The development will be safe for its lifetime, taking account of the vulnerability of its users, without increasing flood risk elsewhere and, where possible, will reduce flood risk overall.

13.23 Reference is made in the Planning Statement [APP-260] to the Flood Risk and Coastal Change section of the PPG, which sets out detailed guidance on the application of the Sequential and Exceptions Tests, as above. Where it is not possible to site the development in low risk areas, the sequential test should compare reasonable available sites within medium risk areas in the first instance, and then, only where there are no reasonably available sites in low and medium risk areas, with high-risk areas.

13.24 In considering the Applicant's approach to the sequential test, it is helpful to refer to the additional advice contained in PPG on Flood Risk and Coastal Change, specifically paragraphs 027a and 28 ('*How should the area of search for the sequential test be identified*' and '*What is a 'reasonably available site'?*', respectively). Paragraph 27a states that the sequential test should be applied proportionately, focusing on realistic alternatives in areas of lower flood risk that could meet the same development need. Further, for infrastructure proposals of regional or national importance the area of search may reasonably extend beyond the local planning authority boundary and that in some instances it may be relevant to consider whether large scale development could be split across a number of alternative sites at lower risk of flooding (but only where those alternative sites would be capable of accommodating the development in a way which would still serve its intended market(s) as effectively).

13.25 Paragraph 5.10.15 of the Planning Statement [APP-260] seeks to address the point about splitting large scale developments across a number of alternative sites with lower flood risk. The Applicant explains that it is not viable since the scheme comprises four parcels functioning as a single generating station connected by inter-array cabling, and additional fragmentation of the scheme into smaller or separate developments would result in increased cabling requirements, greater generation losses and higher infrastructure and associated costs, which could have a significant effect on commercial feasibility.

13.26 As previously referred to in Section 7 on site selection, the Council has had experience in assessing other NSIP-scale solar projects that have successfully amalgamated smaller sites to provide the desired output capacity, most notably the Cottam scheme, a 600MW project consisting of four land parcels, comprising: Cottam 1 (a discontinuous ring of sub-sites totalling 812 ha), and Cottam 2, 3a and 3b, single sites of 168ha, 132ha and 73ha respectively linked by a number of cable route corridors and connecting to the National Grid substation at Cottam Power Station.

13.27 In light of this example, and in the context of being able to design a scheme that is wholly compliant with flood risk policy, it would be helpful to understand why the site selection approach did not pursue this avenue further, through identification of potentially lower flood risk sites that jointly could deliver the same power output. This point is expanded on below with respect to the relatively large area of FZs 1 and 2 to the south and southeast of the proposed PoC at Weston.

13.28 In the SSR [APP-264], at paragraph 3.3.34, there is cross-reference to Figure 3-7 (Flood Risk planning map) and to what are described as '*pockets*' of FZ 1 to the south of Weston, stating that they could not fully accommodate an NSIP scale solar development of this scale alone or in combination. The Council assumes that this statement is predicated on land parcels having to be over a certain size, therefore if that restriction had been relaxed then it is highly likely that potentially more sustainable sites with lower flood risk may have emerged as part of a regional- / strategic-based approach to site selection.

13.29 Furthermore, the area described as having '*pockets*' of FZ1 is actually a relatively large area of FZs 1 and 2, lying between Whaplode Drove and Whaplode, with an area of FZ3 in the centre. It is also an area that sits closer to the PoC than the proposed solar development area. The Council would highlight that Figure 11-3: Fluvial Flood Risk Sheet 1 of 7 [APP-108] illustrates this area very clearly in terms of flood risk.

13.30 Taking this point further, at paragraph 3.3.34 of the SSR [APP-264], the Applicant lists four reasons as to why the lower risk flood risk zones to the south of Weston were not taken forward in the assessment of alternatives. Firstly, there is reference to landowners not willing to put land forward for the scheme, recognising the Applicant's aim to secure land parcels by voluntary agreement where possible. In this regard, it is useful to return to the definition of a

'reasonably available site', where is states that in considering alternative lower risk sites, such sites do not need to be owned by the Applicant to be considered 'reasonably available'. Whilst the Council recognises the applicant's preference to secure land parcels by voluntary agreement, this part of the PPG does make it clear that land ownership in itself should not be an impediment to the consideration of alternative sites in lower flood risk areas. In that regard the Council would expect to have seen further commentary in respect of the rationale for discounting any potential alternative sites that lie within FZs 1 and 2 to the south of the PoC.

13.31 Additionally, the remaining three reasons cited by the Applicant as to why the lower flood risk areas to the south of the PoC at Weston were not pursued as being able to offer potential alternative sites relate to

(i) crown land;
(ii) land already developed; and
(iii) built up areas.

In respect of crown land, it is not clear to what extent this restriction applies within the lower flood risk areas. Similarly, clarity on what the Applicant is referring to in respect of land already developed would be welcomed, since the area of mainly FZs 1 and 2 sitting between Whaplode and Whaplode Drove is predominantly agricultural, similar in nature and scope to the proposed solar development area. Likewise, the reference to 'built up areas' is questioned, since the density of settlements within this area appears to be very similar to that occupied by the proposal.

13.32 In making these comments in relation to site selection and the extent of FZ1 and FZ2 to the south and southeast of the Weston PoC, the Council do recognise that the area sits within an area of high likelihood of BMV, nonetheless, some further justification for not pursuing more land for potential inclusion in the development within these lower flood risk zones would be welcomed.

13.33 With reference to figure 3-7 flood risk planning map of the SSR, in terms of regional- or strategic-level approach to site selection, it would also be helpful to understand the rationale for not exploring the option of developing land to the west of the PoC, where there is a clear change in flood risk in the area to the north of Bourne. As was referenced in Section 7 with respect to BMV, if it is considered that a grid connection corridor of 13km (or 15km if to Weston March A) is feasible and deliverable, then by arcing that length westwards from the PoC it starts to encompass land that sits within areas of lower flood risk (in the same way as the land is less likely to fall into a lower likelihood of BMV category. Section 3.3.33 of the SSR does refer to this area and cites some constraints, but there is limited in-depth analysis to demonstrate that this was a robust and strategic-level approach looked at early on in the site selection process.

13.34 In terms of site-specific flood risk, the Applicant has undertaken flood modelling as part of the FRA to support the application of the sequential test and to aid decisions on siting of critical solar infrastructure. In almost all cases, critical infrastructure (400 kV substation and BESS compound; 132 kV substation and most solar stations) has been sited outside areas of highest flood risk (3b), with the exception of six solar stations in Gotts catchment, land parcel D.

13.35 The Applicant states that it has not been possible to site those six solar stations outside of the functional floodplain without either acquiring additional land (noting that surrounding land is also FZ 3b) or removing the land parcels from the solar development areas, which would reduce the generating capacity of the project. The mitigation proposed for the placement of these stations in FZ 3 is to raise the solar stations onto plinths up to 1.35m in height to provide 600 mm of freeboard to ensure operation in times of flood. In combination with panel support structures, modelling indicates that displacement of floodplain would not result in any significant change in flood depth and would not materially increase flood risk elsewhere. On this basis the Applicant contends that the scheme, in respect of infrastructure placed in FZ 3b meets the exception test as the embedded mitigation demonstrates that the development will be safe for its lifetime.

13.36 A considerable amount of bunding is also proposed around infrastructure proposed in the floodplain. The Council notes that the Environment Agency, in their relevant representation [RR-047], have raised concerns over the extent, layout and function of these bunded areas and their cumulative impact on floodplain storage, flows and maintenance. We will defer to the EA's expertise in providing detailed assessment on such matters to ensure that the ExA has confidence that the sequential and exceptions tests have been met across all parts of the development. In respect of the bunding, given the extensive use of these mitigation features cumulatively, we would agree with the EA that a quantified map showing their full extent would be helpful, and would assist in any further assessment that may be required from a landscape and visual perspective, should that be deemed necessary.

13.37 In terms of compliance with the second limb of the exception test, the Applicant relies on the provision of wider sustainability benefits through the scheme contributing to the UK's net zero and energy security goals at a national level. They also refer to benefits cited in section 4.3 of the Planning Statement [APP-260], including co-located BESS, skills and employment generation, provision of a permissive path between Queens Bank and Shepeau Stow, biodiversity and landscape enhancements, and recovery of agricultural land.

13.38 On the latter point, the Applicant refers to the opportunity for intensively farmed land to recover and for carbon to be stored over the operational life of the project, also citing biodiversity and 'continued' livestock grazing. Reference to this first point on recovery of soils is included in this LIR at section 15. It is unclear what the term 'continued' livestock grazing refers to as the Council understands this

does not currently happen, with the agricultural land in question being dominated by arable use. Further, it is understood that the prospect of grazing is not guaranteed and depends on a number of factors, not least the availability of willing graziers. In this part of the County, where grazing is currently not typical, this is likely to be difficult to secure.

13.39 The Outline Drainage Strategy [APP-227], to be secured in the DCO, is proposed to ensure the proposed development is safe for its lifetime and that there will be no increases in flooding elsewhere. The strategy accounts for new areas of impermeability (e.g. solar station, substation and BESS compounds) and proposes to attenuate runoff via sustainable drainage techniques such as edge swales. New operational roads are proposed to be permeable.

13.40 The FRA and associated documents have been reviewed by the Council in its capacity as Lead Local Flood Authority (LLFA). The LLFA considers these documents provide, at this stage, a suitable assessment of the surface water flood risk and how it will be mitigated by the development. The detailed measures of the larger impermeable areas created for the 400kV substation, the BESS Compound and the three 132kV substations, plus solar stations will need to be approved at the detailed design stage and the LLFA would expect these mitigation measures to be secured within the draft DCO. The detailed design of any SuDs schemes proposed will need to be conditioned and approved, ensuring that greenfield runoff is not exceeded.

Water quality and resources

13.41 Chapter 11 of the ES (Hydrology and Flood Risk) [APP-062] presents an assessment of the potential impacts of construction, operation and decommissioning phases of the proposed development on surface water features, including impacts on water quality and hydromorphology, as well as flood risk and drainage. Reference is made in the application to the drainage attenuation measures, which the Applicant states will ensure no increase in surface water discharge and facilitate improvements in water quality through filter trenches and swales.

13.42 Measures to prevent pollution and flooding are also included in the approach to ensure no adverse impacts on water quality, which can be embedded into the oCEMP, the oOEMP and the oDEMP, supplemented with a Water Management Plan (WMP) and the aforementioned outline drainage strategy. Providing these documents are adequately secured through the DCO, then the Council would agree that this approach is proportionate and appropriate to control potential impacts of the development on water resources and quality.

13.43 In conclusion, notwithstanding the comments regarding site selection and robust application of the sequential and exceptions tests in areas of higher flood risk, the Council in its capacity as LLFA considers that the effects of the development on flood risk and water resources have been satisfactorily addressed at this stage and

that the impacts of the development on water quality, resources and flooding would be **Neutral**.

14 Cultural Heritage (Built Heritage and Archaeology)

14.1 Paragraphs 5.9.23 to 5.9.37 of NPS EN-1 set out the key considerations for determining applications where there is potential for adverse impacts on the historic environment above, at and below the surface of the ground. It requires the SoS to identify and assess the particular significance of any heritage asset that might be affected by the development, including setting.

14.2 The NPPF Chapter 16 (Conserving and enhancing the historic environment) places a requirement on applicants to describe the significance of any heritage assets affected, including any contribution made by their setting. Similar to EN-1 it requires Local Planning Authorities to identify and assess the particular significance of any heritage asset that may be affected by a proposal. Paragraphs 212 to 216 of the NPPF align with EN-1 and require great weight to be given to conserving heritage assets and any harm or loss to a heritage asset requires clear and convincing justification. In cases where the proposal would lead to substantial harm or total loss of a heritage asset, consent should be refused unless certain criteria are met, this includes where the harm or loss is necessary for sustainable public benefit. Where less than substantial harm to the significance of the heritage asset would occur it should be weighed against the public benefits. For non-designated heritage assets a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset.

14.3 **Local Policies:**

- SELLP Policy 29: The Historic Environment
- LMWLP Policy DM4: Historic Environment

14.4 SELLP Policy 29 (The Historic Environment) states that development proposals should conserve and enhance the character and appearance of designated and non-designated heritage assets, such as important known archaeology or that found during development, historic buildings, conservation areas, scheduled monuments, street patterns, streetscapes, landscapes, parks (including Registered Parks and Gardens), river frontages, structures and their settings through high-quality sensitive design. It continues to highlight that distinctive elements of the South East Lincolnshire historic environment will be conserved and where appropriate, enhanced.

14.5 The Policy states that where a development proposal would affect the significance of a heritage asset (whether designated or non-designated), including any contribution made to its setting, it should be informed by proportionate historic environment assessments and evaluations. All heritage assets likely to be impacted by the proposal should be identified, explanations should be provided

regarding the impact of the development on the heritage assets and their setting and demonstrate how harm would be avoided, minimised or mitigated.

14.6 In instances where a development proposal would affect the significance of a heritage asset (where designated or non-designated), the Applicant will be required to undertake and provide information on the significance of the asset; the impact of the proposed development on the significance and special character of the asset; and a clear justification for the works so that the harm can be weighed against public benefits.

14.7 In addition to this, development affecting archaeological remains, whether known or potential, designated or undesignated, should take every practical and reasonable step to protect and, where possible, enhance their significance.

14.8 Planning applications for such development should be accompanied by an appropriate and proportionate assessment to understand the potential for and significance of remains, and the impact of development upon them. If initial assessment does not provide sufficient information, developers will be required to undertake field evaluation in advance of determination of the application. This may include a range of techniques for both intrusive and non-intrusive evaluation, as appropriate to the site.

14.9 Wherever possible and appropriate, mitigation strategies should ensure the preservation of archaeological remains in situ. Where this is either not possible or not desirable, provisions must be made for preservation by record according to an agreed written scheme of investigation submitted by the developer and approved by the planning authority.

14.10 LMWLP Policy DM4 (Historic Environment) reiterates SELLP Policy 29, and states that proposals with the potential to affect heritage assets including features of historic or archaeological importance (whether known or unknown) should be accompanied by an assessment of the significance of the assets and the potential impact of the development proposal on those assets and their settings. Where any impact on heritage assets is identified, the assessment should provide details of the proposed mitigation measures that would be implemented. These should include details of any conservation of assets to be lost and provision for the results to be made publicly available.

14.11 NPS EN-1 paragraph 5.9.22 states that where there is high probability (based on an adequate assessment) that a development site may include yet undiscovered heritage assets with archaeological interests then requirements should be considered to ensure that appropriate procedures are in place for the identification and treatment of such assets discovered during construction. This is largely carried through in NPS EN-3.

Built Heritage

14.12 The Council has reviewed ES chapter 8: Cultural Heritage [APP-059] whilst the overall approach taken is broadly appropriate, this is subject to the resolution of the outstanding matters raised below.

14.13 The Council notes that the Applicant identifies significant residual operational effects on the historic landscape of the former precinct of Crowland Abbey, scheduled monuments associated with the Crowland Abbey landscape, Wykeham Chapel and the Historic Landscape Character Areas of The Fens and The Wash as stated within [APP-069] ES Chapter 18: Summary of Likely Significant Effects. The Council agrees that these receptors are central to the historic environment impacts of the scheme.

14.14 **Former precinct of Crowland Abbey**

The effect on the former precinct of Crowland Abbey should be understood as more than visual change. ES Appendix 8-2: Historic Environment Desk Based Assessment explains that Crowland Abbey occupied slightly higher ground, giving rise to the historic understanding of Crowland as an island within the fens. The site lies within the surrounding fen deposits and within the area known as Great Postland. It also notes that the medieval documentary boundaries defined the island of Crowland and its surrounding marshes and that modern parish boundaries still closely reflect the former abbey precinct. The former abbey boundary includes land parcels A, B and C, with Queen's Bank forming the northern boundary. These land parcels therefore fall within a historically meaningful part of the former monastic estate landscape, rather than simply within open agricultural land.

14.15 The Councils position is that the scheme would affect how this part of the historic landscape is understood and experienced. The concern is not the change to the surroundings of the assets in isolation but the effect of that change on the ability to read the historic relationship between them within the wider setting of the former abbey landscape.

14.16 In relation to St Guthlac's Cross, the Council acknowledges that the Applicant's baseline notes that the cross is no longer in its original location. However, this does not remove the relevance of its historic and landscape relationship with Crowland Abbey, Queen's Bank and the wider former abbey boundary landscape. The asset remains significant as a medieval boundary marker associated with land formerly held by Crowland Abbey and that significance is still understood through its historic function, association and wider landscape context.

14.17 The Council also notes that [APP-069] ES Chapter 18: Summary of Likely Significant Effects Table 18-2 records the same moderate adverse significant residual effect for receptors with different sensitivity/value ratings: medium for the former precinct landscape and high for the scheduled monument at settlement W of

Cate's Cove Corner and St Guthlac's Cross. In each case the magnitude of impact is recorded as minor. The Council does not dispute the conclusion but considers that the reasoning should be clearer, particularly where the impact is described broadly as change within setting.

14.18 **Wykeham Chapel**

In relation to Wykeham Chapel and the Grade I listed Chapel of St Nicholas, the Council notes that the Applicant identifies a significant operational effect and that the level of effect is sensitive to the final siting and form of grid connection infrastructure. The Applicant's assessment records Historic England's concern regarding the effect of Meridian and other overhead line infrastructure on the open agricultural setting of the asset, including views from the access route and from within the chapel through the east window. The Council considers that the least harmful design should be secured through the DCO requirements, including pylon siting, pylon spacing, undergrounding where necessary, access tracks, compounds, planting and other above-ground ancillary infrastructure.

14.19 **Historic Farmsteads**

The Council notes that historic farmsteads have been considered using the *Greater Lincolnshire Farmstead Character Statement (2015).* However, the assessment does not apply LCC's NSIP guidance on the group value of historic farmsteads*: Historic Places Team, Lincolnshire County Council (2024), Historic Farmsteads Group Value Framework for NSIPs.* Given the rural character of the scheme and the number of historic farmsteads within it, this is a notable omission and limits the assessment.

14.20 As a result, the ES assesses farmsteads largely as individual receptors, rather than considering their collective contribution to the historic landscape. This limits the assessment of how the scheme would affect the legibility of the wider fenland settlement pattern. ES Appendix 8-4: Heritage Setting Assessment [APP-203] identifies slight adverse effects on non-designated farmsteads and rural buildings. While these effects may not be significant individually in EIA terms, their wider pattern is relevant to understanding the historic character of the landscape.

14.21 This is particularly relevant to farmsteads within, or historically related to, the former abbey precinct landscape. The ES does not explain whether these assets have collective value as part of that landscape, or how the scheme would affect that relationship.

14.22 **Historic Landscape Character**

The Council agrees with the Applicant's assessment that the scheme would result in significant adverse operational effects on Historic Landscape Character within The Fens and The Wash. ES Appendices 12-3 [APP-237] and 12-4 [APP-238] draw

on *the Historic Landscape Characterisation Project for Lincolnshire (2011)*[8], which identifies The Fens and The Wash as major historic landscape character areas covering a significant proportion of the southern half of the county. The ES describes these areas as flat, open and predominantly rural landscapes, shaped by rectilinear drainage patterns, dispersed settlement, scattered farmsteads, large skies and long-distance views.

14.23 The Councils concern is that these effects should not be treated as purely visual effects. In this context, openness, drainage patterns, field morphology, roads, settlement edges and scattered farmsteads form part of the historic structure of the fenland landscape. The introduction of solar PV modules, substations, BESS infrastructure and overhead line infrastructure would alter the way that landscape is read and experienced during the operational life of the scheme.

14.24 The Council considers that the significant adverse operational effects identified for Historic Landscape Character should be recognised as a material heritage concern. The effect is not simply that new infrastructure would be visible but that the scheme would change the character and legibility of a historic agricultural fenland landscape.

14.25 **Cumulative historic landscape change**

The Council also notes that ES Chapter 8 [APP-059] identifies cumulative disruption of the historic landscape character of The Fens and The Wash through the introduction of industrial features into the flat landscape (table 8-11: Cumulative Effects Assessment in relation to Cultural Heritage). The residual cumulative effect is assessed as moderate adverse and significant for the lifespan of the scheme, with an increase in the magnitude of impact as a result of in-combination effects.

14.26 The Applicant's cumulative visibility mapping helps illustrate how this change may be experienced across the wider landscape, rather than only through direct intervisibility between individual assets and individual scheme components. ES Figure 12-17: Barrier Viewshed – Cumulative Overhead Line Developments shows extensive areas of theoretical visibility within the 15km buffer for cumulative overhead line schemes, including Grimsby to Walpole, WMEL and Spalding Energy Expansion. ES Figure 12-18: Barrier Viewshed – Other Cumulative Developments also shows visibility associated with other solar and energy-related schemes across broad parts of the surrounding fenland. The Council recognises that these are theoretical visibility tools and not direct assessments of heritage harm. However, they help demonstrate why cumulative change in this landscape should not be reduced to individual asset intervisibility, or to isolated viewpoints.

[8] https://www.lincolnshire.gov.uk/downloads/file/2205/the-historic-character-of-lincolnshire-pdfa

14.27 The Council notes the ExA's conclusions in the Springwell Solar Farm Recommendation Report[9] (sections 9.4.17 to 9.4.21). The ExA agreed with LCC that cumulative solar and related development would likely require published landscape character assessments to be updated so that large-scale solar is recognised as a defining land-use characteristic alongside agriculture. The ExA further found that cumulative solar and solar-related development, including non-NSIP schemes, represented a clear and marked change to landscape character resulting in a moderate adverse significant effect.

14.28 This is relevant to the historic environment as well as to landscape character. The ES draws on the Historic Landscape Characterisation Project for Lincolnshire, which provides the county-level framework for understanding the historic character of The Fens and The Wash. That framework identifies the historic structure of these landscapes through features such as drainage, enclosure, field pattern, settlement and farmsteads. If large-scale solar, grid and related energy infrastructure become a defining land-use characteristic, this is likely to have consequences for how the historic landscape is understood, described and assessed in future reviews of historic landscape character.

14.29 The Council considers that cumulative historic landscape change should be recognised separately from the individually significant effects identified in the ES.

14.30 **Overall Assessment**

The Council considers that the scheme would give rise to significant adverse effects on the historic environment, particularly in relation to the former Crowland Abbey precinct, Wykeham Chapel, and the wider Historic Landscape Character of The Fens and The Wash**.** Limitations in the assessment have also been identified, notably the lack of application of the Historic Farmsteads Group Value Framework and insufficient explanation of how impacts on setting translate into consistent effect conclusions across receptors of differing sensitivity.

14.31 Furthermore, the Council considers that cumulative change—particularly from solar and grid infrastructure across The Fens and The Wash—represents a material and distinct heritage impact. This change has the potential to redefine the character of the landscape and affect how it is understood within the Historic Landscape Characterisation framework.

14.32 Overall, the Councils position is that the Scheme would result in meaningful and lasting harm to the historic landscape, both individually and cumulatively, and that these effects should be clearly recognised, robustly justified, and minimised through design and secured requirements. On this basis, the effects of the proposed development on built heritage interests are considered to be **negative**.

[9] https://nsip-documents.planninginspectorate.gov.uk/published-documents/EN010149-001039-EN010149%20-%20Springwell%20Solar%20Farm%20Recommendation%20Report.pdf.

Archaeology

14.33 The Council are broadly satisfied that the work undertaken to date has been completed to the required standards and has provided a solid understanding of the archaeological potential, significance and likely impact arising from the proposed Meridian Solar scheme. It has confirmed the presence of widespread activity, mainly of Iron Age and Roman date, across the site with a focus on the higher dryer 'roddons', which are silted up former river channels. The following comments build on those provided recently in our Relevant Representation.

14.34 There has been an effective programme of desk-based and non-intrusive surveys completed for the site prior to submission of the application, which has enhanced the understanding of the historic environment baseline. The Applicant has completed the ES chapter [APP-059], desk-based assessment [APP-182], aerial assessment [APP-185] and geophysical survey [APP-186] to [APP-196] to the appropriate standards set out by the Chartered Institute for Archaeologists, Historic England and the Lincolnshire Archaeology Handbook. In particular, the Council commend the quality of the geophysical survey and the aerial assessment and the positive contribution they make to the assessment.

14.35 Within [APP-265], Planning Statement Appendix E, Heritage Harm Statement, it states that all assets which have been identified as experiencing an adverse effect in the EIA have been considered within this document. Adverse effects can be experienced as a direct physical impact on historic fabric or as a result of changes to an asset's setting. effects can also be experienced during the construction of the scheme as short-term or long-term impacts, or as a result of the operation of the scheme. We would point out that impacts may also occur during the decommissioning phase of the project and that these should be included within the assessment.

14.36 Within paragraph 3.1.4, it states that for the majority of heritage assets, the ES concludes that the predicted magnitude of impact would result in no more than a moderate adverse change to their cultural significance, due to the scale of the anticipated impact. As a result, it is concluded that the harm caused to these assets, both physically and within their setting, falls within the less than substantial category, or that no harm is caused. The Council would suggest this is likely to be an underestimation of the significance of the impact. The Council do not disagree with the moderate impact, but rather that moderate impacts may be reasonably concluded to be greater than 'less than substantial' in some cases, particularly where the nature of the asset has buried elements that could be more sensitive to change.

14.37 The Council do not agree that temporary impacts have in their entirety been automatically deemed as less than substantial as stated within paragraph 3.1.5. Each impact should be assessed on its own basis and a conclusion provided along with the justification how that conclusion has been reached.

14.38 Paragraph 4.1.3 states that the area of archaeological deposits to the north of High Road, potentially multi-period and dating from the Palaeolithic, Mesolithic, Iron Age, Roman, medieval or post-medieval periods, would only suffer a major adverse impact if the cable route was underground. If the cable route was above ground, the impact would not be significant. The Council consider this assumption could be incorrect, depending on the sensitivity of any archaeological remains where the posts for the overhead route are located. We agree that any underground cable would likely be more harmful and recommend that the overhead route should be chosen here. We note that in Paragraph 4.1.8 the Applicant concludes that aerial photograph survey and Historic Environment Record data collected to date indicates that the potential for archaeological remains decreases in this northern section of the grid connection route north of High Road when compared to the density of archaeological deposits recorded in other areas of the scheme and consider the archaeological significance here to be medium. The Council would query the medium importance ascribed to remains of Palaeolithic and Mesolithic date, given their scarcity within the region. If the evidence is of a transient and ephemeral nature, such as lithic scatters, then the Council could agree with a medium importance (although note Farndon Fields for example). However, settlement or other more intensive exploitation evidence would be higher. Lithic scatters may also indicate archaeological activity could be present below the ground.

14.39 The Council would anticipate that where impacts on high importance archaeological remains have been identified, design finalisation should have been made pre-DCO submission to avoid the uncertainty and lack of definitive impact assessment.

14.40 The Council do not fully agree with the assessment that with mitigation, the harm to the Archaeological Zone 1 spread across Zones B and C would not be significant unless that mitigation was through design, removing the area from the solar arrays or a no-dig solution was found (paragraph 4.1.11). If harm is to occur, the Council would expect appropriate justification to be provided detailing the rationale behind the proposals at this locality.

14.41 The Council broadly agree that the construction of a 132kV substation and adjacent construction compound, access tracks, solar PV modules and below ground cabling within Archaeological Zone 1 will likely lead to a greater magnitude of impact and a lesser magnitude of harm within the array areas (paragraph 5.2.4). The Council has noted that there are often additional sources of disturbance within solar array areas, with ground improvements, grading and compaction, drainage channels, plant movement and landscaping all having impacts, which are not fully accounted for in the assessments. Additionally, ground impacts on archaeological remains of higher sensitivity within the array area may still incur an impact of greater magnitude and this should be recognised within the statement of harm. Construction methodology variation, such as needing to compact soils prior to array construction, would be monitored by the Archaeological Clerk of Works (ACoW).

14.42 The addition of the chapter on assumptions and limitations [APP-059] section 8.5 is beneficial. The identification of the level of accuracy that can be attributed to the assessment results allows confidence ratings to be built into the proposed iterative mitigation strategy. The requirement for an ACoW will include within their role oversight of the day-to-day activities on site to ensure archaeological considerations are met throughout the lifespan of the project. This flexibility and presence on site is a crucial tool in combating unanticipated impacts or changes to the construction methodology or programme.

14.43 In regards the assessments, the conclusions contained within ES chapter 8 [APP-059] Section 8.9 Assessment of Potential Impacts and Likely Significant Effects are under discussion and the Council would advise some amendments. The sources of impact from the Operational Phase will be managed through mitigation set out within the forthcoming Archaeological Mitigation and Management Plan, not the oOEMP (Section 8.9.7). Equally, the management of archaeological impacts from the decommissioning phase will be covered in the Archaeological Mitigation and Management Plan and overseen by the ACoW, not the oDEMP (Section 8.9.9 and 8.9.10)

14.44 The archaeological field evaluation (Volume 6 Environmental Statement 6.3 ES Appendix 8-2: Historic Environment Desk Based Assessment - Appendix E Volume 1 and Appendix E Volume 2 Parts 1-2) [APP-197/APP-198/APP-199] undertaken to date have recorded a number of areas of archaeological interest dating from the later prehistoric period through to the post-medieval period and has successfully characterised and dated many of the features identified from the desk-based, aerial and geophysical assessments.

14.45 There are some outstanding fieldwork requirements, primarily for the grid connection route and inter array connections (Volume 6 Environmental Statement 6.1 ES Chapter 8: Cultural Heritage Para 8.6.37) [APP-059]. The Council are content for these to be undertaken post-DCO and the results incorporated into the final archaeological mitigation and management plan. Any written scheme of investigation must be approved by LCC.

14.46 Consultation has been timely and effective, with channels of communication established early in the project, including with those out in the field undertaking the archaeological trenching. Feedback and comments have been incorporated into the documents and where needed, directly into the fieldwork methodology whilst on site. This has benefitted the archaeological assessment, improved the methodology employed and enhanced the end output. Regular opportunities were taken for monitoring the archaeological trenching in person.

14.47 The Council feels greater clarification is needed regarding the application of significance/importance, the omission of substantial harm within the temporary impacts and details of the justification regarding substantial/less than substantial harm as applied to the residual impact assessment. The Council are disappointed that no outline Archaeological Mitigation and Management Plan has been

included with the DCO application and expect this to be submitted prior to the end of the examination period to allow its review and discussion within the DCO hearings and/or subsequent written deadlines. Areas of Archaeological Potential have been identified (Volume 6 Environmental Statement 6.2 ES Figure 8-5: Zones of Archaeological Potential) [APP-097] and will form the basis for creating the subsequent mitigation and management plans and embedded mitigation is covered within Section 8.

14.48 The Council also expect work to have commenced on the Public Archaeology and Community Engagement Strategy (PACES) prior to the DCO examination. The Meridian Solar Project has the opportunity to play a positive role in enhancing the historic environment. The scheme has encountered areas of significant archaeological activity and utilising this asset for public benefit is highly recommended in the recently adopted Archaeology and Solar Farms Practice Guide under Principle 10, which states that public benefit and knowledge dissemination should be integrated into the delivery of solar farms. As stated in our Relevant Representation, the Council would welcome the inclusion of the PACES within the Commitments Register. Consideration of enhancement of the historic environment is invaluable in balancing the impacts of any development proposal and interest in archaeology, particularly any remains which have been found locally, can be massive and if done well, can have the potential to foster high amounts of positive publicity and public benefits.

14.49 The Council would appreciate involvement in the historic environment content creation of the information boards adjacent to the new permissive path which would follow the boundary of the scheduled monument at Cate's Cove Corner (Commitments Register table 2.1 Section HH-1) [APP-272].

14.50 The archaeological works to date have been largely positive, with a high proportion of the assessments done to the required standards. The Council recognise and accept that it will not be possible to cover all eventualities or impacts but the work to date has covered much that can reasonably be established or anticipated from the quality of the data at hand. The Council look forward to working with the Applicant to further enhance the management and mitigation plan and creating an effective forward-looking and innovative programme of public archaeology and community engagement.

14.51 In view of the range of concerns noted above, the effects of the proposed development on archaeological interests are considered to be **negative.**

14.59 We will continue to work with the Applicant's archaeological consultant as more detail is provided regarding site-specific developmental impacts, to ensure that reasonable and appropriate evaluation and mitigation are undertaken to adequately deal with the impacts on surviving archaeological remains across the Order Limits.

15 Soils, Agriculture and Land Use Impact

15.1 NPS EN-1 at paragraph 5.11.12 states that Applicants should seek to minimise impacts on the BMV agricultural land (defined as land in grades 1, 2 and 3a of the Agricultural Land Classification (ALC) system) and preferably use land in areas of poorer quality (grades 3b, 4 and 5). Paragraph 5.11.34 of EN-1 states that the SoS '*should ensure that applicants do not site their scheme on the best and most versatile agricultural land without justification.'* Where it is sited on BMV, it should '*take into account the economic and other benefits of that land*' and where it is demonstrated to be necessary, areas of poorer quality land should be preferred to those of higher quality.

15.2 Under the heading of 'Solar Photovoltaic Generation', paragraph 2.10.21 of the NPS EN-3 states that '*While land type should not be a predominating factor in determining the suitability of the site location applicants should, where possible, utilise suitable previously developed land, brownfield land, contaminated land and industrial land. 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'.*

15.3 Paragraph 2.10.22 notes that '*Whilst the development of ground mounted solar arrays is not prohibited on agricultural land classified 1, 2 and 3a, or sites designated for their natural beauty, or recognised for ecological or archaeological importance, the impacts of such are expected to be considered and are discussed under paragraphs 2.10.67 – 84 and 2.10.99 - 2.10.118 of this NPS.*'

15.4 Paragraph 2.10.23 acknowledges that it is likely that at this scale Applicants' developments will use some agricultural land, however that '*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.*'

15.5 Paragraph 2.10.24 goes on to state 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 (for example, onshore wind generation, or storage) to maximise the efficiency of land use.

15.6 In the same vein as NPS EN-1, paragraph 2.10.137 of NPS EN3 reiterates that the SoS should take into account '*the economic and other benefits of the best and most versatile agricultural land*' in decision making and that '*The Secretary of State should ensure that the applicant has put forward appropriate mitigation measures to minimise impacts on soils or soil resources.*'

15.7 NPS EN-3 emphasises that the ALC is the only approved system for grading agricultural quality in England and Wales and, if necessary, field surveys should be used to establish the ALC grades in accordance with the current, or any successor to it, grading criteria and identify the soil types to information soil management at

the construction, operation, and decommissioning phases in line with the DEFRA Construction Code (paragraph 2.10.25).

15.8 On 15 May 2024, a Written Ministerial Statement ("WMS") was published on solar infrastructure and protecting food security and BMV land. The Council notes that the 15 May 2024 WMS emphasises elements of the 2024 NPSs. In particular the 2024 WMS emphasises that when considering whether planning consent should be granted for solar development the cumulative impacts, where several proposals come forward in the same locality, should be considered, with the WMS specifically referencing these issues in Lincolnshire - '*…we are increasingly seeing geographical clustering of proposed solar developments in some rural areas, such as in Lincolnshire'.*

Local Policies

15.9 Local policies relevant to the proposal:

- SELLP Policy 3: Design of New Development
- SELLP Policy 30: Pollution
- SELLP Policy 31: Climate Change and Renewable and Low Carbon Energy
- LMWLP Policy DM11: Soils
- LMWLP Policy DM12: Best and Most Versatile Agricultural Land.

15.10 Policy 3 of the SELLP (Design of New Development) requires all development to create distinctive places through the use of high quality and inclusive design and layout and, where appropriate, make innovative use of local traditional styles and materials. Design which is inappropriate to the local area, or which fails to maximise opportunities for improving the character and quality of an area, will not be acceptable. A list of 15 issues that proposals need to demonstrate, where relevant, are listed in the policy, which include (number 13) '*the use of locally sourced building materials, minimising the use of water and minimising land take, to protect best and most versatile soils*'.

15.11 Under Policy 31 of the SELLP (Climate Change and Renewable and Low Carbon Energy), all proposals for renewable energy facilities (excepting Wind Energy) and their associated infrastructure are required to demonstrate no significant harm to a number of interests, including '*4. Agricultural land take*'. The supporting text to the policy (at para 7.5.10) states that lower quality agricultural land should be used and the nature environment / biodiversity protected and enhanced.

15.12 Policy 30 of the SELLP (Pollution) states that development proposals will not be permitted where, taking account of mitigation, they would lead to unacceptable adverse impacts upon *inter alia* land quality and condition. Specific reference is given at para 7.4.4 in the supporting text to the potential for reducing pressure on green field land, which is mostly grade 1 and 2 agricultural land, through remediation of contaminated sites.

15.13 Although specific to minerals and waste proposals, LMWLP Policy DM11 (Soils) requires that development demonstrate protection and wherever possible enhancement of soils, recognising in the supporting text that Lincolnshire has a high proportion of BMV. Similarly, Policy DM12 requires that minerals and waste proposals including significant areas of BMV will only be permitted where no reasonable alternative exists and where, upon restoration, the long-term potential of the BMV land can be safeguarded.

Assessment

15.14 Reading Agricultural Consultants (RAC) have been commissioned, on behalf of the Council, to assist in the consideration and review of the agricultural land and soils aspects of the Meridian proposal. The report draws on local and published knowledge regarding the agricultural sector in Lincolnshire and describes the context of the proposal within that sector. A full copy of the report prepared by RAC is attached to this LIR at Appendix ii. The following summary and conclusions refer to and incorporate commentary from the assessment undertaken by RAC, and they should be read in conjunction with the full report. The detail in this section of the LIR builds upon the points raised in the Council's Relevant Representation [RR-111] and covers the following key areas:

(i) The importance of agriculture and food production to Lincolnshire
(ii) Analysis and critique of the submitted ALC surveys, methodologies and interpretation of results
(iii) Commentary on productivity, economic output and related socio-economic issues

(i) The importance of agriculture and food production to Lincolnshire

15.15 The potential impacts of the Meridian Solar Farm Project proposal on BMV, and potential cumulative effects arising with other projects (both NSIP and TCPA) that are emerging/known about in Lincolnshire, are of significant concern to the Council. The Council will seek to protect high quality agricultural land in Lincolnshire (ALC grades 1, 2 and 3a) from development in accordance with its Energy Infrastructure Position Statement adopted 5 December 2023[10]. This position statement acknowledges that Lincolnshire has a high proportion of BMV land, which is the basis for its prosperous agricultural industry. The Council will object to proposals on grades 1, 2 and 3a agricultural land.

15.16 Lincolnshire County covers 592,100 ha, of which approximately 92% (545,000 ha) is farmed. The county covers 4.5% of England's land area and accounts for 5.4% of its agricultural land. The combination of climate, soil type and topography make the county ideal for a variety of crops. With reference to the quality of the soils, much of Lincolnshire's agricultural area comprise BMV land, estimated to be around 76% (equivalent to 412,556 ha). The wider county area, as defined by

[10] https://lincolnshire.moderngov.co.uk/documents/s60096/Energy%20Infrastructure%20Position.pdf

Greater Lincolnshire Local Enterprise Partnership (LEP) produced about 12% of english agricultural output, by value, in 2019, equivalent to more than £2 billion. In the same period, the area produced 30% of England's vegetables, 12% of all potatoes, 18% of sugar beet, 20% of its wheat and 18% of its poultry. This has led to the area having the UK's leading concentration of fresh produce processors, traders and technology suppliers, providing 21% of Greater Lincolnshire's economic output and 24% of its jobs, compared with 13% nationally.

15.17 Agriculture is therefore critical to the well-being of the county. It is clear that any development impacts on agricultural land are very likely to have an immediate impact on local employment and economic output, and a disproportionately greater impact on food production nationally, when compared with most of the rest of England.

15.18 At the same time, Lincolnshire continues to attract a large number of renewable energy proposals, including many solar farms, and numerous associated transmission infrastructure projects throughout the county. The Department for Energy Security and Net Zero (DESNZ) Renewable Energy Planning Database[11] (REPD) shows that planning permissions granted for solar in Lincolnshire in the period Q3 2025 to Q1 2026 grew by 19.5% in area terms, compared to a national rise of 13%, with the county accounting for around 29% of all new nationally granted solar area over that period, despite having only about 5.4% of the country's agricultural land, of which a large proportion is BMV. The DESNZ Solar roadmap[12] seeks to deploy 45 - 47GW of solar by 2030 in the UK. The REPD shows that overall more than 64GW of capacity had either been granted permission or was in the planning pipeline, with more capacity expected to come forward. In combination with an anticipated extra 9 - 10 GW from rooftop solar, the DESNZ target solar capacity range could yield 54 - 57 GW by the target date.

15.19 The Land Use Framework (LUF) for England[13] (March 2026) sets out Government's vision of how land should be used and suggests that land uses for food production, housing, nature and energy production need not be viewed as competing but as complementary, given the right tools, data and strategic direction, which the Framework provides. The LUF states that change should reflect the strengths of the land, prioritising land use change in areas that are less suitable for high-value, sustainable agriculture and keeping more BMV land producing high value food crops. Specific reference is given to the Fenland National Character Area, within which the Meridian Solar Farm Project proposal lies, whereby there are fewer sustainable opportunities for change that most of the rest of the country.

15.20 The 2024 UK Food Security Report[14] identifies that '*Water and land, important agricultural inputs, are under increasing human and geopolitical competition and*

[11] https://www.gov.uk/government/publications/renewable-energy-planning-database-quarterly-extract

[12] https://www.gov.uk/government/publications/solar-roadmap/solar-roadmap-united-kingdom-powered-by-solar-accessible-webpage

[13]https://www.gov.uk/government/publications/land-use-framework

[14] https://www.gov.uk/government/news/uk-food-security-report-2024-published

are being used at an unsustainable rate. The food system's essential natural resources continue to be depleted without being recovered for future use.' By reducing the amount of BMV land available by incrementally removing land for large infrastructure projects, additional pressure is placed on the remaining land to keep agricultural production supply stable, or alternatively more food will have to be imported with the sustainability implications of food miles and associated carbon emissions.

15.21 When the LUF and UK Food Security Report are read alongside relevant policy in NPS EN-1, NPS EN-3 and the NPPF, the position of central government is clear that land use changes should be directed to areas less suitable for high-value, sustainable agriculture, thereby conserving high-quality land which is better suited to the delivery of sustainable increases in food production.

15.22 Given the policy position on BMV land, it is a critical as part of the assessment of the application to ensure that the information presented in the ES on soil quality and ALC grading is robust and reliable. Additionally, it is a requirement that the submission comprehensively addresses the effects of the scheme in respect of the economic and other benefits of the land within the context of production at various levels to enable the SoS to make an informed decision in line with paragraphs 5.11.34 and 2.10.137 of NPS EN-1 and NPS EN-3, respectively. The next two sections address these points specifically.

(ii) Analysis and critique of the submitted ALC surveys, methodologies and interpretation of results

15.23 Under the heading 'Land Quality', paragraphs 11 – 21, RAC's report at Appendix ii references the freely available information on land quality within the application area, citing Natural England's 2026 Predictive ALC Map for England, the Provisional Map of ALC published by Ordnance Survey, Natural England's map of the Likelihood of BMV Agricultural Land – Strategic Scale map for the East Midlands, DEFRA's Predictive Agricultural Land Classification Map for England (2026), as well as detailed soil survey carried out by MAFF in 1991 on a small part of the site. Collectively, these sources consistently indicate that the Meridian Solar Farm Project falls within an area that is mapped at grades 1 and 2 ALC, and where the likelihood of land being BMV is high.

15.24 The detailed survey carried out for the ES and included at Chapter 5 of the ES [APP-056] identified the following ALC grade split: 95.2ha of Grade 1 (8.9%); 77.4ha of Grade 2 (7.2%); 202.8ha of Subgrade 3a (19%) and 566.5ha of Subgrade 3b (53.1%). Following a second assessment, further to comments from Natural England on the methodology employed, a second analysis suggests the grade distributions are: 120.6ha of Grade 1 (11.3%); 92.6ha of Grade 2 (8.7%); 205.4ha of Subgrade 3a (19.2%) and 523.7ha of Subgrade 3b (49.1%) land.

15.25 Analysis of the observations made to inform the ALC survey (and thus the conclusions drawn for use in the assessment as part of the ES) clearly indicate that

they are significantly different from any previously published assessment of land quality of the proposed development area and surrounding area. Notably, and importantly, the Applicant has identified significant areas of ALC grade 3b (non-BMV) land across large areas of land within the survey boundary, making up nearly 50% of the surveyed area. This is a difference which is not commented on or justified in the ES.

15.26 In noting the large discrepancy in the BMV/non-BMV split between the survey results and the raft of previously published information available, RAC have undertaken a detailed review of the ALC methodology, the results and their interpretation and, as part of the Council's Relevant Representation [RR-111], a series of seven questions and queries were posed to the applicant for response. The Council notes that Natural England, in their Relevant Representation [RR-140], have stated that they also have major concerns regarding the accuracy of the presented ALC grades as a result of the survey undertaken, highlighting a number of common issues identified by RAC. The concerns span a range of matters but include: lack of reference to more detailed published soils information and previous surveys; incorrectly using a field-average approach when mapping ALC grade contrary to prescribed ALC methodology; queries over the extent to which calcareousness was tested and recorded; robustness of recorded logs; drainage status and Wetness Class characterisation; queries over identified of a Slowly Permeable Layer (SPL); limited number of soil pits not prepared to the required standard and not of sufficient quality to substantiate conclusions on soil characteristics.

15.27 It should be noted that there are ongoing and live discussions between the Applicant, the Council and Natural England to discuss these matters in more detail and attempt to seek some level of agreement. As part of that engagement, there has been more information provided by the Applicant to the Council and Natural England to substantiate their position, which we understand will be submitted into the Examination at the earliest possibility for review by the ExA. In the RAC report attached, there is, for example, reference to the original seven queries posed at the Relevant Representation stage by the Council, the Meridian team's response to those queries, and further comment from RAC on those responses (see Appendix 2 of the RAC report – Review of ALC Survey Issues). Additionally, at Appendix 3 of the RAC report, there is a critique of further information supplied by the Applicant in relation to soil pits, which was not part of the formal submission. Again, we anticipate this further information to form part of an early submission by the Applicant of supplementary material into the Examination.

15.28 Notwithstanding however, at this point in time the Council maintains that there are considerable deficiencies in the manner in which the ALC surveys have been conducted, their analysis and interpretation and the conclusions that have been reached on the strength of the survey information presented. Any re-grading deemed necessary would have potential implications on the assessment of significance of effects. In a situation where the downgrading of mapped BMV land is critical to the weight given to soils and agriculture in the planning balance, the

available evidence is considered insufficient to support the conclusions drawn in the ES that the majority of the area taken by the scheme is not BMV. The Council will continue to engage with the Applicant to try and seek resolution of the outstanding matters and it is expected that these issues will form part of a forthcoming SoCG.

15.29 To that end, whilst there remain fundamental concerns with the ALC survey information presented, the Council has necessarily restricted itself from making detailed comments about how the Applicant has used the ALC grading in its micro-siting decisions for infrastructure across the site. This includes assessment of impacts based on the breakdown of scheme components and ALC grades affected, as referenced in Tables 5-12 and 5-13 of the ES Chapter 5 [APP-056]. Nevertheless, and without prejudice to the outcome of ongoing discussions with the Applicant, Natural England and the ExA, the Council notes (at paragraph 5.7.3 of the ES Chapter 5) the commitment to exclude any physical development and retain arable land within Habitat Management Area 6 (for skylark benefit) owing to the prevalence of grade 1 and grade 2 BMV land, which is positive. Similarly, avoiding woodland blocks as part of the landscape design to minimise negative impacts on BMV is also welcomed.

15.30 The Council notes the Applicant's approach to assigning a worst case scenario, in terms of duration of effect, to the creation of hardstandings for the on-site substation, BESS compounds, Solar Stations and CSEC compounds, to classify those as 'permanent' impacts when coinciding with grades 1 and 2 land (paragraph 5.8.2). The Council would question whether, given the longevity of the development for at least 40 years, all BMV land, including 3a graded land, ought to be included in this same category. On the basis of the Applicant's (disputed) figures, this would have implications on significance of effect where permanent effects occur on grade 3a land (high sensitivity) over an area of between 5 – 20 ha (moderate (or medium) magnitude), this would equate to a moderate adverse effect (reference para 5.8.6 of Ch 5). Similarly, if areas have been under-graded, and more land falls into grade 1 and 2, then this would result in more extensive areas being subject to significant Major Adverse effects.

15.31 The Council would also question the summary table of effects 5-16 based on the Institute of Sustainability and Environmental Professionals (ISEP) guidance – there are circumstances in this development where effects would apply across Very High Sensitivity land (Grades 1 and 2) combined with a Medium magnitude of Impact (permanent losses between 5 and 20 ha, where siting BESS, solar stations etc) results in Major adverse effects, which are not recorded in this table. Should any re-grading be deemed necessary (to address the Council's concerns on the ALC survey results) then this may have the effect of categorising more land as BMV, with further implications on the significance of effects.

(iii) Commentary on productivity, economic output and related socio-economic issues

15.32 As referred to previously, agriculture and its supporting infrastructure make Lincolnshire a powerhouse in England's food supply chain. This position means that the sector plays a major role in the day-to-day life and prosperity of a significant proportion of the county's population. Disproportionate impacts on agribusiness arising from this development are likely to have a disproportionate impact on England's agricultural economy.

15.33 The current and historical use of the land proposed to be occupied by the scheme has not been described in great detail, other than it is '*currently used to grow arable crops*'. RAC highlight in their report that this deficiency means that the ES cannot assess the economic contribution of crops grown in the scheme area to individual farm businesses affected, or the impact of the loss of production (through the removal of the land for agricultural purposes) on the local or regional economies. Furthermore, the lack of data on land use and cropping also renders it impossible to undertake any valid assessment of the cumulative impact of the proposal.

15.34 In the absence of any cropping details for the scheme area, RAC have put together an estimate of typical cropping for the immediate area using cropping date from the Rural Payment Agency's Crop Map of England (CROME) for years 2021 – 2025. This shows that cropping of the area is mixed, comprising a range of crops including cereals, cover crops, peas and beans, oilseeds, maize, sugar beet, potatoes, onions and brassicas. Based on this, the potential agricultural output achievable from this range and area of cropping across 1,064ha of proposed development area is estimated to be between £1,431,000 and £1,904,000 annually, equivalent to a per hectare average annual output of between £1,345 and £1,789. Over the minimum 40 year lifespan of the development, this equates to somewhere between £57.24 million and £76.16 million lost to the local economy, excluding any added value within the supply chain.

15.35 When compared to the rest of the county, where average annual economic output per hectare is between £1,096 and £1,459, the economic output per hectare attributable to agriculture on the proposed development area is about 23% greater than that averaged across the county. These estimates of economic output, and in particular the heightened difference in productivity for this part of Lincolnshire where there is higher likelihood of BMV, have not been taken into account in the ES.

15.36 In terms of socio-economic impacts, the report from RAC highlights that social impacts such as employment, including indirect impacts on associated agricultural businesses such as machinery dealers, seed and fertiliser merchants, transport, packing and processing, cannot reasonably be estimated without detailed knowledge of the business(es). In this regard, and in the absence of specific details, Chapter 14 of the ES (Socio-Economics and Land Use) [APP-065] fails to

take fully into account guidance on the essential components of Environmental Assessments and Reports as referred to the guidance issued by the Institute of Sustainability and Environmental Professionals (ISEP).

15.37 The Applicant's assessment of impacts on temporary and permanent elements of agricultural business is questioned since the ES fails to take into account the nature and extent of affected holdings and the impacts each business will experience, including the cropping and rotational areas that will be lost. Similarly, the ES fails to take into account any impact on employment caused by the withdrawal of the land from production or the knock-on impacts any losses may have on local services such as shops, schools and tradesmen.

15.38 In summary, the removal of a significant area of land from agricultural production arising from the development is likely to have impacts extending well beyond the farm boundary. The well-developed inter-relationships between land and communities in Lincolnshire is complex and extensive, and understanding the impact of removal of land from production requires close consultation with affected farm businesses. In the Council's view the ES fails to examine these impacts in any meaningful way and therefore this undermines the ability to take into account the economic and other benefits of that land, as is required by national policy as set out in NPS EN-1 and EN-3 when assessing such proposals.

Other matters (Cumulative effects; potential grazing; drainage and irrigation; Outline Soil Management Plan; soil health)

15.39 The Applicant's assessment of cumulative impacts on agricultural land in relation to agriculture and soils is included at section 5.11 of ES Chapter 5 [APP-056]. Table 5-17 sets out a list of other solar schemes in Lincolnshire that have been considered as part of that assessment, which appears to be comprehensive. In their analysis, the Applicant states that cumulative solar schemes will account for approximately 3% of all agricultural land within Lincolnshire, with above ground infrastructure accounting for approximately 2.3%. These figures broadly compare to those used by the Council in assessment of previous NSIP proposals. The Applicant estimates that around 1.1% of BMV land would be used 'temporarily' and 0.02% of BMV land permanently used across those identified projects. They argue that these figures represent a small proportion of agricultural and BMV land in the County and therefore cumulative effects are assessed as not significant.

15.40 As with the other NSIP solar schemes that have been proposed in Lincolnshire, the Council continues to challenge the use of the word 'temporary' to developments of this nature spanning at least 40 years (with some of those other NSIP schemes spanning 60 years), particularly where the direct impact is the removal of land from existing agricultural systems, with consequential knock-on socio-economic impacts as described in this section.

15.41 Furthermore, the Council would disagree with the statement that the cumulative effects are not significant. If reference is made again to DESNZ Renewable Energy

Planning Database, they clearly show a disproportionate and rapid growth in energy infrastructure in the county compared to the rest of the country, with the areas of planning permissions and consents rising by 19.5%, compared with 13% nationally. Over the same period, Lincolnshire accounts for roughly 29% of all new nationally granted solar area, despite only having approximately 5% of UK agricultural land. This situation is compounded by the fact that much of the affected land is high quality BMV.

15.42 In the context of a national policy direction that is intended to preferentially locate such developments on brownfield, contaminated or industrial land, or, if it has to be located on agricultural land, then lower quality land, the cumulative effects of these projects on agricultural land is considered by the Council to be significant, with those impacts extending to the wider agricultural economic base of the county. It is notable that the ES also fails to assess any cumulative effects relating to the use of land and its productivity, specifically in terms of its contribution to the local and regional economies.

15.43 If Lincolnshire is cumulatively contributing around 3% of its agricultural land to solar projects, then this is, proportionately, significantly higher than that identified in the LUF, which estimates that the approximate area of agricultural land to be used for solar and wind energy by 2035 will be about 1% (or 1.8% of its Utilised Agricultural Area) in England.

15.44 The ES suggests that grazing by sheep could maintain agricultural production. It is noteworthy that sheep cannot graze on weeds arising from cessation of intensive arable production therefore the land would have to be purposely sown with grassland before construction with enough time for proper establishment to provide resilience to traffic between arrays. This is a complication not considered as part of the assessment.

15.45 Land drainage is a key factor in assessing both land classification and the impact on land restoration. This is particularly important along any cable or grid connection route, where trenches are dug, or even where soils are stripped even temporarily, where there is the possibility that important below-ground land drainage infrastructure could be adversely impacted, having a significant effect on agricultural operations. Drainage and other existing underground infrastructure are critical elements of effective agricultural land management in the Fens, most of which have cover of around 0.75m. The ES does not fully account for the possible disruption of this infrastructure during installation and decommissioning. Whilst there is reference to maintaining field drainage functionality in the oCEMP[APP-275], the commitment to maintaining or reinstating existing drainage infrastructure is caveated by the use of the words '*as far as reasonably practicable*'. Given the importance of drainage in this area then this needs to be strengthened to ensure existing drainage systems are not compromised in any way whatsoever as a result of the development at all stages. On a related matter, the Council notes that the Environment Agency has raised concerns in their Relevant

Representation [RR-047] over the need to include a maintenance schedule for field drainage systems, which we would support.

15.46 Also, land that currently benefits from irrigation is not identified. Irrigation enables the full versatility of land to be utilised including the production of high value crops such as potatoes, sugar beet and brassicas. Any extended interruption to the use of an irrigation abstraction licence is likely to result in that licence being revoked permanently, and unlikely to be re-issued at decommissioning, thereby limiting the use of land post-development to crops not reliant on irrigation. This means land currently benefitting from irrigation will be less productive on decommissioning compared to the existing situation. This is a factor that does not appear to have been accounted for in the assessment of likely permanent impacts.

15.47 An Outline Soil Management Plan (oSMP) has been provided by the Applicant. It is largely generic in nature. The baseline soils data used in the oSMP are based on the ALC survey presented with the application, the results from which are questioned by RAC in their report. Detailed surveys of soil type, structure and health should be carried out to form a robust baseline, against which restoration and aftercare can be assessed, to accurately inform the final Soil Management Plan (SMP).

15.48 The oSMP states that land restoration after decommissioning will aim to restore all agricultural land without diminution of original ALC grades, but this statement is undermined given that there is a lack of confidence in the results and mapping from the ALC survey itself. Other deficiencies in the oSMP include a failure to include any details on nature and duration of aftercare, omission to consider mass balance of soil types stripped from area of temporary landtake and appropriate storage in the consideration of soil movement and storage from construction through operation, to decommissioning.

15.49 The scheme is defined as temporary, and the ES fails to include any assessment of any changes that are likely to be experienced during the life of the development. For example, no evidence is provided in terms of potential changes in the soil health of land taken out of production and subject to reduced solar inputs for an extended period. In its current form, there is no proposal for the establishment of any baseline condition assessments of soil health in order that any future changes can be assessed at a later stage.

15.50 Whilst there is some evidence that short term fallowing if intensively farmed arable land has a generally positive effect on soil health, there is little research into the long-term removal of highly productive land from agriculture. RAC's report (paragraph 59) refers to a long-term experiment at Rothamsted's Research station and potential reductions in soil carbon, nitrogen and soil structure over 50 years of bare-fallow management. There are also uncertainties regarding the effects of permanent shade and differential wetting on plant communities and soil structure and health beneath solar PV panels. In the absence of definitive

evidence of long-term solar PV placement being beneficial to these high-quality soils, it is reasonable to seek to retain them for agricultural production.

Conclusion

15.51 In summary, should the development go ahead, there would be a significant loss of BMV land, with consequential negative impacts on economic and other benefits. The vast majority of the site area is currently productive, high-quality farmland, which would be removed from mainly arable farming for at least 40 years, and replaced with, at best, a lower intensity grass-based system. The loss of arable production is considered locally significant and in view of other projects in the wider district and county, potentially cumulative significant adverse effects may arise. When reference is made to the LUF, which suggests that about 1% of land nationally (and about 1.8% of its Utilised Agricultural Area) will be used for solar and wind energy by 2035 (equivalent to 155,000 ha), it is the Council's view that the county of Lincolnshire, which has more agricultural output than any other county, has already met its committed relative proportion of solar development through successive NSIP-scale and other applications of this nature and is therefore disproportionately contributing to this national objective.

15.52 At such a critical time in the delivery of solar energy, the Council considers it imperative that proposals should be fully justified in terms of the prevailing policy environment in respect of BMV. In this case, the Council considers that there are serious reservations over the ALC grading submitted in support of the application, particularly the mapping of almost half the land as grade 3b (non-BMV). In the absence of robust evidence to substantiate the grading applied to these areas and no clear explanation as to why the Applicant's survey results differ so significantly from the many separate sources that indicate to the contrary, it is the Council's view that a precautionary approach needs to be taken in respect of the extent of BMV land within the site area. On applying the Rochdale Envelope approach, as the Applicant has done with the grid connection corridor (relying on the various provisional maps which indicate grades 1 and 2), the Council considers that all the land falling within the site should be viewed as BMV, unless and until such time that firm evidence is provided to the contrary.

15.53 Notwithstanding the Councils significant concerns with the survey and grading, on the basis of the ALC results submitted there has been little attempt to avoid the use of BMV land and a failure to justify any exception for its use, as well as a failure to take account of and assess the economic or other benefits of the BMV land. In conclusion, the impact of the development on BMV and soil resources is contrary to national policies NPS EN-1 and EN-3 and Local Plan policies.

15.54 On this basis, the Council concludes that the proposal would have a **negative** impact on soils, agriculture and land use.

16 Socio-economics

16.1 **Key Policies:**

- SELLP Policy 9 – Promoting a Stronger Visitor Economy
- SELLP Policy 32 – Community, Health and Wellbeing

16.2 NPS EN-1 section 5.13 deals with the socio-economic effects of major energy infrastructure and requires applications to include an assessment of relevant impacts including:

- The creation of jobs and training opportunities.
- The provision of additional local services and improvements to local infrastructure, including the provision of educational and visitor facilities;
- Effects on tourism
- The impact of a changing influx of workers during the different construction, operation, and decommissioning phases of the energy infrastructure.
- Cumulative effects.

16.3 NPS EN-1 makes reference to a list of potential impacts to consider which mirror those set out above, with an additional reference to the contribution to low carbon industries. It also refers to the need for the SoS to require the approval of an employment and skills plan.

16.4 The following comments are based on the ES Chapter 14: Socio-Economics and Land Use [APP-065].

Temporary Workforce

16.5 The ES estimates that during construction that an average of 184 workers would be on site, of which approximately 110 would be from outside the area and require temporary accommodation. These numbers are significantly lower than the estimates provided by other solar projects within Lincolnshire. Although peak figures are quoted later as being at worst case 855 workers, with approximately 470 requiring accommodation. This figure is significantly above the average, and is highly likely to impact upon that availability of overnight accommodation, and also the highway as the application site is located in a particularly rural area where the road network is single carriageway. The A16, A17 and A47, the nearest Key Highway Network and Strategic Highway Network routes are also main freight routes serving the agricultural and food production & processing industries.

16.6 While the impact on tourist accommodation is considered (and it is noted that the intention is to direct overnight accommodation to large establishments), the impact of getting workers from accommodation to site needs further consideration. It is likely that, given the intention to focus accommodation in large establishments with 50+ rooms, this will result in the majority of workers being

accommodated in Spalding or Peterborough and having to travel to site which is in a location where public transport is very limited.

16.7 While it is appreciated that the 60-minute drive time that is used to identify the travel to work area (paragraph 14.4.3) will have been established using a standard method, this should be used with caution. As raised in respect of other NSIPs, within Lincolnshire, a 60-minute travel time covers a smaller area than would perhaps normally be expected. This then impacts upon other assumptions around workforce movements and accommodation availability. As already stated, the Lincolnshire highway network is made up of predominantly single carriageway roads with a slower average travel speed, and a high proportion of slow-moving freight and farm traffic. The 60-minute travel time is, therefore, nearer to 35-40 miles than the 50 miles that appears to be assumed. This is especially the case during the AM and PM peaks. This smaller travel to work area will impact the amount of overnight accommodation for the temporary workforce and thus compound our concerns regarding capacity of accommodation and potential impacts that may arise due to a shortage of overnight accommodation for tourists wishing to stay overnight. Research undertaken for other NSIP projects (Fosse Green) identifies that January, February and March are the months with the highest capacity to accommodate the temporary workforce. The other months of the year do not. While the study area varies for each NSIP, given the degree of overlap of the 60-minute travel to work areas, we do not consider that the overall picture of accommodation availability would be any different for this application.

Visitor Attractions and Recreational Facilities

16.8 While in general the Council agree with the expected impacts set out in paragraphs 14.8.25 - 14.8.31, we do have concerns regarding the impact (both real and perceived) of Lincolnshire as a tourist destination and somewhere to visit. The proposed Weston Marsh substation that this application is proposed to connect to will also (assuming approvals are given) have overhead pylons connecting into and out as a part of the National Grid Grimsby to Walpole scheme. As a result of these projects, there will be a significant increase in pylons and overhead cables in and around Weston Marsh. In particular, our concerns relate to impacts on Springfields Gardens and the Baytree Garden Centre and Owl Centre, where visitors would have direct views of these new pylons and cables, especially from the A16 which is also elevated as it passes close to the Weston Marsh site.

Visitor Economy and Economic Impact

16.9 The Council is extremely concerned about the potential visual degradation of the countryside and the consequent impact on the visitor economy which is worth £2.9bn to Lincolnshire. Visitors come to Lincolnshire for its rurality and unspoilt countryside, our landscape, visitor economy attractions and places of interest. Overall, the proposals are an industrialisation of that countryside and will negatively affect our visitor offer and economic vibrancy and change the visual

impact/beauty of the area. The Council has significant concerns regarding the impacts of solar developments and their associated infrastructure on the public perception of Lincolnshire. In particular, the Fens offer long, uninterrupted views which would be disrupted by developments such as the one proposed here. The impacts of views and the landscape are commented on later in these comments.

Cumulative Impacts

16.10 Lincolnshire is experiencing a significant number of NSIP proposals, with in excess of 20 schemes at various stages of the DCO process. This is not to mention the dozens of TCPA applications in Lincolnshire for major energy infrastructure. The effects of this potentially significant industrialisation and its local environmental, landscape, historic, and community impacts must be carefully assessed. The impact on the county's perception by visitors and tourists as well as residents and businesses is material to the government's decision and must be considered.

16.11 The list of schemes at Appendix 4-1 is noted, however, it is recommended that for the purposes of impacts on temporary worker accommodation all NSIPS are considered, not just solar and electrical infrastructure schemes. Any NSIP where their identified 60-minute travel to work area overlaps with the travel to work area for this scheme should be considered, as there is the potential for overlapping accommodation requirements. In particular, the Springwell Solar Project should be included within the listed schemes. As discussed with other schemes, there is likely to be significant demand for and pressure on overnight accommodation, to the point that there is a serious potential for demand to exceed capacity at times.

16.12 The cumulative impacts of schemes on the Weston Marsh area also needs to be fully considered. The number of schemes that are to feed into and out of the proposed substation will result in a high number of overhead cables in the area that will be highly visible from the A16 and A151. These are main routes to attractions in the area, that include Springfields and Baytree Garden Centre and Owl Centre. The inter-cumulative impacts of these proposals do not appear to be sufficiently analysed or mitigated in this or, potentially, other applications of this type, even when utilising the Government guidance within 'Nationally Significant Infrastructure Projects: Advice on Cumulative Effects Assessment'. Which encourages Applicants to use GIS software to adequately identify other developments; not to limit themselves and their search in terms of the type of proposed NSIPs and to properly consider the nature and capacity of the receiving environment.

Employment and Skills

16.13 As the scheme progresses and, should it be successful in its DCO application, efforts to maximise local employment should be taken. The Council acknowledge the reference in paragraph 14.9.2 to the Outline Skills, Supply Chain and Employment Plan. We recommend ongoing dialogue with local skills providers,

both public and voluntary sector providers. These may include Lincoln College, Boston College and the LCC Employment and Skills team. The upskilling of local residents, either through retraining, or apprenticeships will help ensure that the right skills are available for the proposed development, while also providing long term benefits to the area though a higher skilled workforce.

16.14 The Applicant should consider an approach that prepares the local labour market for the forthcoming opportunities. This could include:

- Local provider engagement at an early opportunity.
- Sector development support, to allow local supply chain to prepare existing workforce, and build and encourage opportunities to grow the workforce.
- Bespoke activity that encourages our evidenced 'hard to reach' and opportunity potential workforce (over 50's, retired military etc) to access new skills and jobs.
- Raising aspirations within the local communities: Evidence shows that low aspirations in the communities is a key blocker to accessing employment. Such an intense, high profile project can help raise aspirations in local communities by supporting local incentives and schemes. This will support the project by unblocking barriers to local people accessing employment. This will need to be funded activity by the developer.

16.15 The Council welcomes the inclusion of requirement 20 in the draft DCO for submission and approval of a skills, supply chain and employment plan (SSCEP), which must be substantially in accordance with the framework (sic) skills, supply chain and employment plan [APP-283 – Outline Skills, Supply Chain and Employment Plan]. Given that skills and employment generation are relied upon as a key benefit from the scheme, as referred to in section 4.3 of the Planning Statement [APP-260], the Council would also recommend that an annual funding contribution of £50,000 (index linked) is provided for the lifetime of the development, to provide a funding mechanism by which the objectives of the SSCEP can delivered, through assisting in its implementation and supporting the initiatives identified. In Lincolnshire a similar contribution has been provided by way of a section 106 agreement in relation to the Heckington Fen Solar Farm and the Springwell Solar farm developments.

Local Electricity Distribution

16.16 Whilst it is understood that the proposed development connects into the transmission network, comments on the local electricity distribution network constraint have previously been provided to enhance understanding of the local energy context and potential barriers to growth. It is welcomed that, if consented, the Applicant will provide a sum of money per MW in line with the guidance,

which will benefit the wider community, and we look forward to hearing more about this in due course.

16.17 While National Grid substations near Spalding are currently displaying distribution capacity[15], three other substations within South Holland are displaying increasing capacity constraints when other contracted proposals are taken into account.

16.18 Further shortage of energy supply may restrict existing and potential businesses from achieving their potential growth and may limit, and impact on, the decarbonisation of these businesses. It will also be necessary to manage the narrative around the proposal in respect of this being an energy generation scheme, while nearby substations are increasingly capacity constrained.

Accessibility

16.19 The DCO application should consider how employment can be made accessible (in terms of travel) for local people to be able to access employment. The Council suggest the following mitigating factors:

- Funded travel to work schemes – LCC are able to help scope and identify suitable projects in the study area.
- Engagement and partnership with local transport providers
- Support for local people to access private transport at reduced cost, where the above solutions are not possible (last resort).
- Where possible, these transport schemes should encourage use of a low carbon vehicle and ensure there is provision for EV charging at the site to encourage use of EVs for the journey to work.

Socio-Economic Tourism Implications

16.20 The ES (Chapter 14) concludes that tourism impacts are "low adverse and not significant", based on narrow criteria such as land-use effects and accommodation capacity.

16.21 These criteria overlook the cumulative visual transformation of a landscape valued for openness and big skies, visitor perception and destination appeal, the reliance of local businesses on rural character and the area's attractiveness to inward investment. The identification of 15 tourism sites within 500 m of the development underscores the economic importance of landscape quality.

16.22 Tourism, recreation, and rural quality of life in South Holland are already fragile. Cumulative industrialisation risks undermining visitor appeal, community

[15] www.nationalgrid.co.uk/network-opportunity-map

wellbeing, business viability and future investment. This is a tangible socio-economic risk.

16.23 On balance therefore, the Council considers the socio-economic impacts associated with the development to be **negative**.

17 Human Health

17.1 Regulation 5(2)(a) of The Infrastructure Planning (EIA) Regulations (2017) states that the EIA must identify, describe and assess in an appropriate manner, in light of each individual case, the direct and indirect significant effects of the proposed development on population and human health. Schedule 4 of the EIA Regulations sets out information for inclusion in ES, with paragraph 5 requiring a description of the likely significant effects on the environment resulting from *inter alia* …(d) risks to human health, cultural heritage or the environment (for example due to accidents or disasters).

17.2 In section 4 (Assessment Principles) of NPS EN-1, in consideration of weighing impacts and benefits, paragraph 4.1.7 states that where the SoS considers that there would still be residual adverse effects after the implementation of mitigation measures, they should be weighed against the benefits of the proposed development. For projects which qualify as CNP infrastructure, it is likely that the need case will outweigh the residual effects in all but the most exceptional cases. This presumption, however, does not apply to residual impacts which present an unacceptable risk to, or interference with, human health and public safety, defence, irreplaceable habitats. This approach is repeated at paragraph 4.2.28, in describing the approach to be taken for non HRA residual impacts of CNP infrastructure.

17.3 Paragraph 4.2.29 goes on to state that '*As a result, the SoS will take as the starting point for decision-making that such infrastructure is to be treated as if it has met any tests which are set out within the NPS's or any other planning policy, which requires a clear outweighing of harm, exceptionality, or very special circumstances*.

17.4 Paragraph 4.4.1 of NPS EN-1 states that '*Energy infrastructure has the potential to impact on the health and well-being ("health") of the population. Access to energy is clearly beneficial to society and to our health as a whole. However, the construction of energy infrastructure and the production, distribution and use of energy may have negative impacts on some people's health*'.

17.5 **Local Policies:**

- SELLP Policy 30: Pollution
- SELLP Policy 32: Community, Health and Well-being

17.6 SELLP Policy 32 requires development proposals to contribute to the creation of socially-cohesive and inclusive communities; reducing health inequalities; and

improving the community's health and well-being. To this end, development will not be permitted unless it (where possible and appropriate) protects and enhances existing PRoW, and creates new links to the rights of way network (part 1).

17.7 SELLP Policy 30 stipulates that development proposals will not be permitted where, taking account of any proposed mitigation measures they would lead to unacceptable adverse impacts upon: health and safety of the public; the amenities of the area; or the natural, historic and built environment; by way of: air quality, including fumes and odour; noise including vibration; light levels; land quality and condition; or surface and groundwater quality.

17.8 The Applicant's assessment of the impact of the proposal on human health is set out in ES Chapter 10 [APP-061]. The assessment considers the impacts during the construction, operational and decommissioning phases of the development and covers impacts associated with air quality, dust, and odour, electromagnetic fields (EMF), employment and training, landscape and visual, noise and vibration, access to PRoW and active travel, traffic and access, social infrastructure, mental health and cumulative effects. The greatest impacts are identified during the construction phase and are assessed as ranging from minor beneficial (not significant) to minor adverse (not significant).

17.9 In respect of EMF effects the Applicant's position is that during construction and prior to energisation, transmission equipment would not produce any significant EMFs. Therefore, construction effects are not considered further in the assessment.

17.10 Operational phase effects of the scheme also range from minor beneficial (not significant) to minor adverse (not significant). EMF effects are considered in the assessment of operational effects and it is concluded that there would be no effect. The decommissioning phase would involve similar types of activities to the construction phase and therefore it is expected that the effects on human health would be comparable.

17.11 The information on human health contained in the application has been reviewed by LCC public health in its statutory role to protect and improve population health and reduce health inequalities. These comments build on previous public health responses submitted at the EIA Scoping and Statutory Consultation (PEIR) stages and consider the likely impacts of the proposed development on the health and wellbeing of the local population.

17.12 In summary, the Council recognises the long-term benefits of renewable energy generation, including its contribution to climate change mitigation and associated health benefits. However, the proposed development has the potential to result in localised adverse impacts on health and wellbeing, particularly in relation to:

- Construction-related impacts (noise, dust, traffic, disruption);

- Long-term mental health and wellbeing effects;
- Health inequalities, particularly among rural and vulnerable populations;
- Uncertainty regarding EMF exposure; and
- Limited clarity on health-enhancing opportunities and community benefit.

These impacts are capable of being mitigated and, in some cases enhanced, subject to strengthened assessment and secured mitigation measures.

17.13 **Health Context**

The development spans multiple wards with varying demographic and socio-economic characteristics. Key local health considerations include:

- Existing health inequalities across Lincolnshire, particularly within rural and agricultural communities;

- Higher prevalence of chronic conditions, including cardiovascular and respiratory disease; and

- Population groups that may be more vulnerable to impacts, including older people, those with long-term conditions and agricultural workers and rural communities.

17.14 The Lincolnshire Joint Health and Wellbeing Strategy[16] identifies priorities including mental health and wellbeing, healthy weight and physical activity. Changes to the environment and landscape associated with the scheme may disproportionately affect these populations, and this requires thorough assessment.

17.15 **Approach to Human Health Assessment**

The inclusion of a dedicated Human Health chapter within the ES is welcomed. However, the assessment would be strengthened by adopting a more explicit Health Impact Assessment (HIA) approach, including the consideration of direct, indirect, and cumulative impacts, greater emphasis on mental health and wellbeing and the consideration of health inequalities and vulnerable groups.

17.16 **Construction Phase Impacts**

The construction phase has the potential to impact local communities through air quality impacts (particularly dust and particulate matter), noise and vibration, increased traffic movements affecting safety and amenity and disruption to local communities potentially resulting in short-term mental wellbeing impacts.

[16] https://www.lincolnshire.gov.uk/directory-record/63751/joint-health-and-wellbeing-strategy

17.17 Without effective mitigation, these impacts could negatively affect nearby residents, particularly sensitive receptors. The implementation of a robust CEMP, controls on noise, dust, and working hours and measures to minimise impacts on sensitive and vulnerable populations, could support the reduction of the overall impacts of the construction phase.

17.18 **Operational Phase Impacts**

While operational impacts on physical health are likely to be limited, there are potential long-term impacts on mental health and wellbeing, including living in proximity to large-scale infrastructure, loss of open views and changes to landscape character, potential sense of enclosure, long-term perception of environmental change. In addition, there is potential for cumulative impacts alongside other infrastructure developments in the area.

17.19 These factors may adversely affect wellbeing over the lifetime of the scheme and are not currently fully explored. The Council recommend further assessment of long-term and cumulative mental wellbeing impacts and the identification of appropriate mitigation and enhancement measures.

17.20 **Landscape, Green Infrastructure and Health Opportunities**

The scheme presents opportunities to deliver health benefits, including the enhancement of green infrastructure, opportunities to PRoW and promotion of active travel and physical activity. While some measures are proposed, the potential to maximise these benefits is not fully realised.

17.21 Strengthening the proposals to enhance access to green space, improve connectivity and accessibility and support community use where appropriate would support the health and wellbeing of local communities. Early implementation of landscaping and habitat creation is strongly encouraged to maximise both mitigation and health benefits.

17.22 **Electromagnetic Fields**

The current assumption that EMF impacts are not significant is not sufficiently justified. Potential exposure, particularly from grid connection infrastructure and overlapping sources, has not been fully assessed. Provision of a full EMF assessment, clear demonstration of compliance with International Commission on Non-Ionising Radiation Protection (ICNIRP) guidelines, consideration of cumulative exposure and the exploration of measures to minimise exposure (e.g. underground cabling) would support the assessment of EMF and the perceived negative effects on local communities.

17.23 **Health Inequalities**

The development has the potential to disproportionately affect certain groups, including rural populations and those with existing health vulnerabilities. Without explicit consideration, the development may contribute to widening health inequalities. Assessment of distributional impacts and identification and implementation of targeted mitigation measures would be welcomed.

17.24 **Community Benefit and Fuel Poverty**

There is an opportunity to deliver meaningful community benefits including contribution to addressing fuel poverty and wider benefits to local health and wellbeing. Exploration of direct benefits to affected communities and consideration of a Community Fund aligned with local needs is recommended.

17.25 **Conclusion**

The proposed development has the potential to adversely impact mental health and wellbeing, health inequalities and local community amenity. Therefore, the Council considers the impacts associated with matters on Human Health to be **negative**. However, these impacts are capable of being mitigated and enhanced through strengthened health assessment (including HIA principles), clear, enforceable mitigation and the maximisation of opportunities to improve health and wellbeing.

18 Minerals and Waste

Minerals

18.1 Paragraph 5.11.19 of NPS EN-1 states that *'Applicants should safeguard any mineral resources on the proposed site as far as possible, taking into account the long-term potential of the land use after any future decommissioning has taken place*'.

18.2 The NPPF paragraph 222 emphasises the importance of a sufficient supply of minerals to provide infrastructure, building, energy and goods that the country needs. It goes on to say at paragraph 223 (c) that planning policies should safeguard mineral resources by defining MSAs and Mineral Consultation Areas (MCAs); and adopt appropriate policies so that known locations of specific minerals resources of local and national importance are not sterilised by non-mineral development where this should be avoided (whilst not creating a presumption that the resources defined will be worked). Part (d) of the same paragraph refers to policies also being designed to encourage the prior extraction of minerals, where practical and environmentally feasible, if it is necessary for non-mineral development to take place. Further policy on safeguarding existing, planned and potential sites for mineral processing, manufacture and distribution facilities in paragraph 223 (part (e)). Paragraph 225 states that local planning

authorities should not normally permit other development proposals in Mineral Safeguarding Areas if it might constrain potential future use for mineral working.

18.3 **Local Policies:**

- SELLP Policy 2: Development Management
- LMWLP Policy M11: Safeguarding of Mineral Resources

18.4 SELLP Policy 2 (development Management) permits development provided that sustainable development considerations are met and specifically references "impact on the potential loss of sand and gravel mineral resources"

18.5 LMWLP Policy M11 (Safeguarding of Mineral Resources) requires proposals for development within a MSA to be accompanied by a Minerals Assessment and will only be granted where it can be demonstrated that it would not sterilise a mineral resource.

18.6 Where this is not the case then proposals will be granted planning permission only where they can demonstrate compliance with one or more of a range of criteria. These include:

(i) demonstrating to the Mineral Planning Authority that prior extraction would be impractical and that the development could not be reasonably sited elsewhere; or

(ii) where the incompatible development is of a temporary nature and can be completed and the site restored to a condition that does not inhibit future extraction; or

(iii) if there is an overriding need for the development to meet local economic needs and the development could not be reasonably sited elsewhere; or

(iv) the development is of a minor nature with negligible impact with respect to sterilising the mineral resource; or

(v) the development is, or forms part of, an allocation in the Development Plan.

18.7 The Applicant has provided a Minerals Safeguarding Assessment (MSA) at Appendix F of the Planning Statement [APP-266]. As stated in the Councils Relevant Representation [RR-111] the MSA identifies that the proposed site intersects with parts of the MSAs in the Lincolnshire Minerals and Waste Local Plan (LMWLP) for sand and gravel. The area of intersection is relatively small, occupying the southwest corner of solar development area A, to the west of Lodge Farm. The Council has reviewed the Applicant's MSA and has no further comments to those made in its Relevant Representation [RR-111] and is satisfied that the proposals would comply with the safeguarding policies in the LMWLP and SELLP set out above. Therefore, the Council does not object to the proposals on

minerals or waste safeguarding grounds. No part of the site intersects or encompasses any existing or allocated minerals or waste sites.

Waste

18.8 NPS EN-1 states at paragraph 5.15.4 that '*All large infrastructure projects are likely to generate hazardous and non-hazardous waste. The EA's Environmental Permitting regime incorporates operational waste management requirements for certain activities. When an applicant applies to the EA for an Environmental Permit, the EA will require the application to demonstrate that processes are in place to meet all relevant Environmental Permitting requirements*'.

18.9 Paragraphs 5.15.13 and 5.15.14 of NPS EN-1 outline that during decision making consideration should be given to the extent the Applicant has proposed an effective system for managing hazardous and non-hazardous waste arising from the construction, operation and decommissioning of the proposed development. Waste should be properly managed, both on-site and off-site and the SoS should be satisfied that the waste can be dealt with appropriately by the waste infrastructure which is, or is likely to be, available. Waste arisings should not have an adverse effect on the capacity of existing waste management facilities to deal with other waste arisings in the area, and steps should be taken to minimise the volume of waste arisings.

18.10 **Local Policies:**

- SELLP Policy 2: Development Management
- LMWLP Policy W1: Future requirements for waste facilities

18.11 Policy W1 of the LMWLP states that the county will, through the site locations document, identify locations for a range of new or extended waste management facilities within Lincolnshire to meet predicted capacity gaps. SELLP Policy 2 criterion 3 seeks to ensure that development would not be wasteful in its use of energy or in its depletion of natural resources.

18.12 The Council have reviewed the application in terms of waste matters, including the assessment of waste in ES Chapter 16 Other Environmental Topics [APP-067] and also the outline Site Waste Management Plan (oSWMP) [APP-285]. Waste management is also referenced in the construction, operational and decommissioning management plans.

18.13 Section 16.6 of APP-067 assesses whether the construction, operation and decommissioning of the Meridian Solar Farm Project would place a significant burden on waste management infrastructure and landfill capacity. The assessment considers general office and welfare, vehicle maintenance, packaging, other construction, solar PV panels, BESS and supporting infrastructure waste streams, including hazardous types of waste.

18.14 In relation to component replacement, the assessment assumes a solar PV panel failure rate of 0.2% (assumed to be an annual rate although not explicitly stated). It also assumes that all panels would be replaced once during the scheme's operational life. Additionally, the BESS may require replacement up to three times. The assessment concludes that, provided appropriate waste management plans are implemented and recycling commitments are adhered to, waste generated during all phases of the development would not give rise to any significant residual effects.

18.15 Section 16.6 of APP-067 also assesses the cumulative effects with other large scale solar developments in Lincolnshire which have the potential to be decommissioned around the same period. The assessment considers two recovery scenarios: a "realistic worst case" (70% recovery rate) and an "absolute worst case" (100% waste to landfill), the impacts of both scenarios are assessed as not significant. Cumulative impacts for the construction and operational stages have not been assessed. The Applicant states at paragraph 16.6.102 that the focus of the assessment has been on decommissioning as this is when the expected peak of waste generation would be. Operational waste is not expected to be concurrent for all schemes, the Applicant considers it would be unlikely that all schemes would replace equipment at the same time.

18.16 The Council welcome the assessment and various references to the waste hierarchy and proximity principle throughout the application documents. The Council provided comments in its Relevant Representation [RR-111] and anticipate that further information will be submitted to address and clarify the points raised. The Council will provide updated comments when more information becomes available during the examination and through the SoCG.

18.17 Following further scrutiny of the assessment, the Council additionally queries the following aspects of the cumulative assessment:

- The 'total waste from cumulative schemes (tonnes)' set out in the first row of table 16.31: Cumulative Waste Assessment does not match the total figures at the bottom of table 16.30: Cumulative developments for waste assessment. For example, total PV panel waste is stated as 386,965 tonnes in 16.30, however in table 16.31 it is stated as 77,393 tonnes. This therefore affects subsequent figures. Consequently, the corresponding m^3 calculation, magnitude of impact and significance of effect may also be underestimated.

- The Council is also aware of a further NSIP scale solar development in Lincolnshire, Windsock Solar, that has now commenced its pre application engagement and should be included in the assessment.

18.18 The Council's own estimate of the number of waste PV panels likely to arise from the decommissioning of solar developments in Lincolnshire supports the view that the cumulative assessment underestimates the scale of waste likely to be generated. It is currently estimated that approximately 16 million PV panels would require recycling and/or disposal at decommissioning alone, see Appendix iii.

Based on the Applicant's module weight of 33.6kg per module (paragraph 16.1.600) this would result in approximately 537,600 tonnes of solar PV panel waste requiring recycling and/or disposal.

18.19 Furthermore, as raised in our Relevant Representation [RR-111] the Council are concerned that the cumulative assessment has been limited to decommissioning. PV panel waste from operational failures and repowering also potentially raises a significant issue. The Council do not agree with the Applicant's reasons for excluding them from the assessment. It is considered likely that schemes with similar lifecycles (40 to 60 years) will overlap in terms of year on year operational failures and the need to repower. This would also apply to planning applications for schemes prior to 2020 that were discounted from the decommissioning assessment. Whilst failures and replacement programmes may vary and occur intermittently at individual sites, the large number of solar developments currently proposed and/or consented across Lincolnshire means that, collectively, significant volumes of waste could arise over the same period, as such the cumulative assessment should adopt a more precautionary approach. Further comments are provided in Section 19 below.

18.20 The commitment in the application documents to maximise recycling and reuse of the scheme components at the end of their life is acknowledged. Solar PV panels are recyclable and, although UK recycling capacity is currently limited, the applicant considers that high recovery rates would be achievable due to proven technology and strong economic and regulatory drivers (16.6.98).

18.21 In respect of LMWLP Policy W1, the Council is required to make provision for sites to meet future predicted capacity gaps for waste arisings. There are currently no waste facilities locally to process discarded solar infrastructure as it is replaced during the lifetime of the development and at decommissioning stage. The Council is concerned about the lack of capacity to manage this waste stream, particularly the quantity of PV panels arising cumulatively alongside other similar projects proposed in Lincolnshire and adjacent areas. This applies not only at decommissioning but also for PV panels which fail, or are routinely replaced, during construction and operation phases or as a result of weather-related impacts (note the impact of Storm Darragh on the Porth Wen Solar Farm on Anglesey). When combined with the other solar projects in the county and region, cumulatively this will potentially present a significant issue and additional facilities will be needed to ensure these waste products are sustainably disposed of.

18.22 For all phases of the development the Applicant is placing considerable reliance on the market response to demand for recycling facilities. Even if it could be assumed that the market would respond to the demand for recycling facilities, it is uncertain where the capacity would be provided. Where possible, local waste facilities should be used to reduce mileage and associated impacts but, given that they may not be available locally, transport needs to be taken into account in assessing the emissions arising from waste handling.

18.23 The Council, in its role as Waste Planning Authority, has a statutory duty to prepare a Waste Local Plan that ensures sustainable waste management within its jurisdiction. The Council must assess the existing and future generation of waste arisings over the plan period, and produce a comprehensive, long-term plan to identify sufficient opportunities to meet the identified waste management needs of the area, aiming to drive waste management up the waste hierarchy.

18.24 This involves setting strategic policies, engaging with stakeholders and the public, identifying sites and facilities where a need is identified, and aligning with national planning policy. The plan must also safeguard existing waste facilities, promote waste reduction and recycling, and support the transition to a circular economy. This process relies heavily on having a complete set of data on the likely waste streams, which we currently do not have for potential future solar waste. Whilst it may be possible for sites to be identified in the plan, it would then still fall to the market to deliver the facilities.

18.25 In relation to the draft DCO [APP-028], the commitments to produce and consult LCC on a CEMP (Requirement 12) and OEMP (Requirement 13), together with the requirement to submit a and obtain approval from LCC for the SWMP (Requirement 14) are welcomed. The commitments in the OEMP and DEMP to review and update the SWMP for each phase of the development are also welcomed. In addition, the Council would also wish to be consulted on the DEMP (Requirement 21).

18.26 The commitments in the oOEMP [APP-276] to share waste data and reporting on waste types and volumes to support regional waste planning are likewise welcomed. However, the Council considers that these commitments should be strengthened by requiring annual reporting of waste arising figures to the Waste Planning Authority together with the provision of a planned annual maintenance schedule. Similar requirements have been secured through the OEMP for the One Earth, Springwell and Tillbridge Solar DCO's.

18.27 On the basis of the above commentary, and until such time as the Applicant can provide further information regarding waste arisings and in reference to cumulative impacts, the Council consider that the development would have a **negative** impact in terms of waste. The Council would be happy to engage further with the Applicant regarding these matters, including through the SoCG.

19 Cumulative Effects

19.1 The EIA Regulations at Schedule 4 require that an ES should include "a description of the likely significant effects on the environment resulting from, inter alia, (e) the cumulation of effects with other existing and/or approved projects, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affected or the use of natural resources."

19.2 NPS EN-1 in section 4 (Assessment Principles), paragraph 4.1.5 states "In considering any proposed development, in particular when weighing its adverse impacts against its benefits, the SoS should take into account: its potential adverse impacts, including on the environment, and including any long-term and cumulative adverse impacts, as well as any measures to avoid, reduce, mitigate or compensate for any adverse impacts, following the mitigation hierarchy."

19.3 **Local Policies**:

- SELLP Policy 31: Climate Change and Renewable and Low Carbon Energy

19.4 Whilst the development plan for the area does not contain any specific stand-alone policies for the consideration of cumulative impacts, SELLP Policy 31 is of relevance for this proposal as it requires cumulative impacts to be taken into consideration when considering the acceptability of the development of renewable energy facilities.

19.5 Policy S31 outlines proposals for renewable energy facilities, including associated development, will be permitted provided individually, or cumulatively, there would be no significant harm to:

(i) visual amenity, landscape character or quality, or skyscape considerations;

(ii) residential amenity in respect of: noise, fumes, odour, vibration, shadow flicker, sunlight reflection, broadcast interference, traffic;

(iii) highway safety (including public rights of way);

(iv) agricultural land take;

(v) aviation and radar safety;

(vi) heritage assets including their setting; and

(vii) the natural environment

19.6 The Applicant's assessment of cumulative effects in the ES considers both intra-project and inter-project cumulative effects. The assessment of inter-project effects is presented within each topic chapter, as has been described in relevant sections set out above. Chapter 17: Effect Interactions of the ES [APP-068] presents the findings of the assessment of intra-project cumulative effects resulting from the scheme only, where these are not already considered within topic specific chapters of the ES.

19.7 The assessment in APP-068 considers the in-combination environmental impacts from the scheme on a single receptor, taking into account embedded design mitigation and additional mitigation where proposed. Moderate adverse effects

on receptors are identified during all phases from an interaction of visual, glint and glare, noise and vibration, air quality and traffic and transport effects on residential and community receptors. The assessment states that these effects would be short-term, temporary, transient, and not continuous throughout the construction period and are considered capable of being managed through management plans and mitigation measures.

19.8 The methodology for the assessment of cumulative effects with other developments is set out with ES Chapter 4 [APP-055] Overview of the EIA Process. In considering inter-project cumulative effects, the ES considered both a long-list and a short-list of projects. ES Appendix 4-1: List of Cumulative Schemes [APP-170] sets out the long-list of schemes considered and identifies those the schemes short-listed which are presented in ES figures 4-1 and 4-2 [APP- 086-087].

19.9 It is noted that consents older than 5 years for NSIPs and 3 years for other types of applications have been excluded from the long-list of cumulative schemes, as it has been assumed they will have either been constructed, be under construction and completed prior to the construction of the Meridian scheme starting, or the consent has expired. These time thresholds appear arbitrary as projects can experience significant delays, can take many years to complete and may also exclude projects that are still capable of being implemented. A more acceptable approach would have been to review projects individually and exclude them based on evidence that they would not overlap with the Meridian project. Notwithstanding, the Council is satisfied that the Applicant has captured the relevant NSIP's and TCPA applications highlighted by the Council within the 30km Zone of Influence (ZOI). The countywide ZOI for solar NSIP and TCPA applications for the assessment of agricultural land and waste is welcomed, subject to the inclusion of Windsock Solar, as highlighted in section 18 above.

19.10 The nature and scale of current and emerging proposals relating to large scale solar developments and other NSIP scale developments in Lincolnshire is particularly significant. At the time of writing this report 9 NSIP scale solar schemes have been granted a DCO in Lincolnshire and a further three schemes (including Meridian) are either progressing through recommendation, decision, examination or pre-application stage. In addition, the county is host to a further 11 NSIP proposals, including five great grid upgrade proposals and a new Lincolnshire reservoir. Other new NSIP proposals are currently emerging and these figures are expected to increase during 2026. The cumulative effects of the Meridian Solar scheme, in combination with other major infrastructure developments identified, could be considerable. These impacts, in particular impacts on landscape character and visual amenity, ecology, heritage, waste management (from construction, operational and decommissioning activities), socio-economic factors, traffic and the loss of BMV agricultural land have been considered in greater detail within the relevant topic-specific chapters above. The Council would also highlight that cumulative amenity impacts could occur on local communities from consecutive and protracted construction periods, not only those that overlap.

19.11 With regard to cumulative landscape and visual effects with other renewable energy and infrastructure projects across the county, these present a further concern. The clustering of a large volume of energy infrastructure around Weston Marsh, accommodating Weston Marsh substations, Grimsby to Walpole, Outer Dowsing, and Weston Marsh to East Leicestershire, as well as the proposed Meridian development, is forecast to be delivered over a prolonged period and lead to adverse cumulative impacts. The scale of other NSIP's and large-scale energy projects proposed in the wider area raises the potential for extensive alteration of the regional landscape character. The combined effect of these developments could be a marked and enduring change, both directly through a change in land use and introduction of solar as a key element, but also in the perception and experience of the landscape, particularly for visual receptors travelling through the landscape and experiencing sequential effects. This is a clear and marked change to landscape character.

19.12 Furthermore, there is recognition in Lincolnshire that the cumulative growth in energy infrastructure is contributing to a fundamental change in the character of Lincolnshire landscapes. In the Springwell Solar DCO decision the SoS recognised that the cumulative impacts of solar and related developments represent a level of impact which will no doubt be reflected in any future landscape character assessment across the region and agreed with the ExA's view that this cumulative effect constitutes a new defining land use characteristic, representing a clear and marked change to the landscape character of that area.

19.13 This is also of relevance to the assessment of the historic environment. The ES identifies a moderate adverse and significant cumulative effect on the historic landscape character of the Fens and The Wash that would arise from the presence of multiple energy and infrastructure developments in the area, as has been described in section 14 above.

19.14 As the proposal would result in the considerable loss of arable land, and therefore the potential for cumulative impacts with other developments, in particular large scale solar development, on ground nesting birds is important. Further information is required to confirm that the proposed mitigation would be adequate. As such, currently the Council do not agree with the Applicant's conclusion that there would be no significant cumulative effects on ecology.

19.15 As Waste Planning Authority, the Council is also concerned about the impact from cumulative waste arisings from solar developments and the lack of existing waste capacity. The waste arisings from these proposals combined, during the construction and operational phases as well as at decommissioning, are potentially significant.

19.16 Based on currently available data, the Council estimates that, should all solar NSIPs and TCPA schemes in Lincolnshire be consented, the cumulative number of solar panels potentially requiring recycling or disposal at the point of decommissioning could be in the region of 16 million units. While the Council

acknowledges that decommissioning is a long-term consideration, we are increasingly concerned about the ongoing annual failure rates of solar panels across these schemes. Even a modest failure rate of 0.2% would result in approximately circa 32,000 panels requiring replacement each year. It is important to note that some schemes are reporting higher annual failure rates, which could significantly increase this figure, see Appendix iii. The Applicant's cumulative assessment focuses on decommissioning waste, as has been described in section 18 above. However, the Council would wish to see consideration also given to cumulative annual failure rates and the associated waste arisings.

19.17 The Council is concerned that the cumulative socio-economic effects of the proposed development in combination with other NSIPs and major infrastructure projects, have not been adequately assessed. In particular, insufficient consideration has been given to the effects of potentially significant industrialisation on local landscape, public access, agriculture, historic and natural environment, and community. The cumulative industrialisation of the countryside also has the potential to affect the perception of the county to visitors and tourists as well as residents and businesses which is also material to the local economy. In addition, there are also significant concerns about the impacts on temporary worker accommodation as is set in section 16 above.

19.18 The Council is particularly concerned about the cumulative impact of large scale solar development on agricultural land, particularly given how important agricultural production is to the county. The cumulative loss of all agricultural land for arable production when combined with other projects across the district and county, is considered to be cumulatively significant in terms of food production and security and the residual socio-economic impact of this loss. If Lincolnshire is on course to cumulatively contribute around 3% of its agricultural land to solar projects, then arguably it is contributing disproportionately to the national objective, whereby the LUF estimates that the approximate area of agricultural land to be used for solar and wind energy by 2035 will be about 1% (or 1.8% of its Utilised Agricultural Area) in England. This effect is compounded by virtue of the fact that much of the land affected will be high quality BMV land, running contrary to policy and the LUF, which promotes more BMV land for producing food.

19.19 The potential for significant inter-projects effects to arise from this development in combination with other developments is of particular concern and as such the Council's position on cumulative impacts in the overall balance is **negative**. The Council will make further comments on the potential cumulative impact of the development with other NSIP proposals as further information on the other projects comes forward.

20 Fire Safety

20.1 Regulation 5(4) of the EIA Regulations requires that significant effects be identified, described and assessed arising from the vulnerability of the proposed development to major accidents or disasters that are relevant to the development

in question. A description of the expected significant adverse effects of the development on the environment deriving from the vulnerability of the development to risks of major accidents and/or disasters must be included in ES (Schedule 4 (8)).

20.2 EN1, EN-2 and EN-5 are silent regarding consideration of major accidents and disasters and other safety issues which may arise specifically from solar PV development and associated energy storage systems as well as electricity networks infrastructure.

20.3 The Planning Practice Guidance section on 'Renewable and low carbon energy' provides specific guidance regarding potential risks arising from BESS's, including engagement with the relevant local fire and rescue service so that its views can be taken into account regarding potential mitigations which would be put into place in the event of an incident.

20.4 The National Fire Chiefs Council guidance regarding grid scale energy storage system planning was updated in December 2025[17]. The guidance emphasises safety for both emergency responders and members of the public aiming to reduce risks associated to BESS's as low as reasonably practicable.

20.5 **Local policies:**

- SELLP Policy 30: Pollution

20.6 Policy 30 (Pollution) seeks to ensure that where any potential adverse impacts, including air quality - fumes and odour, are identified the developer will be expected to demonstrate how these will be addressed and mitigated.

20.7 There is the potential for negative effects to arise as a result of fire safety risk from this development. The potential impacts from major accidents and disasters are considered in Chapter 16 (Other Environmental Topics) of the ES [APP-067]. ES Appendix 16.3 (Long List of Major Accidents or Disasters) [APP-258] includes reference to fire or explosions, with potential receptors identified including local residents, habitats and species and ES Appendix 16.4 (Unplanned Emissions Assessment from Battery Energy Storage System) [APP-259] details the potential consequences from a thermal event occurring to the BESS. In addition, an Outline Battery Safety Management Plan (oBSMP) [APP-284] has been submitted into the examination.

20.8 The oBSMP highlights the schemes concept design was based upon a BESS system utilising a lithium battery technology, which is considered reasonable worst case scenario. The Applicant states that the oBSMP demonstrates the mitigation of the safety risks posed by the BESS and highlights that the Applicant is committed to

[17] https://nfcc.org.uk/our-services/building-safety/grid-scale-energy-storage-system-planning-guidance-for-fire-and-rescue-services/

developing a BESS which incorporates equipment that would provide optimal levels of performance and safety during its lifecycle.

20.9 The provision of a detailed BSMP would be secured via a requirement in the DCO, in consultation with Lincolnshire Fire and Rescue (LFR) and the Environment Agency. Furthermore, the detailed design of the BESS must be in accordance with the oBSMP, the Design Approach Document (DAD) [APP-268] and Design Parameters [APP-269], which contain controls over the BESS including the energy storage capacity and the battery type i.e. that the BESS would be based upon a lithium-ion battery system. This commitment is welcomed by the Council.

20.10 The DAD and design parameters aim to deliver a technically compliant scheme that is safe, secure and efficient. Through design evolution the Applicant settled on proposing a centralised BESS located at the 400kV on-site substation. The Applicant states that this would reduce the number of distributed electrical installations across the Order Limits, which would provide greater flexibility in emergency access and fire response arrangements.

20.11 In recognition of the emerging technology of BESS and the challenges this poses to Fire and Rescue Services, the National Fire Chiefs Council circulated a letter to all Chief Fire Officers on the 22 August 2023 drawing attention to the review of Renewable and Low Carbon Energy Planning Policy Guidance that was updated in August 2023 by the Department of Levelling Up, Housing and Communities to include reference to BESS[9].

20.12 This planning policy guidance encourages planning authorities to consult with their local Fire and Rescue Service as part of formal planning consultations and directs developers to the UK National Fire Chiefs Council guidance on BESS schemes. From discussion with LFR Service who have developed standing advice for BESS[18] based on national guidance, a program of monitoring and risk assessment has been identified as necessary once the BESS has been established to ensure it complies with the BMSP and Emergency Response Plan. During the first year of operation this will involve 21 days of work for the Fire Service and then two days in each subsequent year for the lifetime of the development.

20.13 The need for this monitoring and assessment will enable early engagement to ensure the required standards are being complied with; to ensure the BESS is constructed to the correct standards with support from the Fire Service; early development of emergency response plans; familiarisations of the BESS for local fire crews and overview by the Fire Service; development of on-going maintenance and updating risk information; and assurance for local residents and communities that the BESS are being independently inspected and monitored to reduce the risk of a fire. To enable the Fire and Rescue Service to undertake the necessary monitoring and engagement, the Council's Relevant Representation

[18] https://www.lincolnshire.gov.uk/business-fire-safety/bess

indicated that a financial contribution would be required via a Protective Provision within the DCO to make sure it has sufficient resources in place to facilitate this work.

20.14 With specific reference to the oBSMP, LFR have provided the following comments:

- At this stage, the oBSMP contains generic information, e.g. BESS enclosures, battery technology to be employed etc. LFR will need to be sighted on specific details as they become available, including, but not limited to spacing distances, safety measures based on battery technology and compliance with specific standards.
- The document currently provides only generic references to installation standards. More detailed design and installation standards must be provided at the appropriate stage as they become available.

- Further detail is required regarding the proposed fire suppression systems within BESS containers. This should be provided during the design phase and include system type, activation method, and performance capability.

- The information provided is currently generic regarding site access and accessibility. LFR will require detailed plans covering:

  (i) Access routes for fire appliances
  (ii) Turning facilities
  (iii) Operational working areas around plant and infrastructure

- LFR will require evidence of large-scale testing to demonstrate system performance and validate compliance with applicable safety standards.

- The OBSMP currently references the Fire Service Manual (Section 4.1.1), which is now outdated. This should be replaced with the National Operational Guidance (NOG) to ensure alignment with current UK fire and rescue service practices.

- Whilst the document provides a good overarching framework and addresses key topic areas, the level of detail is not yet sufficient. LFR strongly encourages continued engagement throughout the design phase and reserves the right to identify any elements that may not comply with current national guidance as further detail is provided.

20.15 In summary, the LFR Service remains committed to ongoing engagement throughout the examination process and wishes to have its views considered as specific elements of the fire strategy emerge. Subject to Requirement 6 (Battery Safety Management) and a firm commitment from the Applicant that a Protective Provision, to ensure the Fire Service has sufficient resources to conduct regular inspections of the BESS, will be forthcoming and secured in any DCO that may be granted, the development's impact on fire safety and pollution is currently

assessed as **neutral**. This view is made without prejudice to any further information that may be forthcoming as the Examination progresses and is subject to all mitigation measures being properly implemented and maintained throughout the project's duration should consent be granted.

21. Other topics

21.1 Paragraph 2.10.138 of NPS EN-3 also requires the SoS to ensure that the Applicant has put forward outline plans for decommissioning. An oDEMP has been submitted [APP-277]. In terms of implementation, the Applicant's Funding Statement [APP-033] states that current cost estimate of the scheme is approximately £500M to £700M, which includes development costs, construction costs, preparation costs, supervision costs, land acquisition costs, equipment purchase, installation, commissioning, power export and decommissioning. It is unclear however what the component breakdown is across the overall estimate range provided, and therefore what portion of that sum is estimated to be required for decommissioning. As raised on other NSIP-scale solar schemes, the Council is concerned that the Applicant's Funding Statement does not evidence how decommissioning would be funded, nor does it illustrate how it would deal with long-term shutdowns should they occur.

21.2 To address this, the Council recommends adding to Requirement 21 in the draft DCO to ensure funding or a bond is in place to secure the provision for decommissioning, both after a long outage and at the end of the project's life. The Council would draw the ExA's attention to two other NSIP projects where this matter has been considered:

- Helios Renewable Energy Project – The DCO[19] made 3 December 2025 includes provision (Requirement 5(3)) to require the developer to notify the Local Planning Authority that the undertaker has put in place the requisite decommissioning security no later than year 15 of operation.

- Oaklands Farm Solar Park – page 8, paragraph 4.22 of the SOS's decision letter[20] states that 'the Applicant stated a fund was not necessary since Requirement 22 of the dDCO secured decommissioning of the site, was legally enforceable, and was consistent with recent precedent. The Applicant considered its funding statement as part of the application demonstrated it had sufficient funds to construct, operate and decommission the Proposed Development.' This reinforces the Council's argument that if it is not demonstrated that decommissioning funding is suitably covered within the

[19] https://nsip-documents.planninginspectorate.gov.uk/published-documents/EN010140-001155-DCO%20as%20made%20by%20SoS.pdf

[20] https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010122/EN010122-000918-Secretary%20of%20State's%20Decision%20Letter%20-%20Oaklands%20Farm%20Solar%20Park%20-%2019.06.2025.pdf

Funding Statement, then it would be in public interest to ensure that it is covered in the draft DCO by way of an additional Requirement.

21.3 Furthermore, the Council would also highlight that the OEMP[21] for the Heckington Fen Solar scheme made provisions for extended periods of outage that covered a situation whereby the development should stop generating electricity for a continuous period of 12 months for non-maintenance reasons and would enable the Applicant to provide details on the steps it is taking to rectify the issue along with an expected timeframe to recommence operation.

21.4 The Council may wish to make further representations as appropriate during the examination and at issue specific hearings relating to matters that are not contained within this LIR. Therefore, the comments contained above are provided without prejudice to the future views that may be expressed by the Council in its capacity as an Interested Party in the examination process.

22. Draft Development Consent Order (DCO)

22.1 In addition to the comments provided under the relevant topic chapters above, in respect of the draft DCO [APP-028], at this stage the Council wishes to raise the following additional points:

[21] https://nsip-documents.planninginspectorate.gov.uk/published-documents/EN010123-001048-ExA.oOEMP-D5.V3%20-%20Outline%20Operational%20Environmental%20Management%20Plan%20-%20Rev%203.pdf

DCO Article/Part/Schedule	LCC Comments	Suggested wording
Part 1: Interpretation and Schedule 2 Requirements	The definition of 'maintain' is considered to be too broad and would potentially allow for the repeated wholesale replacement of solar panels. Definition of maintain should be redefined so it is clearer that it would not allow the reconstruction or replacement of the whole development. See the Councils comments in section 18 above regarding concerns about waste arisings, particularly cumulatively with other developments.	
Part 3 (Streets): Articles 9 and 11 Street Works Power to alter layout, etc., of streets	As currently written these articles would give the developer the right to undertake works with no further approvals from the Council. At this stage, the technical details have not been submitted or approved. The Council require highway access works to be delivered via the Section 184 process (or equivalent agreement) which would also for consideration of detailed design and allow for the provision of a bond which, if the developer was unable to complete the works,	As referred to in section 11 above, the Council will expect the need for such further approvals to be included in the DCO ~~application~~ and it has been suggested this could be through the outline CTMP and the final CTMP to be approved by the Council under requirement 15 of the draft DCO. Wording to this effect should be included in outline CTMP as suggested in section 11 above.

	the Council would be able to draw upon to make the Highway safe.	
Part 3 (Streets): Article 10 Application of the permit scheme	The Highway Authority have concerns about the terms used in the draft article, particularly "a permit may not be refused". It creates a presumption that permits will be granted and that disagreement is principally about conditions rather than whether the works should proceed at that time, which for a network on which 72,000 street works take place per annum needs to be a concern for us. There is nothing in the article that appears to expressly preserve the Highway Authority's ability to refuse permits on network management or coordination grounds. The Highway Authority view is that the proposed permit article does not adequately protect the Highway Authority's network management and coordination functions. In particular, it appears to create a presumption that permits must be granted and does not expressly preserve the Authority's ability to refuse, defer or amend permit applications on coordination, traffic management or network capacity grounds. The Authority would seek additional provisions requiring appropriate advance notice of road closures and temporary traffic	The Highway Authority would wish to see some wording added along the lines of: • Nothing in this article shall prevent the relevant highway authority refusing, delaying or requiring amendment of a permit application where reasonably necessary to discharge its duties under the Traffic Management Act 2004, secure the expeditious movement of traffic, coordinate works on the highway network, avoid conflict with other planned or authorised activities, or minimise disruption to road users. • The undertaker must provide advance notice of any proposed road closure, traffic restriction, lane closure or temporary traffic management in accordance with the permit scheme and in any event not less than such period as may reasonably be required by the relevant highway authority to enable network coordination and stakeholder engagement. 10 (2)(d) Where it states "*where a provisional advance authorisation has been granted to the undertaker in advance of the grant of a permit in relation to the construction of the authorised development, the highway authority may not grant a permit for any other works in the location….*" The Authority has

	management, together with express wording confirming that the Authority retains the ability to refuse or modify permit applications where reasonably necessary to fulfil its duties under the Traffic Management Act 2004, coordinate works and events on the network, and minimise disruption to road users. The Authority would also wish to ensure that the permit article cannot override or dilute approvals and protections secured elsewhere within the Highway Authority Protective Provisions. A further point to note is that other works can take place (e.g. unforeseen works) which the Authority would not be in a position to refuse and this conflicts with parts of the proposal at this time and should therefore be revised.	reservations as to whether this would be realistic or possible, especially in respect of urgent works by other promoters. This effectively reserves road space for the Project whilst giving the Authority little corresponding ability to reallocate space if circumstances change. As such the wording should be reconsidered.
Part 3 (Streets): Article 13 Temporary closure, restriction or prohibition of use of streets and public rights of way	Section 13(1) Contains general powers to alter or temporarily close any street or PRoW. This power is considered too broad and should be subject to additional limitations. It should only apply to rights of way included in the PRoW Management Plan and be exercised in accordance with the details set out in that plan, which must be agreed with LCC's PROW and Access Team.	LCC would welcome further discussions with the Applicant regarding the wording of this article and the PRoW-MP as referred to in section 12 above.

Part 6 (Miscellaneous and General): Article 40 Felling or lopping trees or removal of hedgerows	This article provides a blanket approval to remove hedgerows and trees without the need to notify the relevant authority or provide replacement planting. This provision risks undermining the principles and calculation of BNG provision within the site and could result in the loss of valuable trees. The Council recommends that this article is amended to include strengthened safeguards to trees. The commitment set out in the outline CEMP table 3.9 is welcomed: *"Should the requirement for additional tree works be identified, this will be discussed with the Project Arboriculturist and no works will be undertaken without the prior consent of the relevant Local Planning Authority."* However, it is considered that this commitment would be afforded greater certainty if it were secured through a provision on the face of the DCO, rather than relying solely on the outline CEMP.	The safeguards afforded at article 40 (4) to limit hedgerow removal to those specified in schedule 10 to the extent set out in the LEMP to be approved pursuant to requirement 7 should also apply to trees. The Council would also propose the inclusion of an annual maintenance schedule which would be submitted to the RPA, detailing any tree removals and whether replacements are planned. This would align with the approach taken for the Springwell and Tillbridge solar schemes, where a replacement schedule was incorporated within the oOEMP.
Part 6 (Miscellaneous and general):	This article provides a blanket approval to remove trees subject to a Tree Preservation Order (TPO) made after the date of the Order	The Arboricultural Impact Assessment Report [APP-242-243] identifies six TPOs within/adjacent to the development boundary. The report also identifies 38

Article 41 Trees subject to tree preservation orders	without the need to notify the relevant authority or provide replacement planting. The Council recommends that better safeguards to protected trees are included in the DCO.	high quality grade A trees / groups within the Order Limits that may over the course of the lifetime of the site come to be worthy of TPO consideration. As above, the Council would propose the inclusion of an annual maintenance schedule. Additionally, the One Earth Solar DCO[22] includes a similar article (39) to article 41 which requires the undertaker to seek to replace trees that are removed and to consult with the relevant planning authority prior to any activity taking place. The Council would wish to see similar wording included in the Meridian DCO as set out below: 41 (2) (2) In carrying out any activity authorised by paragraph (1)— (a) the undertaker must do no unnecessary damage to any tree and must pay compensation to any person for any loss or damage arising from such activity; and (b) the duty contained in section 206(1) (replacement of trees) of the 1990 Act does not apply although where possible the undertaker is to seek to replace any trees which are removed; and.

[22] https://nsip-documents.planninginspectorate.gov.uk/published-documents/EN010159-001570-One%20Earth%20Solar%20Farm%20-%20Development%20Consent%20Order%20-%20Redacted.pdf

		(c) the undertaker must consult the relevant planning authority prior to that activity taking place.
Part 6 (Miscellaneous and General): Article 47 Procedure in relation to certain approvals etc	The proposed six week timeframe for the determination of any consent or, agreement or approvals is considered to be too short.	The Council would wish this to be amended to 13 weeks. This would be consistent with the recently made DCO for One Earth Solar
Schedule 2 (Requirements): Requirement 2 Commencement of the authorised development	The proposed 7 year implementation period is considered to be long, a more typical implementation period for a DCO would be 5 years and there are numerous examples of solar developments in Lincolnshire where this is the case. The Council is concerned that it would leave uncertainty to landowners, an increased risk that the Environmental baseline conditions may change over time, as well as local and national policy and local considerations. The Applicant's justification for the proposed duration is set out in The Explanatory Memorandum [APP-029] and relates to the uncertainty around grid connection. See the Council's comments under section 8 of this report regarding this matter.	

Schedule 2 (Requirements): Requirement 17 Public Rights of Way	The Council request that the wording is amended so that it captures all PRoW that would be impacted by the development through closure, diversion, use of motor vehicles or other temporary management measures.	17.—(1) No part of the authorised development may commence until a public rights of way management plan for any sections of public rights of way shown to be temporarily closed, <u>diverted, impact by motor vehicles and/or require temporary management</u> within Schedule 6 (streets and public rights of way) for that part has been submitted to and approved by the relevant planning authority, in consultation with the relevant highway authority.
Schedule 2 (Requirements): Requirement 21 Decommissioning and restoration	LCC suggest that an additional clause is provided for a) how a period of extended outage would be managed (if not dealt with through the management plans) and b) funding for decommissioning both as a result of an extended period of outage and at the end of the lifespan of the development – see Section 21 above.	LCC would refer the Applicant and ExA to the wording of Requirement 5 in the made DCO for Helios Renewable Energy Project: *5.—(1) Decommissioning works must commence no later than 40 years following the date of the final commissioning of Work No. 1 that is the subject of the last notice given by the undertaker pursuant to requirement 2(3) (phase of authorised development and date of final commissioning).* *(2) No later than 12 months prior to the commencement of any decommissioning works for any part of the authorised development, the undertaker must—* *(a) submit to the local planning authority for approval a decommissioning environmental*

		management plan for that part; and *(b) submit to the local planning authority for approval in consultation with National Highways (or its successors) a decommissioning traffic management plan for that part.* *(3) No later than year 15 of operation the undertaker must notify the local planning authority that the undertaker has put in place the requisite decommissioning security in the form as required by the landowners.* *(4) The plans submitted and approved under sub-paragraph (2) must be substantially in accordance with the relevant part of the outline DEMP.* *(5) The decommissioning environmental management plan submitted and approved must include a resource management plan that includes details of proposals to minimise the use of natural resources and unnecessary materials.* *(6) No decommissioning works must be carried out until the local planning authority approves the plans submitted in relation to such works are approved as set out on subparagraph (2).* *(7) The plans submitted to and approved pursuant to sub-paragraph (2) must be implemented as*

		approved for the works required to decommission that phase of the authorised development unless otherwise approved in writing. *(8) This requirement is without prejudice to any other consents or permissions which may be required to decommission any part of the authorised development.*
Schedule 2 (Requirements): Requirements 3(Approved details and amendments to them), 5 (detailed design approval), 7 Landscape and Ecological Management Plan, 8 Biodiveristy net gain, 20 Skills, supply chain and employment, 21 Decommissioning and restoration	The Council would wish to be a consultee on these requirements as any approvals given may affect previous approvals given by this Council in respect of other requirements and/or where the Authority has a statutory responsibility such as Highways.	
New Requirement - Grid Connection	For reasons set out in section 8 of this report the Council would wish to see a requirement restricting commencement of the development (including permitted preliminary works) until such time that planning consent has been granted for the Weston Marsh substation or such alternative connection identified .	The Council suggest wording similar to the following: No part of the authorised development, including any permitted preliminary works, shall commence until planning permission has been granted for the Weston Marsh substation B or an alternative point of grid connection.

Schedule 14 Procedure for discharge of requirements	Applications made under requirement 2 (2) – the six week approval timeframe is considered to be too short. The Council request that this is extended 13 weeks which would be more consistent with other solar DCO's that have approved longer timeframes such as Cottam Solar and also the requested timeframe for approvals of other consent under article 47. Further information and consultation 3 (3) The period of 15 working days where consultation is required with relevant consultees is considered to be too short. The Council request that this is amended to 20 working days to allow the relevant consultee sufficient time to review the submission details and respond to the relevant authority.	
Schedule 15 Part 5 Fees	The Council is of the view that the proposed fee structure would not adequately cover the Council's reasonable costs in fulfilling its administrative obligations. It recommends adopting the fee structure used in several recent Lincolnshire NSIPs, which incorporates an increase aligned with the national planning fee rise introduced in April 2025.	5.—(1) Where an application is made to the relevant planning authority for a discharge, a fee is to apply and must be paid to the relevant planning authority for each application. (2) The fee payable for each application under sub-paragraph (1) is as follows— (a) a fee of £2,578 for the first application for the discharge of each of the requirements in

	The most current examples of such a structure can be found in the DCO for One Earth Solar. It is also considered that the first application at the higher fee rate should apply to each of the requirements in schedule 2. Assume this is what this covers from One Earth (3) Where an application under sub-paragraph (1) is made and a fee payable on or after 1 April 2025, then section 18A of the Town and Country Planning (Fees for Applications, Deemed Applications, Requests and Site Visits) (England) Regulations 2012 (as amended by the Town and Country Planning (Fees for Applications, Deemed Applications, Requests and Site Visits (England) Amendment Regulations 2023) will apply as modified by this Order, so that "the relevant amount" means the fee payable under sub-paragraph (2)(a), (2)(b) or (2)(c) above.	Schedule 2; (b) a fee of £588 for each subsequent application for the discharge of each of the requirements listed in paragraph (a) and any application under requirement 5 in respect of the requirements listed in paragraph (a); and (c) a fee of £298 for any application for the discharge of any approval required by a document referred to by any requirement or a document approved pursuant to any requirement. (3) Where an application under sub-paragraph (1) is made and a fee payable on or after 1 April 2025, then section 18A of the Town and Country Planning (Fees for Applications, Deemed Applications, Requests and Site Visits) (England) Regulations 2012 (as amended by the Town and Country Planning (Fees for Applications, Deemed Applications, Requests and Site Visits 158 (England) Amendment Regulations 2023) will apply as modified by this Order, so that "the relevant amount" means the fee payable under sub-paragraph (2)(a), (2)(b) or (2)(c) above. (4) Any fee paid under this Schedule must be refunded to the undertaker within four weeks of— (a) the application being rejected as invalidly made; or

		(b) the relevant planning authority failing to determine the application within the relevant period in paragraph 2(2) unless— (i) within that period the undertaker agrees, in writing, that the fee is to be retained by the relevant planning authority and credited in respect of a future application; or (ii) a longer period of time for determining the application has been agreed pursuant to paragraph 2(2) of this Schedule, as applicable.
Schedule XX	There is currently no agreed Protective Provision for The Protection of Lincolnshire Fire and Rescue included within the DCO, as referred to in Section 20 above.	FOR THE PROTECTION OF LINCOLNSHIRE FIRE AND RESCUE Interpretation 104.— (1) For the protection of Lincolnshire Fire and Rescue as referred to in this Part of this Schedule the following provisions have effect, unless otherwise agreed in writing between the undertaker and Lincolnshire Fire and Rescue. (2) In this Part of this Schedule— "Index Linked" means an increase in the sums payable on an

		annual basis or pro rata per diem in accordance with the most recent published figure for the Consumer Price Index, or during any period when no such index exists the index which replaces it or is the nearest equivalent to it; and "Lincolnshire Fire and Rescue" means Lincolnshire County Council in its capacity as a fire and rescue authority pursuant to section 1(2)(a) of the Fire and Rescue Services Act 2004. Site visits 105.— (1) The undertaker must, prior to the date of final commissioning of Work No. 2, use reasonable endeavours to facilitate a site familiarisation exercise in connection with Work No. 2 of the authorised development for Lincolnshire Fire and Rescue for the purposes of providing the necessary assurance to Lincolnshire Fire and Rescue that all the required systems and measures are in place in accordance with the battery safety management plan. (2) Following the first anniversary of the date of final commissioning of Work No. 2 of the authorised development, the undertaker must use reasonable endeavours to facilitate an annual review of Work No. 2 by Lincolnshire Fire

		and Rescue at the reasonable request of Lincolnshire Fire and Rescue, up until the year in which the undertaker commences decommissioning of Work No. 2. Costs 106.— (1) Pursuant to the provisions set out at paragraph 105, the undertaker must pay to Lincolnshire Fire and Rescue— (a) £16,665 in the first year of operation of the authorised development for, or in connection with Lincolnshire Fire and Rescue's attendance at the site familiarisation exercise facilitated by the undertaker pursuant to paragraph 105(1), such sum to be paid within 30 days following the date of the site familiarisation exercise; and (b) £1,530 in each subsequent year of operation of the authorised development until the date of decommissioning of Work No. 2, such sums to be paid within 30 days of the date of the annual review for that year, if in that year an annual review has taken place pursuant to paragraph 105(2). (2) The costs payable under this sub-paragraph (1)(b) are to be Index Linked.

		Arbitration 107. Any difference or dispute arising between the undertaker and Lincolnshire Fire and Rescue under this Part of this Schedule must be determined by arbitration in accordance with article 38 (arbitration).

Appendix i: Report by AAH Landscape and Visual Impact Assessment (LVIA) – July 2026

AAH consultants

LANDSCAPE AND VISUAL REVIEW

OF THE DEVELOPMENT CONSENT ORDER (DCO) APPLICATION

FOR MERIDIAN SOLAR

FOR

LINCOLNSHIRE COUNTY COUNCIL

June 2026

Landscape and Visual Review

Quality Assurance – Approval Status

Version	Date	Prepared by	Checked by	Approved by	Version Details
1	25/06/26	[redacted]	[redacted]	[redacted]	Issued for LIR

Landscape and Visual Review

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Appendices:

Appendix A: AAH Consultation documents:

- TM01 Scoping Comments 13-06-24
- TM02 Viewpoint Comments 15-09-24
- TM03 PIER Comments 25-05-25
- TM04 Targeted Consultation Comments 14-10-25
- TM05 Extension Comments 27-01-26
- TM06 Relevant Representation comments 20-05-2026

Appendix B: Landscape Institute Technical Guidance Note 1/20 (10 Jan 2020): *Reviewing Landscape and Visual Impact Assessments (LVIAs) and Landscape and Visual Appraisals (LVAs).*

1.0 Introduction

Purpose of the Landscape and Visual Review

1.1 AAH Consultants (**AAH**) has been commissioned to prepare a review of the Landscape and Visual elements of the Development Consent Order (**DCO**) submission for Meridian Solar (the '**Development'**), submitted to the Planning Inspectorate in March 2026 and accepted for Examination in June 2026, on behalf of Lincolnshire County Council (**LCC**). This follows on from AAH providing landscape and visual consultation with the applicant on behalf of LCC at the Pre-Application stage of the project. Pre-Application comments on Landscape and Visual matters are provided within **Appendix A**.

1.2 The purpose of this report is to carry out an independent review of the landscape and visual elements of the DCO submission, with a focus on a review of the Landscape and Visual Impact Assessment (**LVIA**) chapter of the Environmental Statement (**ES**), which is based on the guidance provided within the Landscape Institute *Technical Guidance Note 1/20 (10 Jan 2020): Reviewing Landscape and Visual Impact Assessments (LVIAs) and Landscape and Visual Appraisals (LVAs)*, which is included within **Appendix B** for reference.

1.3 This report will be utilised to inform and guide LCC input into further stages of work through the Examination of the DCO application, which is for a Nationally Significant Infrastructure Project (**NSIP**). This will include input into Local Impact Reports (**LIR**) and Statements of Common Ground (**SoCG**), as well as formal requests for information or responses to formal questions that may be required through the Examination or at any associated Examination issue specific hearings.

About AAH Planning Consultants and the Author

1.4 AAH Consultants comprises professional and accredited individuals. Our consultants are Chartered Members of the Landscape Institute (**CMLI**) and the Royal Town Planning Institute (**RTPI**).

1.5 This review has been prepared by John Brodie, who is a Landscape Architect within AAH with over 20 years' experience in landscape design and assessment, and experience in landscape and visual matters associated with solar NSIP and associated DCO Applications. This report

was reviewed by Dan Brennan, who is a Chartered Landscape Architect within AAH with over 15 years' experience in landscape design and assessment.

Relevant Documents

1.6 The Landscape and Visual review is based on the submission documents (including sub-appendices) submitted to the Planning Inspectorate, which are available at: https://national-infrastructure-consenting.planninginspectorate.gov.uk/projects/EN010169/documents.

The information downloaded and subject to this initial review is based on the document: *Meridian Solar Farm Examination Library – 18th June 2026*. **Please note:** This review is of the information available at the time of writing. Throughout the pre-examination and examination process additional information will be submitted, including updates and amendments to some of the documents listed above.

Previous Consultation

1.7 As part of the DCO process, as stipulated by *The Planning Act 2008* (**PA2008***)*, AAH has carried out pre-application landscape and visual consultation with the applicant and relevant members of their design team over approximately a 12-month period on behalf of LCC. This has included discussion and consultation on:

- Expectations of the LVIA, including content and reflection of current best practice and guidance
- LVIA Methodology;
- ZTV parameters;
- Study Area extents (distance);
- Viewpoint quantity and locations;
- Accurate Visual Representations (**AVR**s), including the quantity and location, as well as type and Level.
- Mitigation Measures/Landscape Scheme/Site Layout;
- Cumulative landscape and visual effects, including identification of sites/projects; and
- Residential Visual Amenity Assessment (**RVAA**) if there are residential properties with receptors likely to experience Significant effects to their visual amenity.

1.8 Section 10.3 and Tables 10-1, 10-2, and 10-3 of the LVIA summarises relevant consultation carried out for landscape and visual matters, and AAH have subsequently issued a Relevant Representation (**RR**) as part of the pre-examination process to summarise the high-level comments on the submission and key areas for the subsequent DCO examination to cover. For reference, the AAH RR is included within **Appendix A**, and this information has been utilised to inform this landscape and visual review.

2.0 Presentation of the LVIA

2.1 The following section provides a review of the presentation of the LVIA, based on the following criteria (where applicable):

- *Is the LVIA appropriate and in proportion to the scale and nature of the proposed development;*
- *Are the findings of the assessment clearly set out and readily understood;*
- *Is there clear and comprehensive communication of the assessment, in text, tables and illustrations;*
- *Are the graphics fit for purpose and compliant with other relevant guidance and standards; and*
- *Are landscape and visual effects considered separately;*
- *Are receptors and all likely effects comprehensively identified;*
- *Does the LVIA display clarity and transparency in its reasoning, the basis for its findings and conclusions; and*
- *Is there a clear and concise summation of the effects of the proposals.*

LVIA Chapter

2.2 The LVIA and associated figures, appendices and documents provide a thorough analysis of landscape and visual effects of the Development, and the level of information and detail is appropriate for the scale and type of development. The assessment is detailed and laid out in a logical manner, the process of assessment is thorough and well explained. It has been carried out to best practice and guidance, primarily the *Guidelines for Landscape and Visual Impact Assessment (GLVIA3)* by the *Landscape Institute*, by a Chartered Landscape Architect. However, we have identified issues with some areas of the LVIA, that we have provided narrative on below, and the DCO Examination provides an opportunity to explore these in more detail.

2.3 The LVIA clearly draws a distinction between **landscape effects** and **visual effects**, with the main chapter focussing on likely **'Significant'** effects. Paragraph 12.4.36 of the LVIA clarifies that *"Residual effects found to be 'moderate' or 'major' are deemed to be 'significant' and may be important or relevant to the decision-making process. Effects found to be 'negligible', or 'minor' are considered to be 'not significant' and may not be important or relevant to the decision-making process".* This is acceptable, and provides a clear and transparent threshold to identifying Significant landscape and visual effects.

2.4 Paragraph 12.4.37 clarifies that the professional judgement of competent experts is applied to assessments throughout the LVIA, including the assessment of significance of effect by combining sensitivity of receptor and magnitude of impact (change). This is promoted within GLVIA3, which states that this is not a prescriptive process and that tables and matrices are provided as a guide to how combinations of sensitivity and magnitude are typically combined. In this LVIA, reasoned explanations of judgements made on effect significance are based on consideration of the factors set out in ES Appendix 12-2 (Doc Ref. 6.2) as an indicative framework. However, conclusions of significance may differ from those in the table when supported by evidence.'' It is important that the application of this professional judgement is explained and transparent throughout especially where there are variations from the indicative framework.

2.5 Section 12.5 goes on to describe the project parameters that the LVIA has assessed, and the author clarifies in para. 21.5.1 that *"To accommodate design flexibility and potential technological changes at construction, the 'Rochdale Envelope' approach been applied within the LVIA to ensure a robust assessment of the likely significant environmental effects of the Scheme on landscape and visual receptors''* The LVIA goes on to clarify that the LVIA *"represents a reasonable worst case scenario in terms of potential effects'' and includes the layout of the Solar Development Areas, the route of the Over Head Inter-Array Connection and Grid Connection Route and mitigation such as planting and seeding.*

2.6 Vegetation removal is mentioned at Construction (12.8.9) and Decommissioning (12.8.39) and is shown in Figures 2.12 Hedgerow Regulations and Tree Preservation Order Plan – Section A and B. However, at this stage, there is little detail. Chapter 9 Ecology and Biodiversity provide more information (P83) but is also light on detail. Appendix 12-8 Arboriculture Impact Assessment (parts 1 and 2) also contains information with Annex B Tree Constraints plans Sheets 1-30 showing trees and hedging impacted by the

development. Perhaps due to these multiple sources of information, it remains difficult to understand how much existing hedgerow will be removed and reinstated (in linear metres) and the suggestion is that few Ancient / Veteran trees or woodland will be impacted by the proposals. However, if proposed mitigation areas and existing retained vegetation proposals are changed in later, detailed design stages, the findings of the LVIA and other supporting documents are also likely to change. Landscape mitigation, and vegetation retention and protection, needs to be clarified in the associated LEMP and secured through the DCO as the assessment relies heavily upon it to reduce the residual landscape and visual effects of the Development.

2.7 The LVIA assesses landscape and visual effects at the main phases: **construction; operation** and **decommissioning**, with the operation phase considered with (year 15) and without landscape mitigation (year 1). The main phases of the project are detailed within *Chapter 12.5*. The LVIA largely considers the scheme in isolation, while Section 12.11 considers the scheme **cumulatively**.

LVIA Appendices

2.8 The Appendices produced as part of the LVIA provide very detailed and clear supporting information relating to the assessment. The appendices are clearly laid out and easy to follow and locate pertinent detailed information relating to the main chapter. The appendices are listed within section 12.1.4 of the LVIA, and are referenced throughout the report to support the findings and provide additional information. The Appendices listed include supporting documents covering Landscape and Visual Legislation, Policy and Guidance, Landscape Assessment, Landscape Baseline, Landscape Assessment, Visual Baseline, Visual Assessment, Landscape and Visual Cumulative Assessment and Arboriculture Impact Assessment.

LVIA Figures

2.9 The Figures are clearly listed within section 12.1.3 of the LVIA, and are referenced throughout the report to support and illustrate the findings. The Figures produced as part of the LVIA are mostly appropriate in the level of detail provided and clarity of information presented. However, Figure 12-3 Public Rights of Way and National Cycle Network would benefit from the identifying long-distance routes such as the MacMillian Way. At this stage,

the Figures 12-21 and 12-22 (Photo sheets) do not show **AVRs** (Accurate Visual Representations) of the proposed development including BESS, substations, pylons, inter-array and solar arrays. Wireframe outlines and extent of development is presently indicated (type 1). The Viewpoints selected to show AVRs, including photomontage (type 3) have not yet been identified.

3.0 Methodology and Scope

3.1 The following section provides a review of the LVIA Methodology based on the following criteria (where applicable):

- *Has the LVIA been prepared by 'competent experts';*
- *Is the methodology in accordance with relevant guidance and meets the requirements of the relevant Regulations;*
- *Does the methodology and scope of the LVIA meet the requirements agreed in discussions at the pre-application stage during scoping and consultation;*
- *Has the methodology been followed in the assessment consistently;*
- *Are the levels of effect clearly defined, and have thresholds and approach to judging significance been clearly defined;*
- *Is detail about various development stages provided and appropriately assessed;*
- *Have cumulative landscape and visual effects been addressed.*

LVIA Methodology

3.2 The LVIA Methodology is presented in section 12.4 of the LVIA and *Appendix 12-2: LVIA Assessment Methodology (Doc Ref 6.3)*. Reference is made in section 1.1.2 of *Appendix 12-2* to best practice and industry guidance, including GVLIA3 and reference to *Notes and Clarifications on aspects of GLVIA 3, LI TGN-2024-01, Landscape Institute*. It demonstrates compliance with GVLIA3 by assessing both **landscape effects** and **visual effects** as interrelated but separate components.

3.3 The process and stages of assessment are clearly presented, including a baseline assessment, the detailing and review of the design, assessment of sensitivity (by assessing value and susceptibility), an assessment of magnitude of impact (in relation to size, scale, geographical extent, duration and reversibility) of the Development on the baseline conditions, and a determination of the significance of effects at all phases of the scheme

(described in paragraph 1.1.6 of *Appendix 12-2* as: Construction, Operation (Year1), Operation (15 year) and decommissioning.

3.4 The study area selection and establishment are explained in detail in paragraphs 1.2.1 of Appendix 12-2 and paragraph 12.4.4 of the LVIA, and the three study areas are illustrated in Figure 12-1 (Doc Ref 6.2):

- **5km: Solar Development Areas** – Land Parcels A-D (including On -Site Substation Compounds),
- **5km: Inter- Array Connections** (including 'Overhead inter-Array Connection' and 'Underground Inter-Array Connection') and
- **10Km: Grid Connection Route** (including 400kV Overhead Line and Cable Sealing End Compounds).

3.5 This is a change from the Scoping Report and PIER ''due to refinement of the Scheme design and locations of the proposed pylons, and to ensure that the assessment is proportionate and focussed on receptors where likely significant effects may occur'' (Para 12.4.6). Paragraph 12.4.7 goes on to clarify that ''with the further design information provided, it is considered highly unlikely that significant effects would be experienced further than 5km from the Solar Development Areas and Inter-Array Connections, and 10km from the Grid Connection Route.''

3.6 AAH have not identified anything on Site that would contradict the statement that there would not be Significant effects beyond 5km (Solar Development Area, Inter-Array) or 10km (Grid Connection Route) and typically distance reduces the likelihood of this occurring. However, it is noted that during consultation, South Holland District Council requested that viewpoints in the 10-15km range should be added to demonstrate how the tallest elements of the Scheme relate to distant sensitive receptors, and these should specifically cover the intervisibility between the Grid Connection route and Boston Borough Council area. It is also the case that during the construction phase (and potentially operation with maintenance and replacement operations) traffic movement to and from the Site may have effects beyond 5km.

3.7 The baseline conditions (Section 12.6 of the LVIA) have been determined following a mix of desk and field studies alongside consultation with appropriate consultees. Desk research has included the prevailing policy framework and fieldwork carried out between October 2023 and February 2026. The identity or experience of these landscape architects is not provided.

3.8 The methodology in *Appendix 12-2* is clear, with chapter 1.7 covering landscape effects and chapter 1.8 covering visual effects. Table 12-10 clarifies how the level or significance of landscape and visual effects are determined by combining judgements regarding the sensitivity of the receptor and the magnitude of the effect arising from the Development.

3.9 Tables 12-1 to 12-9 within the methodology provide criteria for assessment of value, and susceptibility, and subsequently how these have been combined to provide a judgement on sensitivity. These tables provide clear indicative criteria of the assessment of landscape and visual value, susceptibility, sensitivity and magnitude of effects. The utilisation of professional judgement is promoted within the methodology, should an effect be different to that presented within the tables, and the assessment methodology has been carried through into the main assessment and used consistently.

3.10 Given the stated operational time of 40 years (6.1 Chapter 2; The Scheme), it is clear that this is a long-term project. We would recommend that the applicant consider fully that within this 40-year timescale, the panels, inverters, batteries and other associated elements may well need replacing. Given the pace of developments in technology, the panels could be replaced on numerous occasions. At this stage we would need additional information regarding the phases of replacements in order to consider whether there is one single construction stage, or a series of staged re-construction stages, and activity and deliveries, potentially of large-scale equipment, be for the life of the scheme.

ZTV Methodology

3.11 The process of modelling Zones of Theoretical Visibility (ZTVs) and their subsequent presentation on Figures 12-7 to 12-18 is described in paras. 12.4.11 to 12.4.12 of the LVIA. The ZTVs provide both 'bare earth' and 'screened' versions. The methodology, execution and presentation of these Figures is acceptable, with elements modelled to their maximum

parameters and provides a useful tool to understand potential visibility across the Study Area.

Visualisation Methodology

3.12 At this stage, as stated earlier, no photomontage (type 3) visualisations have been provided. It is assumed these will be prepared in accordance with the Landscape Institute *TGN 06/19 Visual Representation of Development Proposals* and presented to demonstrate a 'worst case' scenario, which we assume is to the maximum allowed parameter heights, provided within *Chapter 2: The Scheme,* as this would provide a 'worst case' visualisation.

4.0 Appraisal of Landscape Baseline and Effects

The following section provides a review of the Landscape Baseline and Effects, based on the following criteria (where applicable):

- *Has the methodology been followed in the landscape assessment?*
- *Are all landscape receptors and all likely effects comprehensively identified and assessed?*
- *Has the value and susceptibility of landscape resources been appropriately addressed and at appropriate scales (e.g., site, local, regional, and national)?*
- *Is there a clear and concise summation of the landscape effects of the proposals? and*
- *Are potential cross-over topics, such as heritage or ecology, addressed?*

Landscape Baseline

4.1 The landscape baseline is considered in section 12.6 of the LVIA, with Figure 12-1: LVIA Study Area illustrating the scheme location, the DCO site boundary and 5km and 10km study areas. The Solar Development Areas, Inter-Array Connections and Grid Connection Route cover approximately 1,616 ha2 of predominantly agricultural land (P3 – Chapter 2: The Scheme).

4.2 The baseline follows the LVIA methodology and begins by identifying baseline landscape characteristics, as well as relevant designations, of the study area and the site. This is summarised in the LVIA chapter and further detail is provided in *Appendix 12-3 Landscape Baseline*. Paragraphs 12.6.1 to 12.6.23 provide a narrative on the existing landscape baseline of the site. Designations located within the site and study area are covered in paragraphs 12.6.24 to 12.6.25. Site character is summarised in 12.6.62.

4.3 The LVIA acknowledges that the site is characterised by low-lying arable fields generally bound by drainage ditches with sparse vegetation and an open character.

4.4 Published landscape character assessments are considered in paragraphs 12.6.22 to 12.61 and illustrated in Figure 12.4 National Landscape Character Areas, Figure 12.5 Regional and County Landscape Character Areas and 12.6 District and Borough Landscape Character Areas with further detail provided in *in Appendix 12-3 Landscape Baseline*. At national level, the

site is located within NCA 46 – the Fens, which is described as "*a distinctive, historic and human influenced wetland landscape notable for large-scale, flat, open landscape with extensive vistas to level horizons''*.

4.5 At a district level, many studies, by multiple different authorities, have been reviewed including those by South Holland District Council, South Kesteven District Council, Boston Borough Council, Peterborough and the emerging Fenland Local Plan. These identify more localised variations in Landscape Character around the extent of the site including smaller field patterns to the east of the solar development areas and to the north of Whaplode Drove and Gedney Hill. Settlement is also described as sparse to the south of the solar development area with more settlement around Whapolde Drove and Gedney Hill and Spalding to the north. Vegetation is described as sparse across the entirety of the scheme consisting of roadside trees, shrubs and scrub, occasional broken hedgerows, tree belts and small woodland blocks.

4.6 The author acknowledges in 12.6.63 that the site and study area reflect the boundaries and characteristics of the published character assessments.

4.7 Perhaps because these published character areas are numerous, and aligned with guidance within GLVIA3, no site-specific assessment has been carried out by the author as part of the LVIA. Consequently, AAH believes that details about the context of the Site may have been overlooked. As the smaller field sizes, and variations in settlement described above suggest, there are variations in vegetation cover across the site and its surroundings. As described in 12.6.87 and 12.8.48 later in the LVIA, the majority of residential properties are surrounded by vegetation, and the area around Whaplode and Gedney Hill is generally more vegetated. The smaller fields described are also more likely to be edged by hedgerow and field trees adjacent to settlement and isolated farm houses. Consequently, we would argue that there is more scope for mitigation with hedge and tree planting in some locations, such as at the overhead Inter-Array condition near Whaplode and Gedney Hill.

4.8 The future baseline is described in 12.6.105 and 12.6.106 of the LVIA. The development of further solar farm projects development is not considered. This should be corrected as this is a landscape undergoing extensive change to land-use to meet national renewable energy aspirations and housing needs. The landscape is set to change from one dominated by agriculture to one containing large scale solar development and other land uses. Appendix

4-1: List of Cumulative Schemes (Doc Ref: 6.3) and Figure 15-6: Cumulative Schemes show the short list of cumulative developments that have been considered. It would be helpful if Figure 15-6 named the projects rather than relying on their applications numbers. The cumulative projects listed include the national grid upgrade projects Eastern Green Links 3 and 4 and Grimsby to Walpole and other renewable energy projects including Ossian Wind Farm, Mallard Pass Solar Project and Boston Alternative Energy Facility. Subsequently, we have concerns regarding effects on the regional landscape character and pressures from renewables development at an unprecedented scale. The mass and scale of these identified and potential projects combined has the potential to lead to adverse effects on landscape character over an extensive area across these published character areas. The landscape character of the local, and likely regional area, will be completely altered over the operational period through an extensive area of land use change, and introduction of energy infrastructure in an area that is currently predominantly agricultural. This would also be an issue when experienced sequentially for visual receptors travelling through the landscape and experiencing multiple schemes across potentially several kilometres, albeit with gaps between some of the projects. However repeated views and presence of large-scale energy infrastructure, wind and solar projects would combine over time, resulting in a greater perception of change.

4.9 To calibrate this change to the landscape, these schemes combined, if built, would clearly require the update of any published landscape character assessment, including at a national level (NCA's), so as to include large scale renewable energy generation as a defining land use characteristic as well as agriculture. This is a clear and marked change to landscape character, and several schemes have already been approved, with many in the planning system.

4.10 This baseline process, undertaken by the applicant, resulted in several landscape receptors for the assessment of effects on them by the Development. These are presented in Table 12-5 (p89 of the LVIA). Disappointingly, these are limited to district and local level character areas. As described in Impact Assessment Methodology 12.4.13 to 12.4.17, AAH's expectation would be that landscape receptors are identified at a range of scales and consider character, fabric and designations. AAH believe that features of the fabric of the landscape like trees and hedgerows, agricultural land use and perceptual landscape receptors like 'seasonality' are less well considered in the assessment (Landscape receptors

can include 'constituent elements of the landscape' and 'specific perceptual qualities' P36 – GVLA3). Consequently, the impact of the Development on these landscape receptors is under represented with the focus of the assessment on taller vertical structures with less consideration of the impact of the Solar Development Areas.

4.11 The proposed solar arrays will fundamentally alter the character and appearance of the landscape by replacing large areas of open agricultural land with solar energy infrastructure. Agricultural land varies in appearance throughout the year, and this seasonality is an essential part of its character, which is not considered in the assessment. Features and attributes of the land like this are not identified by the assessment as landscape receptors and so the impact of the development on them is not assessed. Another landscape attribute that is not assessed as a landscape receptor is 'openness' which will also be compromised by the extensive coverage and appearance of these arrays. Seasonality and openness should therefore be assessed as separate landscape receptors in the assessment.

4.12 Table 12-5 summarises the assessment of Landscape Value, Susceptibility and subsequently Sensitivity of all identified receptors which are limited to only district character areas.

Landscape Assessment

4.13 The Landscape Assessment is detailed within section 12.8 of the LVIA, with more detail provided in *Appendix 12-4 Landscape Assessment* which includes a clear assessment of Value and Susceptibility, and subsequently the Sensitivity of the landscape receptors, which is aligned with the criteria provided within the methodology.

4.14 The landscape assessment commences with construction effects at paragraph 12.8.9, with Year 1 of Operation Landscape Effects at paragraph 12.8.25, and Year 15 Operation Landscape Effects at paragraph 12.8.32, and Decommissioning at paragraph 12.8.40.

4.15 The following effects upon identified landscape receptors are identified in the LVIA:

- At **Construction** the following receptors were assessed as having the following significant landscape effects:
    - **Moderate adverse: <u>Significant</u>** for:
        - The Fens (HLCA9)
        - The Wash (HLCA 10)
        - Fen 2 – The Eastern Fens

- WSH 6 - Townlands

- At **Operation (Year 1)** the following receptors were assessed as having the following significant landscape effects:

  - **Moderate adverse effects: <u>Significant</u>** for:
    - The Fens (HLCA9)
    - The Wash (HLCA 10)
    - Fen 2 – The Eastern Fens
    - WSH 6 - Townlands

- At **Operation (Year 15)** the following receptors were assessed as having the following significant landscape effects:

  - **Moderate adverse effects: <u>Significant</u>** for:
    - The Fens (HLCA9)
    - The Wash (HLCA 10)
    - Fen 2 – The Eastern Fens
    - WSH 6 – Townlands

- At **Decommissioning** the following receptors were assessed as having the following significant landscape effects:

  - **Moderate adverse effects: <u>Significant</u>** for:
    - The Fens (HLCA9)
    - The Wash (HLCA 10)
    - Fen 2 – The Eastern Fens
    - WSH 6 - Townlands

4.16 These direct 'Significant' effects at Construction, Operation (Year 1) are due to the ''partial degradation of the key characteristics of these HLCAs / HLCZs through temporary loss of arable land and erection of features on skylines, changing partially the key characteristic of 'openness'' (12.8.13). It is also noted that ''no mitigation planting is proposed for the overhead lines in the Overhead Inter-Array Connection and the Grid connection route'' (p117 LVIA). At Operation (Year 15), mitigation planting around the Solar Development Areas would have established and this will enhance and extend vegetation patterns along field boundaries and watercourse. This will increase vegetation in all of these HLCAs / HLCZs reducing some of the perceived 'openness'.

4.17 AAH would question whether the ''no mitigation'' approach is justified for the Overhead Inter-Array Connection which is located near Whaplode and Gedney Hill where there is more development and associated planting. The Inter-Array Overhead Lines (OHL) will be at a height of 15m in a location adjacent to settlement characterised by garden and field hedge vegetation (12.6.67). Tree heights at maturity can be 20m plus so in the long term they may have a beneficial effect that is in keeping with Landscape character.

4.18 It is also questioned whether a complete 'no mitigation' approach is appropriate for the Grid Connection route as well. It is accepted that as the pylons will be up to 66m, it will not be possible to hide them from view to protect landscape character, but breaking up outlines and filling skylines adjacent to these structures so they do not stand out in isolation may be preferable. While vegetation is sparse, there are localised and isolated blocks of woodland and field edge trees especially adjacent to watercourses including river and ditches. Certainly, the proposed 400kV substation and BESS facilities should be planted to break up the outline of the structures. Obviously, a balance needs to be found so that the character of 'openness' prevails.

4.19 Regarding Decommissioning, it is clarified in Section 12.8.38 of the LVIA, that the design life of the project is 40 years and the project will be dismantled over a 24-month period. All above ground infrastructure will be removed, in addition, concrete foundations will be removed to a depth agreed with the land owner. AAH are happy with this approach, from a landscape perspective, as long as any existing planting disturbed by these operations is reinstated. A commitment to do this should be included in the LEMP.

5.0 Appraisal of Visual Baseline and Effects

The following section provides a review of the Visual Baseline and Effects, based on the following criteria:

- *Has the methodology been followed in the visual assessment?*
- *Are all visual receptors and all likely effects comprehensively identified and assessed?*
- *Has the value and susceptibility of visual resources been appropriately addressed?*
- *Is there a clear and concise summation of the visual effects of the proposals?*
- *Are the viewpoints that have been used appropriate and meet the number, location and requirements agreed in discussions at the pre-application stage during scoping and consultation?*
- *Are the Visualisations/Photomontages that have been used appropriate and meet the number, location and requirements agreed in discussions at the pre-application stage during scoping and consultation?*

Visual Baseline

5.1 The Visual Baseline is considered in section 12.6.64 of the LVIA, and appendix 12-5 describes this in more detail explaining the process of identifying visual receptors through desk-based review, including analysis of ZTVs and field surveys. ZTVs are shown in Figure 12-7 to 12-16 and have been produced for the Solar Development Area, Inter-Array Connections and Grid Connection.

5.2 Paragraph 12.6.65 provides a useful summary overview of the visual baseline describing the ''open, long distant views experienced across the study area due to the low-lying terrain and limited woodland cover''. Paragraph 12.6.76 identifies the following visual receptors likely to experience views of the construction or operation of the Site: Residents; Vehicle Users; Recreational users – Walking, cycling horse riding, boat users, visitors; and Outdoor / Agricultural users.

5.3 Paragraph 12.6.77 goes on to identify focussing on these visual receptors and show a variety of distances and orientation towards the Order Limits. A total of 42 viewpoints have been selected with locations shown in *Figure 12-19 and 12-20*. The baseline follows the LVIA methodology and considers the consultation undertaken at the pre-application stage.

5.4 *Appendix 12-6 identify the receptor groups and summarises* an assessment of Visual Value, Susceptibility and subsequently Sensitivity of all identified receptors. Further detail of the visual baseline, and judgements of Visual Value, Susceptibility and Sensitivity is contained within *Appendix 12-7 Landscape and Visual Cumulative Assessment.*

Visualisations/Photomontages

5.5 At the time of writing, viewpoints with Type 3 (photomontages) visualisations have yet to be completed / included. The proposal plans remain 'indicative' (APP-074 and APP-076). The Photo sheets reviewed seemed only to show development extents and wireframe outlines. There were no close view photomontage images of the proposed substations which remains a significant omission and no images reviewed seemed to accurately show the appearance of the Solar Development Areas. This continues to makes it difficult to assess the true visual impact of the development.

Visual Assessment

5.6 The Visual Assessment is presented within section 12-8 of the LVIA and detailed within *Appendix 12-6 Visual Assessment*. The assessment of value and susceptibility, and subsequently the sensitivity of visual receptors is summarised within *Tables 12-6 to 12-10*. This is aligned with the criteria provided within the methodology.

5.7 Also, in line with the methodology, the assessment of the visual effects considers the change in view to the visual receptors at construction, operation (both years 1 and 15) and decommissioning.

5.8 The LVIA identifies Significant landscape effects at the phases of **construction** (12.8.19), **operation – year 1** (12.8.34), **operation - year 15** (12.8.37), and **decommissioning** (12.8.43) phases. The following significant effects upon identified visual receptors are identified in the LVIA:

At **Construction**:

Major adverse effects: <u>Significant</u> for:

- Viewpoint 3, 14
- Viewpoint 9 (Moderate to Major)

5.9 **Viewpoint 3** is located on a PROW (CROW /7/1) in an elevated position on Welland Bank to the north west of Parcel A. It is anticipated that from this vantage point most of the proposed development will be visible including solar development areas, substations and grid connection OHL and pylons. **Viewpoint 9** is located on Martins Road in close proximity to solar development areas – Parcels B and C. It is anticipated that from this location solar arrays and the overhead Inter Array connection will be visible. **Viewpoint 14** is located on Langary Gate Road near Langary Gate Farm. It is anticipated that in this location the solar arrays of Parcel D will be prominent.

Moderate adverse effects: <u>Significant</u> for:

- Viewpoint 2,5,6,7,8,10,11,12,13,15,20,21,27,30
- Viewpoint LCC 2-1, 3, 8, 9, 10

5.10 These Viewpoints consist of a wide range of receptors on the road and PROW network, along with numerous residents that are in close proximity to the development. These **Moderate Adverse** effects are considered to be Significant and would result from the proposed construction activity seen at close range across a wide extent of a view.

5.11 At **Operation (Year 1)**:

Major adverse effects: <u>Significant</u> for:

- Viewpoint 3, 14
- Viewpoint 9 (Moderate to Major)

Moderate adverse effects: <u>Significant</u> for:

- Viewpoint 2,5,6,7,8,10,11,12,13,15,20,21,27,30
- Viewpoint LCC 2-1, 3, 8, 9, 10

5.12 This represents no change to the receptors experiencing Significant effects from views of the completed Development. Any mitigation planting is yet to establish and is subsequently providing limited or no screening or integration of the Development.

5.13 At **Operation (Year 15)**:

Major adverse effects: <u>Significant</u> for:

- Viewpoint 3, 14
- Viewpoint 9 (Moderate to Major)

Moderate adverse effects: <u>Significant</u> for:

- Viewpoint 2,5,6,7,8,10,11,12,13,15,20,21,27,30
- Viewpoint LCC 2-1, 3, 8, 9, 10

5.14 This represents no change to the receptors experiencing Significant effects. Proposed mitigation planting will have matured, but the significant effects previously identified are expected to remain. The LVIA therefore identifies that several sensitive visual receptors will continue to experience Significant adverse effects over the remaining 40 years of the development.

5.15 At **Decommissioning**:

Major adverse effects: <u>Significant</u> for:

- Viewpoint 3, 14
- Viewpoint 9 (Moderate to Major)

Moderate adverse effects: <u>Significant</u> for:

- Viewpoint 5,6,8,10,12,15,20,21,27,30
- Viewpoint LCC 2-1, 3, 8, 9, 10

5.16 This represents a small change to the receptors experiencing Significant effects. Viewpoints 2,7,11 and 13 are judged to no longer experience Moderate adverse effects at this time. No explanation for this is provided in the LVIA.

5.17 The Development is assessed as resulting in a Significant change to the same visual receptors at all stages from construction through to decommissioning, with the effects also remaining

unchanged. The receptors affected and the significance of the effects on them remains mostly unchanged for the 40-year life of the Development. There is very little explanation in the LVIA for this conclusion which feels simplistic. Development activities at Construction will be very different from those experienced at Operation. AAH would expect to see a change in effect in some of the receptors throughout the design life of the project. This simplification seems to come from an acceptance by the applicant that mitigation will have limited visual impact and so it is not proposed. AAH would reiterate that localised and targeted mitigation to reduce the visual impact of proposed structures will be of value and can be achieved in a way that is compatible with existing landscape character if a balanced approach is taken.

5.18 Appendix 12-6 Visual Assessment (Table 1-1) provides a detailed explanation of the assessment values and is considered reasonable. However, it is noted that the viewpoints assessed as experiencing 'moderate' adverse effects are all located adjacent to the three proposed 132KV substations, and that the 400 kV substation / BESS compound and Weston Marsh B Substations, which will be much larger structures, do not seem to generate Major adverse (significant) effects on the VPs adjacent to them. At this stage, this assumption his seems unlikely, and more information to explain this is required.

5.19 It is also noted that few of the VPs assessed as having moderate or major effects are located on PROW with only CROW/7,11,12/1 and Wstn/3,6/1 mentioned. AAH believe that other PROWs are likely to experience significant effects including those along South Holland Main Drain and are surprised that there is no mention of the MacMillian way, Bridleways or the National Cycle Route in the visual assessment. It is these key linear routes, many used recreationally, that need to be assessed adequately to establish where mitigation could be best utilised to reduce visual impacts.

5.20 Specifically, the development is likely to have an adverse effect on the visual amenity of several key PROWs, Bridleways and Cycle Routes. **VP3** is judged as experiencing a **Major Adverse (significant)** effect as views from this location will be elevated and the full extent of the solar arrays – fields A, B, C, the 132kV substations, and the 400kV substation / BESS will be visible from this location. Due to the prominence of this location and its use as a cycleway (NCN), bridleway and PROW, between Crowland and Spalding, along the River Welland, it will be important to develop a mitigation strategy specifically for this VP to minimise effects. A localised increase in tree-cover around the river edge, tree planting in

field corners and adjacent to structures should be considered with mitigation effects on this view as a priority.

5.21 Also of concern are the impacts of the Development on the PROW associated with South Holland Drain (Flee/8/1 and Flee/8/2) where once again targeted and localised mitigation may be required to reduce impacts. Flee/8/1 and Flee/8/2 are PROW that connect to an extensive and long-distance network of routes that extend as far as the coast and Kings Lynn, following the course of the South Holland Drain and the River Nene. To the west, this PROW extends as far as Eaugate Road (Moul/7/1) but it is possible to continue along the course of South Holland Drain as far as the A16 where there is an under pass that links to the cycleway (NCN) PROWs and Bridleways associated with the River Welland between Crowland and Spalding. AAH have concerns that impacts on this route and the receptors associated with it have not been fully considered in regards to both design of the Development and subsequent mitigation. In what may be an oversight, there are no VPs at this location, with only VPs LCC 06 and LCC 05 located further west located on South Holland Drain.

5.22 In summary, the LVIA is mostly transparent regarding the likely significant effects on the Visual environment, however, AAH have concerns that this assessment is not yet complete and does not adequately assess the impact of the Weston Marsh B substation and the proposed 400kV substation / BESS compound which are still under ongoing design development. There are also concerns that the impact of the development on South Holland drain, and the PROW associated with it, have been overlooked. Photomontages showing the solar arrays and more accurate representation of the proposed Substations in key viewpoints are required and should be agreed with the relevant Local Authorities.

6.0 Appraisal of Cumulative Landscape and Visual Effects and Residential Visual Amenity Assessment

The following section provides a review of the cumulative effects and Residential Visual Amenity Assessment (RVAA), based on the following criteria:

- *Have cumulative landscape and visual effects been addressed?*
- *Are the RVAA and cumulative effects methodologies in accordance with relevant guidance and meet the requirements of the relevant Regulations?*
- *Does the methodology and scope of the assessment of cumulative effects and RVAA meet the requirements agreed in discussions at the pre-application stage during scoping and consultation?*
- *Has the methodology been followed consistently?*
- *Are residential and cumulative receptors and all likely effects comprehensively identified?*
- *Are any residential properties (receptors) likely to experience significant effects to their visual amenity?*

Cumulative Methodology

6.1 Cumulative landscape and visual effects are considered in Section 12.11 of the LVIA, which provides a concise and clear assessment of the cumulative landscape and visual effects associated with the scheme. Appendix 12-7 provides additional detail. AAH has focussed on the information presented within the LVIA.

6.2 The Cumulative Study Area for landscape and visual effects is identified in paragraphs 12.11.7 clarifies that ''any infrastructure related development progressing through the Town and Country Planning Act (TPCA) which is beyond domestic scale and within 5km radius of the scheme is considered and 12.11.8 ''any infrastructure related development progressing through the Nationally Significant Infrastructure (NSIP) process and within 10km radius of the Scheme''. The development considered are listed as including solar farms, Battery Storage Systems (BESS) and Over Head Lines (OHL) for electricity transmission. A full list of

developments is included in Appendix 4-1: List of Cumulative Schemes and illustrated in Figure 4-1: Short List of Cumulative Schemes.

6.3 Paragraph 12.11.4 provides a clear approach to assessing cumulative landscape effects, clarifying these may be **combined** in the same view, or **sequential** where the viewer moves to another location to see different developments (typically along linear routes such as PROW and roads).

Cumulative Landscape and Visual Effects

6.4 For both landscape character and visual effects, at both construction and operation, it is assessed that ''the addition of the Scheme in combination with other individual cumulative schemes does not result in a notable or transformative degree of change. However, the '**totality'** of effects, 'considering the Scheme and all cumulative projects within HLCA10: The Wash, HLCZ WSH6: The Townlands and WSH 4: Reclaimed Wash Farmlands' was considered to constitute a **moderate adverse (significant)** effect.

6.5 It is also the case that overall cumulative effects (this development combined with other proposals) were found to potentially have **moderate adverse (significant)** effects for more sensitive receptors which included in Appendix 12-7 - P47, P50 – **Residents**, P55 – **PROW**, P68 **Recreational** receptors. Table 1-2 provides a detailed explanation of this assessment.

6.6 No further mitigation is proposed to address these cumulative effects. However, AAH believes that the applicant should remain open to providing mitigation (onsite and offsite - possibly in conjunction with other developers) to reduce cumulative impacts.

6.7 Cumulative impacts remain an evolving situation and AAH are concerned about potential adverse (significant) effects on the landscape caused by multiple developments. It is suggested that mitigation proposals for the Meridian Solar proposals may need to evolve, as required, in response to other development as more is known. It is suggested by AAH that the cumulative assessment is updated during the application process and incorporates all foreseeable schemes with (APP084) Figure 4-1 and (APP241) Table 1-2 also updated as required.

Residential Visual Amenity and Settlements

6.8 A description of the approach to RVAA is provided in Section 12.4 and 12.8.45. This highlights **the setback approach** that has been adopted by the scheme to reduce impacts on residents and settlements. The conclusion of the LVIA is that ''whilst significant effects will arise beyond Operation Year 15 for representative views that reflect the outlook for residential receptors, these would not result in major adverse effects during any phase of development and reach a threshold where residential visual amenity would be a consideration''.

6.9 The LVIA concludes that an RVAA is not required for this project. However, looking at the number of VPs assessed as having significant effects, AAH would request further explanation to clarify this conclusion. AAH agree that it is unlikely that properties will reach the Residential Visual Amenity Threshold (RVAT). However, after reviewing the proposed scheme, dwellings located on Cloot Drive / Wash Bank (Sheet 1), Chapel Hill / Eaugate Road, Green Bank / Back Bank (sheet 6), Langary Gate Road (Sheet 7. 8 and 9) are in close proximity to the Development and may benefit from localised mitigation to contain views. AAH look forward to working with the applicant to ensure that the landscape design proposals are robust from a landscape character and visual perspective.

7.0 Mitigation and Design

The following section provides a review of the Mitigation and Design, based on the following criteria:

- *Is there evidence of an iterative assessment-design process and it is clear that this has informed the site redline, layout and primary and secondary mitigation?*
- *How appropriate is the proposed mitigation?*
- *Are potential cross-over topics, such as heritage or ecology, addressed and incorporated within the mitigation?*
- *Is the long-term management of existing and proposed vegetation properly addressed in any management plans to promote establishment?*

Evidence of Iterative Process

7.1 The scheme has been presented as evolving through an iterative process, with the landscape and visual findings feeding back into the design. This is clarified in paragraph 12-7 Embedded Mitigation. During construction (set out in the OCEMP – document 7.10) tree protection measures, lighting restrictions, biodiversity management measures, tree works, protective fencing and site maintenance measures are all outlined. During Operation (set out in the OLEMP – document 7.16 as well as Design Approach Document – ref 7.3) several design principles are outlined. These include Design Principle 2 – integrate the Scheme sensitively within the landscape to reduce potential landscape and visual effects; Design Principle 3 – seek to incorporate opportunities to enhance local recreation and access; Design Principle 4 – ensure responsible construction, ongoing maintenance and decommissioning; Design Principle 8 – design the Scheme to align with existing field boundaries and existing landscape features and vegetation; Design Principle 9 – seek to avoid potential impacts on biodiversity.

7.2 Paragraph 12.7.9 elaborates on Design Principle 2 – careful siting in the landscape, describing the use of offsets from properties and other sensitive features to preserve views and support the creation of green corridors. However, we noted that this principle of development offsets has not been applied to the South Holland Drain at the northern end of

Field D. Solar arrays will surround this feature on both sides, and would have a negative impact on the dwelling called 'Travellers Rest' and on PROW Flee/8/1 and Flee/8/2.

7.3 Paragraph 10.6.1 lists the design principles most relevant to landscape and visual matters. These are noted and positive principles, however the successful implementation of these principles is likely to be limited by the 'no mitigation approach' described in the LVIA (12.8.24). AAH would suggest that further work and explanation is required to show how these principles are to be implemented in a joined up and cohesive manner. It is not clear whether the proposed advanced planting described in 12.7.19 at Martins Road, Langary Gate Road and Field C-1-07 are intended to be interconnected as part of an overall strategy or if they are localised and isolated responses to site issues, and so this needs to be clarified.

Mitigation Measures

7.4 The *Outline Landscape and Ecological Management Plan (OLEMP) – Doc Ref 7.16* provides information regarding the establishment and maintenance of the planting associated with the Development, and this is illustrated in Annex A of the OLEMP.

7.5 The success of the landscape mitigation to meet the objectives laid out in the management plan, to integrate and screen proposals, promote conservation and protection of the environment, and encourage ecological and habitat diversity, is highly dependent upon the successful management and maintenance of the new planting, as well as the protection of exiting trees and hedgerows. The maintenance operations provide an initial overview of operations; however, we would expect the management plan to be developed further, well beyond the initial 5-year period, particularly if landscape and visual effects are being assessed at 15 years. AAH hope that some long-term reduction in landscape and visual effects can be achieved in some locations for some receptors. To help achieve this, and the long-term success of the landscape mitigation, the management plan should cover at least 15 years, and should be in place and actively managed for the lifetime of the project. Similarly, any early planting (e.g. pre-construction advance planting outlines in 12.7.19) should be included in the maintenance plan.

7.6 Monitoring of the proposals is a key aspect of the mitigation plan and is something which needs further development to ensure there is sufficient robustness to deal with the ever

more challenging climatic conditions when it comes to establishing new planting. The updating of the management plans every 5 years after the initial 15-year establishment period will go some way to ensuring that it is kept valid and can respond to issues and trends effectively, such as climate change. Plant replacements should also be considered, and also for a longer period then a "standard" 5 years, and cover for scenarios where there are large areas that have not established, or areas of significant die back beyond a 5-year period.

7.7 While the submission includes landscape proposals, as shown in *Annex A of the OLEMP*, these are of a high level and it would be expected that if the project proceeds, more detailed plans would to be submitted and subsequently agreed with the appropriate consultee/authority prior to the commencement of any works, which would be secured as a Requirement of the DCO. This would include clear detail of the areas of landscape mitigation, location and types of planting (species), as well as number, density and specification.

7.8 In section 5.4.7, replacement planting for failures is 'with matching' species. AAH would suggest that this is revised to 'appropriate' species so that there is some flexibility to assess the cause of failures through survey work and make changes species in response to drought, disease or other identified problem, since it is poor practice to keep replanting the same species without establishing the cause of failure.

7.9 We accept that planting can be an effective way to screen development proposals and add valuable landscape and ecological elements into the landscape, however this needs to be carried out in a way that is sensitive to the existing landscape character, or meet any aims of a published character assessment to improve or introduce new planting to an area.

7.10 This is an open landscape, and planting to simply screen could have detrimental impacts. The PROW and local roads in the study area enjoy an open aspect across most areas of the Study Area. Therefore, care needs to be taken to prevent the loss of this character through an overbearing set of mitigation proposals. At present, an overly cautious 'no mitigation' approach seems to be the applicant's approach. It is noted that appropriate development offsets and careful design will go some way to improve the integration of the Development into the landscape.

8.0 Conclusions and Recommendations

8.1 The following section provides an overall summary and conclusion on the suitability of the Landscape and Visual elements of the DCO submission and whether they are sufficient to support an informed decision. This includes the adequacy of the LVIA, reviewed in accordance with the Landscape Institute *Technical Guidance Note 1/20 (10 Jan 2020): Reviewing Landscape and Visual Impact Assessments (LVIAs) and Landscape and Visual Appraisals (LVAs)*.

8.2 Finally, there are recommendations for further information that should be provided to assist in the examination of the DCO Application.

Summary and Conclusions on the LVIA

8.3 The Landscape and Visual Impact Assessment (LVIA) submitted as part of the DCO Application is considered comprehensive, well-presented and generally undertaken in accordance with current best practice, notably GLVIA3 and LI TGN-2024-01. The LVIA is proportionate to the scale of the Development and has been prepared by competent experts. It identifies potential effects arising from construction, operation (Years 1 and 15) and decommissioning phases.

8.4 By reason of its mass and scale, the Development will lead to Significant adverse effects on landscape character and visual amenity at all main phases of the scheme (construction, operation year 1, operation year 15, decommissioning). The Development has the potential to transform the local landscape by altering its character on a large-scale across an extensive area. This landscape change also has the potential to affect a wider landscape character, at a regional scale, by replacing large areas of agricultural or rural land with solar arrays, substations, pylons and OHL, affecting the current openness, tranquillity and agricultural character that are identified as defining characteristics of the area. We also judge that this is a long-term project in regards to landscape and visual matters, spanning generations.

8.5 Based on our review, it is clear from the LVIA findings that the Development is of a scale that would introduce extensive change to the existing agricultural landscape, permanently altering the character and experience of the Site and its immediate context. Significant

adverse effects on both landscape character and visual receptors are identified at all stages of the Development, even following the establishment of mitigation (Year 15).

8.6 The reliance on planted mitigation in a predominantly open landscape may introduce its own adverse effects, including changes to the perceived openness and rural qualities, and potential enclosure where currently absent. Consequently, the applicant has adopted a 'no mitigation approach' for some areas of the project. AAH would suggest that more mitigation can be integrated into this landscape where it relates to settlements, rivers, watercourses, existing scattered woodland blocks and existing field boundary vegetation.

8.7 The key areas requiring further attention are summarised below.

Methodology and assessment

- Provide clearer explanation where professional judgement results in significance conclusions that differ from the indicative sensitivity and magnitude framework.
- Clarify how replacement of panels, batteries and other infrastructure during the 40-year operational life has been considered within the assessment.

Landscape baseline and assessment

- Clarify the extent of vegetation removal, retention and reinstatement, secure these measures through the LEMP and DCO Requirements, and expand the assessment to include openness, seasonality and agricultural land use as landscape receptors.
- Review the future baseline to better reflect the scale of renewable energy development anticipated across the wider landscape.

Visual assessment

- Complete the visual assessment by providing Type 3 photomontages/Accurate Visual Representations (AVRs), including the solar arrays, substations, BESS compounds and overhead line infrastructure.
- Review the assessment of substations and other major infrastructure, provide further justification where effects remain unchanged throughout the project life, and explain the conclusion that a Residential Visual Amenity Assessment is not required.

- Strengthen the assessment of Public Rights of Way, National Cycle Routes, bridleways and other recreational routes, including additional viewpoints where appropriate, particularly along South Holland Main Drain.

Design and mitigation

- Review the layout and setbacks at South Holland Main Drain/Langary Gate Road (Field D) and Martins Road (Fields A and B), and consider targeted mitigation where compatible with landscape character.

- Strengthen the Outline LEMP through long-term management, monitoring and replacement planting commitments.

Cumulative assessment

- Keep the future baseline and cumulative assessment under review throughout the Examination to reflect emerging renewable energy and grid infrastructure proposals.

Figures and supporting information

- Provide clearer explanation of key assessment judgements within the main LVIA, reducing reliance on supporting appendices.

- Update Figure 12-3 to identify long-distance recreational routes and improve cumulative mapping by naming schemes rather than application numbers.

8.8 Overall, the LVIA presented is robust with good methodology, clear explanations of assessment values and reasonable conclusions. The LVIA is transparent about the significant effects of the development on Landscape character and the visual setting, specifically along the Grid Connection Route, and acknowledges the limitations of mitigation to reduce these effects due to the nature of the existing open landscape. The project has generally been designed with sensitivity to reduce effects on receptors with setbacks and mitigation planting used sparingly to remain in keeping with the existing landscape.

8.9 However, there are a few locations and receptors that are of concern and although it is acknowledged the landscape is open and generally sparsely vegetated, LCC / SHDC are concerned that this shouldn't mean a minimal approach to mitigation in all cases.

Specifically, there may be scope to use localised vegetation for mitigation if it is targeted at sensitive views (e.g. VP3) or used where dwellings already have established vegetation (e.g. at Whaplode Drove). The importance of some PROW including those on South Holland Main Drain seems to have been overlooked. We would suggest that Figure 12-3 Public Rights of Way and National Cycle Route is keyed to highlight longer distance routes like the MacMillian Way. The solar array design (Field D) at the junction of South Holland Drain and Langary Gate Road does not have set backs, so the solar arrays will be on both sides of the PROW in this location.

8.10 With regards to landscape character, the impact of the Solar arrays seems to be understated by the assessment with impact of the development on 'openness' and 'agricultural land use' not considered with sufficient emphasis. The assessment focuses on Landscape Character Areas which is appropriate, but landscape receptors can include 'constituent elements of the landscape' and 'specific perceptual qualities' P36 – GVLA3.

8.11 With regards to visual amenity, the visual assessment seems to be understating the impact of the substations (possibly because their design is not finalised) and more explanation of their visual impact will be required as their design development progresses. There are also many dwellings in proximity to the development that will require localised mitigation to reduce visual impacts upon them. AAH look forward to reviewing planting designs, visualisations and more detailed proposals when this information becomes available.

APPENDIX A

AAH Technical Memos

AAH consultants

Technical Memorandum 1: AAH TM01

Lincolnshire County Council, Meridian Solar Farm

Landscape and Visual Scoping Opinion

This Review has been carried out by AAH Consultants on behalf of Lincolnshire County Council (**LCC**) and relates to landscape and visual issues and elements only. It is based upon a review of the relevant sections of the following document:

- *Meridian Solar Farm EIA Scoping Report; Version 1.0; 19/04/2024.* Prepared by *Temple Group Ltd.* for *Meridian Solar Farm Limited.*

We expect the production of the Landscape and Visual chapter of the Environmental Statement (**ES**), which would be in the form of a Landscape and Visual Impact Assessment (**LVIA**), and any supporting information (such as plans or figures) reflect current best practice and guidance from, as a minimum, the following sources:

- *'Guidelines for Landscape and Visual Impact Assessment'*, (**GLVIA3**), April 2013 by the Landscape Institute (**LI**) and Institute of Environmental Management and Assessment (**IEMA**);
- *'An Approach to Landscape Character Assessment'*, Natural England (2014);
- '*Technical Guidance Note (TGN) 06/19 Visual Representation of Development Proposals'*, 17th September 2019 by the Landscape Institute (LI);
- *'Technical Guidance Note (TGN) 1/20 Reviewing Landscape and Visual Impact Assessments (LVIAs) and Landscape and Visual Appraisals (LVAs)'*, 10th January 2020 by the Landscape Institute (LI) ;
- *'Technical Guidance Note (TGN) 04/20 Infrastructure',* April 2020 by the Landscape Institute (LI); and
- *'Technical Guidance Note (TGN) 2/21 Assessing landscape value outside national designations'*, May 2021 by the Landscape Institute (LI).

Overall, we would expect that the assessment of potential Landscape and Visual matters and evolving proposals relating to the Meridian Solar Farm, as a Nationally Significant Infrastructure Project (**NSIP**), follow an iterative process of engagement and consultation to ensure the following are not fixed at this stage and are discussed, developed and agreed at subsequent technical meetings with LCC and other appropriate stakeholders:

- Landscape and Visual Impact Assessment Methodology;
- Development, and subsequent ZTV, parameters;
- Study Area extents (distance);
- Viewpoint quantity and locations;
- Photomontage/Accurate Visual Representations (**AVR**s):
    - Quantity and location;
    - Phase depiction;
    - AVR Type and Level.
- Mitigation Measures/Landscape Scheme/Site Layout;
- Cumulative effects, including surrounding developments to be considered; and

- The extent as to which a Residential Visual Amenity Assessment (**RVAA**) should be considered (based on the Landscape Institute TGN 2/19) if there are residential properties with receptors likely to experience significant effects to their visual amenity.

While the focus of this review is on Landscape and Visual matters, other information provided within the report, and any associated Appendices, has also been considered, providing background and context to the site. At this initial stage of the NSIP process, the content and level of information provided by the developer within *Section 4.2, Table 4.6 Landscape and* Visual (as a topic to be "Scoped In") are generally considered satisfactory, however, as stated previously, we would expect to discuss this content and approach as part of the iterative process.

The following should be considered in the evolving assessment and layout:

Viewpoints

The final locations of viewpoints are to be reviewed and agreed with LCC and other relevant stakeholders. The final viewpoint selection should also consider views of taller and more conspicuous elements, such as battery storage or sub-stations once the layout is more developed, as well as consider potential key, or sensitive, viewpoints or visual receptors. We would welcome an initial discussion and subsequent workshop (on site if appropriate) with the applicant's team in regards to proposed viewpoints.

Photomontages

To gain an understanding of the visibility of the development and how the panels and infrastructure would appear in the surrounding landscape, Photomontages/Accurate Visual Representations (AVRs) should be produced. The number and location of the agreed viewpoints to be developed as Photomontages/AVRs should be agreed with LCC and other relevant stakeholders and produced in accordance with *TGN 06/19 Visual Representation of Development Proposals*. At this stage, it is deemed appropriate that these should be produced to illustrate the proposals at different phases: Existing Situation (baseline), Operational (year 1) and Residual with planting established (10 to 15 years). The Photomontage/AVR Level and Type is to be discussed and agreed.

Methodology

As stated previously, the LVIA should be carried out in accordance with the GLVIA3 and associated guidance, and undertaken by suitably qualified personnel. The methodology provided at *Table 4.6* is typical of those used for ES Chapters where potential significant effects can be considered and reflects the guidance in GLVIA3. We would request that the most up to date technical guidance be used and the methodology is further interrogated at the next phases of the project.

Paragraph 3.3.8, as part of the overall EIA Approach and Methodology in Section 3, identifies that **Significant effects** are identified as those that are Moderate or above. This is acceptable and expect this be consistently followed through into the LVIA.

The methodology should also clearly lay out the process of assessing temporary and permanent elements of the scheme, and the LVIA should clearly identify those elements that would not be decommissioned at the end of the life of the development, and assessed accordingly.

Scope of the Study Area:

It is acknowledged in *Table 4.6* that, based on a preliminary Landscape and Visual Impact Assessment study area and draft Zone of Theoretical Visibility (ZTV), an initial Study Area covering 5km has been allowed for the proposed development. At this early stage, we recommend these extents are discussed and further reviewed as the full extent of potential visibility of the development is not yet fully known, and it is not clear if the ZTV mapping within *Figure 4.6.1* only includes for potential visibility within 5km, or if no visibility beyond 5km has been identified. The ZTV mapping would be updated once the proposals have developed and the study area should not be fixed until the full extents of visibility are known from both desktop and site work.

Once the study area has been defined, the LVIA should also provide a justification for the full extent/distance, which would be further refined as part of the iterative process.

Landscape

Only the National Landscape Character Area that the site is located within has been identified, however to align with GLVIA3 the LVIA should include an assessment of landscape effects at a range of scales and need to include relevant published landscape character assessments and likely a finer grain landscape assessment that includes the Site and immediate area that also considers individual landscape elements or features that make up the character of the site and study area.

Visual

Several visual receptors are identified within *Table 4.6.1*. However, at this early stage of the project we request these be reviewed and consulted upon further once proposals have been developed and we are not in a position to confirm their inclusion or omission. We would expect that the visual assessment would include for identification of visual receptors, and not just an assessment of any agreed viewpoints, which should clearly cross reference viewpoints to associated receptors.

The visual assessment should take account of the 'worst case scenario' in terms of winter views, and effects associated with landscape mitigation at the Operational Phase (year 1), Residual Phase with planting having established (10 to 15 years), and at the Decommissioning Phase.

The LVIA should ensure all elements associated with the development are considered and assessed, such as battery storage, sub-stations, CCTV poles and boundary fencing, which may be more visible than panels due to height, mass and extent.

In regards to the Electricity Export Connection to NETS, section 2.6 identifies that *"cabling will be overhead, underground, or a combination of the two"*. We wish to note that overhead cabling and pylons are likely to create additional and wider adverse visual effects, over underground cabling, which in turn would likely be of increased concern for local communities. We would welcome the opportunity to discuss the approach further at the pre-application stage.

Cumulative impacts

Cumulative Landscape and Visual effects should be assessed in regards to other major developments, and in particular commercial scale solar developments, as appropriate in regards to proximity and scale. This should consider both Combined (in same view) or Sequential (when the observer has to move to another viewpoint to see the same or different developments) effects

Residential Visual Amenity Assessment

While referenced in a section within *Table 4.6*, the extent as to which a Residential Visual Amenity Assessment (**RVAA**) should be considered within the ES (based on the Landscape Institute TGN 2/19). At this stage it is unclear if there are residential properties with receptors likely to experience significant effects to their visual amenity that would meet the visual amenity threshold, and recommend a Residential Visual Amenity Survey is scoped into the ES, which will ascertain if there are. The scale of the scheme has the potential to give rise to significant effects to local residents, and also the layout should respond to views and proximity to these properties and residents to mitigate any potential adverse effects.

Mitigation and Layout

As this is an iterative process, at this stage it is not relevant to comment on any potential mitigation or layout of the development. However, best practice guidance, relevant published landscape character assessment's and Local and County Council Policy and Guidance shall be referred to and implemented as appropriate.

We would also expect the landscape and planting scheme is coordinated with other relevant disciplines, such as ecology, heritage or civils (e.g. SuDS features), to improve the value of the landscape and reflect appropriate local and regional aims and objectives. Planting should be well considered and not just placed to screen proposals, as this may have a negative effect such as appearing out of character or foreshortening open or panoramic views. Any Landscape Scheme and associated Outline Landscape and Ecological Management Plan should accompany the ES which should cover as a minimum the establishment period, which is assumed would be up to 15 years to cover the period up to the residual assessment.

The management plan should provide for both new planting and existing retained vegetation and how it will be managed and protected through all phases of the development. Any vegetation loss to facilitate development, including access and wider highways works or abnormal vehicular routes for construction, must be clearly identified in the submission.

Oliver Brown CMLI
AAH Landscape

oliver.brown@aahplanning.com
www.aahconsultants.co.uk

13 June 2024

AAH consultants

Technical Memorandum 2: AAH TM02

Lincolnshire County Council, Meridian Solar Project

Visual Amenity: Initial Viewpoint Comments

An initial Team Meeting was conducted by representatives from Meridian Solar, AAH and Lincolnshire County Council (LCC) on 21st August 2024, to discuss the proposed scheme, progress to date, and a strategy for the landscape elements over the coming weeks and months. At this meeting, Meridian Solar presented a plan and schedule showing the location of the development and a shortlist of potential viewpoints for the LVIA. These were subsequently issued to AAH via email after the meeting. AAH visited Site on the 12-13th September 2024 to view the Site and surrounding area, with the aim of reviewing the potential viewpoints currently proposed by Meridian.

Therefore, we have the following general comments and requests:

1. Comments provided are based on the information provided to AAH and subsequent AAH fieldwork carried out to date. Therefore, any comments are based on the layouts currently provided, which are confirmed as undergoing development. This is to be expected as part of an iterative process. While we understand that the information provided to date is not intended to undergo complete change, the layout is still undergoing design development and is subject to modification with updated final layouts, additional viewpoints or further information provided. This is particularly pertinent for the taller/larger and more permanent elements such as sub stations (up to 20m height) or pylons (up to 11m) which due to their mass will likely be more conspicuous in the landscape. At the time of writing, the final location of these elements has not been determined with the information to date based only on solar panels (up to 3m in height);

2. The locations of ancillary elements, such as pylons, substations and associated inverters, transformers and switchgears will be important in reducing visual impacts as these could appear more conspicuous than the uniform PV solar arrays – their location should be carefully considered in relation to visual receptors, but also combined with the PV solar arrays. The final size and location of all these ancillary elements should be provided and indicated on the layouts when available to enable their impact to be understood; and

3. We do not feel we can provide more detailed feedback or suggested viewpoint locations at this stage relating to the sub-station and pylon location(s) until further information is provided. However, we would expect the LVIA to provide a clear evaluation and likely effects of these.

For detailed comments on the proposed viewpoints (1-30), please refer to comments below.

The following additional comments relate to the visibility of the Site from key groups of receptors and viewpoints, and we have included the plan provided to us by Meridian Solar, appended to this memo, which locates the Viewpoints. We would suggest the comments provided are discussed further prior to finalising the viewpoint locations. Should it be considered that AAH's suggested views of the site and development are not attainable, or the viewpoints not appropriate, a statement to this effect should be provided to aid transparency. It is important that all viewpoint photography should provide the most advantageous views of the Site and proposed development, and avoid any obstructions to a clear view such as cars and other traffic:

A. Generally, at this early stage in the design process, **the viewpoints (1-30) have been selected based on the initial ZTV which does not factor in intervening vegetation, topography and buildings**. As more information becomes available regarding the development's design and its visual interaction with the surrounding landscape, viewpoints (1-30) will require adjustment to ensure that they provide the most relevant views of the development from a good range of representative receptors.

B. Viewpoint locations have not prioritised views from the busiest roads in the surrounding landscape with many viewpoints located on minor access roads with few receptors. **No views have been taken from A16** where there is the possibility of using parking bays on this route to capture VPs. For example, there is a parking bay on Cowbit Road on the eastern carriageway with clear views of Development parcel B-5 and the wider Development to the south.

C. Viewpoint locations do not always provide good coverage of views from the edge of larger settlements. Coverage is often on one side only or located on minor roads.

D. Viewpoint locations are not always located near to sensitive receptors like PROW or community facilities.

The following comments relate to the specific Viewpoint locations identified on the plan provided to us by Meridian Solar:

E. **VP8** is well located on the edge of Deeping St Nicholas **-** but its location could be adjusted to the left side of road to reflect views of traffic heading south on New Road.

F. **We have two viewpoints numbered VP26.** One of these, located to the north of Crowland on Common Drove, may be better located nearer the northern edge of Crowland, on Gravel Causeway, near Crowland Wildlife Pond, where there are more potential receptors. The other VP26, located further east on a PROW to the north of Sutton St Edmund, will provide a good impression of views of the Development from the edge of this settlement.

G. **VP25 located to the north of Cowbit is located in a position that shows only views from Barrier Bank.** There is no coverage of the adjacent PROW (New Riv Drove) which is potentially a more sensitive receptor or from the western edge of the settlement of Cowbit which is a focal point for community activity with school, bus stop, shop/garage. **VP22** could

be relocated a bit further north to cover views of the Development from the southern edge of Cowbit.

H. **Longer distance views (VP7, VP28) in the north seem unlikely to provide views of the Development.** The receptors in the north include isolated dwellings, farm steads and campsites that are also unlikely to see the development. One view from the most sensitive receptor (perhaps the edge of Weston Hills) is probably sufficient to demonstrate this.

I. **VP17 and VP6** on Moulton Chapel and Roman Road could probably be consolidated into a single view from Roman Road on the western side of the settlement of Moulton Chapel. VP6 is a glimpsed view between development on the eastern edge of Crowland and doesn't provide an impression of the open views of the Development that will be experienced from the roads on the edge of the settlement.

J. **VP1 and VP30** only one viewpoint is needed from Welland Bank (which is a PROW) with VP1 preferred as it is at a road junction and not obstructed by vegetation.

K. **VP3** on Martins Road could be used to provide views in both an eastern and western direction. May need to be relocated a bit further north to achieve this.

L. **VP11 and VP23** are taken from different PROWs adjacent to the affluent settlement of Aswick Grange that runs along Gull Bank and Eugate Road. This settlement is likely to be sensitive to the Development. VP11 covers the south and west of the settlement and the stretch of Queens Bank that is footpath (PROW). VP23 is located on South Holland Main Drain which is a major east west pedestrian route (PROW) through the Development area. There is some duplication in their views with VP23 possibly re-positioned more to the east to avoid this.

M. **VP13 and VP14** are located to the west of Whaplode Drove a potentially sensitive settlement. These viewpoints are located on the western side of the settlement. There is no VP coverage on the eastern side of the settlement and a VP that covers this would be beneficial. VP13 and VP 14 are located at the northern end of the settlement where there is intervening field boundary vegetation between the road and the proposed Development. Further south on Back Bank views towards the Development are more open and would possibly be more representative of the effects of the Development.

N. **VP24** is taken from the PROW but might be better taken from the road's junction with the PROW to represent views from the PROW, road and the nearby dwelling.

O. **VP29** is taken on Goochgate where there are few receptors except isolated working farms. This is a minor lane with no PROW. A better location may be further north or south to a junction with a higher use road (e.g. Old Fen Dyke or New Fen Dyke).

P. **VP27** is located to the north west of Fenland Airfield on Jeckil's bank. A better VP location may be to the south east of the Airfield on the B1168 which is a busier routeway serving Holbeach St Johns.

Q. **VP 16** is located on Joy's Bank between two large farms. VP may be better located adjacent to one of these farms to give a more accurate impression of impact of Development on these receptors.

R. **VP15** is located to show the view from the road junction (Drove Road / Lambert Bank) and the chapel at Holbeach Drove. Views towards the Development are largely impeded by boundary vegetation on Lambert Bank. Alternative edge of settlement positions may provide a better representation of the visual impact of the Development on this settlement. Alternative locations may include Langley Gate Road or Holbeach Drove Gate (B1168).

S. **VP18** is located at the western end of French Drove which has much less traffic than the eastern end (B1167). The eastern end of French Drove appears to be outside the ZTV - but visibility of the development appeared similar. VP could be located further west to junction with Falls Drove or further north to include PROW that crosses Falls Drove.

T. **VP12** is located on the eastern side of Crowland on James Road and looks north. This is a glimpsed view between existing vegetation with the adjacent business unit presently empty. There may be better views from the edge of Crowland from Cloot Drove looking north.

U. **VP2** could be taken further north nearer to higher use road junction between Barrier bank, Queens Bank and Wash bank.

As stated, at this stage we do not have details on the final location and appearance/extent of taller/larger elements that for part of the development which would likely have visual impacts that may require additional viewpoints beyond those initially identified.

[redacted]
AAH Landscape

[redacted]@aahplanning.com
www.aahconsultants.co.uk

15 September 2024

AAH consultants

Technical Memorandum 3: PIER Landscape and Visual Comments (AAH TM03)

Lincolnshire County Council, Meridian Solar Farm: PIER Landscape and Visual Comments

Introduction

AAH Consultants have reviewed the *Meridian Solar Farm: Preliminary Environmental Information Report* (**PEIR**), on behalf of Lincolnshire County Council, in relation to Landscape and Visual matters. Information downloaded from: https://meridiansolarfarm.co.uk/documents/ and the documents that have been referenced, are as follows:

PEIR Volume I

- Contents
- Chapter 1 Introduction
- Chapter 2 The Scheme
- Chapter 3 Alternatives and Design Evolution
- Chapter 4 Overview of the EIA Process
- Chapter 10 Landscape and Visual
- Chapter 15 Cumulative Effects

PEIR Volume II

- List of Figures
- Figure 1-1 The PV Area
- Figure 1-2 The Site
- Figure 2-1 Indicative BESS and On-Site Substation Compound Locations
- Figure 3-1 Grid Connection Routing Initial Study Area
- Figure 3-2 Grid Connection Routing Study Initial Corridors
- Figure 3-3 Grid Connection Corridors Options
- Figure 6-1 Designated Heritage Assets PV Area and Inter-Array Areas
- Figure 6-2 Non-Designated Heritage Assets PV Area and Inter-Array Areas
- Figure 6-3 Previous Archaeological Investigations PV Area and Inter-Array Areas
- Figure 6-4 Historic Landscape Character PV Area and Inter-Array Areas
- Figure 6-5 Designated Heritage Assets Grid Connection Corridor
- Figure 6-6 Non-Designated Heritage Assets Grid Connection Corridor
- Figure 6-7 Previous Archaeological Investigations Grid Connection Corridor
- Figure 6-8 Historic Landscape Character Grid Connection Corridor
- Figure 10-1 Landscape and Visual Study Area
- Figure 10-2 Planning Designations
- Figure 10-3 Access and Connectivity
- Figure 10-4 National Character Areas
- Figure 10-5 Regional Historic Landscape Character Areas
- Figure 10-6 Landscape Character Types
- Figure 10-7 Zone of Theoretical Visibility (Bare Earth) Combined for Solar PV Modules and Grid Connection Corridor
- Figure 10-8 Zone of Theoretical Visibility (Screened) Solar PV Modules
- Figure 10-9 Zone of Theoretical Visibility (Screened) BESS and On-Site Substation Compounds
- Figure 10-10 Zone of Theoretical Visibility (Screened) Inter-Array Areas

- Figure 10-11 Zone of Theoretical Visibility (Screened) Grid Connection Corridor
- Figure 10-12 Zone of Theoretical Visibility (Screened) Combined for Full Scheme
- Figure 10-13 Viewpoint Location Plan
- Figure 10-14 Visual Receptor Location Plan (0-5km)
- Figure 10-15 Winter Viewpoint Photography
- Figure 10-16 Illustrative Landscape and Visual Mitigation Plan
- Figure 13-7 Public Rights of Way PV Area and Inter-Array Areas
- Figure 13-8 Public Rights of Way Grid Connection Corridor
- Figure 15-1 Location of Short List Committed Developments

PEIR Volume III

- List of Appendices
- Appendix 10-1 Landscape Assessment Tables
- Appendix 10-2 Visual Assessment Tables
- Appendix 15-1 Long List of Other Developments
- Appendix 15-2 Short List of Other Developments

The review takes into account previous AAH comments (Refer to Meridian Solar Farm Technical Memos TMO1: Landscape and Scoping Opinion and TM02: Initial Viewpoint Comments), as well as meetings/workshops held with the Applicant team and any subsequent meeting minutes. The comments provided are intended to assist in guiding the next stage of the development process, refinement of the content of the LVIA chapter and the overall development proposals. It is not a final review of any of the preliminary findings or initial assessments.

PEIR Landscape and Visual Comments

A. Main Overarching Comments on the PEIR:

1. The proposed development is subject to EIA, and a Scoping Report was issued by the developer: Meridian Solar Farm Scoping Report [19/01/24], prepared by [Temple Group Ltd], which identified the need for a section on Landscape and Visual. Subsequently, a Scoping Report Review was carried out by LCC (13/06/24) and a Scoping opinion was received from the Planning Inspectorate and other stakeholders (10/07/2024). Overall, the landscape and visual elements of the PIER and subsequent scope of the LVIA chapter is generally aligned with the scoping report and scoping report review, as well as other AAH comments (AAH TM01: Landscape and Scoping Opinion, TM02: Initial Viewpoint Comments), and meetings/workshops held with the applicant.

2. As outlined within Chapter 10: Landscape and Visual of the PIER, the development proposals are preliminary and continue to be developed as part of an iterative process. This includes the design, layout, siting and heights of the PV modules, BESS units, substations, inter-array connections and the grid connection. Consequently, viewpoint locations and photomontages covering these elements remain subject to change or have not been fully agreed. Specifically, there are no viewpoint locations agreed that cover the proposed grid connection which it is anticipated will consist of overhead lines and pylons with a guidance height of up to 50m. The development of overhead lines and pylons through this landscape is of particular concern, and we strongly recommend the applicant determine these likely effects and consult with LCC and other interested parties as soon as possible. Additionally, only indicative locations of the proposed BESS and sub-stations (5 No.) have been provided on Figure 2-1 with precise siting and design details remaining unresolved. These elements

have a guidance height of 17-17.5m and are likely to have a significant effect on both views from receptors and the landscape.

3. Vegetation retention and mitigation proposals (shown on Figure 10-16) also remain subject to change until the design proposals have been finalised and it is uncertain that the on-site and off-site planting indicated can be fully implemented. Specifically, there is more detailed work to do to ensure that all indicated on-site tree planting will be compatible with proposed built structures, including the PV units, and with the existing landscape character (see PIER P10 Gedney Hill Parish Council comments Table 10-2) which is sensitive to over planting (with for example, woodland blocks) in some locations. There is also more work required to ensure the delivery of off-site planting, especially that requiring voluntary agreement (Para. 10.9.3). A commitment to enhancement is also described in para. 10.9.5 including wetland planting, additional PROW links and information boards. This will also require further consultation and design work to ensure delivery. These proposals must all be well coordinated with the LEMP (para 10.9.4) and an integral part of the development proposals.

4. While it is accepted that a number of designs aspects of the scheme cannot be confirmed at this stage, we will expect that the final LVIA / ES clearly sets out the maximum parameters of the development, such as heights and locations of elements in more detail than that provided in the PIER (para.10.4.91). This is particularly important for larger and taller elements such as the substations, (BESS) battery storage units, inter-array connections and the overhead Grid connection lines and pylons. The PIER uses a 'worst case' scenario to assess likely significant effects through the use of the Rochdale Envelope approach (para.10.4.91) to help ensure effects are not underplayed. At this stage, it is agreed this is a reasonable approach, but there remains some degree of uncertainty about the landscape and visual outcomes and further consultation with LCC and other stakeholders will be required before agreement on significant affects can be agreed.

5. It is requested that further landscape and visual consultation is carried out between AAH/LCC and District Authority landscape specialists (inc. South Holland District Council) and the developer team (Downing Renewable Developments) following the conclusion of this formal consultation process. This would likely cover the PIER comments as well as development proposals and mitigation scheme, including Inter-array and Grid Connection routes and location of any larger structures or buildings such as sub-stations, extent of vegetation loss and mitigation, and also subsequent knock-on effects such as any requirement for additional / amended viewpoints or visualisations.

6. Finally, it is acknowledged that the Viewpoints shown in Figure 10-13 have been amended and adjusted in response to TM02: Initial Viewpoint Comments. A new viewpoint has been taken from the A16 and adjustments to previous viewpoint locations to include more PRoW and other potentially sensitive receptors has also occurred. A review of Figure 10-15: Winter Viewpoint Photography shows that nearly all of these viewpoints will capture potential BESS or inter-array locations (VP 21 being the only exception). However, it is anticipated that as precise locations of the BESS, substations and Inter array connections become known, further adjustments to these viewpoints including their field of vision or location may be required. Additionally, more Viewpoints will be required to cover the Grid Connection corridor which is not yet finalised, and this element is a particular concern in landscape and visual terms.

B. Detailed Comments on PEIR:

In regards to the landscape and visual chapter (**Chapter 10 of the PEIR**):

10 – 1 Introduction

1. The introduction states clearly that this is a preliminary assessment of likely significant effects and that a more detailed assessment will be provided within the full Landscape and Visual Impact Assessment (LVIA) provided as part of the ES.

2. Agreement that the 'Landscape Fabric' should be considered along with Character, Designations and Visual Amenity. However, there is no plan within the PIER showing extent of vegetation / boundary / tree removal. This will be required to fully understand the impact of the proposals on the existing landscape and we encourage the applicant to retain and protect existing vegetation where possible, keeping removal to a minimum. This must consider both on site and wider vegetation removal, such as to facilitate transport access for larger vehicles on the wider network.

10 -2 Legislation, Policy and Guidance

3. A comprehensive list of Legislation, Policy and Guidance is provided; however, we recommend the applicant review any potential Parish Council **Neighbourhood Plans** of relevance to the Application.

10 – 3 Scoping Opinion and Additional Engagement

4. No aspects of landscape and visual have been scoped out for the Construction, Operational and Decommissioning phases of the Development. As the scheme design evolves, detailed elements will become more refined. The PIER is based on maximum parameters to provide a worse case preliminary assessment. It is anticipated that the number and extent of likely significant effects will reduce. It is agreed that this is a reasonable approach at this stage.

5. The scoping consultation raised concerns about the impact of lighting, extent and parameters of the ZTVs, impact on road users, need for 'winter views and 'worst case' scenarios, location of viewpoints, retention of existing vegetation, assessment of cumulative effects and mitigation planting (PIER Table 10-2). Addressing these concerns remains a priority and an ongoing process with more information required in the LVIA, LEMP and ES.

10 - 4 Assessment and Methodology

6. Changes to the 15km study area associated with the BESS and On-Site Substation Compounds and Grid connection Corridor have been made since scoping due to developments to the Scheme design (Para. 10.4.6). No information is provided regarding these developments within the PIER and an explanation may be beneficial if it helps to demonstrate a thorough approach.

7. In some instances, 'professional judgement' will mean that it is 'sufficient to describe only sensitivity' (para. 10.4.28) and a 'detailed justification will not be provided' (para. 10.4.74). We agree that for brevity it may be prudent to reduce the process in some instances - but care will be needed to ensure a thorough approach.

8. The approach to viewpoints is to organise them according to distance from the Site boundary – 0-5km detailed assessment, 5-10km grouped assessment, and 10-15km summary assessment. In some instances, for example, when assessing the Grid connection (50m height) it may be appropriate to provide detailed assessment for distances greater than 5km if the receptors have a high sensitivity and the development features are larger and can be seen from greater distance.

9. It is noted that 'below ground infrastructure would be left in-situ (Para 10.4.81) – see below comments on 'temporary' description of the development (paragraph 13-14).

10 – 6 Baseline Conditions (inc. Future Baseline)

10. PROW and recreational routes are mapped on Figure 10.3. At present, only two long-distance routes are identified in the PIER - McMillian Way and NCN Route 12. We judge that there may be more named routes with potential views of the development, particularly when considering pylons and overhead lines. Perhaps add these, and those already identified, to Figure 10.3?

11. The Future Baseline (para 10.6.64) describes the expansion of nearby settlements due to housing development and holiday lodges. There is no mention of the impact of renewable energy projects in the county, which are extensive (both recently approved and, in the system,) despite these being listed in table 10-14. These schemes must be considered as part of the LVIA, and how this landscape, typified by agriculture, will have large scale energy infrastructure (solar, BESS and new pylons) as a defining landscape feature.

10 – 8 Preliminary Assessment of Likely Significant Effects

12. The development is categorised 'long term' as it is beyond 10 years. The development proposed is 40 years which is four times this length of time. Having reviewed the sections relating to this in GLVIA3, there is some strength to the consideration that this amounts to a permanent project, spanning multiple generations, and should not be described as 'long term'.

13. The development is also categorised as 'temporary' despite **permanent** remaining elements of the scheme including 'underground elements and planting' (para 10.8.3). The development will have ongoing effects on the landscape after decommissioning as remaining underground structures (like concrete foundations) will prevent a return to past land uses like agriculture. We believe the development should not be described as 'temporary' unless there is a commitment by the developer to remove underground elements.

14. It is noted that the 5 to 10km receptors have a low-moderate confidence rating due to the current level of information within the PIER design. This is considered reasonable at this stage but more ongoing certainty will be needed in future phases of the planning process.

15. Mitigation has been considered in line with opportunities set out within existing Landscape Character studies including the Statements of Environment Opportunity (SEO) – (Para 10.8.4). It would be good if these were listed and the proposed design response to them tabled. It may also be worth clarifying if the SEOs relate to NCAs or LCAs.

10-9 Additional Mitigation and Enhancement Measures

16. Many of the listed mitigation proposals are caveated with 'where appropriate' (Para 10.9.4) and therefore require further consultation and agreement with the relevant stakeholders including LCC.

17. The visual containment of the A16 is subject to 'voluntary agreement for planting outside the current scheme'. Further assurances of the deliverability of this proposal will be required and this mitigation will need to be secured as part of the DCO and clearly identified. If this cannot be secured, they cannot form mitigation proposals as part of the LVIA.

18. Areas within the site 'which have no proposed infrastructure' and 'could be used for landscape and visual mitigation planting' will need to be identified and quantified so their value can be assessed - perhaps as a % of the whole proposed development area. 'The larger areas' contributing to BNG should be identified and their links with the surrounding landscape clarified.

19. It is agreed that species selection should be native and agreed with LCC and SHDC.

20. It is agreed that a LEMP should be submitted as part of the DCO application and should set out the purpose of proposed planting, composition and method of establishment. This should provide detailed maintenance operations, and cover, as a minimum, 15 years to ensure planting is properly maintained up to the period assessed for residual effects. It may, however, be appropriate that this is reviewed, updated and carried out for the life of the development to ensure planting is consistently mitigating landscape and ecological effects. Plant replacements should also be considered, and it is likely these would be required for beyond the typical 5-year period to insure against an extensive die back or instance where failure to establish as predicted occurs prior to the 15-year period.

10 -11 Cumulative Effects

21. A map showing the red line boundaries and location of the applications described within table 10-14 would be very useful in helping to understand the cumulative effects of development within the development area. The Landscape and Visual environment around the development has the potential for very significant change through the establishment of multiple NSIP scale solar and energy projects replacing formerly agricultural land and a graphic demonstrating this clearly should be provided in the LVIA / ES.

10 -12 Conclusions and Next Steps

22. Para 10.12.3 mentions the permanent change to the landscape created by the mitigation planting, but fails to mention the permanent change created by the retention of below ground structures, and that 40 years spans several generations and would in our opinion be classed as a permanent development. It is anticipated that without the removal of below ground structures; the land could potentially not return to the agricultural use presently on site. We would suggest the applicant clarifies this point in the ES.

C. Detailed Comments on PEIR Supporting Figures (Chapter 10):

Table 10 -16 Illustrative Landscape and Visual Mitigation plan

23. This plan is 'illustrative' and further detail on the proposed planting plan will be required to show more accurately the mitigation planting that will be possible. We would expect the DCO have a clear requirement that covers a detailed planting scheme and appropriate management linking to the LEMP.

24. Presently, there are unresolved questions around the compatibility of proposed trees adjacent to PV areas and how much undeveloped land will be available for planting. It is also unclear whether off site planting can be protected by agreement or new planting (along the A16) can be implemented as this will also require agreement. It is also unclear what existing planting will require removal to provide access to the site or to accommodate the development. A plan showing this information will be essential.

[redacted]
AAH Landscape

[redacted]
AAH Landscape
www.aahconsultants.co.uk

23/05/25

Technical Memorandum 4: Targeted Consultation Landscape and Visual Comments (AAH TM04)

Lincolnshire County Council, Meridian Solar Farm: Targeted Consultation Landscape and Visual Comments

Introduction

AAH Consultants have reviewed the *Meridian Solar Farm: Targeted Consultation (24th September - 22nd October 2025)* on behalf of Lincolnshire County Council, in relation to Landscape and Visual matters. This document contains (post-PIER) changes to the Meridian Solar Farm proposal due to ongoing surveys, design refinements and feedback from the stage 2 consultation. The information reviewed includes Consultee letter (25th September EN010169) and Meridian Solar Targeted Consultation document *(24th September -22nd October 2025).*

This review takes into account previous AAH comments (Refer to Meridian Solar Farm Technical Memos TMO1: Landscape and Scoping Opinion and TM02: Initial Viewpoint Comments, TM03: PIER Comments), as well as meetings/discussions held with the Applicant team and any subsequent meeting minutes. The comments provided are intended to assist in guiding the next stage of the development process, refinement of the content of the LVIA chapter, and the overall development proposals. It is not a final review of any of the preliminary findings or initial assessments.

Landscape and Visual Comments on Design Refinements (pages 5-9)

A. <u>Design refinement Comments:</u>

BESS moved to 400kV substation to avoid housing adjacent to Land parcels A, C, D.

25. The location selected to consolidate the BESS with a 400kV substation is characterised by an open landscape of flat fields, drainage ditches and long horizons with scattered boundary vegetation. The site is located in the countryside between the small settlements of Crowland and Cowbit. The site itself is a large, flat, square, arable agricultural field defined by South Holland Main Drain on its northern edge. This drain intersects with Wheatmere Drain which runs parallel to the A16 on the Site's western side. Smaller drains define the site's boundaries on its southern and eastern sides. There is very little vegetation on the site itself, boundaries are open with no fencing, and consist mainly of ditches and long marsh grasses. Adjacent to north western corner of the Site, the A16 is edged with vegetation which extends north, on both sides of the road, containing views of properties located on Peak Hill which are 350m to the north west of the Site. This vegetation consists of mainly native shrub species including dogrose and hawthorn. The only other properties near the site are on Queen's bank 640m to the north east of the Site. These properties have intervening shelter belts and garden vegetation which will reduce their visual exposure to the proposed development.

    The A16 is a busy route mostly used by locals and freight; however, it is also likely to be used by some higher sensitivity receptors including tourists visiting local historic centres like Crowland. The traffic noise from the A16 detracts from the location's otherwise tranquil and undeveloped character. Visually, this location contributes to the perception of this landscape as an undeveloped and predominately agricultural landscape.

There are no core paths on the Site or immediately adjacent to it, but further to the east, terminating at Eaugate Road, there is a Bridleway (Moul/7/1) running along the northern edge of the South Holland Main Drain. This route is part of an extensive network that extends as far east as Kings Lynn and beyond. Looking at aerial photographs, although not officially core path, farm tracks continue along the South Holland Main Drain past the Site and there is a bridge, crossing at the Site's north western corner, allowing access to a track along Wheatmere Drain, and an underpass below the A16, which leads to other bridleways south of Cowbit. It seems likely that these are permissive routes that attract sensitive receptors like walkers and horse riders.

The proposal will introduce large man-made buildings with materials, scale and mass uncharacteristic of the location. As this site is very open, but there is established vegetation on A16 on the north western corner of the site, and this could be extended further south to limit views of the development from the A16 and the layby on its eastern side which borders the Site. This vegetation presently limits views towards Stamford House Farm and other properties on Peak Hill to the west of the Site. However, it is unlikely that this approach will completely contain views of the proposal, and any vegetation added to this location, will change its character from open to enclosed. There are no trees or woodland in the immediate vicinity and the flatness of the location precludes the use of bunding.

Overall, this is an open and prominent location, between settlements, where development will change the rural character of this landscape. Mitigation options are limited and the proposals will be prominent in the local landscape and seen from the A16 and adjacent trackways. It is anticipated that the development proposal in this location will result in significant change to landscape character and the visual setting.

Parcel B reconfigured to move solar away from flood zone

30. The reconfiguration of the solar arrays relocates them approximately 500m further north and west into fields adjacent to their previous location. The solar arrays are now mostly located into two larger and more rectangular fields with Cox's Drain on their western edge, and Whipchicken Farm in their south western corner. These fields are flat and arable, edged by drainage ditches, with very little vegetation, except isolated clumps of trees around the farmhouse, and a square, tree lined ditch, to the north east of the farm house.

    These fields form part of an open landscape characterised by small clumps of trees on the distant horizon. The fields will be viewed at distance with larger roads like the A16, located 800m to the west, the B116, located 1.7km to the south, and Martin's Road, located 1.1km to the east. Views from the east are limited by a linear tree lined embankment which was formerly a railway line. A small access road called Whipchicken Road connects with Whipchicken farmhouse adjacent to the Site via an underpass under the A16. This road links with Cox's Drain a minor road that passes the western side of the Site linking the B1166 to the south and Queens bank to the north. Cox's Drain is not a through route and is likely to be used by local and agricultural traffic.

    There are very few potentially sensitive receptors in this location. The nearest PROW/ Bridleway is on Queens Bank 1.5km to the north east. There are few properties adjacent

or close to the Site with the exception of Whipchicken farm. The nearest property beyond this is Thornbury Hall off Whipchicken Road 600m to the south west.

The proposed changes to the Solar arrays will bring them closer to Whipchicken Farm and cover more land to the north of the farm. This is likely to have a negative impact on the inhabitants of this individual property as it will change the setting of their property from a rural character to that of energy generation. The proposed changes will also potentially impact negatively on the square tree lined ditch feature which will become surrounded by solar panels. It is unknown what this feature is (maybe a duck decoy), and as it may have a historic significance, the impact of the development on it should be fully investigated. It may be appropriate to ensure that these features are set back from the development and that corridors with adjacent vegetation or the wider landscape are maintained.

Overall, this is an open, but not prominent location, with few main roads or properties in the vicinity. Where the Site can be seen, it will be viewed at distance and seen in the context of the wider landscape. It is anticipated that the proposed modifications to the design proposal in this location are unlikely to result in significant effects on the wider landscape character or visual environment. However, there are localised features like Whipchicken farm, and a possible duck decoy, that may require adjustments to the proposal to ensure that their setting in the wider landscape is respected.

132kV substation moved from Parcel B to Parcel C to avoid flood zone

31. The proposed relocation of the 132kV substation will see it moved from a location 300m south of Queens Bank Farm, 1.2km further east to a field 400m west of Martins Farm on Martins Road.

    The new location is a triangular shaped arable field that lies adjacent to a dismantled railway on its western side. This boundary is characterised by a raised embankment and a line of mature vegetation consisting of hawthorn and mature trees. The Site's southern boundary is also characterised by vegetation which includes a field ditch, hedgerow and a small triangular area of woodland off Hardy's Lane. The Site's eastern boundaries are also contained by vegetation which consists of a field ditch and hedgerow which forms the western boundary of two smaller adjacent fields that surround Martin's Farm. The Site's northern boundary is more open with no vegetation and the field boundary defined by a field ditch.

    Hardy's Lane to the south of the Site is marked on OS plans as an 'other route with public access'. This route passes the southern boundary of the Site and consists of sections of rough track with field margins that look passable on foot only. The OS plan suggests this route connects Martins Road with a track that leads to Whipchicken Farm and fields to the west of the dismantled railway. It is unclear whether this route is used by sensitive receptors like walkers or horse riders – but is not officially designated. The nearest designated route is a bridleway located on Queens Bank 750m to the north east at the northern end of Martins Road. This route ends at the junction of Eugate Road and Queens bank, but it is likely that some riders may continue along Queens bank / Martins Rd as traffic levels on these routes are low.

There are few properties close to the Site. The nearest is Martins farm which is 400m to the east. This property benefits from hedgerow and tree planting within its grounds, and intervening field edge vegetation, which will filter views towards the Site. Other properties within the vicinity of the Site are further away and are located on either Queens Bank 500m to the north including Poplar tree Farm or on Hull's Drove including Cedar Lodge located 1km to the south. Cedar Lodge will also benefit from hedge and tree planting within its grounds, and intervening field edge vegetation, limiting views towards the site. Poplar farm is a working site, set back from the road, with intervening hedges and trees in the direction of the Site.

Overall, this new location is better contained within the landscape by existing vegetation, including the former railway embankment, and is a better location than that previously selected. The Site is only open to views from the north and Queen's bank, where there is potential to reinforce this boundary with new planting along an existing ditch. However, it is likely the proposed substation buildings will still be seen, at distance, on the horizon from Queens Bank. It is not anticipated that existing vegetation will completely contain views of the proposed substation in the other directions, but it will help to break up the form of the buildings and reduce the significance of the change. The substation will bring change to this open landscape, but this Site is relatively well contained and will help to minimise its impact on the landscape character and visual setting.

Parcel D reconfigured to move away from properties

The reconfiguration of Solar panels in Parcel D will see one large array replaced by three smaller arrays, in surrounding fields near to Northwood Farm, and one larger array 2km located further north on Langary Gate Road adjacent to the crossing (Decoy Bridge) of the South Holland Main Drain. The three smaller arrays are defined by field ditches with one located to the west of Langary Gate Road and two located to the east of Langary Gate Road. Each array will be located within narrow, rectangular parallelogram shaped fields approximately 400 – 700m apart. The larger array is located in a wider squarer parallelogram shaped field on the eastern side of Langary Road, 300m north west of Glasshouse Farm on North Road.

There are several roads that run parallel with each other north / south past the proposed arrays. These include Holbeach Drove (B1168) located 300m to the west of one array and 700m to the west of two others. This route passes 1.4km to the west of the larger array located 2km to the north of the smaller arrays. Holbeach Drove (B1168) passes the site from Hull's Drove (B1166) which links several small settlements including Holbeach Drove and Gedney Hill located 1.4km to the south. Langary Gate Road passes between the three smaller arrays and to the west, and 1.4km to the west of the larger array located 2km further north. North Road leads from the small settlement of Gedney Hill in the south past the smaller and larger arrays on their eastern sides at distances which vary from 500m in the south and 200m in the north.

All of these roads will carry mostly local traffic, with the "B" roads busier than the other routes. User of these routes are unlikely to be highly sensitive receptors, but it may be appropriate to provide some visual containment of the southern arrays from Hull's Drove and Langary Gate Road. There are some small blocks of woodland and vegetated

boundaries in the locality which could be replicated to achieve this. Additionally, there is localised tree planting associated with Fleet Coy Farm nearby.

There are no PROWs close to the three southern arrays with the nearest being a PROW (GEDH/4/1) near Gedney Hill Golf Club, located 700m south east, but screened from the arrays, by intervening settlement including Pinders Cross Farm. The larger northern array lies adjacent to South Holland Drain. This channel has PROW on both its sides (Bridleways – Flee/7/1 and Flee/38/2) with the southern bridleway passing adjacent to the northern array's boundary. The South Holland PROWs are part of a wider network that extends far to the east with links to Lings Lynn and beyond. A setback will be required on this boundary for mitigation planting to limit views between the solar array and the PROW. This planting will also reduce the impact of the northern array on the adjacent property known as Travellers Rest on the northern bank of the South Holland Drain.

The properties close to the array locations are limited in number. Those close to the three smaller southern arrays include Cheviot House, Waltons Farm, North wood House Farm, Poplar Cottage, The Poplars and Northwood House Farm. Properties in the vicinity of the larger northern array include Travellers Rest and Glasshouse Farm. These properties are typically detached and located along Holbeach Drove Gate, Langary Gate Road or North Road. Most of these properties have gardens or grounds with vegetation that will limit views towards the arrays. Some of these properties are commercial premises and places of work.

Overall, the proposed reconfiguration will result in more arrays in different locations throughout this locality. The larger northern array is of a similar size to that originally proposed, meaning that the three smaller arrays will increase panel coverage in this location. Rather than dispersing the effects of the arrays, it could be argued that a greater and wider range of locations will be impacted. For this approach to work, undeveloped land around and between the arrays will need to be retained and enhanced with mitigation in keeping with the local context. There is potential for setbacks, boundary planting and small woodland blocks to be used to achieve this. Without mitigation, there is a danger that the dispersal of the panels into multiple locations will have a more negative impact both visually, and on landscape character, than the one single array as originally proposed.

Section of line undergrounded

15. The undergrounding of a proposed section of the grid connection will result in the construction of two Cable Sealing End Compounds (CSECs). These will appear as square fenced compounds, containing electrical equipment, on either side of the existing overhead power line.

    The proposed site for the CSECs is in fields west of Moulton Mere drain, and west of Delgate Bank. Also in this locality, is a sewage works which will lie approximately 50m southeast of the northern CSEC, and 170m north east of the southern CSEC. The sewage works is accessed via a concrete access road from Delgate Bank, and the proposed undergrounding will travel beneath this road as well as the overhead cabling.

The nearest properties to the proposed CSECs are located along Delgate Bank and include Swanpens Farm (350m northwest) to the north which has extended grounds consisting of a network of fields surrounded by a ditch that extend close (150m) to the northern CSECs. These fields appear to be used to house livestock including horses. The next nearest property is Delgate lodge (200m to the south west) which is located in the southwest corner of the field that will accommodate the southern CSEC. This is a detached private property with a rear garden consisting of a high fencing and mature tree planting. There are also several detached properties known as The Sycamores which overlook the site from West Gate and are located 550m to the north east. Views of the sewage works from West Gate are limited with the existing powerlines appearing as small vertical elements on the horizon. The Fen Gate (B1357) passes the site 800m to the east and from this route the sewage works is also difficult to discern in the distance. It seems likely that the CSECs will also have very limited visual impact from these locations.

Overall, the proposed CSECs will be located in a locality already influenced by man-made development with existing powerlines and a sewage works. This location is relatively remote with limited visibility from busier roads and adjacent to few properties. Those properties that are in the locality are either sufficiently distant or are visually contained by intervening garden or boundary vegetation. It may be appropriate to mitigate the impact of the proposal on Swanpen Farm by increasing the vegetation adjacent to their boundary and tree planting around the northern and southern CSECs to break up any cumulative visual impact between them and the sewage works.

Refined location for Weston Marsh substation

The refined location for the Weston March substation is described generally as 'Spalding Marsh' and is 800m north west of the A151 bypass around the village of Weston. The A151 is a main road connecting Spalding, and other larger towns to the east, like Holbeach, and also links with the A17, providing access to the north via Fosdyke, and the east towards Kings Lynn. The Site is also 1km to the east of the A16 which bypasses Spalding and passes to the west of the Site.

The Site consists of two fields of farm land defined by Rood's lane in the south. Rood's Lane is connected by a PROW (Wstn/3/1) to Wiseman's Gate further east and this link creates a route between the edge of Weston into central Spalding. The route of this PROW runs adjacent to the south eastern corner of the Site where a powerline also crosses the Site and Rood's Lane. The Site's western boundary is defined by Wykeham Lane which links with The Chase in the Site's north western corner. These routes provide access to the site of the ruins of the Chapel of St Nicolas, Wykeham (Grade 1 listed) formerly part of Wykenham Hall a moated country residence for the Prior of Spalding. This site is now occupied by Wakenham Farm and characterised by moated grounds with mature trees and protected ruins. An outcrop of mature trees is located on the Site's north western corner and this blocks views from the ruins and farm towards the Site. This outcrop of trees looks to be established on a remnant of former moat suggesting care will need to be taken with the development to ensure adjacent heritage features are protected.

The Site's northern boundary is partially open to a field further north which lies adjacent to the eastern edge of the Chapel ruins. The other half of the Site's northern boundary is defined by a large field ditch which passes north/ south through the middle of the Site dividing it into two fields. The eastern boundary of the Site is also defined by a field ditch called Lord's Drain. All these field ditches are open with little vegetation and no fencing.

Other properties in the vicinity of the Site include Shepard's farm (300m to the north east), Wool Hall Farm (500m to the south), Home Farm (600m to the west) and Whitehouse Farm (600m to the south east). Most of these properties remain working sites and views towards Site are often contained by mature vegetation within their grounds. Baytree Garden Centre (marked as 'other tourist feature' on the OS) is located 850m from the Site on the southern side of the A151 bypass. Views towards the Site from this location are well contained by boundary vegetation between the garden centre and the A151.

Overall, this Site is in a more prominent edge of settlement location with PROW and main roads within its vicinity. It is likely that the substation will detract from the setting of the Chapel Ruins, but this site is not publicly accessible and it is visually well contained by mature vegetation. However, care will be required to protect this heritage asset during development and mitigation planting on the Site's northern boundary may be necessary. With regards to the PROW, is unclear how well this routeway is used, and mitigation adjacent to it will need to be compatible with the overhead powerlines and the prevailing character of the location which is open ditches. People in surrounding properties and on roads will mostly view the site at distance with intervening boundary or verge vegetation limiting views of the Site. From the south and east looking towards the site, the development will benefit from the vegetated backdrop provided by the Chapel ruins site.

Comments on Order Limits changes:

With regard to the landscape and visual issues: **Order Limits changes** (**Pages 10-21)**

1. The land added will be adjacent to a heritage feature and mature trees. Care will be needed to protect the heritage and trees in this location. Offsets and Root Protection Zones (RPZ) may be required.
2. The land added could potentially be used for mitigation to reduce the visual impact of the development on users of the A151.
3. The land added will allow access to site without vegetation removal. This is an important consideration in this area as existing vegetation limits views towards the development. Offsets and RPZs likely to be required to preserve existing vegetation.
4. This section of the A151 is tree lined and an offset and RPZ may be required to protect the existing trees. Land added could potentially be used for mitigation to reduce the visual impact of the development from the A16 and A151 as required.
5. No negative impacts on landscape or visual context anticipated in this location.
6. Limited road edge vegetation in this location. No negative impacts on landscape or visual context anticipated.

7. Field edge vegetation and disused railway in this location which should be protected and enhanced as likely wildlife corridor.
8. Limited road edge vegetation in this location. Mostly open field. No negative impacts on landscape or visual context anticipated.
9. Some mature road edge trees in this location that will need offsets and RPZs.
10. This area contains a length of hedgerow that will require protection with offsets and RPZ.
11. Unknown third-party asset so difficult to comment. Aerial photographs suggest it may be a telegraph pole. Unlikely to have a landscape or visual impact.
12. Impact on property on corner of Westgate 'The Cottage' with land added surrounding this dwelling. Offsets likely to be required during operations. Reinstatement of damaged boundary vegetation may be required.
13. Limited road edge vegetation in this location. No negative impacts on landscape or visual context anticipated.
14. Habitat reinstatement and enhancement around the sewage treatment works welcomed. Perhaps this work could be linked and extend to the land around the proposed CSECs.
15. See above.
16. Land extension will be adjacent to Moulton Mere Drain. Care will need to be taken to avoid pollution of watercourse and damage to surrounding vegetation.
17. There will be clear views of this land from the Roman road as there is minimal verge vegetation containing views in this location. The added land will bring development operations closer to properties on Roman Road.
18. There will be clear views of this land from the Roman road as there is minimal verge vegetation containing views in this location. The added land will bring development operations closer to properties on Roman Road.
19. There will be clear views of this land from the Roman road as there is minimal verge vegetation containing views in this location.
20. The extension will incorporate an additional stretch of Broadgate Drove which provides access to an adjacent business Lucksbridge Horticulture Limited. No negative impacts on landscape or visual context anticipated.
21. The proposed construction compound is located adjacent to a disused railway line which is heavily vegetated and likely to be an important corridor for wildlife. Cowbit road is also heavily vegetated in this location and development should be offset with RPZs to protect existing vegetation. Any vegetation lost in this area should be re-planted.
22. As with 21 above. This section of the A16 has well vegetated verges. Offsets and RPZ may be required during works and vegetation lost to works should be re-planted. Habitat reinstatement and enhancement should be extended into this area to support reinstatement work in area 24.
23. This location is very open and works access track and other development disturbance will be seen in the context of the wider landscape. Impact of track on adjacent Wheat mere Drain should be mitigated with an appropriate offset. Habitat reinstatement and enhancement should be extended into this area to support reinstatement work in area 24.
24. All habitat reinstatement and enhancement work supported.
25. See above
26. Mature trees within the grounds of Queen's bank farm are close to the boundary of the existing the vehicle access track and will need to be protected from over head damage. Tree works may need to be agreed with owner or appropriate offset / RPZ. Re-instatement works may be required after completion of works.
27. Work related to a new bridge crossing over the A16 means that a new access track and new tree planting have been recently installed at this location. Proposed works will need to reinstate any disturbance to this new planting and protect the existing mature trees on site.

These include a row of mature trees extending east along the northern side of Queens bank which starts near the entrance to the access track.

28. Land added to the extension of the order limits contains mature water edge vegetation consisting of mature willow trees and other native species. This will need to be protected and retained with potential for habitat reinstatement and enhancement work. There are also built structures in the corner of this field possibly related to the ditches and water supply.
29. Limited vegetation on Spalding Road / Barrier bank - but watercourses and ditches will require protection. This is an exposed landscape and development will be highly visible from the A16.
30. See above.
31. See above.
32. This is a generally open and exposed landscape with naturalised fields of native vegetation and more vegetated ditches. Protection of this vegetation will be important to maintain this location's character.
33. This location is strongly influenced by the nearby settlement of Waplode Drove, with smaller field patterns, small woodland blocks and more mature field edge vegetation. Additionally, there are more properties adjacent to this location. A PROW joins Back Bank adjacent to Highbury cottage. Additional care will be needed to limit development impacts on the receptors and landscape in this location.
34. This location is close to the northern edge of the settlement of Waplode Drove, there are many adjacent properties and although no official PROW, field edge tracks run between properties in some locations. Field sizes are smaller and boundaries are more vegetated. Additional care will be needed to limit development impacts on the receptors and landscape in this location.
35. This location is also strongly influenced by nearby settlement with smaller field sizes, more field edge vegetation and a greater density of scattered property. Additional care will be needed to limit development impacts on the receptors and landscape in this location.
36. This is a busier 'B' road (B1168) with close proximity to adjacent settlements like Holbeach Drove, there is a high density of property scattered along this road, and gardens are well planted with mature vegetation. Additional care will be needed to limit development impacts on the receptors and landscape in this location.
37. The southern end of Langary Gate Road is in close proximity to the settlements of Holbeach Drove and Gedney Hill with adjacent land uses including Golf Clubs, Campsites and Plant Nurseries. Field boundaries are well vegetated in some locations along Langary Gate Road. Additional care will be needed to limit development impacts on the receptors and landscape in this location.

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AAH Landscape

[redacted]
AAH Landscape
www.aahconsultants.co.uk

13/10/25

Technical Memorandum 5: Targeted Consultation Landscape and Visual Comments (AAH TM05)

Lincolnshire County Council, Meridian Solar Farm: Extension to Red line Boundary Comments

Introduction

AAH Consultants have reviewed the *Meridian Solar Farm:* Additional *Targeted Consultation (8th January 5nd February 2026)* on behalf of Lincolnshire County Council, in relation to Landscape and Visual matters. This document contains (post-PIER) changes to the Meridian Solar Farm proposal due to ongoing surveys, design refinements and feedback from the stage 2 consultation. The information reviewed includes Consultee letter 8th January (EN010169) and Redline Boundary Extension Plan *6th January 2026 (MS-WSP-RLB-CHNG-002).*

This review takes into account previous AAH comments (Refer to Meridian Solar Farm Technical Memos TMO1: Landscape and Scoping Opinion and TM02: Initial Viewpoint Comments, TM03: PIER Comments) TMO4: Targeted Consultation Comments, as well as meetings/discussions held with the Applicant team and any subsequent meeting minutes. The comments provided are intended to assist in guiding the next stage of the development process, refinement of the content of the LVIA chapter, and the overall development proposals. It is not a final review of any of the preliminary findings or initial assessments.

Landscape and Visual Comments on Extension to the Redline Boundary

A. <u>Comments:</u>

Land shown on Plan *(MS-WSP-RLB-CHNG-002)* **included to facilitate the overhead line connection to National Grid's planned Weston Marsh Substation B.**

1. The location selected to extend the Meridian Solar overhead line connection is characterised by an open landscape of flat fields, drainage ditches and long horizons with scattered boundary vegetation. Tree cover in this area is limited to isolated grouping adjacent to dwellings or defining field edges. Potentially, this is a location sensitive to landscape and visual change. The proposal will introduce large man-made structures with materials, scale and mass uncharacteristic of the location. Presently, there are no overhead lines or pylons on the site - although distant pylons can be seen on the horizon 2km away to the east from Stone Gate.

2. At the time of writing, the exact route and location of the proposed pylons and overhead lines is to be determined.

   'Construction of the overhead line would take place within the area shown on the enclosed plan. Infrastructure within this land would include pylons and the overhead line itself. The full extent of the fields has been included to allow flexibility during detailed design' (Consultee letter 8th January (EN010169).

Therefore, at this stage, only general comments can be made regarding the impact of the overhead line extension on the Landscape and Visual context in this location.

3. The extension is located 1.8km north east of the town of Spalding in the countryside and consists of several fields, and part-fields, of large arable agricultural land located around the lane called Stone Gate. There are no dwellings within the extension zone, but several properties and buildings are located near to its boundary. On the western boundary, which runs along Wykenham Lane and Marsh Road, these include a private dwelling with the ruins of the Chapel of St Nicolas in its grounds, Cowhirne Cottage, Marsh House Farm and a large plant Nursery called Kinder Garden Plants. On the eastern boundary, which crosses Stone Gate, are located Bass Cottages and Shepards Farm. Many of these properties have intervening shelter belts and garden vegetation which will reduce their visual exposure to the proposed development.

4. Other features of interest, in the wider landscape, include the River Welland located 500m to the west of the extension area. This waterway is canalised and passes north / south past with a public bridleway (Wstn/6/1) located on its eastern side. This bridleway runs between the edge of Spalding and following the route of the river as far as the sea (13 km north east) and the coastline adjacent to The Wash. It is likely that users of this route will experience views of the proposed structures within the extension area. It also seems likely that this permissive route will attract sensitive receptors like walkers and horse riders.

5. Two major roads are located in the locality of the proposed extension area. These are the A16 (Spalding ring road) passing the extension area 1km to the south west and the A151 High Road located 1.6km to the south. The A16 is a busy route mostly used by locals and freight; however, it is likely some higher sensitivity receptors, including tourists visiting local historic centres like Crowland also use this route. The traffic noise from the A16 is likely to detract from the extension area's otherwise tranquil and undeveloped character. These routes separate the landscape of the extension area from the adjacent settlements of Spalding and Weston and contribute to the location's sense of isolation. Due to distance and intervening features like embankment vegetation, it is unlikely that views of the proposal from these routes will be of significance.

Landscape Effects

6. The extension area is a sensitive landscape with no existing man-made infrastructure. The proposed development will detract from this locality and conflict with its existing rural character. It will also detract from the setting of the ruins of the Chapel of St Nicolas which are likely to be located adjacent to the proposed structures. However, in the wider landscape, the extension area is influenced by man-made change including the A16, A151 and the edge of Spalding. Development in the extension area will result in change to the landscape setting, but this change is not likely to be significant.

Visual Effects

7. The extension area is located in an open landscape, but receptors are limited with no major routeways or PROW through the proposed extension area. The only routeway, with sensitive receptors likely to be affected, is located 500m outside the extension zone (public bridleway Wstn/6/1). This will experience a negative local impact, but many views from this route (those heading south) will be seen with the context of Spalding and associated road infrastructure in the background. Other receptors will be limited to isolated buildings, often with intervening vegetation, or places of work, with low sensitivity. Development in the extension area will result in change to the visual setting, but this change is not likely to be significant.

Mitigation

8. The mitigation options in this location are limited due to the flat and open character of the landscape. There are no woodlands in the immediate vicinity and the flatness of the location precludes the use of bunding. Any vegetation added could change the landscape's character from open to enclosed and will need to be targeted at field edges or planting around dwellings to be consistent with the existing setting. Mitigation should be used sparingly to specifically reduce impacts on sensitive receptors which include the public bridleway Wstn/6/1 and the the ruins of the Chapel of St Nicolas.

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AAH Landscape
www.aahconsultants.co.uk

27/01/26

Technical Memorandum 6: Relevant Representation Landscape and Visual Comments (AAH TM06)

Lincolnshire County Council, Meridian Solar Farm: Relevant Representation Landscape and Visual Comments

Introduction

AAH Consultants, on behalf of Lincolnshire County Council (**LCC**) and South Holland District Council (**SHDC**), has reviewed the relevant Landscape and Visual elements of the Meridian Solar Farm Application to provide initial comment to be incorporated within a Relevant Representation statement from LCC and SHDC.

The Meridian Solar Farm (Reference: EN010169) Application documents that have been accessed and reviewed are available on the Planning Inspectorate Website at:

https://national-infrastructure-consenting.plannninginspectorate.gov.uk/projects/EN010169/documents

This review includes:

6.1 ES Chapter 1: Introduction
6.1 ES Chapter 2: The Scheme
6.1 ES Chapter 3: Alternatives and Design Evolution
6.1 ES Chapter 8: Cultural Heritage
6.1 ES Chapter 12: Landscape and Visual (APP-063)
6.2 ES Figure 12-1: LVIA study Area
6.2 ES Figure 12-2: Topography
6.2 ES Figure 12-3: Public Rights of Way and National Cycle Network
6.2 ES Figure 12-4: National Landscape Character Areas
6.2 ES Figure 12-5: Regional and County Landscape Character Areas
6.2 ES Figure 12-6: District and Borough Landscape Character Areas
6.2 ES Figure 12-7 to 18: Viewshed studies
6.2 ES Figure 12-19: Viewpoint Locations on OS Mapping
6.2 ES Figure 12-20: Viewpoint Locations on Aerial Photography
6.2 ES Figure 12-21: Photo sheets Part 1 to Part 12
6.2 ES Figure 12-22: LCC Photo sheets Part 1 to Part 4
6.3 ES Appendix 12-1: Landscape and Visual Legislation, Policy and Guidance
6.3 ES Appendix 12-2: LVIA Methodology
6.3 ES Appendix 12-3: Landscape Baseline
6.3 ES Appendix 12-4: Landscape Assessment
6.3 ES Appendix 12-5: Visual Baseline
6.3 ES Appendix 12-6: Visual Assessment
6.3 ES Appendix 12-7: Landscape and Visual Cumulative Assessment
6.3 ES Appendix 12-8: Arboriculture Impact Assessment
7.2 Inter-relationships with other NSIPS report
7.3 Design Approach Document
7.9 Biodiversity Net Gain Report
7.10 Outline Construction Environmental Management Plan
7.11 Outline Operational Environmental Management Plan

7.12 Outline Decommissioning Environmental Management Plan
7.16 Outline Landscape and Ecology Management Plan

This review also takes into account previous AAH comments (Refer to Meridian Solar Farm Technical Memos TMO1: Landscape and Scoping Opinion and TM02: Initial Viewpoint Comments, TM03: PIER Comments, TM04 Targeted Consultation Comments, TM05: Extension Comments), as well as meetings/discussions held with the Applicant team and any subsequent meeting minutes. The comments provided are intended to assist in guiding the next stage of the development process, refinement of the content of the LVIA chapter, and the overall development proposals. It is not a final review of any of the preliminary findings or initial assessments.

This Technical Memorandum (**TM**) includes initial comments, and a full review of the landscape and visual elements of the scheme that is currently being carried out. This full review will be included within the individual Local Impact Reports (**LIR**) submitted by LCC and SHDC later in the examination process. This will include a full review of the submitted LVIA chapter and associated appendices and figures of the ES to *Technical Guidance Note (TGN) 1/20 Reviewing Landscape and Visual Impact Assessments (LVIAs) and Landscape and Visual Appraisals (LVAs),* 10th January 2020, by the Landscape Institute (**LI**).

By reason of its mass and scale, LCC / SHDC judge that the proposed development will lead to Significant Adverse effects upon the existing landscape and visual baseline, which is reflected within the submitted Landscape and Visual Impact Assessment (**LVIA**).

6.1 ES Chapter 12: Landscape and Visual (APP-063)

Landscape Effects

The development has the potential to transform the local landscape by altering the character on a large scale. This landscape change also has potential to affect wider landscape character, at a regional or county scale, by replacing large areas of agricultural or rural land with solar development, affecting the current openness, tranquillity and agricultural character, that are defining characteristics of the area. LCC / SHDC are concerned about the landscape character effects through changes to the land use over an extensive area of agricultural land, as identified in Section 12.8 of the LVIA chapter. The LVIA chapter identifies a *"*partial degradation of the key characteristics of (these) HLCAs/ HLCZs through the temporary loss of arable land and erection of features within the skyline, changing partially the key characteristic of 'openness', as a result of the erection of taller infrastructure in particular.'' Specifically, the landscape associated with the **Grid Connection Route** and the **Inter-Array Connections** (overhead line elements) are identified as having a high susceptibility to the development.

Significant landscape effects are subsequently identified in the LVIA chapter with the identification of Significant adverse effects to **The Fens (HLCA9**), **The Wash (HLCA 10),** and at a local level to **FEN 2 – the Eastern Fens and WSH6 - Townlands** at Construction, Year 1 (winter) Operational and Year 15 (summer) Operational. Moderate adverse (significant) landscape effects largely arise from the character areas directly affected (where the development is located within these areas). Appendix 12-4 Landscape Assessment (Table 1) provides a detailed explanation of these assessment values.

In summary, the LVIA is transparent regarding significant effects on Landscape Character likely to be caused by the proposal with effects on landscape character assessed as significant for several landscape receptors.

Visual Effects

The scale and extent of development would also lead to Significant Adverse effects on views from visual receptors, changing them from views experienced within an agricultural or rural landscape to that of a landscape containing large scale solar development and OHL infrastructure.

The development has been identified in the LVIA as resulting in a Significant change to a variety of visual receptors **including VP 2, 3, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15, 20, 21, 27, 30 and LCC 2-1, 3, 8, 9, 10** at Construction, Year 1 (winter) Operational and Year 15 (summer) Operational. Significant adverse visual effects largely arise from sensitive users in close proximity to the development where it is not possible to sufficiently screen views of large infrastructure such as pylons or extensive solar arrays.

Most receptors are evaluated to receive Moderate adverse (significant) effects from the development. Only **VP3** PROW CROW 7/1, **VP9** Martins Road / Hardy's Lane junction, and **VP14** Langary Gate Road are judged to experience Major adverse (significant effects). Appendix 12-6 Visual Assessment (Table 1-1) provides a detailed explanation of these assessment values.

In summary, the LVIA is transparent regarding significant effects on the Visual environment likely to be caused by the proposal with effects on many receptors evaluated as significant.

Mitigation & Enhancement Measures

Mitigation is described in Section 12.7 and includes outline CEMP and LEMP proposals, a description of the design principals that have been applied, and embedded measures, including careful site selection and offsets adjacent to dwellings. Existing vegetation patterns have been conserved and new green infrastructure corridors created. 7.3 Design Approach Document provides more detailed information.

The LVIA is transparent about the effectiveness of the proposed mitigation to reduce significant effects on the landscape or visual setting. It is noted that significant landscape and visual effects, caused by the change in land use and the massing of the proposed infrastructure, are judged in the LVIA to change little upon the successful establishment of the proposed planting scheme (Operational - Y15 summer). It is also stated (p59) that 'based on the open fen and character of the landscape and limited existing vegetation, it is not anticipated that winter views would materially alter the conclusions of the LVIA'.

The LVIA acknowledges that mitigation planting and habitat creation will establish beneficial landscape and visual assets across the area, however, 'it will not be possible to fully mitigate the significant landscape and visual effects due to the requirements of the Scheme. As such no additional mitigation is proposed because the scale and functional requirements of the

infrastructure preclude further screening or landform modification without compromising safety and operational integrity' (para 12.9.2)

In summary, there is no pretence within the LVIA that mitigation planting can limit the development's effects on landscape character or the visual setting. Preference has been given to good design and embedded measures which are described in Section 12.7 of the LVIA and include careful site selection and offsets to reduce harm to sensitive receptors (residents) where possible.

RVAA

A description of the approach to RVAA is provided in Section 12.4 and 12.8.45. This highlights the set back approach that has been adopted by the scheme to reduce impacts on residents and settlements. The conclusion of the LVIA is that 'whilst significant effects will arise beyond Operation Year 15 for representative views that reflect the outlook for residential receptors, these would not result in major adverse effects during any phase of development and reach a threshold where residential visual amenity would be a consideration'.

In summary, the LVIA concludes that an RVAA is not required for this project. However, looking at the number of VPs assessed as having significant effects, LCC /SHDC would request further explanation to clarify this conclusion.

Decommissioning

In Section 12.8.38 of the LVIA, it is clarified that the design life of the project is 40 years and the project will be dismantled over a 24-month period. All above ground infrastructure will be removed, in addition, concrete foundations will be removed to a depth agreed with the land owner.

Cumulative Effects

An analysis of the cumulative effects is provided in Section 12.11 of the LVIA. This analysis considers both combined impacts and sequential impacts, explains what types of developments have been considered (solar farms, BESS OHL and electricity transmission infrastructure). For both landscape character and visual effects, at both construction and operation, it is assessed that 'the addition of the Scheme in combination with other individual cumulative schemes does not result in a notable or transformative degree of change'. However, the '**totality'** of effects, 'considering the Scheme and all cumulative projects within HLCA10: The Wash, HLCZ WSH6: The Townlands and WSH 4: Reclaimed Wash Farmlands' was considered to constitute a moderate adverse (significant) effect.

Appendix 12-7 Landscape and Visual Cumulative Assessment (Table 1-2) provides a detailed explanation of the assessment values.

No further mitigation is proposed to address these cumulative effects.

7.16 Outline LEMP

The applicant commits to a 5-year establishment period with long term management including only the replacement of planting proving a screening function. LCC / SHDC would request an

establishment period of **15 years** to align with the assessed residual landscape and visual effects. This will ensure that the proposed planting scheme meets the aims and objectives laid out in the submission.

Conclusion

Overall, the LVIA presented is robust with good methodology, clear explanations of assessment values and reasonable conclusions. The LVIA is transparent about the significant effects of the development on Landscape character and the visual setting and acknowledges the limitations of mitigation to reduce these effects due to the nature of the existing open landscape. The project has been designed with sensitivity to reduce effects on receptors with set backs and mitigation planting is used sparingly to remain in keeping with the existing landscape.

Going forward, LCC and SHDC will assess the significant receptors identified in the LVIA in more detail, and establish if there are any omissions, but initial impressions are encouraging.

At this stage, there does not seem to be a complete Landscape Masterplan of the whole project within the application documents. Parts are shown in the 7.16 Outline Landscape and Ecology Management Plan, but an overview of the whole scheme's landscape design and mitigation proposals does not seem to be provided.

John Brodie MLA
AAH Landscape
www.aahconsultants.co.uk

19/05/26

Technical Memorandum 7: Relevant Representation Landscape and Visual Comments (AAH TM07)

Lincolnshire County Council, Meridian Solar Farm: Relevant Representation Landscape and Visual Comments

Introduction

AAH Consultants, on behalf of Lincolnshire County Council (**LCC**) and South Holland District Council (**SHDC**), has reviewed the relevant Landscape and Visual elements of the Meridian Solar Farm Application to provide initial comment to be incorporated within a Local Impact Report (LIR) statement from LCC and SHDC.

The Meridian Solar Farm (Reference: EN010169) Application documents that have been accessed and reviewed are available on the Planning Inspectorate Website at:

https://national-infrastructure-consenting.planninginspectorate.gov.uk/projects/EN010169/documents

This review includes:

6.1 ES Chapter 1: Introduction
6.1 ES Chapter 2: The Scheme
6.1 ES Chapter 3: Alternatives and Design Evolution
6.1 ES Chapter 8: Cultural Heritage
6.1 ES Chapter 12: Landscape and Visual (APP-063)
6.2 ES Figure 12-1: LVIA study Area
6.2 ES Figure 12-2: Topography
6.2 ES Figure 12-3: Public Rights of Way and National Cycle Network
6.2 ES Figure 12-4: National Landscape Character Areas
6.2 ES Figure 12-5: Regional and County Landscape Character Areas
6.2 ES Figure 12-6: District and Borough Landscape Character Areas
6.2 ES Figure 12-7 to 18: Viewshed studies
6.2 ES Figure 12-19: Viewpoint Locations on OS Mapping
6.2 ES Figure 12-20: Viewpoint Locations on Aerial Photography
6.2 ES Figure 12-21: Photo sheets Part 1 to Part 12
6.2 ES Figure 12-22: LCC Photo sheets Part 1 to Part 4
6.3 ES Appendix 12-1: Landscape and Visual Legislation, Policy and Guidance
6.3 ES Appendix 12-2: LVIA Methodology
6.3 ES Appendix 12-3: Landscape Baseline
6.3 ES Appendix 12-4: Landscape Assessment
6.3 ES Appendix 12-5: Visual Baseline
6.3 ES Appendix 12-6: Visual Assessment
6.3 ES Appendix 12-7: Landscape and Visual Cumulative Assessment
6.3 ES Appendix 12-8: Arboriculture Impact Assessment
7.2 Inter-relationships with other NSIPS report
7.3 Design Approach Document
7.9 Biodiversity Net Gain Report
7.10 Outline Construction Environmental Management Plan
7.11 Outline Operational Environmental Management Plan

7.12 Outline Decommissioning Environmental Management Plan
7.16 Outline Landscape and Ecology Management Plan

This review also takes into account previous AAH comments (Refer to Meridian Solar Farm Technical Memos TMO1: Landscape and Scoping Opinion and TM02: Initial Viewpoint Comments, TM03: PIER Comments, TM04 Targeted Consultation Comments, TM05: Extension Comments, TM06: Relevant Representation Comments), as well as meetings/discussions held with the Applicant team and any subsequent meeting minutes. The comments provided are intended to assist in guiding the next stage of the development process, refinement of the content of the LVIA chapter, and the overall development proposals. It is not a final review of any of the preliminary findings or initial assessments.

This Technical Memorandum (**TM**) includes a full review of the landscape and visual elements of the scheme. This review will inform the individual Local Impact Reports (**LIR**) submitted by LCC and SHDC later in the examination process. This review is undertaken with reference to *Technical Guidance Note (TGN) 1/20 Reviewing Landscape and Visual Impact Assessments (LVIAs) and Landscape and Visual Appraisals (LVAs),* 10th January 2020, by the Landscape Institute (**LI**).

By reason of its mass and scale, LCC / SHDC judge that the proposed development will lead to Significant Adverse effects upon the existing landscape and visual baseline, which is reflected within the submitted Landscape and Visual Impact Assessment (**LVIA**).

6.1 ES Chapter 12: Landscape and Visual (APP-063)

Methodology and scope

As indicated in TM3 – PEIR review (Detailed Comments – 10.1 Introduction), the 'landscape fabric' should be assessed as well as character designations and visual amenity. The assessment focuses on Landscape Character Areas which is appropriate, but landscape receptors can include 'constituent elements of the landscape' and 'specific perceptual qualities' P36 – GVLA3. LCC would suggest that the development's impact on 'openness' and 'seasonality / agricultural land use' are identified and assessed as separate landscape receptors.

The scoping consultation raised concerns about the impact of lighting, extent and parameters of the ZTVs, impact on road users, need for 'winter views' and 'worse case' scenarios, locations of viewpoints, retention of existing vegetation, assessment of cumulative effects and mitigation planting (PIER Table 10-2). LCC believes that progress has been made on many of these issues in the LVIA but that more information is required regarding mitigation planting (detailed planting design proposals) and now that the locations of substations and other infrastructure is more fixed, LCC would expect a review of VPs adjacent to these structures in conjunction with LLCC /SHDC, and visualisations of substations, solar arrays, pylons and other structures to be produced.

LCC remain concerned that the replacement of the solar arrays during the lifetime of the development has not been assessed or considered further. Potentially, this could this will have similar impacts as those experienced at construction. For example, access will be required by large vehicles which may result in localised loss of vegetation. It is important that any existing planting or newly planted vegetation disturbed by these operations is reinstated. A commitment to do this should be included in the LEMP.

Baseline

The Future baseline does not appear to have included any increase in energy infrastructure within the landscape (but it does describe an increase in residential properties). LCC would expect the increase in energy infrastructure and its implications on the future landscape to be described.

Landscape Effects

The LVIA chapter identifies a "partial degradation of the key characteristics of (these) HLCAs/ HLCZs through the temporary loss of arable land and erection of features within the skyline, changing partially the key characteristic of 'openness', as a result of the erection of taller infrastructure in particular.'' Specifically, the landscape associated with the **Grid Connection Route** and the **Inter-Array Connections** (overhead line elements) are identified as having a high susceptibility to the development and we would agree with this. However, LCC also believe that the Solar Arrays will result in significant change to the landscape and this should not be downplayed or over looked.

Grid Connection Route
The proposed Grid connection route will ccomprise 13km of 400KV overhead electricity line, supported by steel lattice pylons, spaced approximately every 350m, with a height of 50-66m.

At a national level, the Grid Connection Route is wholly **within National Landscape Character Area NLCA 46: The Fens.** Further NCA's are located over 10km away and it is accepted that these will not be negatively impacted by the proposed Grid connection route. Landscape features of NCA 46: The Fens with potential sensitivity to change include expansive 'openness', rural remoteness and tranquillity, sparse woodland with notable small woodland blocks often around farmsteads, orchards (around Wisbech), dispersed ribbon settlements and scattered farms.

At a local level, the Grid Connection Route (from north to south) passes through WHS4 Reclaimed Wash Farmlands, WSH6 Townlands and FEN 2 The Eastern Fens. WS4 Reclaimed Wash Farmlands is characterised by large scale farmsteads, a small number of orchards and dyke field boundaries. WSH6 Townlands is characterised by nucleated mediaeval market towns including Boston and Spalding, and sparse tree cover with small plantations in field corners and around farmsteads. FEN2 The Eastern Fenlands is characterised by a strong feeling of openness with few hedges and dispersed but relatively high settlement density.

The impact of the proposed Grid Connection on the Landscape character of these features is of concern to LCC/SHDC with anticipated changes to openness and tranquillity, and the landscape setting of many settlements – some of them nucleated and some scattered. It is anticipated that the development will have an adverse effect on the landscape setting of eastern Spalding, Weston, Weston Hills, Moulton Chapel, Cowbit and many other scattered dwellings in this area. Tree cover and hedging is sparse, and the proposed pylons are very high, so mitigation options will be limited.

Generally, the LVIA identifies **Moderate Adverse (significant)** effects on the landscape character of NLCA 46: The Fens, WHS4 Reclaimed Wash Farmlands, WSH6 Townlands and FEN 2 The Eastern Fens at Construction and Operation. Appendix 12-4 provides an explanation of these assessment conclusions which is considered reasonable.

Inter-Array Connections

The Inter-Array connections occur in two locations. There is an underground connection between Land Parcel A and Land Parcel B (north of Crowland), and an overhead connection between Land Parcel C and Land Parcel D (north of Whaplode Drove). The overhead connection will consist of approximately 3.1km of 132kV, supported by timber poles, varying in height between 6.7m and 15 m.

The Inter Array Connections are fully contained within National Landscape Character Area NLCA 46: The Fens and Fen 2 The Eastern Fens. Other NLCA are located over 10km away and it is accepted these will not be negatively impacted by the proposed Inter-Array connections.

The impact of the proposed Inter Array Connections on the surrounding Landscape character will be more localised than the Grid Connection route as only part of it is above ground. Arguably, the over ground section is in a more remote location, than the Grid Connection, and this area has a strong residential community based around Whaplode Drove. However, the scale of development proposed is significantly less than the Grid Connection with overhead lines reaching only 15m compared to 65m. Consequently, mitigation planting in this location may be of benefit and this location is more vegetated and wooded than the wider surrounding Fen landscape due to planting associated with dwellings.

Generally, the LVIA identifies **Moderate Adverse (significant)** effects on FEN 2 The Eastern Fens at Construction and Operation. Appendix 12-4 provides an explanation of these assessment conclusions which is considered reasonable. LCC is satisfied with the conclusions / explanations provided by the applicant in appendix 12-4.

Solar Development Area

Priority within the LVIA assessment is given to the effect of vertical features like pylons and substations. However, LCC / SHDC have concerns that the impact of the Solar Development Areas on landscape character may have been understated.

The Solar arrays will have a height of 4.3m making them taller than most hedgerows (where they occur). The Solar arrays consist of four land parcels (A to D) with a combined area of 1067 ha which is equivalent to 1,493.8 football pitches (at 1.4 pitches per hectare). A typical array will extend up to 36m and will be 7 m in width.

These arrays will change the appearance of this land from open agricultural to industrialised energy production. Agricultural land varies in appearance, with the time of year, and this seasonality is an essential part of its character which is not considered in the assessment. Features and attributes of the land like this are not identified by the assessment as landscape receptors and so the impact of the development on them is not assessed. Another landscape attribute that is not assessed as a landscape receptor is ‘openness’ which will also be compromised by the extensive coverage and appearance of these arrays. LCC believe that seasonality and openness should be assessed as separate landscape receptors in the assessment.

Visual Effects

The scale and extent of development would also lead to Significant Adverse effects on views from visual receptors, changing them from views experienced within an agricultural or rural landscape to that of a landscape containing large scale solar development and Over Head Line (OHL) infrastructure.

The development has been identified in the LVIA as resulting in Moderate adverse (significant) change to visual receptors VP 2, 5, 6, 7, 8, 10, 11, 13, 15, 20, 21, 27, 30 and LCC 2-1, 3, 8, 9, 10 at Construction, Year 1 (winter) Operational and Year 15 (summer) Operational. These moderate adverse visual effects largely arise from medium sensitive users experiencing an effect of medium magnitude where it is not possible to contains views of large infrastructure such as pylons, substations or extensive solar arrays.

Only VP3 PROW CROW 7/1, VP9 Martins Road / Hardy's Lane junction, and VP14 Langary Gate Road are judged to experience Major adverse (significant effects). Appendix 12-6 Visual Assessment (Table 1-1) provides a detailed explanation of these assessment values which is considered reasonable. However, it is noted that these viewpoints are located adjacent to the three proposed 132KV substations, and that the 400 kV substation / BESS compound and Weston Marsh B Substations, which will be much larger structures, do not seem to generate Major adverse (significant) effects on the VPs adjacent to them. At this stage, this assumption his seems unlikely, and more explanation and information are required.

The proposals so far assessed remain 'indicative' (APP-074 and APP-076) and the photo sheets reflect this with the extent of development indicated and red line outlines of substations – but as yet, there are no detailed photomontages providing accurate visual representations of the likely appearance of the development. Specifically, the absence of the Solar arrays from these views or accurate representations of the substations is problematic and makes it difficult to assess the true visual impact of the development on these views.

Specifically, the development is likely to have an adverse effect on the visual amenity of several key PROWs, Bridleways and Cycle Routes. VP3 is judged as experiencing a Major Adverse (significant) effect as views from this location will be elevated and the full extent of the solar arrays – fields A, B, C, the 132kV substations, and the 400kV substation / BESS will be visible from this location. Due to the prominence of this location and its use as a cycleway (NCN), bridleway and PROW, between Crowland and Spalding, along the River Welland, it will be important to develop a mitigation strategy specifically for this VP to minimise effects. A localised increase in tree cover around the river edge, tree planting in field corners and adjacent to structures should be considered with mitigation effects on this view as a priority.

Also of concern are the impacts of the development on the PROW associated with South Holland Drain (Flee/8/1 and Flee/8/2) where once again targeted and localised mitigation may be required to reduce impacts. Flee/8/1 and Flee/8/2 are PROW that connect to an extensive and long-distance network of routes that extend as far as the coast and Kings Lynn, following the course of the South Holland Drain and the River Nene. To the west, this PROW extends as far as Eaugate road (Moul/7/1) but it is possible to continue along the course of South Holland Drain as far as the A16 where there is an under pass that links to the cycleway (NCN) PROWs and Bridleways associated with the River Welland between Crowland and Spalding. LCC / SHDC have concerns that impacts on this route and the receptors associated with it have not been fully considered in regards to both design of the

development and subsequent mitigation. In what may be an oversight, there are no VPs at this location, with only VPs LCC 06 and LCC 05 located further west located on South Holland Drain.
In summary, the LVIA is mostly transparent regarding the likely significant effects on the Visual environment, however, LCC / SHDC have concerns that this assessment is not yet complete and does not adequately assess the impact of the Weston Marsh B substation and the proposed 400kV substation / BESS compound which are still under ongoing design development. There are also concerns that the impact of the development on South Holland drain, and the PROW associated with it, have been overlooked. Photomontages showing the solar arrays and more accurate representation of the proposed Substations in key viewpoints are required and should be agreed with LCC / SHDC.

Mitigation & Enhancement Measures

Mitigation is described in Section 12.7 and includes outline CEMP and LEMP proposals, a description of the design principals that have been applied, and embedded measures, including careful site selection and offsets adjacent to dwellings. Existing vegetation patterns have been conserved and new green infrastructure corridors created. 7.3 Design Approach Document provides more detailed information.

However, it is noted that the principle of development offset Described in Section 12.7) has not been applied to the South Holland Drain at the northern end of Field D where development will surround this feature on both sides. The principle described in section 12.7, is that offsets should be provided on at least one side of dwellings and other sensitive receptors. This will have a negative impact on the dwelling called 'Travellers Rest' and on PROW Flee/8/1 and Flee/8/2.

The LVIA is transparent about the effectiveness of the proposed mitigation to reduce significant effects on the landscape or visual setting. It is noted that significant landscape and visual effects, caused by the change in land use and the massing of the proposed infrastructure, are judged in the LVIA, to change little upon the successful establishment of the proposed planting scheme (Operational - Y15 summer). It is also stated (p59) that 'based on the open fen and character of the landscape and limited existing vegetation, it is not anticipated that winter views would materially alter the conclusions of the LVIA'.

The LVIA acknowledges that mitigation planting and habitat creation will establish beneficial landscape and visual assets across the area, however, 'it will not be possible to fully mitigate the significant landscape and visual effects due to the requirements of the Scheme. As such no additional mitigation is proposed because the scale and functional requirements of the infrastructure preclude further screening or landform modification without compromising safety and operational integrity' (para 12.9.2)

It is agreed that there is more possibility to mitigate the effects of the 132kV overhead lines of the Inter-Array connection around Whaplode Drove at 15m in height, than the 400kv pylons and overhead lines of the Grid Connection at 66m in height, for example, but it is suggested mitigation options should still be provided for both. While the substations and pylons cannot be completely hidden from view, mitigation planting in adjacent areas will help to reduce their visual impact by breaking up outlines and filling the skylines adjacent to the structures so they do not stand out in visual isolation. Specifically, more can be done with the mitigation around CSEC (Sheet 7) and the 400kV substation (Sheet 9) than a few perimeter shrubs. It may be appropriate in these localised

areas to introduce small copses in field corners utilising the land in the wider order limits. As tree cover is not a defining characteristic of the development landscape, balance is needed, and LCC /SHDC look forward to reviewing and inputting into this process. While Gedney Hill Parish – P10 PIER, have expressed concern about over planting, this is not an excuse to abandon all mitigation proposals. Please refer to TM03 PIER review – Paragraph 3 – which describes vegetation and mitigation proposals. At PIER stage there was a commitment to explore off site planting and voluntary agreement (Para.10.9.3) which has not been taken forward. It is also noted that there were commitments to enhancement works including wetland planting, PROW links and information boards. Detailed planting and design proposals remain to be completed.

Due to the extent of the project, landscape mitigation proposals are shown on plans APP-074 Indicative Solar Development Area and Inter-Array Connections Layout Plan (Sheet 1 to 8) at a scale of 1:8000 (A3) and on APP-076 Indicative Grid Connection Route and Layout Plan (Sheet 1 to 9) at a scale of 1:5000 (A4). Therefore, this information is spread across many pages and this makes understanding the overall landscape strategy difficult. It is our suggestion that a Landscape masterplan is generated and that this is accompanied by a more strategic level plan explaining interconnections like green corridors, relationship to key PROW, and the proposed mitigation approach to different parts of the development.

In summary, while there is an acknowledgment in the LVIA that mitigation measures have their limits, LCC / SHDC would still like to see well considered mitigation applied to all areas of the proposed development including the Grid Connection route. Proposed tree and shrub planting should not be a token gesture, but should be sufficient to break up building lines, and fill the horizon to integrate otherwise intrusive new structures. Extensive woodland is not a defining characteristic of the development landscape - but small copses and occasional field trees on boundaries (particularly adjacent to water courses) do occur. Also, it is common for planting to be clustered around dwellings and other built structures. As long as moderation is applied, it is not anticipated that localised mitigation planting would have a negative impact on the existing landscape character. There is also more work to be done to ensure that key views from PROW routes are properly mitigated to reduce visual impacts on them where possible.

RVAA

A description of the approach to RVAA is provided in Section 12.4 and 12.8.45. This highlights the set-back approach that has been adopted by the scheme to reduce impacts on residents and settlements. The conclusion of the LVIA is that ‘whilst significant effects will arise beyond Operation Year 15 for representative views that reflect the outlook for residential receptors, these would not result in major adverse effects during any phase of development and reach a threshold where residential visual amenity would be a consideration’.

In summary, the LVIA concludes that an RVAA is not required for this project. However, looking at the number of VPs assessed as having significant effects, LCC /SHDC would request further explanation to clarify this conclusion.

Specifically, after reviewing the proposed scheme, dwellings located on Cloot Drive / Wash Bank (Sheet 1), Chapel Hill / Eaugate Road, Green Bank / Back Bank (sheet 6), Langary Gate Road (Sheet 7. 8 and 9) are in close proximity to the development and may require localised mitigation to reduce views of the development from these specific receptors.

LCC / SHDC look forward to working with the applicant to ensure that the landscape design proposals are robust from a landscape character and visual perspective.

Decommissioning

In Section 12.8.38 of the LVIA, it is clarified that the design life of the project is 40 years and the project will be dismantled over a 24-month period. All above ground infrastructure will be removed, in addition, concrete foundations will be removed to a depth agreed with the land owner. LCC are happy with this approach, from a Landscape and Visual perspective, as long as any existing planting disturbed by these operations is reinstated. A commitment to do this should be included in the LEMP.

Cumulative Effects

An analysis of the cumulative effects is provided in Section 12.11 of the LVIA and in Appendix 12-7 LVIA Cumulative Assessment. This analysis considers both combined impacts and sequential impacts, explains what types of developments have been considered (solar farms, BESS OHL and electricity transmission infrastructure). For both landscape character and visual effects, at both construction and operation, it is assessed that 'the addition of the Scheme in combination with other individual cumulative schemes does not result in a notable or transformative degree of change'.

However, the '**totality'** of effects, 'considering the Scheme and all cumulative projects within HLCA10: The Wash, HLCZ WSH6: The Townlands and WSH 4: Reclaimed Wash Farmlands' was considered to constitute a **moderate adverse (significant)** effect.

It is also the case that overall cumulative effects (this development combined with other proposals) were found to potentially have **moderate adverse (significant)** effects for more sensitive receptors which included Appendix 12-7 - P47, P50 – **Residents**, P55 – **PROW**, P68 **Recreational** receptors.

Appendix 12-7 Landscape and Visual Cumulative Assessment (Table 1-2) provides a detailed explanation of the assessment values.

No further mitigation is proposed to address these cumulative effects. LCC believes that the applicant should remain open to providing mitigation (onsite and offsite - possibly in conjunction with other developers) to reduce cumulative impacts.

This is an evolving situation and LCC / SHDC are concerned about potential adverse (significant) effects on the landscape caused by multiple developments. It is suggested that mitigation proposals for the Meridian Solar proposals may need to evolve, as required, in response to other development as more is known. It is requested by LCC / SNDC that the cumulative assessment is updated during the application process and incorporates all foreseeable schemes with (APP084) Figure 4-1 and (APP241) Table 1-2 updated as required.

7.16 Outline LEMP

The applicant commits to a 5-year establishment period with long term management including only the replacement of planting providing a screening function. In response to more extreme weather conditions, LCC / SHDC would request an establishment period of **15 years** to align with the assessed

residual landscape and visual effects. This will ensure that the proposed planting scheme meets the aims and objectives laid out in the submission.

In section 5.4.7, replacement planting for failures is ‘with matching’ species. LCC would suggest that this is revised to ‘appropriate’ species so that there is some flexibility to assess the cause of failures through survey work and make changes species in response to drought, disease or other identified problem. It is poor practise to keep replanting the same species without establishing the cause of failure.

LCC would also suggest that any early planting (pre-construction) is included in the LEMP as mentioned in 5.1.3

Conclusion

Overall, the LVIA presented is robust with good methodology, clear explanations of assessment values and reasonable conclusions. The LVIA is transparent about the significant effects of the development on Landscape character and the visual setting, specifically along the Grid Connection Route, and acknowledges the limitations of mitigation to reduce these effects due to the nature of the existing open landscape. The project has generally been designed with sensitivity to reduce effects on receptors with set backs and mitigation planting used sparingly to remain in keeping with the existing landscape.

However, there are a few locations and receptors that are of concern and although it is acknowledged the landscape is open and generally sparsely vegetated, LCC / SHDC are concerned that this shouldn't mean a minimal approach to mitigation in all cases. Specifically, there may be scope to use localised vegetation for mitigation if it is targeted at sensitive views (e.g. VP3) or used where dwellings already have established vegetation (e.g. at Whaplode Drove). The importance of some PROW including those on South Holland Main Drain seems to have been overlooked. We would suggest that Figure 12-3 Public Rights of Way and National Cycle Route is keyed to highlight longer distance routes like the MacMillian Way.

The solar array design (Field D) at the junction of South Holland Drain and Langary Gate Road does not have set backs, so the solar arrays will be on both sides of the PROW in this location.

With regards to landscape character, the impact of the Solar arrays seems to be understated by the assessment with impact of the development on 'openness' and 'agricultural land use' not considered with sufficient emphasis. The assessment focuses on Landscape Character Areas which is appropriate, but landscape receptors can include 'constituent elements of the landscape' and 'specific perceptual qualities' P36 – GVLA3.

With regards to visual amenity, the visual assessment seems to be understating the impact of the substations (possibly because their design is not finalised) and more explanation of their visual impact will be required as their design development progresses. There are also many dwellings in proximity to the development that will require localised mitigation to reduce visual impacts upon them. LCC / SNDC look forward to reviewing planting designs, visualisations and more detailed proposals when this information becomes available.

[redacted]
AAH Landscape
www.aahconsultants.co.uk

22/06/26

APPENDIX B

Landscape Institute Technical Guidance Note 1/20 (10 Jan 2020): Reviewing Landscape and Visual Impact Assessments (LVIAs) and Landscape and Visual Appraisals (LVAs)

Landscape Institute Technical Guidance Note

Reviewing Landscape and Visual Impact Assessments (LVIAs) and Landscape and Visual Appraisals (LVAs)

Technical Guidance Note 1/20 (10 Jan 2020)

The purpose of this guidance is to establish a framework for carrying out reviews of LVIAs and LVAs, analysing in a structured and consistent way if the assessment reflects the approach advocated in GLVIA3 and has led to reasoned and transparent judgements. Use of this framework should in due course further raise the standard of assessments

1. Introduction

The third edition of the *Guidelines for Landscape and Visual Impact Assessment* (GLVIA3) was published in April 2013. It has been widely welcomed, accepted and adopted for use in assessing the effects of projects on landscape and visual amenity and since publication been promoted by Landscape Institute (LI) training events.

GLVIA3 sets out that assessment of effects on the landscape and visual resource that may result from a development proposal may be undertaken formally as Landscape and Visual Impact Assessment (LVIA) typically as part of an Environmental Impact Assessment (EIA) or less formally as a Landscape and Visual Appraisal (LVA). The LI strongly recommends that GLVIA 3 is followed when undertaking these assessments and that the resulting LVIAs and LVAs should be objective with clear thinking, easy to follow, and demonstrate how they have informed appropriate siting, design, and mitigation.

The main difference between an LVIA and LVA is that in an LVIA the assessor is required to identify 'significant' effects in accordance with the requirements of Environmental Impact Assessment Regulations 2017, as well as type, nature, duration and geographic extent of the effect whilst an LVA does not require determination of 'significance' and may generally hold less detail.

In the case of LVIAs, The Regulations have further implications for landscape professionals:

- Reg. 18 (5) stipulates that the developer must ensure that the ES is prepared by '*competent experts'* and that the developer must include a statement "*outlining the relevant expertise or qualifications of such experts".*

- Reg 4 (5) places obligations on the relevant planning authority or the Secretary of State because they "…*must ensure they have, or have access as necessary to, sufficient expertise to examine the Environmental Statement."*

Note that the terms 'competent expert' and 'sufficient expertise' are not defined in the EIA Regulations. The Landscape Institute, in the absence of formal certification of specific competence, considers that a 'competent expert' would normally be a Chartered Member of the Landscape Institute who, has substantive experience of undertaking and reviewing LVIAs. This may be evidenced by the assessor's CV, by reference to previous assessments, and by endorsement by other senior professionals.

Following on from GLVIA3, which focusses on how to *undertake* LVIAs/LVAs, this document provides guidance on how to *review* LVIAs or LVAs prepared by others. Such review may be undertaken from within the organisation which produced the LVIA/LVA, e.g. as part of a QA process, or by third parties on receipt of LVIAs and LVAs, such as landscape and or planning professionals in public sector bodies.

This guidance sets out a framework for carrying out such reviews in a structured and consistent way that reflects the approach to assessment advocated in GLVIA3 and use of it should further raise the standard of assessments.

2. Existing advice and guidance

GLVIA3 Chapter 8, under the heading "Review of the landscape and visual effects content of an Environmental Statement", says:

"8.35 Competent authorities receiving Environmental Statements will often subject the documents to formal review of both the adequacy of the content and of their quality. The review process will usually check that the assessment:

- *meets the requirements of the relevant Regulations;*
- *is in accordance with relevant guidance;*
- *is appropriate and in proportion to the scale and nature of the proposed development;*
- *meets the requirements agreed in discussions with the competent authority and consultation bodies during scoping and subsequent consultations.*

8.36 The summary good practice points in this guidance should assist in review of the landscape and visual effects content of an Environmental Statement. In addition, several existing sources may also help anyone involved in reviewing this topic to decide what to look for:

- *IEMA has developed a series of general criterial for reviewing Environmental Statements and registrants for the EIA Quality Mark*[1] *must meet the criteria…*
- *The former Countryside Commission published criteria for reviewing the landscape and countryside recreation content of Environmental Statements…*
- *Appendix 1 of Scottish Natural Heritage's Handbook on EIA* [2]*contains useful tests to help judge the landscape and visual effects content of Environmental Statements…"*

In addition, European Commission guidance on ES review[3], published in 2001 and, although directed at whole ES review rather than topic specific review, has also provided useful pointers.

This review framework has been developed in this context.

[1] IEMA EIA Quality Mark, IEMA website: https://www.iema.net/eia-quality-mark [accessed 200110]

[2] Scottish Natural Heritage, A handbook on environmental impact assessment v5, 2018, SNH website: https://www.nature.scot/sites/default/files/2018-05/Publication%202018%20-%20Environmental%20Impact%20Assessment%20Handbook%20V5.pdf [accessed 200110]

[3] European Commission, Guidance on EIA-EIS Review, Luxembourg: Office for Official Publications of the European Communities 2001 ISBN 92-894-1336-0, EC website: http://ec.europa.eu/environment/archives/eia/eia-guidelines/g-review-full-text.pdf [accessed 200110]

3. Carrying out the review

There are three main components of a review of a LVIA or LVA leading to a report containing the overall conclusion in respect of the completeness, competency and reliability of the LVIA/LVA.

1. **Checking the methodology used to undertake the assessment, the criteria selected (including balance between), and the process followed;**
2. **Checking the baseline, content and findings of the assessment;**
3. **Checking the presentation of the assessment findings.**

As a starting point when undertaking a review, the reviewer will need to define the structure and process to be followed by for example setting out a set of headings or questions against which the LVIA or LVA is examined. Setting out standard or systematic questions will allow consideration being given to each step and each element covered in the assessment. The "good practice" bullet points at the end of each chapter in GLVIA3, noted above, may provide a starting point for such an approach. It is also important to bear in mind the principle of proportionality (cf. EIA Directive). Both the LVIA (or LVA) and the Review should have a defined scope and level of detail which is proportionate and reasonable to allow an informed decision to be reached.

In order to improve consistency and quality of reviews of LVIAs and LVAs the Landscape Institute has produced this framework. Those who undertake reviews should follow this framework and modify or adapt the framework to the Review being carried out and set out the reasons for such modifications.

Step 1. Checking methodology, criteria and process

In this phase, the reviewer will check the methodology, scope and process used in the assessment and how these relate to GLVIA 3. This involves reviewing the following:

a) Does the scope of the assessment meet the requirements set out in the Scoping Opinion and/ or as defined in the LVIA or LVA and if substantively different, are the reasons clearly set out and explained?
b) What consultations have been carried out and have responses been acted upon?
c) Has the scope and methodology of the assessment been formally agreed with the determining authority? If not, why not?
d) As part of the methodology, has the terminology been clearly defined, have the criteria to form judgements including thresholds been clearly defined and have any deviations from good practice guidance (such as GLVIA3) been clearly explained?
e) Does the assessment demonstrate a clear understanding and provide a separate consideration of landscape and visual effects?
f) Does the assessment demonstrate comprehensive identification of receptors and of all likely effects? and
g) Does the assessment display clarity and transparency in its reasoning, the basis for its findings and conclusions?

Step 2. Check the baseline, content, and findings of the assessment

As part of this stage in the review process the reviewer will consider the description of the baseline, both in narrative as well as in illustrations by plans, photographs and drawings etc. This may also include publicly available aerial photography, books, online resources, local plans and management plans.

The reviewer may also consider that a site visit may be necessary either to complement or to verify baseline information. The site visit and potential visits to viewpoints are also useful to check actual findings of the assessment.

This stage of the review typically includes further tests:

a) What is the reviewer's opinion of the scope, content and appropriateness (detail, geographic extent) of both the landscape and the visual baseline studies which form the basis for the assessment of effects (supported by appropriate graphic such as ZTVs etc as appropriate)?
b) Has the value of landscape and visual resources been appropriately addressed (including but not necessarily limited to) considerations of: local, regional and national designations; rarity, tranquillity, wild-land and valued landscape?
c) Have the criteria to inform levels of sensitivity (both landscape and visual) and magnitude of change have been clearly and objectively defined, avoiding scales which may distort reported results?
d) How well is the cross-over with other topics, such as heritage or ecology, addressed?
e) Is there evidence of an iterative assessment-design process?
f) Is it clear how the methodology was applied in the assessment, e.g.: consistent process, use of terms, clarity in reaching judgements and transparency of decision-making?
g) How appropriate are the viewpoints that have been used?
h) How appropriate is the proposed mitigation, both measures incorporated into the scheme design and those identified to mitigate further the effects of the scheme, and mechanisms for delivering the mitigation?
i) What is the reviewer's opinion of the consistency and objectivity in application of the criteria and thresholds set out in the methodology for assessing the sensitivity of receptors, the magnitude of changes arising from the project, the degree/nature of effects, and the approach to judging the significance of the effects identified, in the case of EIA projects?
j) What is the opinion on the volume, relevance and completeness of the information provided about the development or project including, where relevant, detail about various development stages such as construction, operation, decommissioning, restoration, etc.?
k) Does the document clearly identify landscape and visual effects which need to be considered in the assessment? and
l) Have levels of effect have been clearly defined and, in the case of LVIA, have thresholds for significance been clearly defined and have cumulative landscape and visual effects been addressed?

Step 3. Critique of the presentation of the findings of the assessment

This phase is perhaps the most straightforward. It involves examining the 'presentation' of the assessment including report text, figures/ illustrations, visualisations, and other graphic material forming the LVIA or LVA, and answering the following:

a) Does the LVIA/ LVA display transparency, objectivity and clarity of thinking, appropriate and proportionate communication of all aspects of the assessment of landscape and visual effects, including cumulative effects.
b) Have the findings of the assessment been clearly set out and are they readily understood?
c) Has there been clear and comprehensive communication of the assessment, in text, tables and illustrations?
d) Are the graphics and/or visualisations effective in communicating the characteristics of the receiving landscape and visual effects of the proposals at agreed representative viewpoints?
e) Are the graphics and/or visualisations fit for purpose and compliant with other relevant guidance and standards? and
f) Is there a clear and concise summation of the effects of the proposals?

Overall Conclusion: Report the review

The final step of the review process is to use the reviewer's findings to draft a short report which would include (but need not be limited to):

1. Confirmation of the brief issued to the reviewer setting out the scope of the review;
2. A summary of how the review was undertaken);
3. A summary of findings of the review of the assessment methodology;
4. A summary of findings of the review of the scope of the assessment;
5. A summary of findings of the review of the actual assessment of effects;
6. A summary of findings of the presentation of the assessment;
7. A summary statement by the reviewer in respect of appropriateness, quality, comprehensiveness, compliance and conformity with relevant guidance and regulations;
8. Recommendations for further information to be sought (if necessary); and
9. Overall conclusions on the adequacy of the assessment and whether it is sufficient to support making an informed planning decision.

The report can also include further information not covered here but relevant to reporting on the compliance (or otherwise) of the LVIA or LVA with GLVIA3 or matters of competence or expertise. This guidance provides a summary framework for reviewing and reporting only; the Landscape Institute continues to regard GLVIA3 as the primary source of guidance for undertaking LVIAs and LVAs.

4. Further information

For further information or to provide feedback on the guidance in use, please refer to the Landscape Institute's website, using the search terms GLVIA. At the time of publication, material is likely to be found in the following section: https://www.landscapeinstitute.org/technical/glvia3-panel/

Authored by [redacted] FLI on behalf of the GLVIA Panel and approved by LI Technical Committee
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Landscape Institute
85 Tottenham Court Road
London
W1T 4TQ

www.landscapeinstitute.org

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Appendix ii: Meridian Solar Farm. Soils, Agriculture and Land Use Impact. Report of Reading Agricultural Consultants (RAC) August 2026

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August 2026

Meridian Solar Farm.

Soils, Agriculture and Land Use Impact

Report of Reading Agricultural Consultants

Beechwood Court
Long Toll
Woodcote
RG8 0RR

01491 684 233
reading-ag.com

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APPENDICES

Appendix 1: Comparison of ALC Mapping

Appendix 2: Review of ALC Survey Issues

Appendix 3: Review of Soil Pits

Introduction

1. This report has been prepared to inform Lincolnshire County Council's (LCC) Local Impact Report (LIR), describing the likely effect of the proposed development of Meridian Solar Farm on the County. It draws on local and published knowledge regarding the agricultural sector in Lincolnshire and describes the context of the Scheme within that sector.

2. This report assesses the relevant section of the Environmental Statement (ES) against published guidelines available to the Applicant, describes the site in the context of agriculture and soils in a local and national context, and the likely contribution of the Scheme in the light of its own direct and cumulative effects and in the light of ongoing rapid development of green energy infrastructure in the County. It specifically describes:

   - impacts on soil and wider agricultural resources; and
   - socio-economic and social issues.

3. Earlier comments raised by RAC and used to inform LCC's Relevant Representation are set out in RAC's '*Comments on 6.1 ES Chapter 5 and associated documents for Relevant Representation*' document, dated May 2026. References out to this document are highlighted, thus: **[comment]**.

Background

4. Lincolnshire county covers 592,100ha, of which about 545,000ha, that is about 92% is farmed. The county covers 4.5% of England's land area and accounts for 5.4% of its agricultural land. The proposed solar development area would occupy 1,064.1ha of agricultural land, plus 526.2ha of grid and inter-array connection corridors and 3.3ha of non-agricultural, that is a total of 1,593.6ha, in the region of 0.3% of Lincolnshire's farmland.

5. The wider county, as defined by the Greater Lincolnshire Local Enterprise Partnership (LEP), produced about 12% of English agricultural output, by value, in 2019, that is more than £2 billion[1]. In the same period, the area produced 30% of England's vegetables, 12% of all potatoes, 18% of sugar beet, 20% of its wheat and 18% of its poultry. This key position in food production extends through food processing and distribution and in total the food chain

[1] https://www.greaterlincolnshirelep.co.uk/priorities-and-plans/sectors/agri-food-sector/ : Accessed 11/06/26

provides 21% of Greater Lincolnshire's economic output and 24% of its jobs[2], compared with 13% nationally.

6. Agriculture is critical to the well-being of the County and it is clear from these simple statistics that any impact on agricultural land in Lincolnshire is very likely to have an immediate impact on local employment and economic output, and a disproportionate impact on food production nationally, when compared with most of the rest of England.

7. Lincolnshire is also undergoing a significant transformation, into one of the UK's foremost clean energy hubs, bringing significant investment into the County, onshoring energy from local offshore wind generation and imported power from Scotland, green hydrogen generation, ground mounted solar, and associated energy storage and transmission infrastructure. Reductions in construction and infrastructure costs and rapidly developing generating technologies have stimulated still more development seeking to take advantage of a favourable national policy environment.

8. The Department for Energy Security and Net Zero's (DESNZ) Solar roadmap[3] seeks to deploy 45-47GW of solar in the UK by 2030, with scope to extend this upper limit. The Department estimates that up to 0.4% of total UK land would be required to deliver this target solar under deployment assumptions consistent with the Clean Power range.

9. The DESNZ's Renewable Energy Planning Database[4] (REPD) shows that planning permissions granted for solar in Lincolnshire in the period Q3 2025 to Q1 2026 grew from 5,888ha to 7,036ha, 1.3% of the County's farmland – an increase in land take of 1,148ha over two quarters. This constitutes a 19.5% rise in area over two quarters compared to a national rise of 13%, with the County accounting for roughly 29% of all new nationally granted solar area over the two quarters, despite having only about 5% of England's agricultural land.

10. Overall, the REPD shows that at the end of Q1 of 2026 more than 64GW of capacity had either been granted permission, or was in the planning pipeline, with more capacity expected to come forward in the rest of 2026. In addition to this capacity, the Solar roadmap anticipates that an additional 9-10GW of rooftop solar projects could deploy before 2030 making it possible that

[2] Agriculture alone provides 4% of the region's workforce. https://www.greaterlincolnshirelep.co.uk/priorities-and-plans/priorities/priority-skills/local-skills-report/ : Accessed 11/06/26
[3] https://www.gov.uk/government/publications/solar-roadmap/solar-roadmap-united-kingdom-powered-by-solar-accessible-webpage : Accessed 11/06/26
[4] https://www.gov.uk/government/publications/renewable-energy-planning-database-quarterly-extract : Accessed 11/06/26

Department's solar capacity range of 45-47GW could yield 54-57GW by its target date, notwithstanding other technology-related gains.

Land Quality

11. The total area of Best and Most Versatile (BMV) agricultural land taken for the Scheme varies according to the source used. Natural England's (NE) 2026 Predictive ALC map for England[5] shows the whole area within ALC Grades 1, 2 and 3a, which is BMV land, refining the Provisional map cited in Chapter 5 of the ES, which does not differentiate between Grades 3a (BMV) and 3b (non-BMV). Furthermore, NE's strategic scale map of the East Midlands Region of England, predicting the likelihood of BMV land shows that there is a high likelihood, that is 60% or greater chance, of the land being BMV. Whilst these sources are intended to be used for strategic planning purposes only, and it is necessary to carry out detailed soil surveys to confirm or refute mapped grades, strategic mapping is generally accepted to be an accurate indicator of grading.

12. Page 100 of the Scoping Report for the Scheme states that the initial findings of a reconnaissance survey found the land to be mainly of Subgrade 3a quality with areas of Grades 1 and 2, all BMV. A separate MAFF survey carried out in 1991[6], shows a small part of the site to be mainly Grades 2 and 3a, with insignificant inclusions of Grade 1 land. This is consistent with the Predictive Map, which shows that 412,556ha of land in Lincolnshire is BMV, that is about 76% of all agricultural land.

13. The Provisional map of ALC, published by the Ordnance Survey at 1;63,360 scale, based on detailed and reconnaissance surveys carried out by MAFF and the Soil Survey of England and Wales, indicates that the land occupied by the Scheme is all within Grades 1 and 2, that is BMV land.

14. Natural England's map of the Likelihood of Best and Most Versatile (BMV) Agricultural Land - Strategic scale map for the East Midlands (1:250,000) shows the best available estimate of agricultural land quality at 18/08/2017. This indicates that there is a high likelihood (>60%) of BMV land across the area of land occupied by the Scheme.

[5] https://environment.data.gov.uk/dataset/a817d96f-271d-487b-89ad-48d271f931aa Accessed 11/06/26
[6] Crowland, Postlands Estate (ALCC05791)
https://publications.naturalengland.org.uk/publication/5590632018477056 Accessed 11/06/26

15. Subsequent to the publication of these maps, Defra's Predictive Agricultural Land Classification Map for England (1:250,000) (2026) replaces the earlier maps confirms that the area of land covered by the Scheme is either Grade 1, 2 or 3a, that is BMV land.

16. The detailed survey carried out for the ES and included at Chapter 5 of the ES first identifies: 95.2ha of Grade 1 (8.9%); 77.4ha of Grade 2 (7.2%); 202.8ha of Subgrade 3a (19%) and 566.5ha of Subgrade 3b (53.1%) land.

17. A compilation showing these maps in context of each other is attached at Appendix 1 to this report.

18. Following comment from Natural England on the methodology used to classify land, a second analysis suggested that the distribution of land grades was: 120.6ha of Grade 1 (11.3%); 92.6ha of Grade 2 (8.7%); 205.4ha of Subgrade 3a (19.2%) and 523.7ha of Subgrade 3b (49.1%) land.

19. The first assessment[7], which classifies soils according to averages between observations within fields, flies in the face of Natural England's prescribed methodology for ALC[8], which states that "*Land is graded and mapped without regard to present field boundaries, except where they coincide with permanent physical features*".

20. The second assessment[9] is based on mapping the grade of land according to observations made on a 100m x 100m grid across the area of the Scheme, without regard to present day field boundaries. This assessment is technically more likely to represent the grades of the area of land as derived from the interpretation of the results of the soil survey, provided that the survey and its interpretation were undertaken correctly.

21. Any analysis of the observations made to inform this work, and thus the ES, shows that the conclusions drawn and used in the assessment are significantly different from any previously published assessment of the quality of the land of the proposed development area and of the surrounding area, a difference which is not commented on or justified in the ES.

[7] 5.6.10 of EN010169-000343-6.1 ES Chapter 5 Agriculture and Soils & EN010169-000235-6.2 ES Figure 5-2 ALC Soil Type Average Survey Results for Solar Development Area

[8] Guidelines for grading the quality of agricultural land (JP069) https://publications.naturalengland.org.uk/publication/6257050620264448 Accessed 11/06/26

[9] 5.6.12 of EN010169-000343-6.1 ES Chapter 5 Agriculture and Soils & EN010169-000234-6.2 ES Figure 5-1 ALC Auger by Auger Point Survey Results for Solar Development Area

The development of agricultural land and BMV land

22. Whilst there may be no embargo on the development of BMV agricultural land, there is a presumption against its unjustified use for green energy infrastructure, set out in the Overarching National Policy Statement for Energy (EN-1)[10] which states at 5.11.12 and 5.11.34 that:

> *"Applicants should seek to minimise impacts on the best and most versatile agricultural land (defined as land in grades 1, 2 and 3a of the Agricultural Land Classification) and preferably use land in areas of poorer quality (grades 3b, 4 and 5)."*

and that:

> *"The Secretary of State should ensure that applicants do not site their scheme on the best and most versatile agricultural land without justification."*

23. The Policy goes on to require that:

> *"Where schemes are to be sited on best and most versatile agricultural land the Secretary of State should take into account the economic and other benefits of that land. Where development of agricultural land is demonstrated to be necessary, areas of poorer quality land should be preferred to those of a higher quality."*

24. The NPPF suggests that the planning system should support the transition to a low carbon future whilst helping to minimise vulnerability and improve resilience. There is no requirement for Applicants to demonstrate overall need for renewable energy and guidance suggests that applications should be approved where their impacts are (or can be made) acceptable.

25. The Land Use Framework for England[11] sets out Government's vision of how land should be used and suggests that land uses for food production, housing, nature and energy production need not be viewed as competing but as complementary, given the right tools, data and strategic direction, which the Framework provides. The Framework does not suggest that land use change away from food production takes place on BMV land, although farmers and landowners may identify potential for agri-voltaics, where solar panels are installed above crops, or habitat restoration to deliver wider, landscape benefits, spilling over into delivery of better soil and water quality and habitat. Instead, it states that change should play to the strengths of the land,

[10] https://www.gov.uk/government/publications/overarching-national-policy-statement-for-energy-en-1-2025
[11] https://www.gov.uk/government/publications/land-use-framework

where land use change would be prioritised in areas that are less suitable for high-value, sustainable agriculture, keeping more BMV land producing high value food crops. The conclusion of the analysis informing the Framework was that the Fenland National Character Area, within which the Scheme lies, had fewer sustainable opportunities for change than most of the rest of the country.

26. In order to deliver the Framework's vision, to deliver national objectives for nature restoration and development without reducing domestic food production, it is stated that agricultural land with the greatest long-term potential for food production, that is BMV land, should be strategically conserved and used to deliver sustainable increases in food production. The Framework's conclusion is that most changes should be about "*making land more multifunctional alongside food production, rather than taking it out of production entirely*."

27. The UK Food Security Report[12] states that the UK is 75% self-sufficient in home-grown produce, although 85% of agricultural land is used for grazing livestock or animal feed production. Thus, the relatively small proportion of all agricultural land in UK used to produce food for direct human consumption highlights the need to conserve high-quality farmland to be used as the basis of a strategic plan to develop a core of sustainable food production, resilient to climate change, on the best quality agricultural land.

28. Solar and ground-mounted solar developments have generally proceeded smoothly through the planning system because of the significant weight given to green energy generation in the planning balance. Central Government's target for the installation of solar generation, overseen by the Solar Council and guided by the Solar Roadmap, is approaching fulfilment and the tipping point at which the weight of food security influences the balance significantly is fast approaching, particularly when Rooftop Solar is brought into account[13].

29. The location of a proposed transformer station at Weston Marsh, near Spalding, associated with the T-junction in the much-enhanced land-based infrastructure serving the Eastern Green Links making land fall in Lincolnshire, is used as the primary justification for the location of the Scheme. Limited reference is made to the taking of BMV land in the decision-making process leading to site selection.

[12] https://www.gov.uk/government/statistics/united-kingdom-food-security-report-2024
[13] https://hansard.parliament.uk/commons/2025-06-30/debates/25063038000015/SolarRoadMap Accessed 11/06/26

30. Lincolnshire County Council's draft Environmental Policy[14] (March 2026) addresses the effects of infrastructure on the County's agriculture and the County's environment generally. It states that:

> *"Agriculture is a fundamental part of the Lincolnshire landscape and environment and as a Council we will seek to protect the interests of food security for the nation. The Council will take into account the protection of our best and most versatile agricultural land when considering the acceptability of proposals for onshore windfarms, solar panels or electricity transmission pylons that includes significant agricultural land take. This will be considered alongside the local environmental, landscape, historic and community impacts to ascertain if there is any justification for these projects."*

31. Thus, it is clearly the position of Central and Local Government that BMV land should be protected and that its loss should be avoided through effective site selection, it being unnecessary on a national scale to take BMV land to meet solar generation targets. Whilst farmers and landowners may identify potential for agrivoltaics, where crops and solar co-exist, planners should direct land use change toward areas that are less suitable for high-value, sustainable agriculture, conserving high-quality land which is better suited to the delivery of sustainable increases in food production.

32. The area occupied by the Scheme extends to 1,067.4ha of high-quality agricultural land, including 3.3ha of identified non-agricultural land, plus 526.2ha of grid and inter-array connection corridors. In addition to employing a methodology that fails to comply with NE guidance as described below, the ES also fails to identify the range or areas of crops grown within the Scheme area and so inevitably fails to place the economic and other benefits of the land within the context of local, regional or national production, as required by Policy. This context also applies to the quality of land taken for the development.

33. The following sections deal with these concerns in detail, setting out likely impacts of the Scheme on the local environment and economic activity.

[14] https://lincolnshire.moderngov.co.uk/documents/s72246/Appendix%20A%20-%20Proposed%20Environment%20Policy%20for%20Adoption.pdf

Soils

34. Section 5.6 of the ES describes the baseline conditions of the soils of the site; the survey that informs the assessment fails to describe typical cropping on the land surveyed or assess the economic output from the land.

35. A detailed critique of the site soil survey is attached at Appendix 2 to this Report. This document includes the Applicant's responses to specific questions and further comment on those responses.

36. The soils of the area were mapped by the Soil Survey of England and Wales (SSEW) (the 1:250,000 scale National Map) as: the Wallasea 2 association in Parcels A, B and C, being deep, stoneless clayey soils derived from marine alluvium, calcareous in places and some deep calcareous silty soils; and the Wisbech association in Parcel D, being stoneless calcareous coarse silty soils, also derived from marine alluvium. It is notable that SSEW identifies soils in both associations as locally "*calcareous in the Wallasea and calcareous in the Wisbech*".

37. More detailed mapping is readily available at 1:50,000 scale and is accompanied by the definitive reference text '*Soils of the Boston and Spalding District*' (Soil Survey Memoir No. 27) published by the SSLRC in 1990. These detailed and authoritative references are not identified in the ES and there is no evidence that they were consulted in advance of the soil survey that informs the assessment of ALC grades at the site.

38. The ES places the Wallasea soils in Wetness Classes III and IV, citing the Bulletin accompanying the National Map. This is a misinterpretation, as the Bulletin puts these soils after drainage in Wetness Class II. Given the range of cropping on these soils (cereals, oil seed rape, potatoes, sugar beet and brassicas) and the dense network on distributor drains maintained by the Internal Drainage Board, it is extremely unlikely that the land in the Meridian Scheme is undrained.

39. Non-calcareous Wallasea clay soils cannot be poorer than Subgrade 3a in this local climate, while calcareous Wallasea soils would be in Grade 2. The schedule of observations from the soil survey carried out to inform the grading of the site within the ALC framework fails to identify specifically calcareous soils and so a significant area of calcareous clayey alluvial soils, which cannot be poorer than Grade 2 in the ALC system, are classified as Grade 3b in the assessment. This appears to have been the consequence of a failure to undertake any field tests for calcareous soils and incorrectly assessing the Wetness Class; which failures should nullify the

findings of the survey. Wisbech soils can be either Grade 1 or 2. If the ALC guidance is applied correctly, the whole area is of BMV quality.

40. The assessment also describes limitations to ALC grades, as presented in Appendices 5-2 and 5-3 to the ES. The most significant of these is the identification during the survey of a Slowly Permeable Layer (SPL) at between 30cm and 40cm depth across large parts of the site. This feature is claimed to limit the ALC grade to Subgrade 3b. These observations, made from hand-augered samples, are only informed by observations made from the excavation of two soil pits, the locations of which are shown to be remote from a large proportion of the auger observations.

41. A detailed critique of the soil pits and observations made by surveyors used to inform the soil survey is attached at Appendix 3 to this Report.

42. Expert interpretation of these observations in the local context strongly suggests that the application of this limitation is wrong. NE guidance on ALC states that:

> *"soils developed in marine alluvium can have very porous subsoils due to the presence of vertical channels and such soils often do not have slowly permeable horizons"*

43. This guidance is supported by the depth of the features observed in the photographs, which strongly suggests that they are the result of husbandry (plough pans) and are thus temporary and easily removed through the use of appropriate soil management practices **[paras 16 & 42 et seq: RR]**.

44. Furthermore, the information derived from the two soil pits is limited to poor quality images and basic descriptions, which make interpretation difficult. British Society of Soil Science (BSSS) Guidance on assessing land classification[15] requires that soils should be described using methods described in the Soil Survey Field Handbook[16], including the description of soil pits dug to at least 100 cm. The available evidence strongly suggests that this guidance has not been followed, and pits were dug to insufficient depth **[Photographs 6 & 7 EN010169-000156-6.3 ES Appendix 5-2 Agricultural Land Classification Report - Parcels A and D and Photograph 9 EN010169-000157-6.3 ES Appendix 5-3 Agricultural Land Classification Report - Parcels B and C].** Further, there is no evidence of any detailed examination of soil structure in or colour of the pit walls. The assertion in the assessment of the presence of less than 0.50% biopores greater than 0.50mm

[15] https://soils.org.uk/wp-content/uploads/2022/02/Assessing-Agricultural-Land-Jan-2022.pdf Accessed 11/06/26
[16] Hodgson, J M (1997) Soil Survey Field Handbook

diameter and of prismatic structures is made without the benefit of robust supporting evidence from observation pits. No laboratory evidence is available to support the texturing of the visible elements of the soil profile of any pit. This is not accepted practice **[para 44: RR]**.

45. In the Site Survey Logs **[Appendix II of EN010169-000157-6.3 ES Appendix 5-3 Agricultural Land Classification Report - Parcels B and C & EN010169-000156-6.3 ES Appendix 5-2 Agricultural Land Classification Report - Parcels A and D]**, the recorded observations within each soil type described are generally similar in terms of horizon depths and content. The auger logs appear to have been copied and pasted and not individually described. This is despite the ES stating that "*a degree of variability in physical characteristics within a discrete area is to be expected*". The lack of variation in observations and lack of consistency between observed and measured laboratory soil textures fail to provide confidence in the ALC grading ascribed to each bore, particularly the clay soils graded as 3b, which rely on the identification of a slowly permeable horizon.

46. The ES contains no detailed description or images of the soil types identified at the site, and the lack of a baseline description of soils condition makes it impossible to establish a robust baseline from which changes in the physical and chemical characteristics of the soils of the Scheme area, pre- and post- development can be identified. This fails to comply with recent ISEP guidance[17], which is referred to in the ES **[pp3&4: RR]**.

47. Taken with the failure to record the presence or absence of calcium carbonate in the surveyed soils, and the incorrect assignment of Wetness Class, in a situation where the downgrading of mapped BMV land is critical to the weight given to soils and agriculture in the planning balance, the available evidence is insufficient to support the conclusion drawn in the ES that the majority of the area taken by the Scheme is not BMV and that the loss of more than 418ha of highly productive BMV land for 40 years is not significant.

Outline Soil Management Plan (oSMP)

48. The published Meridian oSMP is largely generic containing local detail where available in common with other solar NSIPs in Lincolnshire.

49. The baseline soils data used in the oSMP are based on the results of Meridian's ALC survey. The results of the survey are questioned in this report with particular regard to the identification of

[17] https://www.isepglobal.org/resources/news/2026/january/the-best-and-most-versatile-farmland-should-be-protected-amid-rapid-expansion-of-uk-solar-power-says-new-guidance/ : Accessed 11/06/26

soil features within areas classified as Grade 3b, where established mapping strongly suggests that soils are likely to be sensitive to disturbance. Detailed surveys of soil type, structure and health should be carried out and a baseline, against which restoration and aftercare can be assessed, established before work on site commences, in order to inform accurately the final Soil Management Plan.

50. The oSMP states that land restoration after decommissioning will aim to restore all agricultural land without diminution of original ALC grades, as informed by the detailed ALC survey. Given the lack of confidence in the findings of the original survey which maps land, identified elsewhere as BMV, as non-BMV, it is not possible to write or rely on its recommendations without additional detailed survey work.

51. The oSMP does not include any details of the nature or duration of any aftercare that may be necessary to restore disturbed land to its original ALC grade and condition. Aftercare should be described for all land stripped during the construction period, including access tracks, works compounds and electrical installations.

52. The oSMP also fails to consider the mass balance of soil types stripped from areas of temporary land take and appropriate storage in the consideration of soil movement and storage from construction, through operation to decommissioning and restoration. This is of particular concern with respect to the undertaking of necessary works during the establishment of inter-array and grid connections, although equally applicable to works associated with the arrays.

53. The oSMP fails to include description of soil storage, specifically: bund specifications for individual soil types and longevity, including maximum dimensions and vegetation management.

54. The Outline Construction Environmental Management Plan (oCEMP) identifies a risk associated with Unexploded Ordnance (UxO) in part of the Scheme area. This risk and details of mitigation methods should also be referenced in the oSMP, particularly with regard to completing the ALC surveys in plots of land shown as unsurveyed.

Cumulative Land Take

55. DESNZ's Renewable Energy Planning Database monitors renewable energy projects quarterly. The database for Quarter One (Q1) of 2026 reflected Lincolnshire's rapid growth in energy infrastructure, with the area of planning permissions granted growing from 5,888ha to 7,036ha –

a 1,148ha over two quarters. This represents a 19.5% increase in land take, compared with a 13% increase in land take nationally.

56. Lincolnshire accounted for roughly 29% of all new nationally granted solar area over the two quarters despite only having approximately 5% of UK agricultural land. This strongly suggests that the County is having approved a disproportionate number of decisions for ground-mounted PV.

Land Use and Cropping

57. The proposed solar development area grid and associated inter-array connection corridors occupy a total of 1,593.6ha, that is about 0.3% of Lincolnshire's farmland. Whilst this may seem like a small proportion of the farmed area of the County, it is important to view this proposal in the context of its contribution to the cumulative impact of all developments, and particularly solar developments on potentially sensitive receptors, as required in ES.

58. The current and historical use of the land to be occupied by the Scheme is not described in greater detail than that it is "*currently used to grow arable crops*". Thus, the ES cannot assess the economic contribution of crops grown in the Scheme area to individual farm businesses affected, or the impact of the loss of production on the local or regional economies.

59. ES requires that impacts of proposed developments are assessed cumulatively as well as in their own right. The lack of data on land use and cropping also renders it impossible to undertake any valid assessment of the cumulative impact of the proposal.

60. The ES sets out detailed cumulative impact assessments for Agriculture and Soils, Materials and Waste, Traffic, and Landscape and Visual topics, addressing:

- Nationally Significant Infrastructure Projects (NSIPs) within 30km, within five years;
- Town and Country Planning Act (TCPA) applications within 15km with three years; and
- Solar schemes within the administrative County of Lincolnshire within the past five years for NSIPs and three for TCPA applications.

Only projects under the last bullet are considered in the agricultural land assessment. Projects assumed to form part of the existing baseline, that is operational schemes or schemes where construction is nearly complete, are excluded from the assessment, along with schemes that have had permission refused, have been withdrawn, or otherwise have not proceeded.

61. The ES fails to assess any cumulative effects relating the use of land and its productivity, specifically in terms of its contribution to the local and regional economies.

62. The Land Use Framework (LUF) for England[18] was published in March 2026. This document seeks to balance food security and national security whilst increasing resilience to climate change and ecosystem degradation. Lincolnshire includes some of the most productive land in England, growing a wide range of high yielding and high value crops.

63. The LUF estimates the approximate area of agricultural land in England that will be used for solar and wind energy by 2035 to be 155,000ha, that is about 1% of land and about 1.8% of its Utilised Agricultural Area (UAA). The LUF recommends that planning decisions should contribute to and enhance the local environment by recognising the economic and other benefits of BMV land, such as that included in the Scheme area, advocating that it should be strategically conserved and used to deliver sustainable increases in food production.

64. Lincolnshire contains 545,362ha of agricultural land, of which 412,556ha (75.6%) are mapped as BMV[19]. At 1,593.6ha, the Scheme would occupy about 0.3% of farmed land in Lincolnshire and cumulatively with other solar developments 1.4%. Given that the total area is mapped by MAFF and the Soil Survey as BMV, the site would occupy 0.35% of the County's BMV land.

65. Agricultural land in South Holland District, in which the Scheme lies, covers 74,238ha and is predominantly BMV, with less than 2,000ha (2.5%) falling into Grade 3 or lower[20]. The importance of farmland in the District is reflected in the relatively small area of ground-mounted solar installations that are either operational or awaiting construction, that is eight sites covering less than 110ha, generating about 15MW of electricity; the District has more than 1,000MW of existing generating capacity. The Scheme would occupy about 2.1% of the agricultural land in the District, all of it mapped by Natural England and the Soil Survey as BMV.

66. The Scheme is said to be temporary, and the ES fails to include any assessment of any changes that are likely to be experienced during the life of the development. For instance, no evidence provided of change in the health of land taken out of production and subject to reduced solar inputs for an extended period, and there is no proposal for the establishment of any baseline condition of soil health in order that change can be assessed at the end of the Scheme's life.

[18] https://assets.publishing.service.gov.uk/media/69c6903eb66ff902f454435b/Land_Use_Framework_PRINT.pdf : Accessed 11/06/26
[19] https://environment.data.gov.uk/dataset/a817d96f-271d-487b-89ad-48d271f931aa : Accessed 11/06/26
[20] As shown on the Provisional Map of ALC.

67. Whilst it is accepted that short term fallowing of intensively farmed arable land has a generally positive effect on soil health, there is little research into the long-term removal of highly productive land from agriculture. A review of Rothamsted Research's Highfield experiment[21] suggests that 50 years of management of typical silty clay loam soil as bare-fallow can result in significant reductions in soil carbon and nitrogen, and in the abundance of biological communities, with soil structure also severely compromised.

68. Uncertainty regarding the impacts of permanent shade and differential wetting on plant communities and soil structure and health under solar arrays means that it is impossible to definitively foretell the true impact of long-term change of use on high-quality soils. Thus, in the absence of evidence of long-term PV being beneficial to these soils, it is reasonable to retain them for agricultural production.

69. Furthermore, land that currently benefits from irrigation is not identified. Irrigation enables the full versatility of land to be utilised, including the production of high value crops such as potatoes, sugar beet and brassicas. Any extended interruption to the use of an irrigation abstraction licence is extremely likely to result in the revocation of that licence by the Environment Agency. Any such revocation will be permanent, and it is unlikely that a licence similar to the original would be granted when the land is returned to agriculture, so limiting the use of the land to crops not requiring irrigation. Thus, any land benefitting from irrigation will be less productive on decommissioning of the solar array than is currently the case. The ES fails to identify any agricultural land that benefits from irrigation and thus cannot accurately assess the temporary or likely permanent impacts of its loss from the farming economy.

70. Drainage and other existing underground infrastructure, such irrigation mains, are critical elements of effective agricultural land management in the Fens. Most such infrastructure is buried with about 0.75m of cover, just below the maximum depth of normal tillage operations. The ES does not take into account the possible disruption of this infrastructure during the installation and decommissioning of the solar arrays, including the inter array connections.

71. In the absence of cropping details for the Scheme area, an estimate of typical cropping for the immediate area has been made using cropping data from the Rural Payment Agency's Crop Map of England (CROME) for the years 2021-2025. Crome shows that the cropping of the area is

[21] Hirsch, P. R., Jhurreea, D., Williams, J. K., Murray, P. J., Scott, T., Misselbrook, T. H., Clark, I. M. (2017). Soil resilience and recovery: Rapid community responses to management changes. Plant and Soil, 412, 283–297.

mixed, including cereals (55.7%); cover crops (12%): peas and beans (7.6%); oilseeds (6.3%); maize (5.8%); sugar beet (4.1%); potatoes (2.5%); and others, including onions and brassicas (6%).

72. The potential agricultural output achievable from this range and area of cropping across the 1064.1ha of the proposed development area (excluding impacts associated with grid and array connectors) is estimated to be between £1,431,000 and £1,904,000 annually, based on standard costs taken from the 2026 edition of the John Nix Pocketbook for Farm Management; that is an average annual output per hectare of between £1,345 and £1,789. Whilst the expected life of many solar farms is being promoted to be 60 years[22], for the claimed 40 years of this development that would be between £57,20,000 and £76,160,000 lost to the local economy, excluding any added value within the supply chain.

73. In order to put this into context with the rest of the County, a similar exercise has been carried out to estimate the proportions of crops grown in the administrative County of Lincolnshire and apply standard values for outputs.

74. Field scale agriculture in Lincolnshire covers about 435,700ha and the cropping data from CROME for the years 2021-2025 shows a similar mixture of cropping, including cereals (44.7%); cover crops & fallow (18%): peas and beans (5.2%); oilseeds (5.5%); maize (6.6%); sugar beet (3.4%); potatoes (1.9%); others, including onions and brassicas (0.8%), grassland and forage (13.8%); and cover crops, fallow, hedgerow.

75. The potential agricultural output achievable from this range and area of cropping is estimated to be between £477,663,500 and £635,735,000 annually, based on standard costs taken from the 2026 edition of the John Nix Pocketbook for Farm Management; that is an average annual output per hectare of between £1,096 and £1,459 across the County. These values exclude any value added within the supply chain.

76. Thus, the economic output per hectare attributable to agriculture on the proposed development area is about 23% greater than that averaged across the County. This significant difference in productivity has not been taken into account in the ES.

77. It is also clear from this summary that the area of land under, allocated and being considered for ground-mounted solar PV in Lincolnshire, including this proposal, is approaching that proportion of land suggested in the LUF as necessary for solar and wind energy across England. It has been

[22] e.g. Fosse Green, Mallard Pass, Lime Down, Green Hill, East Pye, Maen Hir, The Droves, One Earth and Light Valley.

acknowledged by the Secretary of State for Energy Security and Net Zero in their Outer Dowsing Decision Letter[23] that there is no defined threshold upon which a conclusion regarding the acceptability of the loss of BMV land can be made if the cumulative loss of agricultural land is proceeding without consideration of when the tipping point into unacceptability is reached.

78. It is proposed that this tipping point is being approached, where the County of Lincolnshire, which contributes more agricultural output than any other county, is already at or nearing the committed proportion of solar development identified as the average national requirement. In the case of this Scheme the proportion of BMV land to be taken is reasonably disputed and the Applicant has failed to justify its loss from production for 40 years claimed by the Developer or for an extended period of 60 years, as is claimed by a number of concurrent Solar NSIPs[15], in Lincolnshire and across the UK.

79. At such a critical time in the delivery of solar energy, it is imperative that proposals should be fully justified in terms of guidance set out by Authority. In this case, the Applicant has made no attempt to avoid BMV land and has failed to justify any exception to the Government's guidance on the use of BMV land for solar PV.

80. The ES also suggests that grazing by sheep could maintain agricultural production. Sheep cannot graze on weeds arising from intensive arable production, so the land would have to be converted to grassland, preferable creeping fescue to avoid poaching. The grass would have to be sown before construction and would take two years to become established and resilient to traffic movements during construction and between the arrays. This complication is not considered as part of the assessment.

Socio-economic issues

81. Agriculture and its supporting infrastructure make Lincolnshire a powerhouse in England's food supply chain. This position means that the sector plays a significant role in the day-to-day life and prosperity of a significant proportion of the County's population and disproportionate impacts on agribusiness are likely to have a disproportionate impact on England's agricultural economy.

[23] https://nsip-documents.planninginspectorate.gov.uk/published-documents/EN010130-002643-SoS%20Decision%20letter.pdf : Accessed 11/06/26

82. Whilst the direct economic impacts of the Scheme are relatively easy to estimate, social impacts such as employment are less easy, given the lack of information about the farm businesses affected. Indirect impacts, on agricultural businesses such as machinery dealers, seed and fertiliser merchants, transport, packing and processing cannot realistically be estimated without detailed knowledge of the businesses.

83. The Socioeconomics and Land Use Chapter (14) of the ES fails to take fully into account ISEP guidance on the essential components of Environmental Assessments and Reports **[p4: RR]**.

Agricultural businesses

Temporary

84. A total of 42 agricultural landowners are located within the grid connection route and three tenants who farm the agricultural land, and a further 14 agricultural landowners located within the inter-array connections and two tenants who farm the agricultural land. The holdings are identified as having medium sensitivity on the grounds that the area is rural, numerous holdings are affected and there is potential for substitution because of the number of holdings in the area. No details of the specific nature of cropping or the scale of the affected businesses or the infrastructure/ investment in holdings are described to permit specific assessment of impacts to be made.

85. The impact associated with construction on the holdings affected by the grid connection route and inter array connections is identified as being temporary and fully mitigated and so is assessed as low, given the temporary nature of the development the magnitude of impacts, although the nature and scale of any impacts are not described.

86. Overall, the Scheme is assessed as having a low to very low adverse impact for both landowners and tenants with medium sensitivity affected by the grid connection route and inter array connections, leading to a negligible to minor adverse effect. This is considered not significant by the Developer.

Permanent

87. The ES identifies a total of five landowners within the Scheme Area, and that no tenant farmers are affected.

88. The ES states that voluntary agreements have been reached with all landowners in the Scheme area and that it provides an opportunity to diversify operations and generate non-agricultural income from their land. The affected agricultural land holdings have been assigned a medium

sensitivity. The provision of an income from the land occupied by the proposed scheme is identified as a beneficial impact and its magnitude has been assessed as medium beneficial. 180ha of land within the Scheme area will be retained for agricultural use, for ecological mitigation.

89. Given that the proposed scheme will provide a diversified source of income for landowners, the assessment concludes that the proposed change in land use would not compromise the financial viability of individual farm holdings and so assesses the effect on agricultural land holdings as minor beneficial, that is not significant.

90. The ES fails to take into account the nature and extent of the affected holdings and the impacts each business will experience, including the cropping and rotational areas that will be lost. Further, the removal of 1,064.1ha of land of unknown outputs from production is likely to have impacts extending beyond the farm boundary.

Employment

91. Agricultural businesses in Lincolnshire can typically employ skilled and unskilled labour on permanent or short-term contracts and the nature and scale of labour varies significantly with farm type. Furthermore, it is common for businesses that specialise in growing crops with long rotations, such as brassicas and potatoes, to rent in land in order to increase output and provide annual landlords with additional income.

92. High value crops, like brassicas and potatoes, generally have higher labour requirements and the loss of land from rotations is likely to have a direct impact on businesses, output and employment.

93. Whilst a well-equipped modern arable-only farm with a rotation of wheat/oilseed rape/wheat /beans/wheat/oats would have a labour requirement of only one worker per 405ha and either a comprehensive set equipment or an arrangement with an agricultural contractor, a specialist vegetable grower with arable interests may employ between four and 70 workers per 405ha depending on the degree of vertical integration in the business, which may extend from growing through storage, packing, transport and sales, plus a significant number of seasonal staff at peak planting and harvest times.

94. In addition to direct employment, Lincolnshire farms rely on a highly developed network of allied businesses including machinery sales and service, hauliers, seed and requisite suppliers, employment agencies and business management consultancies.

95. The ES fails to take any impact on employment caused by the withdrawal of the land from production or the knock on impacts any losses may have on local services such as shops, schools and tradesmen.

Economic impacts

96. The well-developed interrelationships between land and communities in Lincolnshire is complex and extensive. The impact of the removal of land from production can only be understood through close consultation with the farm businesses affected by the Scheme.

97. The ES makes no effort to examine in detail the impact on these businesses and therefore cannot extend any assessment beyond the boundary of the proposal. This failure makes it impossible to enable the Secretary of State to take into account the economic and other benefits of that land, as required by the Overarching National Policy Statement for Energy (EN-1).

Assessment

98. The weight attributable to soils and to agricultural land in the assessment falls into two areas, the grade of the land as classed in the ALC system and the productivity of the land.

99. Lincolnshire County Council views agriculture as a fundamental part of the Lincolnshire landscape and environment and as a Council it seeks to protect the interests of food security for the nation. The Council also seeks to protect its BMV land when considering NSIPs that include significant agricultural land take, whilst considering the local environmental, landscape, historic and community impacts in the justification for such projects

100. In the case of this application, detailed survey carried out for the ES identified the distribution of land grades as: 120.6ha of Grade 1 (11.3%); 92.6ha of Grade 2 (8.7%); 205.4ha of Subgrade 3a (19.2%) and 523.7ha of Subgrade 3b (49.1%) land.

101. This grading is significantly different to other sources of land grading:

- NE's 2026 Predictive ALC map for England shows the whole area within ALC Grades 1, 2 and 3a;
- NE's strategic scale map of the East Midlands Region of England, predicting the likelihood of BMV land shows that there is a high likelihood, that is 60% or greater chance, of the land being BMV; and
- MAFF and the Soil Survey of England and Wales' 1:63,360 scale indicates that the land occupied by the Scheme is all within Grades 1 and 2, that is BMV land.

102. Thus, the conclusions drawn and used in the assessment are significantly different from any previously published assessment of the quality of the land of the proposed development area and of the surrounding area, a difference which is not commented on or justified in the ES.

103. Section 5.8 of ES Chapter 5, Agriculture and Soils, assesses the potential impacts and likely significant effects of the Scheme. Footnote 14 to Table 5-12 and footnote 16 to Table 5-13 state that, because the restoration of Grades 1 and 2 land to be occupied with BESS stations and solar stations to its original condition cannot be guaranteed, the assessment assumes a permanent impact across this area. This differentiation is not reflected in the body of the table and the respective totals for permanent and temporary land take cannot be verified and the validity of the summary table of effects (Table 5-16) is uncertain.

104. Furthermore, the separate treatment of Grades 1 and 2, and Grade 3 land, all BMV land, is not justified. It is the view of the Council that all BMV land should be treated equally and that impacts on Grade 3a land should regarded as permanent. This change would cause the assessment of effects to be changed, with a significantly greater area of land would be classified as suffering a Moderate Adverse effect. Where land has been under-graded in the assessment, and land falls into Grade 1 and 2, the effect would be Significant Major Adverse.

105. The ES fails to identify a detailed cropping history for the Scheme area and potential agricultural output from it.

106. An assessment of cropping in the immediate area of the Scheme shows that the cropping of the area is mixed, including cereals (55.7%); cover crops (12%): peas and beans (7.6%); oilseeds (6.3%); maize (5.8%); sugar beet (4.1%); potatoes (2.5%); and others, including onions and brassicas (6%).

107. The potential agricultural output achievable from this range and area of cropping across the proposed Scheme area (excluding impacts associated with grid and array connectors) is estimated to be between £1,431,000 and £1,904,000 annually, that is an average annual output per hectare of between £1,345 and £1,789. Over the 40-year design life of the Scheme, this equates to a loss to the local economy of between £57,20,000 and £76,160,000, excluding any added value within the supply chain.

108. This should be compared with field scale agriculture in Lincolnshire as a whole, which has a cropping mix comprising: cereals (44.7%); cover crops & fallow (18%): peas and beans (5.2%); oilseeds (5.5%); maize (6.6%); sugar beet (3.4%); potatoes (1.9%); others, including onions and brassicas (0.8%), grassland and forage (13.8%); and cover crops, fallow, hedgerow.

109. The potential agricultural output achievable from this range and area of cropping is estimated to be between £477,663,500 and £635,735,000 annually, that is an average annual output per hectare of between £1,096 and £1,459 across the County. These values also exclude any value added within the supply chain.

110. This analysis shows that the economic output per hectare attributable to agriculture on the proposed development area is about 23% greater than that averaged across the County. This significant difference in productivity and thus the role of the land in the local economy should be taken into account in the planning balance.

111. In his decision letter relating to the application for development consent for the Outer Dowsing Offshore Wind Scheme (ODOWS)[24], the Secretary of State (SoS) agreed with LCC's concerns and the Examining Authority's conclusions that the adverse effects of the Scheme would be significant. The SoS also agreed at paragraph 4.140, that the lack of a defined threshold at which the cumulative loss of agricultural land tips into unacceptability makes it impossible to conclude exactly when land loss becomes unsupportable. In the case of the ODOWS, the SoS believed that the Applicant had made reasonable attempts to avoid and minimise the loss of BMV agricultural land and concluded that land use matters weighed moderately against the making of the Order.

112. In the case of this proposal, it is contended by LCC that development occupies solely BMV land and that no attempt has been made to mitigate the loss of highly productive BMV land in the County.

Summary

113. The County of Lincolnshire covers 5,921km^2, of which 5,450km^2, that is about 92%, is farmed. The county covers 4.5% of England's land area and accounts for 5.4% of its agricultural land. The proposed solar development area would affect 1,593.6ha of agricultural land.

114. The wider county produces about 12% of English agricultural output by value and has a key position in a food chain that provides 21% of Greater Lincolnshire's economic output and 24% of its jobs. Any impact on agricultural land in Lincolnshire is very likely to have an immediate impact on local employment and economic output, and a disproportionate impact on food production nationally, when compared with most of the rest of England.

[24] https://nsip-documents.planninginspectorate.gov.uk/published-documents/EN010130-002643-SoS%20Decision%20letter.pdf

115. The total area of Best and Most Versatile (BMV) agricultural land taken for the development varies according to the source used. The results of the survey carried out for the ES is inadequate to justify the conclusions drawn in the assessment, given its failure to properly grade land. LCC contends that the Scheme occupies solely BMV land and that no attempt has been made to mitigate the loss of highly productive BMV land in the County.

116. The ES fails satisfy the requirement of the Overarching National Policy Statement for Energy (EN-1) that Applicants should seek to minimise impacts on BMV land and the Secretary of State should ensure that where schemes are to be sited on BMV land the economic and other benefits of that land should be taken into account and the development justified, which this application fails to do.

117. The ES fails to address any cumulative effects relating to the use of land and its productivity, specifically in terms of its contribution to the local and regional economies. LCC calculates that the annual productivity of the land is between £1,345/ha and £1,789/ha, for the solar PV areas, that is £1,431,000 and £1,904,000 annually or a loss to the local economy over the 40 year life of the development of between £57,200,000 and £76,160,000.

118. The area of land under, allocated to and being considered for ground-mounted solar PV in Lincolnshire, including this proposal, accounts for 1.3% of the County's farmland, that is approaching the 1.8% proportion of utilised agricultural area land suggested in the LUF as necessary for solar and wind energy in the UK. There is no defined threshold upon which a conclusion regarding the acceptability of the loss of BMV land can be made if the cumulative loss of agricultural land is proceeding without consideration of when a tipping point into unacceptability is reached.

119. It is proposed that this point is being approached, where the County of Lincolnshire, which contributes more agricultural output than any other county, is nearing the committed proportion of solar development identified as the average national requirement.

120. At such a critical time in the delivery of solar energy, it is imperative that proposals should be fully justified in terms of guidance set out by Authority. In this case, the Applicant has made no

attempt to recognise the contribution of BMV land to productivity [25, 26, 27, 28]and has failed to justify any exception to the Government's guidance on the use of BMV land for solar PV.

121. The ES fails to take into account the nature and extent of the affected holdings and the impacts each business will experience, including the cropping and rotational areas that will be lost.

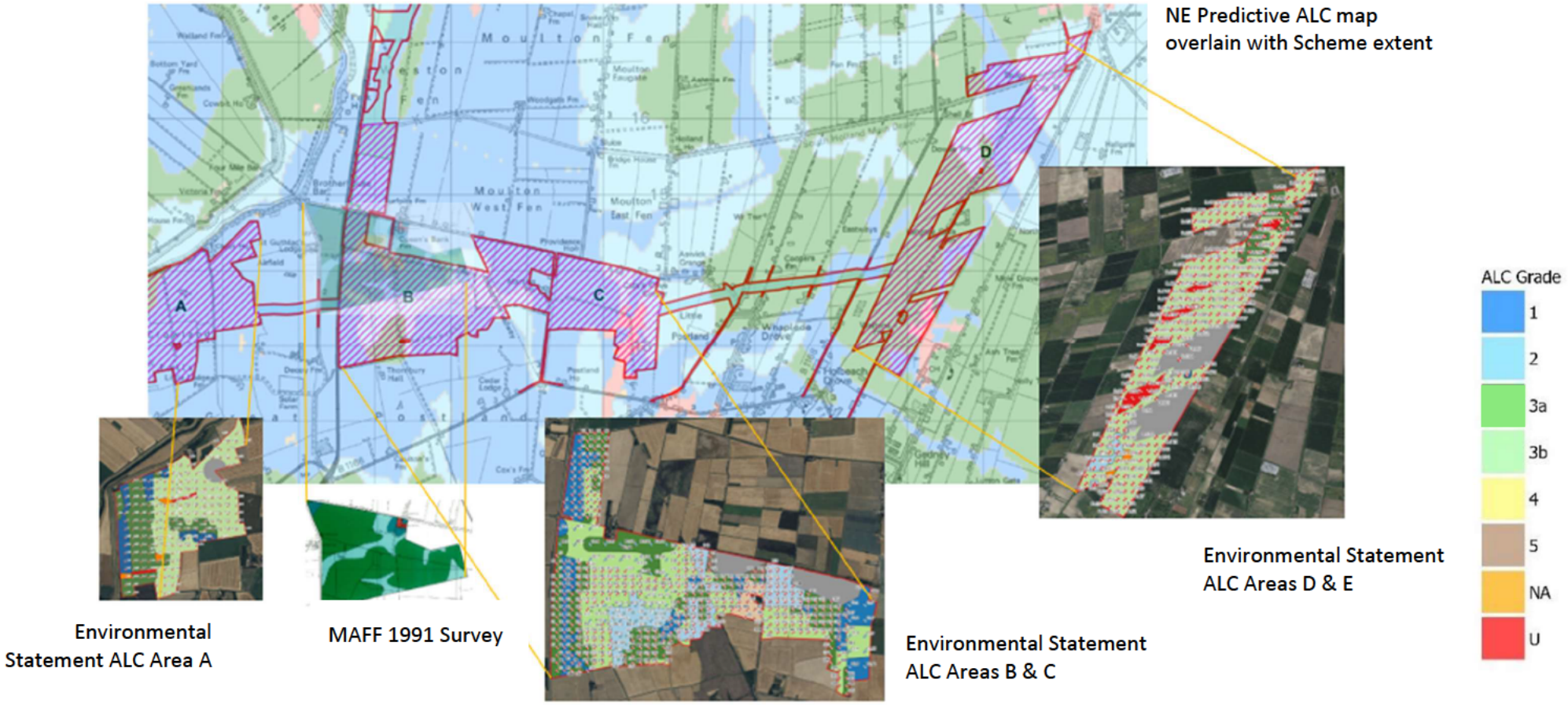
122. Further, the removal of the land from production is likely to have impacts extending to businesses in the food chain and farming support sector beyond the farm boundary. The ES fails to take any impact on employment caused by the withdrawal of the land from production or the knock on impacts any losses may have on local services such as shops, schools and tradesmen.

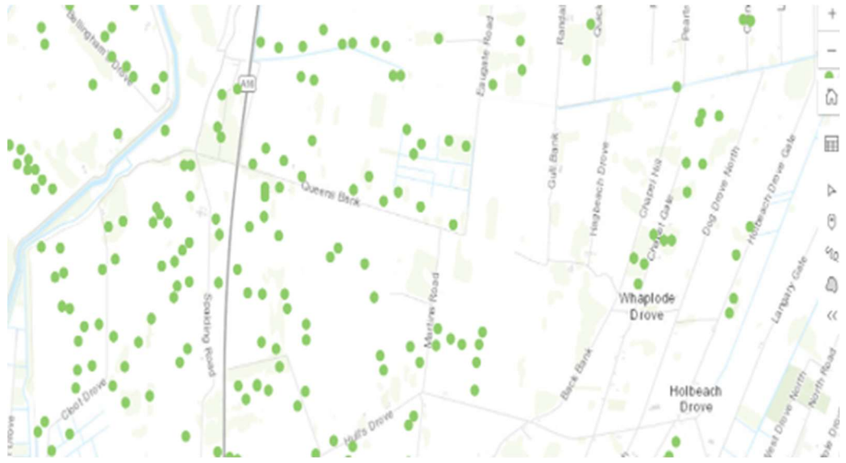
123. The well-developed interrelationships between land and communities in Lincolnshire is complex and extensive. The impact of the removal of land from production on these receptors is not assessed and this failure makes it impossible for the Secretary of State to take into account the economic and other benefits of that land, as required by the Overarching National Policy Statement for Energy (EN-1).

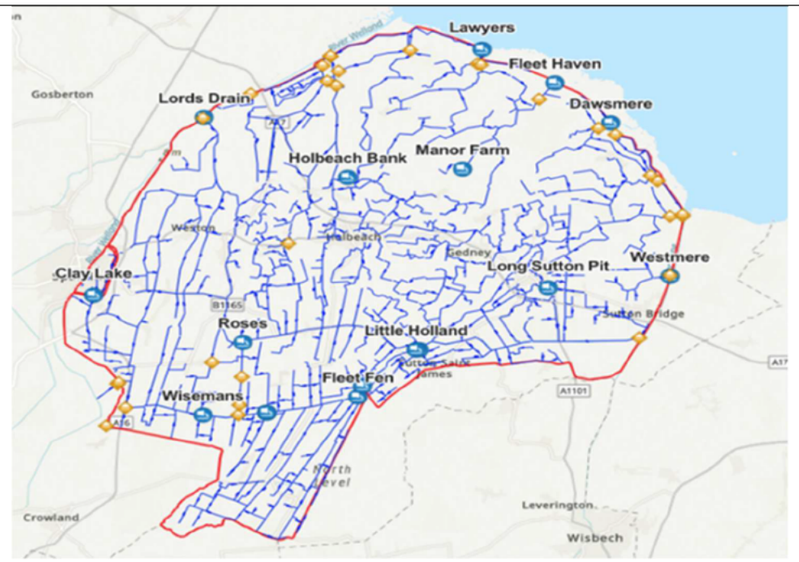
[25] NPPF: https://assets.publishing.service.gov.uk/media/67aafe8f3b41f783cca46251/NPPF_December_2024.pdf Accessed 11/06/2026
[26] NPS 3 https://assets.publishing.service.gov.uk/media/695d1368b5c46330350ed9a2/national-policy-statement-for-renewable-energy-infrastructure-en-3-web-accessible.pdf Accessed 11/06/2026
[27] NPS EN1 https://www.gov.uk/government/publications/overarching-national-policy-statement-for-energy-en-1-2025 Accessed 11/06/2026
[28]ISEP Guidance https://www.isepglobal.org/media/onndjxns/isep-solar-pv-on-agricultural-land-2025.pdf Accessed 11/06/2026

Appendix 1: Comparison of ALC Mapping.

Natural England Predictive Map (2026) & MAFF (1991) -v- Environmental Statement (NTS)



RAC Question	Meridian Response	RAC Clarification
Why is there no reference to the 1:50,000 Soil Map of the Boston and Spalding District that maps the soils at five times the scale of the 1:250,000 National Soil Map? The accompanying Memoir states that these marine clays (Wallasea and Newchurch series) are porous and moderately permeable, but that cultivation pans are common in the upper subsoil. However, these are temporary features and do not affect the ALC, as is confirmed in the ALC guidelines. Since the slowly permeable layer is reported by Meridian as starting at 35 cm depth, it is reasonable to assume, in the lack of other real evidence, that what is being described is a cultivation pan in the upper subsoil.	The Boston and Spalding District Soil Map was not specifically referenced within ES Appendix 5-2: Agricultural Land Classification Report – Parcels A and D [APP-172] and ES Appendix 5-3: Agricultural Land Classification Report - Parcels B and C [APP-173] (hereafter referred to as 'the ALC Survey Reports'). The assessment utilises the nationally recognised soil mapping datasets alongside published geological information from the British Geological Survey (BGS), which were considered appropriate and proportionate, and represent the information typically presented within Environmental Statements. In any event, reference to the Boston and Spalding District Soil Map would not materially alter the assessment conclusions. The soils encountered during the survey were consistent with the mapped Wallasea 2 Association and with the published superficial geological deposits. Furthermore, the Wallasea 2 Association is associated with soils exhibiting Wetness Class III to IV characteristics, which is consistent with the wetness assessment undertaken. The suggestion that the slowly permeable horizon identified during the survey represents a cultivation pan is not supported by the field evidence. Whilst cultivation pans may occur within this soil association, their relevance to ALC grading is dependent upon them being restricted to the cultivated horizon and representing a temporary structural limitation that can be alleviated through normal agricultural operations. In contrast, the slowly permeable clay horizon identified during the survey was observed from approximately 35 cm below ground level and extended to the maximum depth investigated (120 cm bgl). The horizon therefore forms an inherent and persistent component of the soil profile rather than a shallow cultivation-induced feature. Accordingly, it would not be appropriate to classify the identified slowly permeable layer as a temporary cultivation pan for the purposes of ALC assessment. Cultivation pans are typically relatively thin, discrete layers, whereas the observed horizon extended throughout the lower soil profile. The wetness limitation was assessed on the basis of the observed soil profile characteristics and in accordance with the methodology set out in the MAFF ALC Guidelines1. The conclusions presented therefore remain unchanged.	1) The Boston and Spalding (B&S) map provides much more detail that the National Soil Map and at 1:50,000 shows field boundaries. Although the National Soil Map is a nationally recognised data set, it is intended for use at strategic scale only and it should not be used to inform field scale investigations where more detailed published mapping is available (see Natural England's Guide to assessing development proposals on agricultural land - GOV.UK). The BSSS ALC validation process (https://soils.org.uk/wp-content/uploads/2022/02/Assessing-Agricultural-Land-Jan-2022.pdf) specifically asks whether published soil maps are mentioned in reporting and whether the data are consistent with that expected for the area. 2) From the making of the B&S map there are many auger bores on the Landis Portal that cover the Meridian sites. These were available for purchase until March 2026, and are now freely available. They would have provided a useful comparative resource to inform a soil survey. 3) The question of the identification of a slowly permeable layer is dealt with in detail under Comment 2, below.  4) The statement that the Wallasea 2 Association is associated with soils exhibiting Wetness Class III to IV characteristics, which is consistent with the wetness assessment undertaken is incorrect in this part of Lincolnshire. The Bulletin accompanying the National Soil Map states (page 119) that these soils respond to under-drainage and drained soils are in Wetness Class(WC) II, but undrained soils are In WCIII and IV. This part of Lincolnshire comes within the South Holland Internal Drainage Board and water levels are controlled by a dense network of open drains controlled by pumping stations and sluices, into which field drains discharge.

RAC Question	Meridian Response	RAC Clarification
		 The proposed development area is one of the most intensively farmed parts of Britain and it is incomprehensible that none of the Wallasea soils have been under drained over the Meridian sites. Undrained Wallasea soils are found in the recently reclaimed Kent and Essex coastal marshes where the soils are still salt affected (sodic), causing clay particles to disperse and block drains. The B&S Memoir (page 3) explains that the last marine incursion in this part of Lincolnshire was over 2,000 years ago, after which the land has been under freshwater and any salt remaining has been displaced.
Why are there no detailed pit descriptions to provide evidence that 673 ha of clay soils are uniformly slowly permeable, even though the ALC guidelines state that soils developed in marine often do not have slowly permeable horizons? In 5.1.2 of both Appendices "generalised profiles of the soil types encountered" are presented, and "the general profile is reflective of the findings in the soil pit associated with the Soil Type identified on site". Based on photos in the appendices it appears only two pits were dug in each soil type, but no detailed descriptions are provided. For a survey of this size, where the literature states slowly permeable horizons are unlikely to exist, one would expect many soil pits to have been dug and described in detail to confirm their existence and	The survey methodology, including the excavation and assessment of soil inspection pits, was undertaken in accordance with the Guidelines and Field Survey Handbook. Soil pits characterise each identified soil type and verify the soil profile characteristics recorded during auger observations. The number and distribution of inspection pits were considered sufficient to characterise the identified soil type in accordance with the MAFF Guidelines and Field Survey Handbook. The ALC Survey Reports presented generalised soil profiles for each soil type to avoid unnecessary repetition where profile characteristics were found to be consistent across the survey area. However, in response to this comment, the full soil pit logs and descriptions have now been provided. These demonstrate the basis upon which the soil types were identified and confirm the presence of the soil characteristics described within the assessment. It is acknowledged that soils developed in marine often do not have slowly permeable layers, however, the presence (or otherwise) of a slowly permeable layer cannot be determined solely from the origin of the parent material and must be established through field observation. During the site works and the progression of soil inspection pits and auger borings, slowly permeable clay horizons were identified within the soil profiles examined and therefore the assessment was based on observed site-specific conditions rather than assumptions regarding the behaviour of marine-derived soils. The reviewer also suggests that laboratory testing of undisturbed samples for density and porosity should have been undertaken. Whilst such investigations may provide supplementary information, they are not a requirement of the MAFF Agricultural Land Classification Guidelines or	1) The claimed lack of porosity is a key argument in placing these soils in Grade 3b and this can only be judged from a soil pit, not with an auger. 2) The Meridian survey identifies four ALC grades – 1, 2, 3a and 3b - and yet there are only two generalised soil profiles summarised in the ES 6.3 Appendices 5.2 and 5.3. This is contrary to Natural England's Guide to assessing development proposals on agricultural land - GOV.UK) which state ALC surveyors should: • dig small inspection pits by hand to a minimum depth of 1m to add supporting evidence to the borehole data • dig pits where there's a change in main soil type and ALC grade to provide a good depiction of the site 3) In June 2026, at LCC's request, Meridian provided seven soil pit descriptions with photos and locations, that were not included in the ES. Of these seven, only one reached the required depth of 1m; the others are 35cm, 40cm, 42cm, 50cm, 58cm and 62cm deep. A separate review of the individual soil pits is attached and only a summary is provided here. As well as being shallow, five of the seven pit faces are smeared flat with horizontal marks indicating they were excavated by a digger, possibly for an archaeological trench. A soil examination pit should be picked clean to expose the soil structure which clearly was not done here.

RAC Question	Meridian Response	RAC Clarification
continuity across the landscape. Undisturbed samples could also have been usefully sent to a laboratory for measurements of density and porosity.	Field Survey Handbook and are not routinely required to identify slowly permeable horizons within an ALC assessment. The assessment was therefore undertaken using the standard field-based methodology prescribed by the guidance. Accordingly, the conclusions presented are based upon field observations collected in accordance with established ALC survey procedures and are supported by the inspection pit and auger data.	 4) According to the Soil Survey Field Handbook (page 52) the percentage of macropores (i.e .visible pores) is estimated by examining the ped interior, with reference to the accompanying diagrams (Figs 19 – 22). This could not have been done on smeared pit faces where structure and consistence, let alone porosity, could not have been examined. 5) Natural England's Guidelines (see above) state that pits should be dug where there is a change in main soil type and ALC grade to provide a good depiction of the site. However, four of the seven pits are clustered in a 3b map unit in Area A, with only one pit each in Areas B, C and D. This pit distribution does not adequately reflect the changes in ALC grading across the four areas. Only Pit 1 is representative of Soil Type 1 in the ES; the remainder all approximating to Soil Type 2. If the pits are, in reality, shallow trenches excavated for another purpose (such as archaeology), then the choice of sites for profile descriptions is unlikely to be as objective as it should be for an ALC survey over 1200 ha. 6) In terms of soil description, all soil type 2 profiles are described as ungleyed. And yet these soils approximate to the Wallasea series which is a pelo- alluvial gley soil. In the two unsmeared soil profiles where subsoil colours are visible, the subsoil is intensely gleyed, being pale grey with bright orange mottles and would certainly qualify as a Bg horizon. 
In the absence of more than two soil pits, how can such reliance be placed on auger bores for the recognition of slowly permeable horizons? The main indicators described in the report are	The assessment did not rely solely on auger observations for the identification of slowly permeable horizons. The survey was undertaken in accordance with the MAFF Agricultural Land Classification Guidelines and Field Survey Handbook, which utilise a combination of auger borings and representative soil inspection pits. Within this methodology, auger borings provide the	LCC's response in Comment 2 details concerns about the value of Meridian's soil pits. The depth and frequency do not align with published methodology as the pits are too shallow, the faces are smeared, the descriptions incomplete and inaccurate as regards gleying. Also, the locations of the pits are not shown and none are geo-referenced.

RAC Question	Meridian Response	RAC Clarification
the presence of less than 0.50% biopores greater than 0.50mm diameter and prismatic structures. Even a highly experienced soil surveyor would struggle to identify structure and porosity with accuracy with an auger, without frequent pits.	primary means of assessing the spatial distribution and variability of soils across a site, whilst inspection pits are used to verify and characterise representative soil profiles in greater detail. Whilst inspection pits provide the most detailed assessment of soil structure and porosity, the MAFF methodology does not require excavation of pits at every observation point. Rather, representative pits are used to calibrate and verify the wider auger survey. This approach is standard practice within ALC surveys and reflects the methodology set out in the published guidance.	
Why are so many auger bores within each soil type identical in terms of horizon depths and content? The auger logs appear to have been copied and pasted and are not individually described, as if the surveyor in the field merely noted it was the same as the previous one. This is despite 3.5.2 admitting "a degree of variability in physical characteristics within a discrete area is to be expected". This does not give confidence in the ALC grade ascribed to each bore, particularly the clay soils in 3b which depend on identification of a slowly permeable horizon.	All auger borehole logs were recorded in accordance with the Field Survey Handbook using a standardised descriptive framework to ensure consistency in the recording of soil characteristics across the survey area. The occurrence of identical or near-identical horizon depths at adjacent observations is not unusual where soils have developed with horizon boundaries recorded during ALC surveys typically assigned to the nearest integer depth within a homogenous soil unit. The similarity between certain auger logs reflects the homogeneity of soil forming materials across the site, particularly within the identified clay-dominated soil units, which laboratory analysis confirms to be texturally consistent. The use of standardised terminology for horizon descriptions, colours, textures, and structure can result in repeated descriptors where no meaningful variation is observed between adjacent locations. This does not indicate duplication of records, but rather consistency in field observations. Where variation does occur within soil types, this is captured within the dataset, particularly in relation to topsoil depth (ranging from approximately 20 cm to 50 cm) and variability in subsoil horizon development (including both single and multiple horizon expressions extending to between 60 cm and 90 cm depth). These differences are significant in the context of Agricultural Land Classification, particularly in relation to the depth to slowly permeable layers and resultant wetness class assessment. In addition, variation in diagnostic features such as mottling (including presence or absence of ochreous and grey mottles) further demonstrates that auger observations were independently assessed at each location rather than transcribed from previous logs. The dataset as a whole demonstrates sufficient variation in key diagnostic parameters to support the soil type delineation and associated ALC grading, particularly in relation to identification of slowly permeable horizons.	1) The frequently identical horizon depths and content is highly unusual and at odds with the varied auger logs presented in the LRA survey and those on the Landis Portal for this area. It is also at odds with the pit photographs which, where not smeared, show significant variations in topsoil depth and subsoil colour. 2) Slowly permeable horizons cannot be accurately identified in auger samples as subsoil structure and porosity, which are key to ALC grading, are distorted. Recognition of slowly permeable horizons has to be done by means of a sufficient number of profile pits to calibrate the auger descriptions, and LCC considers the pit descriptions are inadequate for this purpose.
Why was the calcium carbonate content of the soils not tested in the field with 10% HCl, as required in the ALC guidelines? Both the National Map Bulletin and the Boston and Spalding Memoir describe the Wallasea as deep stoneless clayey soils, calcareous in places. The calcareous clay soils are the Newchurch series with is mapped around Waplode, but is everywhere a common associate of the Wallasea series. The significance is that a calcareous clay soil in Wetness Class III with < 126 field capacity days is in 3a, not 3b. Lack of testing for calcium	Testing for calcium carbonate using 10% HCl was undertaken in accordance with the ALC guidance. The results of the testing demonstrated that calcareous conditions were not uniformly present across the clay soils. Positive reactions were recorded only in limited and spatially discontinuous locations, with the majority of observations indicating non-calcareous conditions below approximately 25 cm depth. This is consistent with the published soil information, which describes the Wallasea soils as being "calcareous in places" rather than uniformly calcareous throughout their extent. The ALC assessment was based on the field observations recorded in situ rather than an assumption that all soils associated with the Wallasea or related soil series are calcareous. Where calcareous conditions were identified and considered relevant to the ALC assessment, these were taken into account within the grading process and are reflected in the final classification mapping, albeit over a relatively limited area. Accordingly, it is incorrect to suggest that calcium carbonate testing was not undertaken or that its absence invalidates the assessment. Testing was undertaken and the results incorporated into	1) The presence of naturally occurring $CaCO_3$ can raise the ALC grade and should be tested and recorded in every sample where its presence is possible. The auger bores on Landis Portal have a significant proportion of calcareous clay soils (Newchurch series) with the frequency increasing eastwards towards Holbeach Drove. 2) These calcareous soils, even in the unlikely event of them being in Wetness Class III, would be in the BMV 3a subclass. However, it is important to note that the evidence from previous surveys is that these under drained heavy soils are in Wetness Class II, which puts them in Subgrade 3a, even if they are non calcareous (or Grade 2 if calcareous). 3) Observations in soil science should be reproducible and replicable so that someone going back to the same geo-reference should be able to find the same or very similar profile characteristics. For this reason the CaCO3 content should have been recorded in the auger and pit logs as it is an essential component of the ALC grading. Its beneficial effect on soil structure is will also be an important component of the soil health assessment on decommissioning.

RAC Question	Meridian Response	RAC Clarification
carbonate invalidates Meridian's 3b blanket grading of the clay soils	the interpretation of soil wetness and land quality. Equally, the presence of calcareous soils as an associated component of the mapped soil association does not demonstrate that calcareous conditions occur universally across the survey area, nor does it invalidate the grading assigned to areas where field observations confirmed non- calcareous conditions. For clarity, calcium carbonate testing was undertaken and informed the grading assessment. The omission of detailed discussion regarding negative test results should not be interpreted as an absence of testing. The comment therefore reflects a reporting clarification rather than a deficiency in the survey methodology or grading process.	
What is the justification for Meridian's field average approach to ALC? Meridian state in 6.2.1 that "it is justifiable for the purpose of this report to adopt the field average approach to ALC as there was no in field evidence that variable grades within the same land parcel were managed differently". This allows them to include 235 ha of 3a land in 3b. In 5.4.9 of ES Chapter 5 they state this approach "complies with published methodology", whereas the opposite is true. The ALC guidelines state "Land is graded and mapped without regard to present field boundaries, except where they coincide with permanent physical features".	The reviewer has referred to a statement within the MAFF ALC Guidelines relating to variability within mapping units. It is noted that this statement forms part of a broader section of guidance that also addresses how variability should be considered in relation to mapping scale and the aggregation of field observations into coherent spatial units. In full context, the relevant section of the Guidelines states: “The grade or subgrade of land is determined by the most limiting factor present. When classifying land, the overall climate and site limitations should be considered first as these can have an overriding influence on the grade. Land is graded and mapped without regard to present field boundaries, except where they coincide with permanent physical features. A degree of variability in physical characteristics within a discrete area is to be expected. If the area includes a small proportion of land of different quality, the variability can be considered as a function of the mapping scale” This section then goes on to describe limitations associated with variation and “patchwork soils” which complicate management and cropping. This statement sits within a wider methodological framework that requires point-based observations (auger and pit data) to be interpreted and generalised into mapping units defined by dominant soil and land characteristics. The purpose of this approach is to ensure that Agricultural Land Classification mapping reflects meaningful spatial variation rather than isolated or non-continuous occurrences, as is additionally outlined within the BSSS working with soil (How2 sheet 4.3.2) which advises to “Keep inclusions of land of a different grade to a minimum (unit impurities)”. The approach adopted in this assessment is consistent with that principle. Observed variability was considered in the context of its spatial extent, continuity, and relevance at the mapping scale used for the survey. Where slight variations in land quality were identified, these were assessed against the criteria for defining discrete mapping units rather than being treated as individual isolated inclusions requiring separate delineation. The use of Field average ALC mapping is undertaken at a scale that reflects the practical management and continuity of land quality across the field or parcel. As such, isolated or minority point observations of differing soil characteristics are assessed in the context of their spatial extent, continuity, and whether they represent a mappable and operationally distinct land resource. In this survey, the occurrences of Subgrade 3a characteristics within areas mapped as Subgrade 3b were limited in extent and did not form continuous or readily definable land units capable of being mapped separately with confidence at the survey scale. The observed pattern was one of localised variability within a predominantly 3b resource rather than extensive tracts of distinct 3a land. In practice, land is managed at field scale rather than on the basis of small within-field variations that lack sufficient extent or coherence to influence agricultural operations independently. Where higher-quality characteristics are limited in extent and embedded within a dominant lower-grade soil unit, they do not function as separate agronomically distinct areas capable of supporting differentiated management. Accordingly, the presence of limited 3a characteristics within a predominant 3b mapping unit does not, in itself, justify separate delineation or alter the classification of the overall unit. The presentation of field averages reflects the dominant limiting factors and the operational capacity of the area. Notwithstanding the above, it is noted that both field-average and auger-by-auger point analyses were presented within the ALC Survey Reports and ES Chapter 5: Agriculture and Soils [APP-056], with the assessment of effects undertaken within ES Chapter 5: Agriculture and Soils [APP-056]	The primary purpose of this ALC survey is to assist with planning the siting of infrastructure, with particular reference to avoidance of long term damage to BMV land. It is not to do with identification of agronomically distinct areas that influence agricultural operations, so the issue of field boundaries is not relevant to an ALC survey for solar. In fact ES Figure 5.1 (auger by auger point survey results) confirms the areas of 3a land are large enough to stand-alone at the scale of mapping and there is no practical justification for merging them with 3b land.

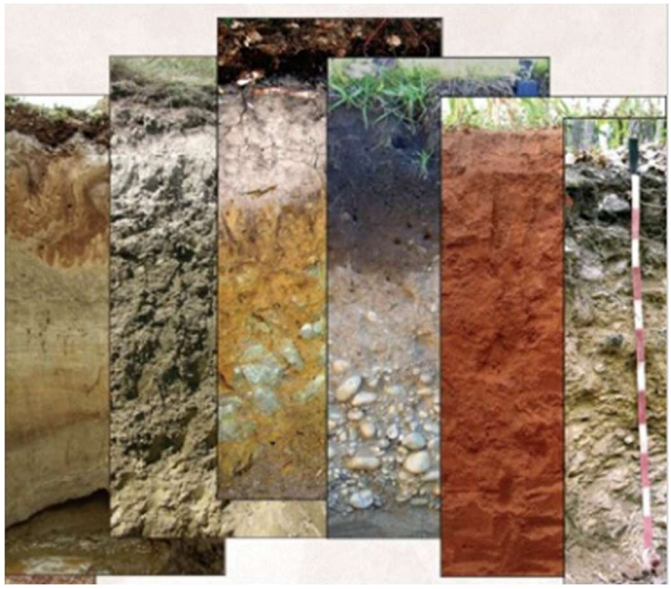
RAC Question	Meridian Response	RAC Clarification
	being based on the auger-by-auger point analysis of ALC grades in order to present the worst-case assessment outcomes	
Why have Meridian contradicted an earlier ALC survey on MAGIC? They refer to one covering the land south of Queen's Bank Farm in Area B. What they do not explain is why this earlier survey, which showed the land to be in Grades 1, 2 and 3a, is now classified by Meridian as mainly Subgrade 3b. Some justification would be expected."	The earlier ALC survey referred to by the reviewer is available through the Natural England Access to Evidence database and was considered during the desk study. However, the documentation available for that survey does not provide sufficient supporting information to enable a meaningful technical comparison with the ALC Survey Reports for the Scheme. In particular, the published material does not include detailed soil profile descriptions, soil logs, or other field data presented in accordance with the MAFF Field Survey Handbook that would allow the basis of the grading decisions to be independently reviewed. As a result, it is not possible to determine whether any apparent differences in grading arise from variations in survey methodology, survey density, interpretation of soil characteristics, site conditions at the time of survey, or other factors. Consequently, it would be inappropriate to draw conclusions regarding the reasons for any differences in classification solely from the published grading plans. The ALC Survey Reports for the Scheme are based on site-specific field observations collected during the survey and interpreted in accordance with the MAFF Agricultural Land Classification Guidelines and Field Survey Handbook. The grading assigned reflects the soil and site conditions encountered during the survey and is supported by the recorded field evidence. In the absence of equivalent supporting data from the earlier study, no robust technical comparison between the two assessments can be undertaken.	1) Despite the lack of auger and pit descriptions, this post 1988 survey report does record the reason for the permeability of the clay subsoils and their being in Wetness Class II. Over the majority of the site soils have developed directly from marine alluvium and comprise clay, silty clay or occasionally clay loam topsoils over heavy clay occasionally silty clay subsoils (frequently the clay percentage of the clay topsoils exceeds 50%). Due to the presence of reed channels within the subsoil these profiles are permeable and free draining and are assessed mainly as wetness class II. (Wetness class II occurs where the subsoil reed channel network is intact, but damaged slightly immediately below the plough layer by continued cultivations, consequently causing some very slight impedance to subsoil drainage). 2) The reporting of old reed channels is a significant detail that is missing in the Meridian report and LCC does not agree that no robust technical comparison between the two assessments can be made. 3) On page 38 of the East of England Bulletin there is a detailed profile description of the Wallasea series which describes root channels at depth with a combination of subsoil structure and consistence that confirms there is no slowly permeable layer. This is the degree of detail that is to to be expected in an ALC report for an NSIP.

Appendix 3: Review of Soil Pits

Review of Meridian soil pits

1. Natural England's Guide to assessing development proposals on agricultural land - GOV.UK requires that the ALC surveyor should
    - dig small inspection pits by hand to a minimum depth of 1m to add supporting evidence to the borehole data; and
    - dig pits where there is a change in main soil type and ALC grade to provide a good depiction of the site.
2. Depths of the pits identified by Meridan as having been used to inform the soil survey are:
    - Pit 1: 35 cm
    - Pit 2: 112 cm
    - Pit 3: 58 cm
    - Pit 4: 50 cm
    - Pit 5: 42 cm
    - Pit 6: 62 cm
    - Pit 7: 40 cm
3. Therefore, only one pit meets the depth criteria for ALC survey pits.
4. The available images of Pits 1, 2, 4, 5 and 7 have heavily smeared faces, suggesting that they have been dug using a mechanical excavator, so that soil structure and colour cannot be identified. Soil examination pits should be picked clean of any smearing for a proper description and comparison can be made, as shown below for a range of soil types.

Appendix 3: Review of Soil Pits



5. The assessment of ALC used in the ES allocates the soils of the Scheme area to Grade 3b where they are assessed as slowly permeable. This assessment requires reference to Figure 5 of the ALC guidelines, or Figure 27 and Tables 4 and 5 of the Field Handbook. Since soil structure, consistence and porosity cannot be reliably assessed with an auger, digging pits is essential. The degree of smearing of the faces of five out of the seven reference pits makes it impossible to accurately assess structure, consistence and porosity.

6. The lateral smearing seen in the images is not consistent with the vertical smearing that would be associated with hand digging with a spade, giving the impression the described profiles are actually in a trenches (possibly archaeological) dug using a mechanical excavator, as seen here in Pit 2



7. Furthermore, the pit faces are dry and crumbling, giving the impression they had not been freshly dug and been open for some time when the examination was carried out.

8. The silty clay soils across much of the site are of the Wallasea association, in which calcareous Newchurch soils are a common associate. Newchurch soils in Wetness Class III cannot be poorer than Grade 3a

(Table 6 of the ALC Guidelines). Testing for $CaCO_3$ with 10% HCL is essential in grading these soils and yet it is not recorded in the pit profile descriptions.

9. Natural England's Guidelines (see above) state that pits should be dug wherever there is a change in main soil type and/or ALC grade, to provide a good depiction of the site. However, four of the seven pits referred to in the information supporting the assessment are clustered in a 3b map unit in Area A, with only one pit in each of Areas B, C and D.

10. This pit distribution does not adequately reflect the likely changes in soil type and ALC grading across the four areas. Only Pit 1 is representative of Soil Type 2 as described in the ES; the remainder of the pits all approximate to Soil Type 1. If the pits are, in reality, trenches excavated for another purpose (such as archaeology), then the choice of sites for profile descriptions is unlikely to be as objective as it should be for an ALC survey across 1,200 ha.

11. All pit faces shown in the photographs appear to show a plough pan in the lower topsoil/upper subsoil. This feature can be rectified by subsoiling and cannot be considered a permanent feature of the soil profile. Thus, the observed feature should not influence the ALC grading. Insufficient evidence is provided in the pit descriptions or accompanying images to support the Assessment's assertion that this slowly permeable layer plays an active part in soil function further into the subsoil than the observed bases of the pits (see para 2).

Pit	**Pit summary**	**Nearest auger**	**Comment**
Pit 1	0-20 SZL 20 – 35 LS WC I Grade 1	232. Sandy silt loam: Grade 1	Pit is only 35cm deep and smeared below 20cm, so that is not possible to examine and interpret the soil structure.
Pit 2	0-36 HZCL 36-70 ZCl 70+ C WC III Grade 3b	367 and 367 HZCL over ZC. Grade 3a	Pit to 112cm in an area mapped as Grade 3a (as confirmed by adjacent observations at bores 362 and 367). The 3b pit is not representative of this 3a map unit.
Pit 3	0-23 HZCL 23+ZC SPL at WCIII	D63 HZCL over ZC Grade 3b	Pit is only 58 cm deep and the description does not match the photo. The horizon below the topsoil is intensely gleyed (pale grey with prominent orange mottles) and so definitely not 10YR 5/4 with some grey mottles, as described. Also, the pit is described as not

Appendix 3: Review of Soil Pits

Pit	Pit summary	Nearest auger	Comment
	Grade 3b		gleyed, which contradicts the soil being in WC III.
Pit 4	0-35 HZCL 35+ ZC WC III SPL at 35 Grade 3b	A164 HZCL over ZC Grade 3b	Pit is only 50 cm deep in an area of 3b. The subsoil colour is gleyed (7.5 3/2) and yet the pit is described as not gleyed, which contradicts it being placed in WCIII.
Pit 5	0-20 MZCL 20- 50 SZL 50+ SC WCIII SPL 45cm Grade 3a	A99 HCL over SC Grade 3b	Pit is only 42 cm deep in an area of 3b. It is graded 3a so is not representative of this map unit. The pit is only 42 cm and yet the profile describes 50 + cm., so how was this lower subsoil description obtained?
Pit 6	0-20 HZCL 20-36 ZCL 36+ WCIII Grade 3b	A65 HZCL over SZL over ZC Grade 3b	Pit is only 62 cm deep. The horizon below the topsoil is intensely gleyed (pale grey with prominent orange mottles) and definitely not 10YR 5/4 with some grey mottles, as described. Also, the pit is described as not gleyed, which should contradict the soil being in WC III.
Pit 7	0-20 HZCL 20-50 ZL 50+ ZC WCIII Grade 3b	A63 HZCL over SZL over ZC Grade 3b	Pit only 40 cm deep. Face below 17 cm too smeared to see any detail. Also, the pit is described as not gleyed, which should contradict the soil being in WC III.

Appendix iii: LCC Potential Cumulative Solar PV Waste Arisings

The calculations below based on information provided in NSIP applications with regard to PV panel failures (rather than tonnage).

	MW	Operational time period	Max no of panels	PV Failure rate (%)
Beacon Fen	400	40	884,000*	0.20%
Fosse Green	240	60	575,000	0.05%
Heckington Fen	400	40	884,000*	0.20%
Tillbridge	500	60	1,105,000*	
Cottam	600	60	1,320,000	0.40%
West Burton	480	60	1,000,000	0.40%
Gate Burton	530	60	1,171,000*	
Mallard Pass	350	60	773,500*	0.2%
One Earth	740	60	1,600,000	0.05%
Meridian	750	40	1,657,500*	0.2%
Leoda	600	40	1,320,000*	
Springwell	800	40	1,500,000	
Windsock	200	40	442,000*	
TCPA	1110		2,453,100*	
ESTIMATED TOTAL NUMBER OF PANELS			**16,243,400**	

*Please note not all NSIP applications provide information on PV panel numbers, therefore those indicated are an estimate of the number of panels based on an average of MW/no. of panels where the information is provided (2210 per MW). PV failure rates are provided in 8 DCO applications, and include 0.05%, 0.2% and 0.4% per annum.

Solar NSIP Total no of panels	PV failure rate (%)	Potential no. of PV failures per annum
16,243,400	0.05%	8,121
16,243,400	0.20%	32,486
16,243,100	0.40%	64,972