



**North Kesteven
DISTRICT COUNCIL**

**Application by Fosse Green Energy Ltd for an order
granting development consent for the Fosse Green
Energy solar farm**

Local Impact Report

prepared by North Kesteven District Council



NKDC reference: 23/0325/NSIP

Planning Inspectorate reference: EN010154

January 2026

Contents	Page
1. Terms of Reference and Introduction.....	4
2. Scope, Purpose and Structure of the LIR.....	4
3. Application description.....	4
4. Site Description, Surroundings and Characteristics.....	8
5. Planning History.....	10
6. Legislative and Policy Context – National Policy Statements.....	10
7. National Planning Policy Framework (NPPF), NPPG and Written Ministerial Statements	16
8. Central Lincolnshire Local Plan (April 2023)	17
9. Neighbourhood Plans/Other Local Policy/Guidance/Strategies	22
10. Site Selection, Alternatives and Design Evolution	26
11. EIA Methodology	29
12. North Kesteven District Council Assessment of Impacts	30
13. Landscape and Visual	30
14. Soils and Agricultural Land.....	40
15. Ecology	47
16. Cultural Heritage	52
17. Rights of Way and Permissive Paths	57
18. Water Resources and Flood Risk.....	61
19. Access and Traffic.....	68
20. Noise and Vibration.....	70
21. Climate.....	73
22. Glint and Glare.....	76
23. Socio-economics.....	79
24. Air Quality.....	83
25. Other Environmental Topics.....	85
26. Cumulative Effects.....	90
27. Draft Development Consent Order and Planning Obligation.....	93
28. Grid Connection - General.....	97
29. Summary and Conclusion (including summary table of effects	98

Appendices – see next page

APPENDICES

Appendix A – AAH Landscape and Visual Impact (LVIA) – AAH November 2025

Appendix B – Biodiversity report - Lincolnshire County Council November 2025

Appendix C – Archaeology - LCC's Historic Environment (Infrastructure) Officer

Appendix D – Review of Fosse Green Solar Project ES Chapter Soils and

Agriculture - Landscape October 2025

Appendix E – Details of Stepping Out Walks:

- E1 - Thorpe on the Hill
- E2 - Morton and Tunman Wood
- E3 - Bassingham and Villages Circular

Appendix F – Planning History

Appendix G – Development Plan Policies:

- G1 Central Lincolnshire Local Plan
- G2 Thorpe on the Hill Neighbourhood Plan
- G3 Bassingham Neighbourhood Plan
- G4 Coleby Neighbourhood Plan

1 Terms of Reference and Introduction

1.1 This report comprises the Local Impact Report (LIR) of North Kesteven District Council (NKDC). In preparing this report the Council has had regard to the purpose of LIRs as set out in s60(3) of the Planning Act 2008 (as amended), MHCLG's Guidance for the examination of applications for development consent and the Planning Inspectorate's Advice for Local Authorities.

2 Scope, Purpose and Structure of the LIR

2.1 This LIR describes the impacts of the 'Authorised Development', including its component 'Works' (as described in Schedule 1 of the submitted draft Development Consent Order (dDCO)) through the phases of:

- site clearance
- construction and commissioning
- operation while commercially generating electricity
- decommissioning at the end of its life.

2.2 North Kesteven District Council and Lincolnshire County Council (LCC) are both relevant planning authorities for the purpose of the examination of the Fosse Green Energy NSIP, and each will prepare and submit its own separate LIR.

2.3 This LIR has been prepared to highlight the ways in which the proposed development of a solar farm and associated battery storage facility at the Fosse Green Energy site will affect the locality and local community. It is not intended as a technical document – the application itself is accompanied by a great deal of technical information – but as a broad overview of the likely issues (positive, negative and neutral) that might arise from the proposed development. These are summarised in tabular form.

2.4 This LIR seeks to identify where there is compliance (or conversely where there is a tension or conflict) with national and, in particular, local plan policy; and to distinguish between matters that are of most potential impact and those that are either temporary or less significant in the longer term.

3 Application Description

3.1 The Fosse Green Energy solar farm is a proposed solar photovoltaic (PV) electricity generating and battery storage facility with associated infrastructure which the applicant estimates would have a maximum generation capacity measured in megawatts (MW) of between approximately 342MW and 385MW of electricity, together with a 480MW battery energy storage system (BESS). It is proposed to have an operational lifespan of 60 years for electricity generation, in addition to the construction and decommissioning phases, which is longer than the 40 year duration more typically sought for solar farm developments.

3.2 The key components of the proposed development, as set out in section 3.3 of Chapter 3 of the submitted Environmental Statement ([APP-028](#)) are:

- Solar photovoltaic panels and mounting structures
- Battery energy storage system (BESS)
- Inverters, transformers and switchgear
- Onsite substation and control buildings
- Onsite cabling between elements of the development
- Ancillary infrastructure such as weather stations, combiner boxes
- Fencing and security measures
- Water supply and drainage infrastructure
- Access tracks
- A high voltage cable enabling connection to the national grid
- Landscaping, permissive paths, biodiversity mitigation and enhancement measures

3.3 The proposed Order Limits are divided by the applicant into two main, overlapping areas: The ‘Principal Site’, and the ‘Cable Corridor’ (see section 4 of this LIR for further details). The evolution of the proposals has followed an iterative process informed by ongoing environmental assessment, consultation and engagement with statutory and non-statutory consultees, including the local community.

3.4 Some elements of the proposed development remain to be confirmed, and are intended to be the subject of more detailed designs which would be submitted to the relevant planning authorities for their approval after DCO is granted. This includes choices on both major components of the development; and on more detailed design aspects of the development, such as the colour of fencing. Major components where flexibility is currently sought include:

- a) whether there will be a single, centralised BESS, or a number of smaller BESS distributed around the site ('distributed BESS')
- b) whether the solar panels will be comprised of fixed south-facing arrays, or made up of single axis tracker panels which rotate to follow the sun during the day
- c) where the grid connection cables will be installed within an identified corridor of land

3.5 **The solar panel arrays** would occupy approximately 456ha (1126 acres) of land within the Principal Site. These would be accompanied by between 84 and 100 ‘solar stations’ across the area, each serving a number of panel arrays. Solar stations would be sited within their own fenced compounds, each measuring approximately 33m x 27m, and contain items such as inverters, a transformer, and switchgear mounted on concrete bases. If the ‘distributed BESS’ option is chosen at the detailed design stage, each of these smaller battery storage facilities would be co-located in the same compound as the solar station.

3.6 The height of the solar PV panels will be up to 3.5m above existing ground levels, and leave a minimum of 0.8m clearance below. There will be at least

8.25m between the front of one row and the front of the next row for fixed south-facing panels; which would be reduced to 4m for single-axis tracker panels. In either case, there would be a minimum of 2m gap between rows.

- 3.7 **The on-site substation** would accommodate the buildings and equipment such as transformers and switchgear needed to convert electricity generated by the solar arrays to the 400kV necessary for onward transmission to the national electricity grid. It would have its own fenced compound measuring 155m x 105m (1.63ha) accommodating transformers, further switchgear and metering equipment, stores and staff welfare facilities. The on-site substation would be located south of Aubourn, and be connected by buried cabling to the solar stations around the wider site.
- 3.8 **The Battery Energy Storage System (BESS)** would either be a single, centralised facility; or would be distributed in smaller units around site. If a centralised BESS is selected at the detailed design stage, this would be located adjacent to the on-site substation compound, within its own area measuring approximately 315m x 165m (5.2ha). If the distributed BESS option is chosen, each small unit would be located alongside each solar station.
- 3.9 A further 245ha (605 acres) of the Principal Site would be devoted to ecological and landscape measures – the most extensive of which would be bird mitigation areas – made up of ‘Managed arable’ (181ha) and ‘Permanent grassland’ (64ha).
- 3.10 Within the remaining areas of the Principal Site there would be access tracks and buried inter-connecting cables, as well as security fencing around the operational areas. There would also be new hedgerows and tree planting, together with field margins managed for biodiversity; and a community orchard planted to the east of Witham St Hughs. However, much of the land outside the solar arrays, substation, BESS and bird mitigation areas would continue to be farmed during the operational life of the development.
- 3.11 The **Cable Corridor** runs for approximately 10km (6.2 miles) and overlaps with the Principal Site south of Aubourn, north-east of Bassingham, where the high voltage (400kV) cables would reach the on-site substation and centralised BESS (if selected).
- 3.12 The grid connection would in practice be made up of three conductor cables running in parallel, along with a communications cable. The Cable Corridor varies in width along its length, and occupies a total of 351ha (867 acres) of land – though only 298ha of the Cable Corridor would be outside the Principal Site. In addition, not all of the Cable Corridor would be required for the installation of the cables themselves. As well as forming the cable trenches, works would include soil and subsoil stripping, materials storage and up to seven works compounds. These works would be carried out within a width of 30m – 40m inside the overall Cable Corridor, narrowing as the cables pass features such as watercourses and roads. It is intended that the precise path of the grid connection cables (within the defined corridor) will be decided at the detailed design stage.

3.13 The application includes works to terminate the grid connection cables and facilitate their connection to a new substation at Navenby which is proposed by National Grid Plc, but for which no planning application has yet been submitted. A grid connection agreement has been secured between the applicant and Grid Electricity System Operator Limited (NESO) to connect the Proposed Development to the National Electricity Transmission System (NETS) at the proposed National Grid Navenby Substation. This includes an agreed connection date of 30 May 2033, but the application intends to negotiate an advancement of this date if DCO is granted.

3.14 There is no single main access into the site. Instead, a total of 19 access points are proposed for the construction phase, leading to an internal network of access tracks. There would be one main construction compound, with a series of smaller compounds distributed across the site. The access points would be reduced to 10 for the operational phase, along with a further 3 emergency access points.

3.15 Three Public Rights of Way (PROW) referenced TOTH/13/1, THUN/2/1 and AUBO/10/1 would be permanently diverted; and a further 33 would be affected during the construction period. New permissive paths with a total length of 9.5km would be provided by the applicant for the duration of the operational phase of the project, but public access to these permissive paths is not guaranteed once the project has been decommissioned and control of the land returned to its owners.

3.16 As above each group of solar panels would feed into the national electricity network via the proposed NGNS, which is not yet built. The 400kV grid connection would operate at a 240MW power capacity agreed with National Grid Plc, who are in the process of preparing a planning application for the Navenby substation which is stated by the Grid as being submitted in 'early 2026' (www.nationalgrid.com/electricity-transmission/network-and-infrastructure/infrastructure-projects/navenby-substation). The substation proposals fall to be considered through the Town and Country Planning Act (1990) and as such a planning application must be made to North Kesteven District Council; rather than comprising an NSIP under the provisions of the Planning Act 2008. The precise route of the grid connection is not yet decided, though a 10km long route corridor has been identified. The Fosse Green Energy application for a DCO includes the extent of the land required, along with the powers necessary, to enable works to connect to the new substation.

3.17 Construction of the Fosse Green solar farm is anticipated to take from 2 - 2.5 years commencing in 2031. This timetable is based on information from National Grid Plc regarding their programme for obtaining planning permission and constructing the new substation.

4 Site Description, Surroundings and Characteristics

4.1 The ‘Order Limits’ proposed by the application can be divided into two, overlapping main areas:

- a) the **Principal Site** – covering 1070ha (2643 acres) of land
- b) the **Cable Corridor** – covering 351 ha (867 acres) of land

4.2 The Principal Site and the Cable Corridor overlap by some 53 ha (131 acres). This means that there are 1368ha (3379 acres) within the total proposed Order Limits (paragraph 3.1.3 of Chapter 3 of the ES [APP-028](#)).

4.3 There are no statutory environmental designations and assets located within the Order Limits. However, there are significant numbers of designated heritage assets (Listed Buildings, Conservation Areas and Scheduled Monuments) and a smaller number of designated biodiversity assets (such as SSSIs and Local Nature Reserves) located within the potential zone of influence of the development, some close to the boundary of the Order Limits. Additional non-statutory environmental designations cover land both inside and with the zone of influence of the Order Limits.

Principal Site

4.4 The Principal Site extends from close to Thorpe on the Hill and Morton in the west, to the south east of the A46 where it passes between Aubourn and Witham St Hughs. The site then divides, with one branch extending further south to just north of Norton Disney / west of Bassingham. The other branch heads south-east, across the River Witham and passing to the south of Aubourn. The eastern extent of the Principal Site is the River Brant.

4.5 The majority of the land within the Principal Site is in agricultural use, predominantly regularly shaped arable fields with mostly low hedgerows, individual trees, linear tree belts and small woodland blocks. The area is crossed by farm access tracks, and local roads. The landscape is relatively flat, often affording open views. Agricultural land is graded, with Grade 1 being excellent quality and Grade 5 being very poor quality. Grade 3 is further divided into subgrades 3a “good” and 3b “moderate” quality land. Grades 1, 2 and 3a are defined as the “best and most versatile” (BMV) in the National Planning Policy Framework (NPPF). The Principal Site will impact on agricultural land (including some BMV land) – further details are provided in section 14 of this LIR.

4.6 The Principal Site includes land that would be used to site the solar panel arrays, BESS, on-site substation and associated infrastructure; as well as ecological and landscape mitigation and enhancement measures.

Cable Corridor

4.7 The Cable Corridor leaves the Principal Site and heads east, crossing the line of the River Brant before ascending the Lincoln Cliff and running just north of Boothby Graffoe, where it would cross the B1202 and A607; before turning south-east once more to reach the site of the proposed NGNS to the east of

Navenby. As for the Principal Site, most of the land within the Cable Corridor is in agricultural use. Although it has not yet been surveyed in detail to establish the grade of the land which would be affected by the route of the cable connection, it is anticipated that this will encounter a similar balance of BMV / non-BMV quality land.

- 4.8 In terms of risk of flooding from rivers, the majority of the site lies within Flood Zone 1 (little/no risk). However, the central and eastern parts of the site have areas of greater flood risk around the River Witham and River Brant. Areas at risk of flooding from surface water are smaller in total, but tend to be more scattered and localised across the site.
- 4.9 There are several non-statutory sites designated for biodiversity importance either inside or within 2km of the Order Limits – two of these are Local Wildlife Sites (the River Witham, Aubourn to Beckingham LWS, and the Navenby Green Man Road Verges LWS), both of which would be crossed by cables installed for the development. The Council also part owns Tunman Wood (along with Lincolnshire County Council and the Lincolnshire Wildlife Trust) which is a Local Wildlife Site and abuts the Order Limits.
- 4.10 There are 123 statutory designated heritage assets within 3km of the Order Limits, including five scheduled monuments, 114 Listed Buildings, and one Registered Park and Garden. None are physically within the Order Limits, but one - the Grade II Listed River Farmhouse – is located within a small parcel of land which is surrounded by the site boundary. Additionally, a significant number are located close to the site boundary – including the Grade II* listed Church of St Germain at Thurlby, and the Hall Close Scheduled Monument at Haddington. There are also Conservation Areas located near to the site, including at Bassingham, Coleby, Harmston, Navenby and Waddington. There are a number of non-designated but recognised ‘Locally Listed Buildings’ around the site.
- 4.11 No part of the site or its immediate surrounding context falls within a statutory designated landscape, though the Cable Corridor does pass through the locally designated Lincoln Cliff Area of Great Landscape Value (AGLV).
- 4.12 A significant number of public rights of way (PROW) and existing permissive paths run within and alongside the site. These include three of the ‘Stepping Out Walks’ supported by the Council as part of its adopted Active Travel Strategy 2025 – 2030:
 - Thorpe on the Hill
 - Morton and Tunman Wood
 - Bassingham and villages circular

5 Planning History

- 5.1 Inevitably for such extensive site - stretching from Thorpe on the Hill and Marton in the west, to Bassingham on the west side of the River Witham, and the Cable Corridor extending further east and south the Navenby – there is an extensive planning history for the land within and around the proposed Order Limits. However, much of this history is not relevant to this NSIP application.
- 5.2 The table provided in **Appendix F** lists a small number of planning applications and permissions which are considered to be particularly pertinent to consideration of the Fosse Green NSIP proposals. They include two applications for Battery Energy Storage Systems which overlap with the Cable Corridor, and intend to connect to the NGNS, if consented in the future. Both of these applications are live and under consideration at the time of writing.
- 5.3 In addition, within the wider area there are two other solar NSIP at different stages in the DCO process, both of which also seek to connect to the national network via the proposed NGNS. The examination into the Springwell Solar Farm closed on 9th October 2025, and a decision is anticipated by April 2026. The Leoda Solar Farm – located mainly around the villages of Brant Broughton, Leadenham and Welbourn - has completed the EIA Scoping stage (March 2025), and it is anticipated that an application for development consent order will be submitted in July 2026. The North Hykeham Relief Road is also included owing to its scale, nature and proximity to parts of the order limit and potential cumulative effects.

6 Legislative and Policy Context – National Policy Statements

- 6.1 NKDC recognises the application as one made under the Planning Act 2008 (PA2008) for a Development Consent Order (DCO) for development that falls within the definition of energy generating stations set out in section 15 of the PA2008.
- 6.2 The PA2008 provides for two different decision-making procedures for NSIP applications.
 - i) Section 104 - where a relevant National Policy Statement (NPS) has been designated and has effect; and
 - ii) Section 105 – where there is no designated NPS or there is a designated NPS but which does not have effect.
- 6.3 The application falls to be determined under section 104 of PA2008 due to electricity generation by solar generating stations being included within the scope of EN-1 'Overarching National Policy Statement for Energy' and EN-3 'National Policy Statement for Renewable Energy Infrastructure'. In addition, energy storage infrastructure, such as BESS, also falls within the scope of EN-1 and EN-3.
- 6.4 EN-5 'National Policy Statement for Electricity Networks Infrastructure' is relevant to the proposed development as the policy recognises electricity

networks as ‘transmission systems (the long distance transfer of electricity through 400kV and 275kV lines), and distribution systems (lower voltage lines from 132kV to 230V from transmission substations to the end-user) which can either be carried on towers/poles or undergrounded; and associated infrastructure, e.g. substations (the essential link between generation, transmission, and the distribution systems that also allows circuits to be switched or voltage transformed to a useable level for the consumer) and converter stations to convert DC power to AC power and vice versa’.

- 6.5 At the time of writing this LIR, the current versions of EN-1, EN-3 and EN-5 are dated November 2023, and came into force on 17 January 2024¹.
- 6.6 Together, NPS EN-1 (Overall National Policy Statement for Energy), Energy EN-3 (Renewable Energy Infrastructure), and EN-5 (Electricity Networks Infrastructure) provide the primary policy framework for the decision by the Secretary of State on this type of application. Under the Planning Act 2008, where an NPS has effect, the Secretary of State (SoS) must also have regard to any Local Impact Report (LIR) submitted by a relevant local authority; any relevant matters prescribed in regulations; and any other matters which the Secretary of State thinks are both important and relevant to the planning decision.

EN-1 ‘Overarching National Policy Statement for Energy’ (November 2023)

- 6.7 NPS EN-1 is an overarching document supported by the suite of five technology-specific NPSs. It sets out government’s aims for decarbonisation of the power sector and to support sustainable development. Paragraph 3.3.63 states that ‘...*the urgent need for CNP Infrastructure to achieving our energy objectives, together with the national security, economic, commercial, and net zero benefits...*’. It also emphasises that the need for these types of infrastructure is urgent, that substantial weight should be given to this need when considering NSIP applications and that there is no requirement to consider separately the specific contribution of any individual project to satisfying the need established in EN-1.
- 6.8 In respect of this solar farm DCO application, it falls within the meaning of low carbon infrastructure for the purposes of EN-1, since the policy includes (4.2.5):
 - For electricity generation, all onshore and offshore generation that does not involve fossil fuel combustion
 - For electricity grid infrastructure, all power lines in scope of EN-5 including network reinforcement and upgrade works, and associated infrastructure such as substations.

¹ It should be noted that a draft version of this LIR was reported to the Council’s Planning Committee on 16th December 2025 setting out references to the policies contained in revised versions of EN-1, EN-3 and EN-5 which were published in December 2025 and came into effect on 6th January 2026. However, under transitional arrangements, the Fosse Green Energy DCO application will be considered against the versions of these NPS which came into effect on 17th January 2024, albeit that the revised versions are capable of being material considerations. Therefore this submitted LIR refers to the January 2024 versions of EN-1, EN-3 and EN-5.

6.9 EN-1 states at paragraphs 3.3.6 that in all but the most exceptional circumstances, the need for Critical National Priority infrastructure, (together with national security, economic, commercial and net zero benefits) will outweigh any residual impacts which are not addressed through the mitigation hierarchy (avoid, minimise, restore, offset). This presumption, however, does not apply to ‘... residual impacts which present an unacceptable risk to, or interference with, human health and public safety, defence, or irreplaceable habitats’. It would also not apply to situations where residual impacts need to be considered under the framework set out in the Habitats Regulations.

6.10 The NPS does not contain any general requirement to consider alternatives or to establish whether the proposed project represents the best option from a policy perspective (paragraph 4.3.9). The applicant should, however, include information about the reasonable alternatives that they have studied including an indication of the main reasons for their choice (4.3.15). This is also a requirement of The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017. The Secretary of State, given the level and urgency of need for new energy infrastructure will be guided by principles of proportionality and ability to meet the objectives of the development when deciding what weight be given to alternatives.

6.11 Achieving biodiversity net gain is not currently an obligation on applicants (this will be introduced from May 2026), however, energy NSIP proposals are encouraged to seek opportunities to contribute to and enhance the natural environment by providing net gains for biodiversity, and these should be set out in a biodiversity gain statement.

6.12 The NPS envisages that, wherever reasonably possible, applications for new generating stations and related infrastructure should be contained in a single application or in separate applications submitted in tandem which have been prepared in an integrated way. The Secretary of State will need to be satisfied that appropriate grid network connections are/will be in place for a given project.

6.13 An assessment of any likely significant heritage impacts of the proposed development as part of the EIA, together with mitigation, is expected by the NPS. This should include consideration of heritage assets above, at, and below the surface of the ground. The NPS advises that considerable importance should be given to the desirability of preserving all heritage assets. Substantial harm to or loss of significance of asset of the highest significance should be wholly exceptional. Where there would be less than substantial harm of a designated heritage asset, it must be demonstrated that substantial public benefits outweigh that harm or loss.

6.14 In terms of landscape issues the overarching commentary in EN-1 is that the landscape and visual effects of energy projects will vary on a case-by-case basis according to the type of development, its location and the landscape setting of the proposed development.

6.15 EN-1 requires the applicant's Landscape and Visual Impact Assessment (LVIA) to include reference to any landscape character assessment and associated studies as a means of assessing landscape impacts relevant to the proposed project, as well as any relevant policies based on these assessments in local development documents in England.

6.16 In terms of decision making, EN-1 requires the SoS to have regard to the degree to which projects have been carefully designed to take account of the potential impact on the landscape. The general aim is that with reference to siting, operational and other relevant constraints harm to the landscape should be minimised, providing reasonable mitigation where possible and appropriate.

6.17 EN-1 also notes that the Secretary of State will have to judge whether the visual effects on sensitive receptors, such as local residents, and other receptors, such as visitors to the local area, outweigh the benefits of the project. When considering whether reductions to the scale of a project could help to mitigate adverse visual and landscape effects, EN-1 cautions that reducing the scale or otherwise amending the design of a proposed energy infrastructure project may result in a significant operational constraint and reduction in function – for example, the electricity generation output – which needs to be factored into decision making.

6.18 In relation to impacts on Best and Most Versatile (BMV) land, EN-1 (5.11.12) requires applicants to seek to minimise impacts on BMV (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) except where this would be inconsistent with other sustainability considerations. Applicants should also identify any effects and seek to minimise impacts on soil quality taking into account any mitigation measures proposed.

6.19 Where new energy infrastructure is, exceptionally, necessary in flood risk areas, EN-1 (aims to make it safe for its lifetime without increasing flood risk elsewhere and, where possible, by reducing flood risk overall. It should also be designed to remain operational during times of flood. The Sequential Test for flood risk should be applied, and if necessary, the Exception Test.

6.20 At Section 4.11, EN-1 advises that the connection of a proposed electricity generation plant to the electricity network is an important consideration for applicants wanting to construct a generation plant such as a solar farm. It envisages that '*wherever reasonably possible, applications for new generating stations and related infrastructure should be contained in a single application to the Secretary of State or in separate applications submitted in tandem which have been prepared in an integrated way, as outlined in EN-5. This is particularly encouraged to ensure development of more co-ordinated transmission overall.*' (paragraph 4.11.7).

EN-3 ‘National Policy Statement for Renewable Energy Infrastructure’ (November 2023)

6.21 NPS EN-3, taken together with EN-1 above, provides the primary policy for NSIP applications for renewable energy infrastructure. This includes solar photovoltaic (PV) electricity generating stations of a size >50MW in England; although noting that this threshold will increase to >100MW from 31/12/25 through the provisions of the Infrastructure Planning (Onshore Wind and Solar Generation) Order 2025. While EN-1 contains the overarching principles and the policy on impacts arising from energy infrastructure, the policies in EN-3 are concerned with specific considerations arising from solar PV (and other renewable technologies covered by the NPS). It reiterates the urgent need for new major renewable electricity infrastructure.

6.22 Section 2.10 of EN-3 sets out the detailed policies on solar PV covering:

- site selection and design (such as topography, network connection, proximity to dwellings, agricultural land classification, public rights of way, accessibility, security and lighting),
- technical considerations (such as capacity, site layout, project lifetime, decommissioning, flexibility in project details), and
- site specific impacts (such as landscape and visual impact, traffic, glint and glare, cultural heritage, ecology etc) and mitigations

6.23 EN-3 reiterates (2.10.29) the advice that poorer quality land should be preferred to higher quality land avoiding the use of Best and Most Versatile agricultural land where possible together with consideration of whether continued agricultural use can be accommodated to maximise the efficiency of land use. The NPS confirms that the Agricultural Land Classification (ALC) system should be applied in the overall assessment of the construction, operation and decommissioning phases. Whilst the statement recognises that solar farms of the scale governed by the Planning Act may use some agricultural land, applicants are expected explain their choice of site, noting the preference for development to be on brownfield and non-agricultural land.

6.24 EN-3 recognises that below ground impacts may include direct impacts on archaeological deposits through ground disturbance associated with trenching, cabling, foundations, fencing, temporary haul routes etc. It anticipates that the results of pre-determination archaeological evaluation will inform the design of the scheme and related archaeological planning conditions. Where a site includes, or has potential to include, heritage assets with archaeological interest, the applicant should submit an appropriate desk-based assessment and, where necessary, a field evaluation (including investigative work).

EN-5 ‘National Policy Statement for Electricity Networks Infrastructure’ (2023)

6.25 As identified in relation to EN-1, government has concluded that there is a CNP for the provision of nationally significant low carbon infrastructure. This includes for electricity grid infrastructure, all power lines in scope of EN-5 including network reinforcement and upgrade works, and associated infrastructure such

as substations. NPS EN-5, taken together with EN-1 above, provides the primary policy for NSIP applications for electricity networks infrastructure. This includes two main elements:

- transmission systems (long distance transfer of electricity through high voltage power lines) and distribution systems (lower voltage lines from transmission substations to the end-user) which can either be carried on towers/monopoles, or undergrounded; and
- related infrastructure e.g. substations and convertor stations to convert DC power to AC power and vice versa.

6.26 EN-5 also applies to associated development forming part of an NSIP project for which a DCO is sought (paragraph 1.6.4, first bullet point). In the case of this application, the grid connection cable and related apparatus is considered to be associated development, and so is covered by EN-5. The advice on generic impacts detailed in EN-1 is relevant alongside the additional policies in EN-5 for renewable technologies on factors influencing site selection and design, biodiversity and geological conservation, landscape and visual, noise and vibration, electric and magnetic fields; and sulphur hexafluoride.

6.27 EN-5 recognises that the initiating and terminating points – or development zone – of new electricity networks is not substantially within the control of the applicant. It may be determined by the location of new generating stations or other infrastructure requiring connection to the network, and/or system capacity and resilience requirements determined by the Electricity System Operator. These locational constraints do not exempt applicants from their duty to consider and balance the site-selection considerations set out in the NPS, much less the policies on good design and impact mitigation.

6.28 EN-5 includes a section on ‘Environmental and Biodiversity Net Gain’ which states that when planning and evaluating a project’s contribution to environmental and biodiversity net gain, it will be important, for both the Applicant and examining Authority, to recognise that ‘the linear nature of electricity networks infrastructure allows excellent opportunities to: i) reconnect important habitats via green corridors, biodiversity stepping zones, and re-establishment of appropriate hedgerows; and/or ii) connect people to the environment, for instance via footpaths and cycleways constructed in tandem with biodiversity enhancements.’

6.29 The NPS aspires to co-ordination between applications for new generating stations and their related infrastructure but also recognises that this is not always possible.

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

6.31 The ‘Clean Power 2030 Action Plan: A New Era of Clean Electricity’ was published in December 2024. It outlines a target of clean power generation to

meet Great Britain's total annual electricity demand, backed up by unabated gas supply to be used only when essential by 2030.

7 National Planning Policy Framework (NPPF), National Planning Practice Guidance (NPPG) and Written Ministerial Statements (WMS)

National Planning Policy Framework

- 7.1 The latest version of the National Planning Policy Framework (NPPF) was published in December 2024 and updated in February 2025.
- 7.2 Paragraph 5 of the NPPF states that the document does not contain specific policies for NSIPs. These are to be determined in accordance with the decision-making framework set out in the Planning Act and relevant NPSs for nationally significant infrastructure, as well as any other matters that are considered both important and relevant (which may include the NPPF).
- 7.3 The NPPF states that the planning system should support the transition to a low carbon future and support renewable energy and associated infrastructure (paragraph 161) and that local planning authorities should, when determining planning applications for such development, approve the application if its impacts are (or can be made) acceptable. Applicants are not required to demonstrate the overall need for renewable or low carbon energy (paragraph 168(a)).

National Planning Policy Guidance (NPPG)

- 7.4 The National Planning Policy Guidance (NPPG) outlines guidance on the specific planning considerations that relate to large scale ground-mounted solar PV farms. It states that one consideration amongst others should be whether land is being used effectively; recommending that large scale solar farms are focused on previously developed and non-agricultural land.
- 7.5 The NPPG advises that where a proposal involves greenfield land, decision making should consider whether (i) the proposed use of any agricultural land has been shown to be necessary and poorer quality land has been used in preference to higher quality land; and (ii) the proposal allows for continued agricultural use where applicable and/or encourages biodiversity improvements around arrays.

Written Ministerial Statement

- 7.6 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 energy generation, and the WMS (dated 25/3/15 and referenced UIN HCWS488) affirmed that meeting energy goals should not be used to justify the unnecessary use of high quality agricultural land. The WMS noted that 'any proposal for a solar farm involving the best and most versatile agricultural land would need to be justified by the most compelling evidence'.

7.7 The then Secretary of State for Energy Security and Net Zero, in May 2024, released a written ministerial statement regarding the impact of solar farms on food production. In particular, it referenced the impact of geographical clustering of solar developments in some rural areas, such as in Lincolnshire, and drew attention to the importance of considering cumulative impacts.

7.8 The NPSs provide the predominant policy context; and whilst the applicant's DCO application has cross referred to the NPPF and the NPPG where applicable, where there are any inconsistencies between the NPPF and the relevant NPSs, it is policies within the latter that prevails.

8 Central Lincolnshire Local Plan (April 2023)

8.1 The Central Lincolnshire Local Plan forms part of the development plan for North Kesteven (replacing the previous Central Lincolnshire Local Plan, adopted in 2017). The relevant policies and a brief summary of each are set out are set out below. Relevant extracts of the CLLP are included at Appendix G1 to this LIR.

Table 8.1

Policy	Summary
Policy S1: The Spatial Strategy and Settlement Hierarchy	<p>The spatial strategy will focus on delivering sustainable growth for Central Lincolnshire that meets the needs for homes and jobs, regenerates places and communities, and supports necessary improvements to facilities, services and infrastructure.</p> <p>Development should create strong, sustainable, cohesive and inclusive communities, making the most effective use of previously developed land and enabling a larger number of people to access jobs, services and facilities locally.</p>
Policy S5: Development in the Countryside	<p>Part E 'Non-residential development in the countryside' states that such proposals will be supported provided that:</p> <ul style="list-style-type: none"> a) The rural location of the enterprise is justifiable to maintain or enhance the rural economy or the location is justified by means of proximity to existing established businesses or natural features; b) The location of the enterprise is suitable in terms of accessibility; c) The location of the enterprise would not result in conflict with neighbouring uses; and d) The development is of a size and scale commensurate with the proposed use and with the rural character of the location.

Policy S10: Supporting a Circular Economy	<p>The Joint Committee is aware of the high energy and material use consumed on a daily basis, and, consequently, is fully supportive of the principles of a circular economy.</p> <p>Accordingly, and to complement any policies set out in the Minerals and Waste Development Plan, proposals will be supported, in principle, which demonstrate their compatibility with, or the furthering of, a strong circular economy in the local area (which could include cross-border activity elsewhere in Lincolnshire).</p>
Policy S11: Embodied Carbon	All development should, where practical and viable, take opportunities to reduce the development's embodied carbon content, through the careful choice, use and sourcing of materials.
Policy S14: Renewable energy (matters for solar based energy proposals)	<p><i>(specific matters for solar based energy proposals)</i></p> <p>Proposals for ground based photovoltaics and associated infrastructure, including commercial large scale proposals, will be under a presumption in favour unless there is clear and demonstrable significant harm arising; or the proposal will take place on Best and Most Versatile (BMV) agricultural land and does not meet the requirements of Policy S67, or the land is allocated for another purpose.</p> <p>Proposals should be accompanied by evidence demonstrating how opportunities for delivering biodiversity net gain will be maximised in the scheme taking account of site-specific factors.</p>
Policy S16: Wider Energy Infrastructure	<p>The Joint Committee is committed to supporting the transition to net zero carbon future and, in doing so, recognises and supports, in principle, the need for significant investment in new and upgraded energy infrastructure.</p> <p>Where planning permission is needed from a Central Lincolnshire authority, support will be given to proposals which are necessary for, or form part of, the transition to a net zero carbon sub-region, which could include: energy storage facilities (such as battery storage or thermal storage); and upgraded or new electricity facilities (such as transmission facilities, substations or other electricity infrastructure).</p>
Policy S21: Flood Risk and Water Resources	All development proposals will be considered against the NPPF, including application of the sequential and, if necessary, the exception test. Development proposals that are likely to impact on surface or ground water should consider the requirements of the Water Framework Directive.

Policy S28: Spatial Strategy for Employment	<p>In principle, employment related development proposals should be consistent with meeting the following overall spatial strategy for employment.</p> <p>The strategy is to strengthen the Central Lincolnshire economy offering a wide range of employment opportunities focused mainly in and around the Lincoln urban area and the towns of Gainsborough and Sleaford, with proportionate employment provision further down the Settlement Hierarchy</p>
Policy S47: Accessibility and Transport	<p>Development proposals which contribute towards an efficient and safe transport network that offers a range of transport choices for the movement of people and goods will be supported.</p> <p>All developments should demonstrate, where appropriate, that they have had regard to the following criteria: a) Located where travel can be minimised and the use of sustainable transport modes maximised; b) Minimise additional travel demand through the use of measures such as travel planning, safe and convenient public transport, car clubs, walking and cycling links and integration with existing infrastructure; c) Making allowance for low and ultra-low emission vehicle refuelling infrastructure.</p>
Policy S53: Design and Amenity	All development, including extensions and alterations to existing buildings, must achieve high quality sustainable design that contributes positively to local character, landscape and townscape, and supports diversity, equality and access for all.
Policy S54: Health and Wellbeing	The potential for achieving positive mental and physical health outcomes will be taken into account when considering all development proposals. Where any potential adverse health impacts are identified, the applicant will be expected to demonstrate how these will be addressed and mitigated. Part (c) of the policy promotes schemes that will safeguard, create or enhance the role of allotments and orchards.
Policy S57: The Historic Environment	Development proposals should protect, conserve and seek opportunities to enhance the historic environment of Central Lincolnshire. Development should protect the significance of heritage assets (including where relevant their setting) including through protecting and enhancing architectural and historic character, and take into account the desirability of sustaining and enhancing non-designated heritage assets and their setting.

	<p>Where a development proposal would result in less than substantial harm to a designated heritage asset, permission will only be granted where the public benefits, including, where appropriate, securing its optimum viable use, outweigh the harm.</p> <p>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.</p>
Policy S59: Green and Blue Infrastructure Network	<p>The Central Lincolnshire Authorities will safeguard green and blue infrastructure in Central Lincolnshire from inappropriate development and work actively with partners to maintain and improve the quantity, quality, accessibility and management of the green infrastructure network.</p>
Policy S60: Protecting Biodiversity and Geodiversity	<p>All development should a) protect, manage, enhance and extend the ecological network of habitats, species and sites of international, national and local importance (statutory and non-statutory), including sites that meet the criteria for selection as a Local Site; b) minimise impacts on biodiversity and features of geodiversity value; c) deliver measurable and proportionate net gains in biodiversity in accordance with Policy S61; and d) protect and enhance the aquatic environment within or adjoining the site, including water quality and habitat.</p> <p>Development should avoid adverse impact on existing biodiversity and geodiversity features as a first principle, in line with the mitigation hierarchy. Where adverse impacts are unavoidable, they must be adequately and proportionately mitigated. If full mitigation cannot be provided, compensation will be required as a last resort where there is no alternative.</p> <p>If significant harm to biodiversity resulting from development cannot be avoided, adequately mitigated, or, as a last resort, compensated for, then planning permission will be refused</p>
Policy S61: Biodiversity Opportunity and Delivering Measurable Net Gains	<p>Following application of the mitigation hierarchy, all development proposals should ensure opportunities are taken to retain, protect and enhance biodiversity and geodiversity features proportionate to their scale, through site layout, design of new buildings and proposals for existing buildings with consideration to the construction phase and ongoing site management.</p> <p>All qualifying development proposals must deliver at least a 10% measurable biodiversity net gain attributable to the</p>

	<p>development. The net gain for biodiversity should be calculated using Natural England's Biodiversity Metric. Biodiversity net gain should be provided on-site wherever possible.</p>
Policy S66: Trees, Woodland and Hedgerows	<p>Development proposals should be prepared based on the overriding principle that the existing tree and woodland cover is maintained, improved and expanded; and opportunities for expanding woodland are actively considered and implemented where practical and appropriate to do so. Proposals for new development will be expected to retain existing hedgerows where appropriate and integrate them fully into the design having regard to their management requirements.</p> <p>Loss of hedges of high landscape, heritage, amenity or biodiversity value unless the need for, and benefits of, the development clearly outweigh the loss, and this loss can be clearly demonstrated to be unavoidable.</p>
Policy S67: Best and Most Versatile Agricultural Land	<p>Proposals should protect the best and most versatile agricultural land so as to protect opportunities for food production and the continuance of the agricultural economy. Significant development resulting in the loss of the best and most versatile agricultural land will only be supported if:</p> <ul style="list-style-type: none"> a) The need for the proposed development has been clearly established and there is insufficient lower grade land available at that settlement; and b) The benefits and/or sustainability considerations outweigh the need to protect such land, when taking into account the economic and other benefits of the best and most versatile agricultural land; and c) The impacts of the proposal upon ongoing agricultural operations have been minimised through the use of appropriate design solutions; and d) Where feasible, once any development which is supported has ceased its useful life the land will be restored to its former use (this condition will be secured by planning condition where appropriate).
Policy S84: Ministry of Defence Establishments	<p>Part Two 'Development affecting MOD establishments' of policy S84 states that development 'will not be supported where it would adversely affect military operations or capability unless those impacts can be appropriately mitigated in agreement with the MOD'.</p>

9 Neighbourhood Plans and Other Local Policy, Guidance and Strategy

9.1 The following 'made' Neighbourhood Plans are relevant to the application site:

- Thorpe on the Hill Neighbourhood Plan – made in March 2018 and covering parts of the Principal Site (see Appendix G2 to this LIR)
- Bassingham Neighbourhood Plan - made in November 2017 and covering parts of the Principal Site (see Appendix G3 to this LIR)
- Coleby Neighbourhood Plan - made in January 2018 and covering parts of the Cable Corridor (see Appendix G4 to this LIR)

Furthermore Eagle and Swinethorpe and Swinderby are in the process of preparing Neighbourhood Plans however these are at early stages, are not yet 'made' and have an approved Plan Area designation only.

9.2 The Thorpe on the Hill Neighbourhood Plan (TOTHNP) notes that Tunman Wood is located within the wider Witham Valley Country Park and that the network of public footpaths and bridleways is generally well used by villagers, especially those paths around the western boundary of the Parish. The Neighbourhood Plan confirms that one of its aims is to preserve and enhance the network of footpath and cycle routes for both residents' and visitors' use.

9.3 There are 6 objectives, reinforced through applicable policies, which the TOTHNP seeks to deliver, including 'to ensure that any new development harmonises with the landscape character of our Parish and the "townscape" character of our village' (objective 1) and 'to protect and enhance our open spaces that are valued for their contribution to recreation, visual amenity, ecology and biodiversity, and landscape character and quality' (objective 3). Map 3 'Areas of biodiversity value' confirms the location of ancient woodland, Local Wildlife Sites and Local Nature Reserves within and adjacent to the Parish and policy 3 'Biodiversity' amongst other things seeks 'the provision of a net gain in flora and fauna'.

9.4 Policy 5 of the TOTHNP requires development outside the village curtilage to not reduce the separate identity of Thorpe on the Hill by reducing the existing gap between the village curtilage and the A46 furthermore requires development to take account of important views that are set out on associated Map 5. Cross reference to that map shows that views 2-6 would be interrupted to a greater or lesser extent by the proposed development.

9.5 The made Bassingham Neighbourhood Plan (BNP) has a central aim, which includes that 'the villages built heritage will be maintained, and its existing setting and close relationship with the surrounding countryside and the landscape within which it sits will be respected'. The BNP's associated 'Environment, Design and Sustainability' objective then sets out a broad aim of facilitating sustainable energy 'without compromising the inherent landscape and countryside quality surrounding the village'.

9.6 Policy T1 'Transport considerations in new development' of the plan seeks opportunities to extend existing routes for walkers and cyclists, including routes linking into the surrounding countryside, as well as into the village. Policy ES4: 'Landscape and Countryside Surrounding the Village' requires proposals amongst other things to contribute to a green infrastructure network, conserve

hedges and the field pattern they create and the avoidance of the best and most versatile agricultural land (Grades 1,2 and 3a) in preference for use of poorer quality land.

- 9.7 Policy ES5 'Renewable Energy Schemes' supports the principle of such within the plan area as long as proposals, amongst other things, allow for continued safe use of public rights of way, do not adversely affect existing amenities and do not detract from the rural, visual and historic character of the village and the surrounding landscape setting and environment.
- 9.8 The cable corridor passes through the part of the Coleby Neighbourhood Plan (CNP) area. Policy 1 of the CNP 'Appropriate Location for Development' sets out that amongst other things development will need to demonstrate that it can be carried out without resulting in an unacceptable impact on the setting of the village within the wider landscape and the landscape character within the Parish.
- 9.9 Figure 12 of the CNP maps a number of important views, including from elevated positions on the edge of the Lincoln Cliff AGLV and Figure 15 then maps footpaths and Public Rights of Way; and where CNP Policy 5 sets out that development resulting in an unacceptable adverse impact on existing footpaths and rights of way will not be supported.
- 9.10 The Lincolnshire Minerals and Waste Plan (Core Strategy and Development Management Policies) is also applicable. LMWLP Policy M11 (Safeguarding of Mineral Resources) requires proposals for development within a mineral safeguarding area (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. Where this is not the case then proposals will need to demonstrate compliance with a range of criteria.
- 9.11 The site intersects (at the northernmost corner of the site) with a MSA for sand and gravel. Lincolnshire County Council (as Minerals Planning Authority), at EIA Scoping stage, confirmed that there is no requirement for the applicant to undertake a minerals assessment for the development.
- 9.12 The LMWP is being updated, and additional reserves will be required to cover the proposed new plan period up to 2041. Consultation on the 'preferred approach' draft local plan was undertaken in 2024. No up-to-date public information is available on the timeline for the preparation of the 'proposed submission' draft version and examination by the Secretary of State. The Council defers to Lincolnshire County Council regarding the likely impact of the Fosse Green Energy solar park on minerals reserves and safeguarding areas. For that reason extracts from the LMWLP are not appended to this LIR.
- 9.13 The Council considers that the following key plans, studies, strategies and guidance (some of which comprise part of the evidence base to the preparation of the CLLP) are also material to the assessment of the proposed development.
 - NKDC Climate Response Strategy and Framework (2025-2030)
 - NKDC Climate Action Plan 2025/26
 - NKDC Environment Policy 2024/25 – 2026/27

- The NK Plan 24-27
- NK Community Strategy 2030
- NK Economic Strategy 2024
- NK Tourism Strategy 2024
- NKDC Air Quality Strategy 2024-2029
- NKDC Heritage Strategy 2025
- North Kesteven District Council Landscape Character Assessment (2007)
- North Kesteven District Council Strategic Flood Risk Assessment (2009)
- Central Lincolnshire Level 1 Strategic Flood Risk Assessment (SFRA) (2015 and 2022)
- Biodiversity Opportunity Mapping for Central Lincolnshire
- Central Lincolnshire Green infrastructure mapping for Central Lincolnshire
- Historic Landscape Characterisation Project for Lincolnshire
- 4th Lincolnshire Local Transport Plan (LTP4) and consultation draft LTP5
- Central Lincolnshire Economic Needs Assessment (ENA) March 2020
- NKDC criteria for the assessment of non-designated heritage assets
- North Kesteven Active Travel Strategy 2025 - 2030

A number of these are summarised below.

NKDC Climate Response Strategy and Framework to 2030 and Climate Action Plan (CAP) 25/26

9.14 The NKDC CRS is the Council's vision for a sustainable carbon reduction transition by 2030 for both North Kesteven District Council (NKDC) and the District of North Kesteven, supported by mitigation measures to reduce emissions and adaptation measures to improve resilience to the effects of climate change. Aim 2 of the CRS focuses on encouraging and promoting action to tackle environmental challenges, including reducing carbon emissions across the district by working with residents, communities and local businesses. It also includes collaborative efforts to promote adaptation and resilience.

9.15 The NKDC Climate Action Plan establishes the actions being taken across the Council and the District to achieve its carbon reduction goals and address the climate emergency and complement the CRS. The Strategy and Action Plan are fundamentally integral to one another and shape the Council's activities, building upon its Climate Emergency Declaration in July 2019. The Climate Action Plan contains nine themes used to categorise our climate actions, including 'decision making' and 'energy'. The Climate Response Strategy acts as the overarching document which sets out the aims and objectives for NKDC's carbon reduction efforts, and also shapes the council's Action Plans.

9.16 The 'decision making' theme within the Climate Action Plan includes embedding climate actions and activities within Council Service Delivery Plans and accounting for climate implications as part of its corporate decision-making processes.

9.17 The 'energy' theme focuses on reducing fossil fuel dependence and associated emissions by promoting renewable energy generation opportunities for both

NKDC and the District. It sets out to do this by supporting renewable energy generation opportunities across the District of North Kesteven.

NKDC Environment Policy 2024/25 – 2026/27

9.18 This document sets out NKDC's corporate environment policy and provides guidance through 8 key principles to ensure that all necessary steps are taken to help protect and enhance the natural environment, address the climate emergency, and work towards achieving its carbon reduction goals. The key principles include;

- empowering everyone within NKDC to act to protect and enhance the natural environment, take action to address the climate emergency, and work towards our carbon reduction (2030) target
- ensuring that the decisions we make at all levels consider the climate emergency, deliver our carbon reduction goals, and;
- protecting and enhancing the natural environment, supporting ecosystems, habitats, and biodiversity.

The NK Plan 24-27 and Community Strategy

9.19 The NK Plan and the overarching Community Strategy drive forward the Council's priorities for 'Our Economy', 'Our Homes', 'Our Environment', 'Our Communities', 'Our Green Thread' and 'Our Council' through to 2030. The 'Our Environment' Key Ambition is to 'Champion greenhouse gas reduction, both within the Council and across the District'. Given the extent of the target for net-zero by 2030, the 2021 NKDC Corporate Peer Challenge identified the Council's 'excellent ambitions for tackling climate change'.

9.20 The 'Environment' action within the 'Our Green Thread' priority is to 'champion and deliver a just transition for our climate and environmental commitments and aspirations'. The associated 'Sustainable Development Goals' confirm that as the Council targets its carbon reduction goals and actions and the aspirations of our Community Strategy in 2030, it has aligned all that it does with the United Nations Sustainable Development Goals; making this a shared vision where global aims influence local ambition.

9.21 The Council has also adopted an Economic Strategy and Tourism Strategy. The Tourism Strategy is a central component of the 'Our Economy' priority of the 2024-27 NK Plan which aims to 'Support sustainable and regenerative local economic growth and resilience, transitioning to a green economy working within environmental thresholds'. The Economic Strategy recognises that the District has a significant number of operational and proposed solar farms and increasingly associated battery storage facilities. It supports the growth of the green economy and to maximise the benefits arising from solar farms including the creation of a dedicated Community Energy Fund. It also seeks to support skills development for the green economy including sustainable construction and specialised trades.

9.22 The adopted NKDC Heritage Strategy contains five themes and has an overarching vision including that 'historic buildings, archaeological sites, natural

heritage, and local customs and traditions will be better understood, preserved and protected for future generations’.

10 Site Selection, Alternatives and Design Evolution

Site Selection

- 10.1 The Site Selection Report (Appendix A of the Planning Statement) describes the process which the applicant has gone through to identify the site which forms the submitted application. It begins with the Stage 1 identification of a search area of 15km radius, centred around the limiting factor of the available grid connection point at the proposed NGNS. This is consistent with paragraph 2.10.60 of EN-3, also set out that applicants for solar generating stations will need to consider several factors when considering the design and layout of sites, including “proximity to available grid capacity to accommodate the scale of generation, orientation, topography, previous land – use and ability to mitigate environmental impacts and flood risk”.
- 10.2 Within that area of search, a ‘Principal Site’ of approximately 1,000ha in size was sought to accommodate the proposed solar arrays, associated infrastructure, and mitigation land.
- 10.3 Then, within that search area, in Stages 2 and 3 the applicant then sought to identify potentially available sites (by size, land assembly, topography, and use of previously developed land) which were unconstrained by key environmental and planning constraints such as high quality agricultural land, medium and high flood risk areas, designated ecological sites, cultural heritage assets, and existing urban areas. Stage 3 concluded that there was no available and previously developed land of sufficient size to accommodate (either individually or in combination) the proposed development.
- 10.4 Stage 4 involved a desktop evaluation of five potential sites identified in Stage 3, including against national and local (development plan) policies, as well as operational considerations. Four sites were discounted at an early stage, on various grounds relating to issues such as size; irregularity of shape and isolation (being not possible to join together in a coherent and efficient scheme design); and proximity to active airfields such as RAF Waddington. The remaining potential site was assessed in more detail, but found to be unsuitable, including for the close proximity of substantial areas of ancient woodland; the presence of active minerals interests, which would affect its availability.
- 10.5 The site selection process therefore moved on to Stage 5, which re-introduced the key environmental and planning considerations which had been excluded from the earlier site assessments. This included consideration of sites containing high quality agricultural land (based on available broad scale on-line mapping), and land in medium and high flood risk areas. This exercise resulted in the identification of a short-list of 4 sites which had potential to provide a suitable and available site for the development. The question of availability involved discussions with landowners who may be willing to provide their land without the need for exercise of compulsory purchase powers; and to identify a

main, 'Principal Site' with land in as few ownerships as possible, to maximise land use efficiency.

10.6 Four potential sites were identified at Stage 5, and these were subjected to a detailed desktop assessment:

Site 6: Harmston involved four land parcels totalling 650ha around the villages of Aubourn, Harmston, Waddington and Coleby. This was discounted due to insufficient size (combined with difficulty of combining with part of another site which would fragment ownerships): proximity of listed buildings and scheduled monuments; the presence of Grade 2 agricultural land; presence of some land within high risk Flood Zone 3 (albeit less than Site 9); and potential landscape and visual impacts associated with nearby villages and the Lincoln Cliff Area of Great Landscape Value.

Site 7: Bassingham Fen involved a cluster of 10 parcels of land totally approximately 790ha. This was discounted due to insufficient size (combined with difficulty of combining with part of another site which would fragment ownerships): proximity of listed buildings and scheduled monuments, including Somerton Castle within the site; the presence of Grade 2 agricultural land; the majority of the land being within medium / high risk Flood Zones 2 and 3 (albeit less than Site 9); and potential landscape and visual impacts associated with nearby villages and the Lincoln Cliff AGLV.

Site 8: Scopwick Heath involved four relatively flat land parcels totalling approximately 1,920ha, so in excess of what was likely to be required for the proposed development. The western end of this site was between and around the villages of Navenby, Wellingore, Boothby Graffoe, Scopwick, Ashby-de-la-Launde; and the site also bordered RAF Digby to the south east. The land within this site has also since been identified as overlapping with NSIP proposals for the Springwell Solar Farm (which completed its examination in September) and the Leoda Solar Farm (which has yet to be submitted for examination). This site was discounted due to being almost entirely Grade 2 agricultural land; proximity to RAF Digby; and potential landscape and visual impacts associated with the Lincoln Cliff AGLV.

Site 9: Fosse Green (the chosen site) has a 'Principal Site' covering 1070ha of contiguous land, close to the optimal size identified at the start of the exercise, and likely to be sufficient to accommodate the proposed development without the need to combine with other parcels of land. The site is also in a relatively small number of ownerships. Together, these factors would assist in land assembly, minimising the need to exercise compulsory purchase powers, and offer advantages in delivery. Identified potential constraints involved the presence of some medium / high risk Flood Zones 2 and 3 towards the east of the site; and the proximity of listed buildings and scheduled monuments. However, the broad scale on-line mapping of agricultural land quality indicated that the vast majority fell within Grade 3, with only a relatively small area in the east within the higher Grade 2.

10.7 On this basis, Site 9 was taken forward as the Principal Site for preparation of a scheme design, assessment and submission of the NSIP application.

Design Evolution and Alternatives

10.8 Paragraph 2.10.60 of 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 proximity to available grid capacity to accommodate the scale of generation, orientation, topography, previous land – use and ability to mitigate environmental impacts and flood risk*'. In practice, the list of design considerations is much larger, and also includes topics such as solar panel and BESS type and specification.

10.9 Legislation requires that the ES includes:

'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.'

10.10 The process for site selection relating to the Principal Site are set out above. At the Scoping stage for the ES, three alternative routes were also considered for the 250m wide Cable Corridor to connect the Principal Site to the proposed Navenby substation grid connection point (described in section 4.7 of ES Chapter 4). Option C (northern route) was discounted at an early stage due to potential issues with proximity to residential properties, non-designated heritage assets and the former RAF Coleby Grange. The other two options were taken forwards for further consultation. Option A (central route) was chosen principally because it would have fewer watercourse crossings and a shorter length than Option B (southern route).

10.11 Chapter 4 of the Environmental Statement (ES) ([APP-029](#)) describes the consideration of alternatives and design evolution in relation to the proposed development.

10.12 The submissions also include a Design Approach Document ([APP-186](#)). Changes made to the scheme design include:

- alterations to the boundary of the development and Order Limits
- removal of solar PV panels on land south of the A46 following ecology surveys which identified the existence of ground nesting bird habitat
- identification of an area to the north of the A46 suitable for solar panels
- changes to the layout at River Farm, a Grade II listed building, to preserve the setting of both this and the Church Farm heritage asset
- removal of solar PV panels from three fields following statutory consultation, in response to feedback from the community
- amendment to the permissive path network following comments from Lincolnshire Wildlife Trust and the local community.

10.13 Design Principles have been developed into a series of Design Commitments (Appendix A of [APP-186](#))). Proposed Development Parameters ([APP-187](#))

have also been set, forming the basis for the environmental assessment of the project in accordance with the 'Rochdale Envelope' (i.e. providing for some localised flexibility to make amendments to the scheme post-development). Key alternatives considered include technological alternatives such as fixed south-facing solar panels or single-axis tracker panels; having a single centralised BESS, or a number of smaller distributed BESS. Site layout alternatives considered include design consideration of environmental and planning constraints. This included an alternative layout north of the A46 which was subject to consultation with the local community; and an access off the A46 (rather than using existing local roads) which was subject to consultation with National Highways. Both were rejected.

- 10.14 The ES EIA scoping also considered whether the grid connection should be made up of overhead lines or buried cabling. The former was rejected, largely due to potential landscape and visual impacts.
- 10.15 The 'Design Commitments' and the 'Development Parameters' both reflect the flexibility sought by the applicant; and (together with embedded mitigation and other control documents such as works plans and outline management plans) will set the framework for the detailed design. The DCO Requirements would secure this detailed design framework.

11 Environmental Impact Assessment (EIA) Methodology

- 11.1 The ES is required to contain the information specified in regulation 14(2) and must meet the requirements of Regulation 14(3) and 14(4) of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017. It must also include any additional information specified in Schedule 4 - Information for Inclusion in Environmental Statements of the EIA Regulations at (Regulation 14(2)) which is relevant to the specific characteristics of the particular development or type of development and to the environmental features likely to be significantly affected. The Council and its consultees do not identify any overarching areas where the submission documents do not accord with these regulations, although we do highlight some parts of the assessment methodology which are considered deficient, including in relation to heritage (above and below ground) and Biodiversity Net Gain.
- 11.2 The Council also notes that where the applicant has identified that flexibility is required in relation to design and layout considerations (including for the choice of panel type, distributed or centralised BESS, and the details of infrastructure such as the on-site substation structures), guidance produced by the Planning Inspectorate with regard to the use of the 'Rochdale Envelope' appears to have been applied within the relevant ES chapters to ensure a robust assessment of the likely significant (and worse case) environmental effects of the proposed development. We note that this involves assessing the maximum (and where relevant, minimum) parameters, size (footprint, width, and height) technology, and locations of the different elements of the proposed development for the elements where flexibility needs to be retained.
- 11.3 The Council also agrees that, with the exception of certain above-ground heritage assets, the applicant has applied relevant 'Zones of Influence' for each

environmental topic area based on the extent of likely effects as identified as the study area in each of the individual topic chapters of this ES. In most cases these have been agreed with the Council and its consultees at pre-application stage and in feedback in relation to the Preliminary Environmental Impact Report (PEIR).

11.4 Finally, the Council has also discussed and agreed the 'Cumulative Sites Long List and Shortlist' (Chapter 4, Appendix 4.1 and 4.2 respectively) which presents the identified long list of existing and/or approved developments within the search area and sets out the threshold criteria applied to identify the shortlist of existing and/or approved developments for each environmental topic. The Council will keep this under review with the applicant.

12 North Kesteven District Council Assessment of Impacts

12.1 The following sections identify:

- the relevant policies within the development plan and other local policy documents;
- the key issues raised by the proposed development;
- the extent to which the applicant has addressed these issues; and thus
- the degree to which the Council considers the proposal to comply with local policy and the NPSs.

13 Landscape and Visual Impacts, and Residential Visual Amenity

13.1 EN-1 states that the Examining Authority (ExA) needs to consider the design of a scheme carefully. They should have 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.

13.2 Paragraph 5.10.35 of EN-1 states that the ExA 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 ExA 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 Secretary of State considers reasonable'.

13.3 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*'. Paragraph 5.10.6 then states that projects need to be designed carefully, taking account of the potential impact on the landscape, and that they should have 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'.

13.4 The specific guidance relating to Solar Photovoltaic Generation in section 2.10 of EN-3 notes at paragraph 2.10.94 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 2.10.95 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'.

- 13.5 CLLP policy S14 'Renewable Energy' supports proposals for renewable energy schemes subject to the direct, indirect, individual and cumulative impacts of development on, amongst other things, landscape character and visual amenity being acceptable or capable of being made acceptable.
- 13.6 CLLP policy S53 'Design and Amenity' states all development must achieve high quality sustainable design which contributes positively to the local character and landscape. Development should, amongst other things, be based on a sound understanding of the context, integrating into the surrounding, relate well to the site, protect any important local views into, out of or through the site, reflect the identity of area and contribute to the sense of place and maintain landscape quality and minimise adverse visual impacts through high quality building and landscape design.
- 13.7 No part of Fosse Green Energy or the land surrounding it falls within a designated landscape. There is one registered park and garden (Coleyb Hall) within 3km of the Principal Site, and within 1km of the Cable Corridor.
- 13.8 The application documents include ES Chapter 10 Landscape and Visual Amenity (referred to in this LIR as the LVIA) ([APP-035](#)). The Council has an agreement with Lincolnshire County Council to commission and share specialist advice from AAH consultants on the impacts of the solar farm on landscape and visual impacts. A copy of AAH's review of the applicant's LVIA is attached at **Appendix A** to this LIR. AAH was involved in pre-application landscape and visual consultation with the applicant during 2024, as set out in Appendix A of their review.

General Comments

- 13.9 AAH consider that:
 - a) the extent of the study area is justified, and the identified Zones of Theoretical Visibility are an acceptable basis for the assessment.
 - b) the LVIA and associated figures, appendices and documents provide a generally comprehensive assessment of the proposed development, with an appropriate level of detail.
 - c) the assessment contains an appropriate level of detail for a scheme of this scale and context, and is laid out in a logical manner.
 - d) the process of assessment is thorough and well explained, and has been carried out in accordance with best practice and guidance.

- e) the LVIA includes:
 - i. an appropriate baseline assessment
 - ii. a detailed review of the scheme design
 - iii. an assessment of the magnitude of impacts of the development
 - iv. a determination of the significance of the effects of the development, made by combining the value, susceptibility and sensitivity of the receptor with the magnitude of impacts
- f) different phases of the development are considered – peak construction activity in winter, the first year of solar operation, year 15 when the proposed planting is well established, and decommissioning.
- g) an appropriate distinction is made between landscape effects and visual effects, focussing on the major and moderate residual impacts, which are considered to be ‘significant effects’.
- h) a ‘worst case’ scenario has been assessed, based on design parameters identified in Chapter 3 of the ES – in accordance with the ‘Rochdale Envelope’. This approach has been carried through to the photomontages and visualisations which assume the solar panels are at the maximum height allowed by the development parameters.
- i) the LVIA considers the development at the construction, operation and decommissioning phases, as well as cumulatively.

13.10 Nevertheless, AAH have identified some issues with the LVIA, predominantly related to disagreements over its findings (rather than methodology), where professional judgement is involved. The LVIA does recognise that the development would have significant effects on both landscape character and visual amenity; but AAH consider that there are areas where further clarity or additional work is considered necessary.

13.11 Firstly, it is queried whether the assumptions on plant growth rates allow for issues during the establishment period, and for any replacements to be carried out should there be plant failures or lack of acceptable growth. Achieving the forecast plant growth rates in practice depends on the successful implementation of a robust and well considered Landscape and Ecological Management Plan (LEMP) (see further comments on this below). Further clarification is sought on this point.

13.12 Secondly, there are also concerns regarding hedgerows being maintained at 3m, as outlined in paragraph 10.4.39, bullet (e) of the LVIA ([APP-035](#)). Such tall hedgerows may perform a screening function, but are equally likely to then appear out of character with the generally low hedgerows evident in the wider

character area, where low, well maintained hedgerows are more typical. Further comments are made on the effects of mitigation planting below.

13.13 Thirdly, AAH raise concern regarding any assumptions of reversibility and duration, given the 60 year proposed operational phase of the development. Sixty years is considered at least two generations. On that basis it is suggested that it might be more appropriate to suggest that the landscape and visual effects are considered permanent rather than temporary. It is not clear whether the assessment of effects fully takes this into account.

13.14 Lastly, it is stated in ES Chapter 5 Environmental Impact Assessment Methodology ([APP-030](#)) that over the 60 year extended 'temporary' operational phase there would be periodic replacement of development components, and the design life of key equipment is provided in Table 3-11. If the panels are likely to be replaced on numerous occasions, additional information may be required to assess the impacts of what might, in effect, be more than a single construction stage, but rather a series of re-construction periods, potentially involving large-scale equipment.

Landscape Character Impacts

13.15 Very broadly, the general character of the Principal Site is low lying, relatively flat and open agricultural land, with limited tree cover. The LVIA acknowledges the national, regional and local Landscape Character Areas which cover the site; and goes on to identify and assess more detailed, fine grained character areas.

13.16 AAH considers that the LVIA fails to acknowledge that solar farm and other energy projects such as BESS, overhead lines and pylons, and associated sub stations and converter stations (some already approved, others in the pipeline) are, together, likely to significantly impact on the existing landscape character over an extensive area across the published character areas. The landscape will change from predominantly agricultural to one of agricultural use with energy infrastructure; and this will form part of the 'future baseline' character of the area. This would require changes to the national, regional and local character assessments over time.

13.17 In the LVIA effects are assessed upon the following landscape receptors:

- the Principal Site itself
- the Cable Corridor
- various Local Landscape Character Areas (LLCA).

13.18 The LVIA identifies the following landscape effects:

Construction:

Major adverse (Significant) effects for:

- The Principle Site
- Cable Corridor
- LLCA 03: Tunman Hill

- LLCA 08: Thurlby Fenland

Moderate adverse (Significant) effects for:

- Sub-area 2: Terrace Sandlands
- Sub-area 5: Witham & Brant Vales
- LLCA 13: Low Fields South
- LLCA 14: Low Fields North
- LLCA 15: Lincoln Cliff

At Operation (Year 1):

Major adverse effects (Significant) effects for:

- The Principle Site
- LLCA 03: Tunman Hill
- LLCA 08: Thurlby Fenland

Moderate adverse (Significant) effects for:

- Sub-area 2: Terrace Sandlands
- Sub-area 5: Witham & Brant Vales

At Operation (Year 15):

Moderate adverse effects (Significant) effects for:

- Principle Site
- LLCA 03: Tunman Hill
- LLCA 08: Thurlby Fenland

13.19 Overall, the LVIA concludes that at year 15, the entirety of the Order Limits, together with the local landscape character areas of LLCA 03: Tunman Hill and LLCA 08: Thurlby Fenland will experience significant residual effects, even with the proposed mitigation planting. AAH comment that this will affect the sense of openness, seasonal rhythm of farming practices and rural tranquillity currently experienced.

13.20 The LVIA finds that other local landscape character receptors will not experience residual significant effects. AAH does not agree with this finding, and considers that that all landscape character areas directly affected by the development would have residual significant effects – primarily through a change of land-use, namely:

- a) LCT 4a: Unwooded Vales - **Moderate and Significant effects** at all phases
- b) Sub-area 6: Lincoln Cliff - **Moderate and Significant effects** at all phases.
- c) Sub-area 2: Terrace Sandlands and Sub-area 5: Witham and Brant Vales - **Moderate and Significant effects** at operation year 15

13.21 It is agreed that reductions in effects at the operation phase for areas within the cable corridor are expected, because all works will be below ground – though this is dependent upon the retention and protection of existing vegetation. Any removals have the potential to adversely effect the landscape character areas, and would need mitigation to be effective in order to avoid residual effects.

Visual Impacts

13.22 The LVIA describes the visual baseline, and identified visual receptors through desk-based review, analysis of Zones of Theoretical Visibility (ZTVs) and field surveys. These receptors are:

- Residents
- Recreational users on public rights of way (PRoW), promoted walking routes and Cycle Routes
- People travelling on roads
- Commercial users

13.23 These receptors are also evaluated for their visual value, susceptibility, and subsequently sensitivity. A total of 35 representative viewpoints are presented as baseline photographs; and 11 of these were taken forward to be developed as photomontages in the subsequent assessment of visual impacts. AAH consider that this baseline and viewpoint selection process has followed recognised good practice and taken into account the outputs from pre-application consultation.

13.24 The LVIA identifies the following visual effects:

Construction

Major adverse (Significant) effects for:

- Residents of Church Farm and Low Barn
- Recreational users of PRoW west of Thorpe on the Hill (TOTH/7/2, TOTH/21/1, TOTH/6/2, TOTH/6/3)
- Recreational users of Aubo/12/2
- Recreational users of Aubo/8/1
- Recreational users of TOTH/11/1
- Recreational users of TOTH/12/3
- Recreational users of TOTH/15/1
- Recreational users of Aubo/10/1

Moderate adverse (Significant) effects for:

- Residents of Thorpe on the Hill
- Residents of Scotland Farm
- Residents of Housham Wood Farm
- Residents of Eagle Barnsdale
- Residents of Morton

- Residents of High Walks Farm
- Residents of Witham St. Hughs (east)
- Residents of River Farm (north)
- Residents of Tonge's Farm
- Residents of Bassingham
- Residents of Coleby
- Residents of Boothby Graffoe
- Residents of Thurlby
- Residents of Malborough
- Residents of North Field Farm
- Residents of Grange Cottage
- Recreational users of TOTH/6/1 and TOTH/6A/1
- Recreational users of TOTH/18/1
- Recreational users of Viking Way (PRoW Cole/2/1 and BooG/2/2)
- Recreational users of Bass/1/1, NoDi/1/2, NoDi/4/1, ThuN/5/1
- Recreational users of ThuN/2/1
- Recreational users of Bass/22/1, Bass/21/2, Bass/20/1
- Users of Clay Lane and Bassingham Road

Operation (Year 1)

Major adverse Significant effects for:

- Recreational users of PRoW west of Thorpe on the Hill (TOTH/7/2, TOTH/21/1, TOTH/6/2, TOTH/6/3)
- Recreational users of Aubo/8/1
- Recreational users of TOTH/12/3

Moderate adverse Significant effects for:

- Residents of Housham Wood Farm
- Residents of Church Farm and Low Barn
- Residents of Grange Cottage
- Recreational users of TOTH/6/1 and TOTH/6A/1
- Recreational users of Aubo/12/2
- Recreational users of Bass/1/1, NoDi/1/2, NoDi/4/1, ThuN/5/1
- Recreational users of ThuN/2/1
- Recreational users of TOTH/11/1
- Recreational users of TOTH/15/1
- Recreational users of Bass/22/1, Bass/21/2, Bass/20/1
- Recreational users of Aubo/10/1
- Users of Clay Lane and Bassingham Road

Operation (Year 15)

Major adverse (Significant) effects for:

- Recreational users of PRoW west of Thorpe on the Hill (TOTH/7/2, TOTH/21/1, TOTH/6/2, TOTH/6/3) – winter
- Recreational users of Aubo/8/1 – winter and summer

Moderate adverse (Significant) effects for:

- Residents of Grange Cottage – winter
- Recreational users of PRoW west of Thorpe on the Hill (TOTH/7/2, TOTH/21/1, TOTH/6/2, TOTH/6/3) – summer
- Recreational users of TOTH/11/1 – winter
- Recreational users of TOTH/12/3 – winter

13.25 During the construction phase, a large number of residents, PRoW users and some roads would experience clear and often close views of construction machinery and activity, with little or no screening – resulting in major and moderately adverse impacts, which are significant effects. The number of receptors experiencing these adverse effects would unsurprisingly reduce once the development is operating at year 1 – though mitigation planting would not have had the chance to develop by that point and would provide minimal screening. By year 15 there would be a further reduction in receptors experiencing significant adverse effects due to mitigation planting maturing – however, several sensitive receptors would continue to experience such effects for the full duration of the development over the remaining 45 year lifespan.

13.26 Adverse effects would be experienced by several PRoW receptors. These might include the Stepping Out Walks (see Appendix E) which are promoted in North Kesteven District, but which have not specifically been included in the LVIA.

13.27 There is also concern that the mitigation planting itself may cause adverse visual effects by blocking or foreshortening currently open, relatively uninterrupted views – thereby appearing out of place in what is otherwise an open landscape. This emphasises the need for mitigation planting to be carefully considered at the detail design stage, and not only seek to screen views of development. Future users of the planned permissive paths would also be likely to experience continued sequential views of the development, and so are unlikely to reduce the visual impacts experienced.

13.28 During decommissioning, the potential visual effects could be similar to those at the construction phase, however receptors will benefit from established planting associated with the scheme, which would provide screening and integration in views, and so reduce the number of significant effects which would occur.

Cumulative Landscape and Visual Impacts

13.29 The cumulative impacts section of the LVIA has looked at developments within a 2km zone of influence from the edge of the Order Limits. AAH also welcome the inclusion of four other large scale solar developments in the wider locality which are at differing stages in the NSIP consenting process:

- Springwell Solar Farm – recommendation stage, following completion of examination
- Great North Road Solar and Biodiversity Park – examination stage
- One Earth Solar Farm – examination stage
- Leoda Solar Farm Ltd – at the pre-examination stage.

13.30 AAH do not take significant issue with the cumulative impact assessment for non-NSIP proposals, though it is suggested that during the construction stage, Fosse Green together with the North Hykeham Relief Road may have significant adverse landscape effect on the North Kesteven District landscape sub-area Witham and Brant Vales and significant adverse visual effect on receptors using the Viking Way.

13.31 Perhaps a greater concern is around the findings for cumulative landscape impacts with the other four NSIP schemes in the area, which AAH consider to be underestimated in the LVIA. AAH's view is that the landscape character of the local, and potentially regional area, may be completely altered over the operational period through an extensive area of land use change, and introduction of energy infrastructure in an area that historically and currently is predominantly agricultural. This would be an issue when experienced sequentially for visual receptors travelling through the landscape and experiencing these schemes across potentially several kilometres, albeit with gaps of several KM between the schemes. Repeated views and presence of large scale solar would undoubtably increase the susceptibility of receptors to changes in view.

Residential Visual Amenity

13.32 This concerns private views and amenity from a total of 29 receptors made up of individual residential properties, groups of properties or settlements – as opposed to the main parts of the LVIA which is typically concerned with views from public places.

13.33 The LVIA identifies multiple residents of properties that would experience significant adverse effects – though AAH agree with the authors that it is unlikely any would reach the recognised Residential Visual Amenity Threshold which is when '*the greatest magnitude of change*' would occur. Nevertheless, these negative effects on residential visual amenity are of concern to the Council.

Mitigation

13.34 The proposed development includes within its preliminary design 'embedded' mitigation' measures, which have been taken into account in the LVIA, forming part of the iterative design process. AAH are satisfied that the layout appears to have responded to many issues and LVIA findings. However, a key criticism is the number and extent of PRoW users that are significantly adversely affected by the scheme, which implies that insufficient offsets from the solar

panel arrays and associated infrastructure may have been provided for in the iterative design approach.

13.35 The Framework Landscape and Ecological Management Plan (Framework LEMP) ([AS-101](#)) includes information on planting and land management, including Figure 15-1 Landscape Mitigation Plan at Appendix A. Whilst these proposals are welcome, it should be recognised that this mitigation depends heavily on the successful implementation and subsequent management of new planting; together with protection of existing trees and hedgerows. Each part of the development is intended to come forward with its own detailed LEMP, consistent with the fLEMP. The length of time covered by the detailed LEMPs should be at least sufficient to cover the 15 year period on which the findings of the LVIA are based. Indeed, AAH recommend that the LEMPs should cover the whole of the operational period. Further, there should be provisions to cover any pre-construction planting.

13.36 Monitoring of planting should be carried out periodically, in order to properly consider the need for replacement of failed planting; with the LEMPs updated every five years. It is also recommended that detailed mitigation planting design is carefully co-ordinated with panel layout details; and that overbearing mitigation screen planting is avoided where it would interfere with characteristic open views from sensitive receptors such as PRoW.

Conclusions

13.37 By way of summary, by reason of its mass and scale, the proposals would have Significant adverse effects on landscape character and the visual amenity of numerous visual receptors at all main phases of the scheme (construction, operation year 1, operation year 15). Some of these effects are considered to be understated in the LVIA.

13.38 Visual receptors adversely affected would include users of PRoW. The Development has the potential to transform the local landscape by altering its character on a large scale across an extensive area, both locally and at a regional scale.

13.39 Solar development would replace large areas of agricultural land, affecting the current openness and tranquillity that are identified as defining characteristics of the area. Effects would be very long term, and should possibly be considered as permanent for the purposes of LVIA. Cumulative impacts of the proposals with other large scale solar energy schemes in the pipeline are also underestimated.

13.40 Mitigation proposals will be heavily dependent for their success on good implementation and management – the detailed LEMPs should cover an extended period to ensure that the mitigation which is embedded in the scheme (and leads to some of the conclusions of the LVIA) does achieve what is intended.

13.41 The Council considers that there are **negative** impacts in terms of both landscape character and visual amenity, both in relation to the Fosse Green scheme, and cumulatively with other developments. Whilst residential visual amenity impacts do not exceed the RVAA threshold, they are nevertheless of concern, and therefore also considered **negative**.

14. Soils and Agricultural Land

14.1 Paragraph 5.11.12 of EN-1 outlines 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 (ALC) and preferably use land in areas of poorer quality (grades 3b, 4 and 5).*

14.2 Paragraph 5.11.34 of EN-1 states that the decision maker should ensure that '*... applicants do not site their scheme on the best and most versatile agricultural land without justification. 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*'.

14.3 Under the heading of 'Solar Photovoltaic Generation', paragraph 2.10.29 of 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. 'Best and Most Versatile agricultural land is defined as land in grades 1, 2 and 3a of the Agricultural Land Classification.'

14.4 The above paragraph provides for a two-part approach. The first part is about site selection – seeking to guide applicants towards previously developed, brownfield, contaminated and industrial land rather than agricultural land where possible. The second part is about both refining site selection once the use of agricultural land has been found necessary; as well as to scheme layout and design – i.e. applicants should avoid where possible use poorer quality land in preference to BMV. Paragraph 2.10.30 of EN-3 expects applicants to consider this point, noting that '*Whilst the development of ground mounted solar arrays is not prohibited on BMV agricultural land, 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 2.10.73 – 92 and 2.10.107 – 2.10.126*'.

14.5 Furthermore, paragraph 2.10.31 of EN-3 acknowledges that whilst it is likely that applicants' developments may use some agricultural land, nevertheless '*Applicants should explain their choice of site, noting the preference for development to be on brownfield industrial and low and medium grade agricultural land*. This relates to the site selection part of paragraph 2.10.29.

14.6 Paragraph 2.10.32 of EN-3 states that '*Where sited on agricultural land, consideration may be given as to whether the proposal allows for continued agricultural use and/or can be co-located with other functions (for example, onshore wind generation, storage, hydrogen electrolyzers) to maximise the efficiency of land use.*' This relates more to the layout and design part of paragraph 2.10.29.

14.7 Paragraph 2.10.145 of EN-3 reiterates that the SoS should take into account '*... the economic and other benefits of the best and most versatile agricultural land*'.

14.8 Noting the above approach, the Written Ministerial Statement on solar infrastructure (15 May 2024) emphasised the onus placed on developers to show that the use of higher quality land is necessary, stating:

As is outlined in the National Policy Statement, the starting position for solar PV developers in taking forward Nationally Significant Infrastructure Projects is 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.

14.9 The Written Statement was made against the backdrop of the version of EN-3 which came into force in January 2024. The approach in the Statement reinforces the approach in EN-1 and EN-3 set out above.

14.10 The Written Ministerial Statement also recognised the geographical clustering of proposed solar developments in some rural areas, highlighting Lincolnshire as a specific example; and notes that '*... it is important to consider not just the impacts of individual proposals, but also whether there are cumulative impacts where several proposals come forward in the same locality*'.

14.11 EN-3 paragraph 2.10.145 also states that '*The Secretary of State should ensure that the applicant has put forward appropriate mitigation measures to minimise impacts on soils or soil resources*'. These measures should include a soil resources and management plan, developed '*... in line with the ambition set out in the Environmental Improvement Plan to bring at least 40% of England's agricultural soils into sustainable management by 2028 and increase this up to 60% by 2030*' (EN-3 paragraph 2.10.34). Paragraph 2.10.127 provides further advice on mitigation.

14.12 Under the sub-heading of 'Additional matters for solar based energy proposals', CLLP policy S14 'Renewable Energy' states that proposals for ground based photovoltaics and associated infrastructure, including commercial large scale proposals, will be under a presumption in favour (of approval) unless, amongst other things, 'the proposal is (following a site specific soil assessment) to take place on BMV agricultural land and does not meet the requirements of Policy S67'.

14.13 CLLP policy S67 'Best and Most Versatile Agricultural Land' states that significant development resulting in the loss of the best and most versatile agricultural land will only be supported if:

- The need is clearly established;
- The benefits outweigh the need to protect such land, when taking into account the economic and other benefits of the best and most versatile agricultural land;
- The impacts of the proposal upon ongoing agricultural operations have been minimised through the use of appropriate design solutions; and
- Once the development has ceased its useful life then the land should be returned to its former use’.

14.14 In line with Policy S67 ‘Best and Most Versatile Agricultural Land’ of the Central Lincolnshire Local Plan (CLLP), the Council wishes to ensure that the need for the proposed development has been clearly established and there is an insufficient availability of lower grade land; the benefits of the development outweigh the need to protect such land, when taking into account the economic and other benefits of BMV land; the impacts on ongoing agricultural operations have been minimised; and that the land will be restored to its former use.

14.15 The application documents include ES Chapter 12: Socio-Economics and Land Use ([AS-016](#)), which contains sections on agriculture and soils; ES Appendix 12-B Agricultural Land Classification Report ([APP-161](#)); and a Framework Soil Management Plan ([AS-100](#)). The Council has appointed Landscape agricultural consultants to provide it with specialist advice on soils and agriculture. Landscape have reviewed these documents, and their full comments are attached at **Appendix D** to this LIR.

Agricultural Land Classification

14.16 The land within the Principal Site has been subjected to an agricultural land classification survey ([APP-161](#)) and the broad results (separating best and most versatile land from other land) are summarised in the table below. Landscape have confirmed that the methodology used in the survey is in line with accepted guidance.

Classification	Area (ha)	Proportion of Principal Site
Non-agricultural land	40	3.7%
Total BMV agricultural land (all grade 3a)	241	22.5%
Total Non-BMV agricultural land (grade 3b)	790	73.8%
Total Principal Site ²	1071	100%

² It is noted that the figures in the table above (taken from Table 6 in the Agricultural Land Classification Report [APP-161](#)) are not consistent with those in Table 12-15 of ES Chapter 12 ([AS-016](#)). Paragraphs 12.5.12 and 12.5.13 of Chapter 12 state that the ALC Report was based on a larger area than the DCO site boundary; and that the data in Chapter 12 reflects the Principal Site boundary. However, the figure of 1018.7ha for the Principal Site area given in Chapter 12 does not match the figure of

14.17 By way of reference, across Lincolnshire the estimated proportion of BMV is 71.2% while across North Kesteven the proportion of BMV is 67%, slightly lower than the county average. This shows that the Principal Site is well below the District and County averages, and does not contain any Grade 1 or 2 land. The Cable Corridor beyond the Principal Site has not been surveyed in detail to date, though broad scale mapping indicates that although much of the route may have a similar overall balance of BMV to non-BMV land as the Principal Site, there could be areas of Grade 2 land encountered.

Site Selection

14.18 The application includes at Appendix A to the Planning Statement ([AS-098](#)) a Site Selection Report, which includes best and most versatile agricultural land classification as one of its evaluation criteria under the indicator heading of Land Use. For a 15km radius search area centred on the site of the proposed NGNS, the broad scale Natural England Agricultural Land Classification maps indicated that the land to the west of the Lincoln Cliff tends to contain less BMV land than the area to the east (it should be noted that the detailed survey information reported in the table above was not available for the initial site selection stages). Brownfield land is relatively scarce across the search area for a development of this scale; indeed there are no suitable entries on the Council's published Brownfield Land Register (2024, or the pre-publication draft 2025 version) within the site selection search area.

14.19 Site selection has to take into account a wide range of issues, including a variety of environmental and other constraints. The Council remains concerned at the potential for a significant area of agricultural land, including BMV land, to be taken out of production for a very significant period of time (in excess of 60 years from construction to decommissioning). However, given the policy context - in particular that set out in the National Policy Statements EN-1 and EN-3, and in Policy S67 of the CLLP in relation to agricultural land quality - it is considered that the selection of the application site has taken a reasonable approach. Broadly, this is also supported by the results of the more detailed land classification survey of the application site reported above. Whilst almost all of the site is currently in agricultural use, the proportion of the Principal Site (22.5%) which is classed as BMV land is lower than some other solar NSIP schemes which have been granted consent; typically in the region of 40-50%.

Scheme design

14.20 The Principal Site includes areas for siting the solar arrays (456ha, 43%), together with 8ha (0.75%) for other infrastructure such as the on-site substation and BESS (centralised). The Principal Site also includes mitigation land such as the Bird

1070ha provided in paragraph 3.2.1 of the Planning Statement ([AS-098](#)) or paragraph 3.1.3b of ES Chapter 3: The Proposed Development. No clear explanation has been provided. Therefore, pending clarification from the applicant, the Council has used the figures in the Agricultural Land Classification Report [APP-161](#)) for the purposes of this LIR.

Mitigation Areas (a combined total of 245ha of managed arable land and permanent grassland, 22.9%), tree planting, hedgerows and field margins. That would leave approximately 361ha (33.7%) of land within the Principal Site which would be largely undeveloped but might accommodate a variety of uses including access tracks and buried cable runs. Currently, the Council does not have figures quantifying the areas of BMV land which fall within each of these categories of use.

14.21 However, Plate 6-1 in the submitted Planning Statement ([AS-098](#)) shows the main areas of development (solar panel arrays, and Bird Mitigation Areas) within the Principal Site overlaying the agricultural land classification categories identified in the survey.

14.22 Broadly, it can be seen that most of the areas proposed for both the solar panels and the Bird Mitigation Areas would occupy non-BMV (Grade 3b) land within the site. Although not shown, this would also be the case for the on-site substation and the centralised BESS (if that option is chosen). Where non-BMV Grade 3b land is shown unoccupied by these elements of the development – such as a strip east of Witham St Hughs - it is noted that much of that land is subject to other constraints such as flood risk from local watercourses and the River Witham/Brant.

14.23 The development proposed within the Cable Corridor would be limited to a narrower area of land within which the grid connection cables would be buried, following which the intention is to replace soils and return the land to agriculture. The intention is to carry out a detailed agricultural land classification survey once the precise route options have been narrowed down further, as part of the detailed design process.

14.24 Therefore although the Council seeks greater clarity on matters such as area figures for different parts of the development in terms of land quality, currently the application appears to present a scheme which in general terms has had due regard to avoiding the use of BMV land as far as possible and seeking to strike a balance which also avoids other environmental constraints affecting the site. Subject to further clarifications and potential refinements, the Council considers that the staged approach taken is therefore largely in line with relevant national and local policy in this respect.

Impacts

14.25 As reported above, the submitted information states that those parts of the Principal Site occupied by the solar arrays will cover approximately 456ha (43%), and the on-site substation together with the centralised BESS (if this option is chosen) will cover a further 8ha (0.75%). Officers have been unable to identify in the documentation an area figure for other infrastructure such as access tracks; and it is not possible to say with precision what area of the Principal Site might be 'sealed over' by hard surfacing, as opposed to being used to site solar panels on driven piles. It is also not possible to say with any accuracy how much of the Principal Site used for infrastructure (rather than mitigation) will occupy the higher quality BMV land.

14.26 Published IEMA guidelines say that the permanent sealing of land above 20ha (including temporary development where there would be a reduction in soil quality) is a major adverse (significant) effect.

14.27 The overall approach taken by the development is to strip and store soils from where development will take place – such as from the on-site substation compound prior to hard surfacing, and from areas used for access track formation and widening. Soils will not be stripped from the areas covered by the solar panels themselves. Once the scheme has been constructed, commercially commissioned, and completed its operational phase (i.e. finished generating electricity for supply to the national grid), the site will be decommissioned – not less than 60 years hence.

14.28 At that stage, the applicant proposes that the development is removed, soils replaced and land returned to the landowners who can resume agricultural management if they wish to. On that basis, it is claimed that any impacts on agricultural land would be temporary, albeit long-term. The only identified exception to this would be for retained habitat creation areas, where 4.6ha of the land (1.5ha of which is BMV) would remain outside of agriculture representing a permanent impact.

14.29 A similar approach would be taken to the installation of the grid connection cable, with soils replaced and the land returned to agriculture on completion. This would result in a short term temporary effect on agriculture.

14.30 Taking the applicant's approach, it would appear that little or none of the land is proposed to be 'sealed over' permanently. However, it is less clear that all of this land could be restored without a loss of quality.

14.31 The advice from Landscape is that there is at present no established consensus on whether a long-term temporary use of land should be considered as not significant; and therefore the loss of any BMV over the IEMA 20ha threshold for the duration of the operational life of the development may still be 'significant' in EIA terms. This is especially so if restoration activities are not entirely successful in rectifying damage and bringing all of the land back to its BMV status once the scheme has been decommissioned.

14.32 It is considered important to confirm the amounts of land which would be affected by each element of the development, and the agricultural quality of those areas of land – especially as the application includes significant amounts of hardstanding, piling, foundation slabs and access tracks which would present challenges for restoration.

14.33 The Framework Soil Management Plan ([AS-100](#)) submitted with the application sets out practices to be followed during the construction, operation and decommissioning of the development. Landscape highlight the potential for significant and long-lasting damage to soil structure during the construction phase,

especially through large numbers of vehicle movements and during wet weather. It is advised that this should be addressed in the detailed Soil Management Plans which it is intended will be developed (in general conformity with the Framework Soil Management Plan for each part of the development as it comes forward. Whilst many of the damaging operations can be remedied using agricultural equipment, the layout of the panels and buried cables will often prohibit this during the life of the solar farm and as such remedies can only be completed at the end of term when all infrastructure has been removed. If the soil is in a substandard condition during the operation of the solar farm, carbon sequestration is reduced and infiltration of water can also be reduced, leading to localised standing water and the reduction in soil quality.

- 14.34 It is proposed that the solar array areas might be used for some form of agriculture during the operational phase, albeit most likely low intensity grazing for instance by sheep rather than the predominant intensive arable production which currently takes place. The application suggests that this has the potential to yield benefits for soil structure and organic matter, compared to continuing intensive arable farming.
- 14.35 Further, management of the Bird Mitigation Areas might also use agriculture, especially for the arable areas to support ground nesting birds such as skylark (see section 15 of this LIR) – though once again that management would likely be at a lower intensity than current arable farming practices. Finally - and although it is not entirely clear from the application documents - other parts of the site will function to provide interconnecting cable runs and access, but appear likely to be retained in agricultural use of some kind alongside other biodiversity mitigation measures, such as enhanced field margins and hedgerows. This could also yield benefits for soil health.
- 14.36 However, Landscape advise that if soil health is to be given weight in the decision, there should be an indication of the degree of longevity of these benefits. This would also benefit from some monitoring to assess changes over time.
- 14.37 With reference to cumulative impacts, at a District and County Level, the Council agrees with Landscape that this project, together with other solar PV schemes in Nottinghamshire and Lincolnshire, may have a significant effect on the BMV resource. ES Chapter 12 assesses cumulative effects in relation to the loss of BMV across Lincolnshire. However, Chapter 12 states that the proposals in the Principal Site involve only 0.09% of the farmland in the East Midlands ([AS-016](#), paragraph 12.7.43) – it does not look at the Lincolnshire scale, where there are numerous solar PV schemes either consented or in the pipeline; or take into account the wider locality into Nottinghamshire.
- 14.38 Finally, it is not clear whether the applicant has committed to conservation grazing of the solar array areas. If there is no grazing as a means of managing the grassland below the solar panels, the impact of the withdrawal of agriculture due to the development during the operational phase will be greater than it would otherwise be, over the 60 year lifespan of the project - reducing the contribution that agriculture makes towards economic activity within North Kesteven and more

widely across the County (recognised in paragraph 187(b) of the NPPF). The provision of conservation grazing beneath the solar panels would offer some continuation of agricultural use on the agricultural land including BMV land. The Council's position is that it should be provided in line with best practice guidance by BRE (2014) 'Agricultural Good Practice Guidance for Solar Farms'.

14.39 The Council considers that a Requirement to ensure that conservation grazing is provided would give more certainty that the land could continue in agricultural use both during operation and at the end of the decommissioning. A further option to enhance the value of the land while not in agricultural production would be planting to help with nitrification (e.g. non-edible legumes such as vetches).

Conclusions on agriculture and best and most versatile land

14.40 The Council in general agrees that, within the policy framework set out in the relevant NPS, the application has justified its use of agricultural land to accommodate this development. Subject to further clarification on certain points, the Council also considers it likely that the applicant has presented a scheme which largely avoids BMV land where possible; not least mindful of the flood risk constraint affecting parts of the site.

14.41 However, that does not necessarily mean that there is no adverse impact on agriculture, BMV land and soils. It is considered that the ES somewhat downplays both the impacts of largely removing the land from agriculture land during what is a very lengthy lifespan of the development; and the risks that long term damage to soils may occur, particularly during the construction and decommissioning phases.

14.42 On the basis of the currently available information, Council therefore concludes that the loss of arable production and the suspension of agriculture within the Principal Site during the construction phase, together with the lengthy 60 year operational phase and the decommissioning phase, involving a significant amount of BMV land is locally significant; and in view of other projects in the wider District and County, potentially cumulatively significant. Doubts about the ability of decommissioning works to restore the land to its original agricultural quality remain; and that scope for mitigation by grazing across the solar array areas does not appear to have been committed to. These effects are considered to represent a **negative** impact.

15 Ecology and Biodiversity (including Biodiversity Net Gain)

15.1 Paragraph 5.4.42 of EN-1 states that '*... development should, in line with the mitigation hierarchy, aim to avoid significant harm to biodiversity and geological conservation interests, including through consideration of reasonable alternatives.... Where significant harm cannot be avoided, impacts should be mitigated and as a last resort, appropriate compensation measures should be sought*'. Paragraph 5.4.43 of EN-1 also sets out that if significant harm to biodiversity cannot be avoided (e.g. thorough choosing an alternative site),

adequately mitigated or compensated for, then ‘... *the Secretary of State will give significant weight to any residual harm.*’

15.2 EN-1 also notes that due consideration should also be given to regional and local biodiversity and geological designations because these sites have a fundamental role to play in meeting overall national biodiversity targets; contributing to the quality of life and the well-being of the community; and in supporting research and education. However, these designations should not be used in themselves to refuse development consent (paragraph 5.4.52).

15.3 EN-3 also highlights that solar farms have the potential to increase the biodiversity value of a site, especially if the land was previously intensively managed. Paragraph 2.10.89 notes that “*In some instances, this can result in significant benefits and enhancements beyond biodiversity net gain, which result in wider environmental gains and which is encouraged*”.

15.4 CLLP policy S14 ‘Renewable Energy’ states that proposals for renewable energy schemes, including ancillary development, will be supported where the direct, indirect, individual and cumulative impacts are, or will be made, acceptable, including in relation to biodiversity and geodiversity considerations.

15.5 CLLP policy S59 ‘Green and Blue Infrastructure Network’ states that the Central Lincolnshire Authorities ‘*will safeguard green and blue infrastructure in Central Lincolnshire from inappropriate development and work actively with partners to maintain and improve the quantity, quality, accessibility and management of the green infrastructure network*’. Continuing, the policy notes that ‘*Proposals that cause loss or harm to the green and blue infrastructure network will not be supported unless the need for and benefits of the development demonstrably outweigh any adverse impacts. Where adverse impacts on green infrastructure are unavoidable, development will only be supported if suitable mitigation measures for the network are provided*’.

15.6 CLLP policy S60 ‘Protecting Biodiversity and Geodiversity’ states that development proposals will be considered in the context of the relevant Local Authority’s duty to promote the protection and recovery of priority species and habitats. If the proposals do cause adverse impacts, then the benefit of the scheme will need to provide benefits the clearly outweigh the harms.

15.7 Development will only be supported where the proposed measures for mitigation and/or compensation along with details of net gains are acceptable. All developments are required to meet the tests of:

- Protecting, managing, enhancing and extending the ecological network of habitats, species and sites of international, national and local importance.
- Minimising impacts on biodiversity and geodiversity value.
- Delivering measurable and proportionate net gains in biodiversity.
- Protecting and enhancing the aquatic environment within or adjoining the site, including water quality and habitat.

15.8 Part 2 of CLLP policy S60 requires developments to seek to preserve, restore and re-create priority habitats, ecological networks and the protection and recovery of priority species set out in the Natural Environment and Rural Communities Act 2006, Lincolnshire Biodiversity Action Plan, Lincolnshire Geodiversity Strategy and Local Nature Recovery Strategy. It further requires that where adverse impacts are likely, '*development will only be supported where the need for and benefits of the development clearly outweigh these impacts*' and in such cases, '*appropriate mitigation or compensatory measures will be required*'.

15.9 CLLP policy S61 'Biodiversity Opportunity and Delivering Measurable Net Gains' requires development to deliver at least a 10% measurable biodiversity net gain (BNG) attributable to the development. The net gain for biodiversity should be calculated using Natural England's Biodiversity Metric, and should be provided on-site wherever possible. Unless specifically exempted, a biodiversity gain plan should be submitted providing clear and robust evidence for biodiversity net gains and losses, and which includes details of the pre-development biodiversity value of the onsite habitat, the post-development biodiversity value of the onsite habitat following implementation of the proposed ecological enhancements/interventions and on ongoing management strategy for any BNG proposals.

15.10 Finally, CLLP policy S66 'Trees, Woodland and Hedgerows' requires proposals to provide evidence that they have been subject to adequate consideration of the impact of the development on any existing trees and woodland. New developments will also be to retain existing hedgerows where appropriate and integrate them fully into the design having regard to their management requirements. There is an interface here with CLLP policy S60 given the impacts on hedgerows, a habitat of principal importance.

15.11 The Council normally commissions ecological advice on NSIP projects from AECOM. However in this case, AECOM are advisers to the applicant. Therefore the Council has agreed with Lincolnshire County Council (LCC) to share advice from LCC's in-house ecologist, alongside advice from NKDC's own specialist on BNG in particular. The LCC advice on the topic of ecology is attached at **Appendix B** to this LIR.

15.12 Overall, LCC's assessment is that the ecological information and assessments accompanying the application provide a reasonable summary of ecological interest features and likely significant effects, mitigation, and residual effects of the proposed development. Further detail is set out below.

Designated Sites

15.13 There are:

- no internationally important sites designated for biodiversity within 10km of the site – LCC agree with the submitted Habitats Regulations Screening exercise, which concludes that significant effects on European Sites is not

likely, and so there is no need to carry out a Habitats Regulations Assessment.

- two nationally important sites designated for biodiversity are within 5km of the site – LCC also agree with the applicant's findings that there will not be any adverse effects on these sites
- 29 non-statutory sites designated for biodiversity importance are either inside or within 2km of the site – two of which are Local Wildlife Sites (The River Witham, Aubourn to Beckingham LWS, and the Navenby Green Man Road Verges LWS), both of which would be crossed by cables installed for the development. LCC note that it is proposed to use trenchless methods to cross the River Witham; and soil storage and habitat restoration using locally sourced seed for the impacted length of the Green Man Road verges. These mitigation proposals are considered acceptable. LCC also advise that appropriate mitigation measures are proposed to protect LWS which lie adjacent to the proposed DCO boundary.

15.14 Consequently, it is concluded that as long as the proposed mitigation measures are implemented, there will be no significant effects on statutory or non-statutory designated biodiversity sites.

Habitats and species

15.15 The submitted Environmental Statement has identified a range of ecological impacts across the site clearance, construction, operation and decommissioning phases of the development. These potential impacts include both permanent and temporary damage to habitats; species mortality and disturbance; and the potential for causing the introduction or spread of invasive non-native species.

15.16 However, overall LCC agrees with the applicant that the proposed impact avoidance and mitigation measures (including the framework management plans) are appropriate and should be effective as long as secured in the DCO and control documents. These would include measures to protect ancient and veteran trees within and adjacent to the site (though see comments on trees under the headings of 'Biodiversity Net Gain' below, and 'Other Topics' later in this LIR). Also, three fields assessed as having particular value for scarce arable flora would be harvested to collect seed prior to construction. This seed would be used on of the margins of these and surrounding fields, and subsequently managed to encourage these species by creating favourable conditions.

15.17 Without mitigation, the proposed development has the potential to result in negative effects on the populations of a number of species / species groups. However, mitigation proposals have been identified to ensure there would be no harm to otters and water voles, both of which have been identified within the site. LCC have also suggested that detailed proposals for habitat mitigation and enhancement should take account of two notable butterfly species found within the study area.

15.18 The proposals have assessed potential impacts on the breeding birds present within the site, in particular ground-nesting species such as lapwing and skylarks. LCC welcome the Bird Mitigation Areas proposed, which would provide areas of 'permanent' (for the duration of the operation of the solar farm) grassland, and arable fields retained and managed with skylark refuges.

15.19 The applicant has identified the presence of 10 species of bats, including one which is nationally rare, and another which is rare in Lincolnshire. However, no adverse impacts of the development on bats have been identified, and it is acknowledged that steps have been taken to avoid and mitigate for harm through measures such as further pre-construction surveys. Nevertheless, the potential effects of solar farms on bats are not well understood currently. Given the importance and sensitivity of these species, it is recommended 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.

Cumulative effects

15.20 In terms of cumulative impacts, LCC agree with the applicant that if the proposed mitigation for this and other developments in the area is implemented in line with good practice, then there should be no additional adverse effects. However, it is noted that in its cumulative assessment tables, there is an empty row in the data for veteran and ancient trees which will need to be completed.

Biodiversity Net Gain (BNG)

15.21 The draft DCO has committed to measures designed to deliver minimum BNG of 30% in habitat units, 50% in hedgerow units, and 10% in watercourse units during the operation of the solar farm. The net gain would be based on the submitted Biodiversity Net Gain Report, and secured through among other things the detailed design and detailed Landscape and Ecological Management Plans.

15.22 However, NKDC's own ecological adviser has raised significant issues with the applicant's submissions on BNG. These issues include gaps and errors in information including in relation to:

Baseline

- survey methodologies
- condition assessments
- justification for the use of assumptions and significance multipliers
- confirmation that pre-application degradation has been considered
- failure to properly consider small areas of habitat within the Cable Corridor
- absence of information relating to the identification of ancient and veteran trees

Delivery of post-construction BNG

- Incorrect figures for habitat loss and replacement in the Metric
- A lack of clarity regarding the identification of the habitat type and condition for areas under the solar panels in relation to the single axis tracker option
- Failure to meet the BNG ‘trading rules’ for arable field margins lost to the development
- A lack of clarity on how hedgerows which are already in good condition will be enhanced by increasing distinctiveness

15.23 Other comments are made regarding the provision and management of buffers, for instance around areas of ancient woodland adjacent to the site; and for the creation and enhancement of grasslands.

15.24 Given that the development is proposed to advance in ‘parts’, a commitment is sought that all non-panel related habitat creation and enhancements are completed as part of the first phase of the development, and secured for the full proposed 60 period of the development.

15.25 On the basis of the advice from the Lincolnshire County Council ecological adviser, the Council concludes that, if the full suite of avoidance and mitigation measures are carried out effectively, the proposals would have a **negative** impact on ecology during the construction phase. If all of the proposed enhancements are delivered promptly and effectively, this adverse impact may prove to be short term, and has the potential to become instead a **positive** effect over the 60 year operational lifespan of the development.

15.26 However, as submitted and summarised above, there are a number of potentially significant omissions from the applicant’s BNG submissions meaning that the baseline metric and proposals cannot be accepted as accurate and sufficient at this stage. Until those concerns have been resolved satisfactorily (in accordance with Central Lincolnshire’s BNG guidance and national guidance), NKDC currently concludes that the proposals would have a **negative** impact in terms of BNG requirements.

16 Cultural Heritage

16.1 Section 5.9 of EN-1 states that the SoS should consider the impact of a proposed development on any heritage assets and that they should take into account the particular nature of the significance of the heritage assets and the value that they hold for this and future generations. This understanding should be used to avoid or minimise conflict between conservation of that significance and proposals for development.

16.2 In terms of archaeological assets, paragraph 5.9.21 states that where there is a high probability that a development site may include as yet undiscovered heritage assets with archaeological interest, then Requirements should be considered for the DCO to ensure that appropriate procedures are in place for the identification and treatment of such assets discovered during construction.

16.3 EN-1 expands the definition of heritage significance to acknowledge the contribution that can be made by setting (5.9.22) and sets out the approach (5.9.6) regarding non-designated archaeological heritage assets of demonstrably equivalent significance to Scheduled Monuments.

16.4 EN-1 also recommends that the applicant prepares proposals that enhance heritage significance and mitigate heritage harm, and considers whether the development effects will be direct, indirect, temporary or permanent. It further identifies a need to weigh any identified less than substantial harm to the significance of a designated heritage asset against the public benefits of the proposal (5.9.32).

16.5 CLLP policy S57 'the Historic Environment' requires development proposals to protect, conserve and seek opportunities to enhance the historic environment of Central Lincolnshire including through protecting the significance of heritage assets (including where relevant their setting), and taking into account the desirability of sustaining and enhancing non-designated heritage assets and their setting.

16.6 Continuing, the policy states that where a development proposal would result in less than substantial harm to a designated heritage asset, permission will only be granted where the public benefits, including, where appropriate, securing its optimum viable use, outweigh the harm. Finally, 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.

16.7 The area in and around the application site contains a large number of heritage assets, including statutorily designated Listed Buildings, Conservation Areas, and Scheduled Monuments; as well as non-statutory assets such as buildings on the Local List. The area also has significant potential to contain as-yet undiscovered archaeological resources.

Above-ground Heritage Assets

16.8 The Council is concerned at the pre-application approach taken by the applicant to the assessment of potential effects on some aspects of the heritage environment. There is disappointment at the low level of engagement with the Conservation team at the Council. Table 7-2 in Chapter 7 of the ES shows that the applicant's heritage advisers did not make contact to discuss concerns arising from comments made by the Council on this topic at both the PEIR Review and Scoping Opinion stages. The comments appear to have for the most part been disregarded, with instead a heavy reliance on coming to an agreed position with Historic England. Despite Table 7-3 recording engagement with NKDC at a meeting on 2nd November 2023, officers have not been able to establish who represented the Council heritage team at that meeting.

16.9 Furthermore, despite previous comments, a study area for non-designated assets extending to a distance of 1km from the site boundary, and 3km in the

case of designated heritage assets has been maintained despite requests for this to be extended to 5km.

16.10 These comments aside, the lists of assets scoped into the study for further assessment (set out in Table 7-9 of Chapter 7 of the ES) is generally acceptable; the potential effects on those assets has been sufficiently well considered; and the overall scheme design has ensured that the potential impacts of solar arrays on those assets has been appropriately limited. The remaining concerns are set out below.

16.11 The breadth of the chosen study area may have resulted in the lack of proper consideration of the setting of some listed buildings. It is noted that no assets outside the 3km study boundary appear to have been considered, with the exception of the setting and views of Lincoln Cathedral.

16.12 Further consideration should be given to the potential impacts of the development on some of the heritage assets during the operational stage - further assessment, and analysis should be undertaken, and a bespoke approach to mitigation developed as necessary. These assets are identified below:

- Morton Manor and Morton Grange (both Grade II Listed) – the setting analysis considers solar panels from a static position (measured from the heritage assets), but doesn't consider the movement in around the heritage assets, which also contributes to its setting. The approach towards the settlement of Morton from the A46 will be adversely affected by a solar array to the north-east of the road. This will change the currently open rural character and adversely impact on the setting of the listed buildings.
- River Farmhouse, Norton Disney (Grade II Listed) – the impact on the agricultural character and appearance of the farmhouse has been underplayed. Changes to the setting, including movement along Claypit Lane and views from within the site, should be incorporated into the assessment. Currently it is considered that this asset will experience a medium-high level of less than substantial harm.
- Grange Cottage, Aubourn (Grade II Listed) – the proposals will change the agricultural landscape in which the asset is appreciated. Currently it is considered that this asset will experience a medium level of less than substantial harm.

16.13 There are some inaccuracies within the detailed heritage assessment. For instance, Coleby Hall Registered Park and Graden is noted as being within 1km of the cable route, but is actually also within 3km of the principal site, as is the Coleby Conservation Area. The Council has also been unable to find reference to Househam Wood Farm, which appears to be a possible Non-designated Heritage Asset located at the Southeast corner of Househam Wood, together

with farm building at Househam Grange. The proximity of these properties to the solar arrays requires further consideration.

16.14 In summary the Council disagrees with some aspects of the methodology and conclusions of the assessment of the potential effects of the development on above-ground heritage assets. Further detailed assessment is required to ensure that the solar arrays do not have unacceptable adverse impacts on the setting of the heritage assets, including to ensure that any mitigation is bespoke considering the individual impacts, rather than employing a blanket bespoke mitigation as proposed.

16.15 In view of these conclusions, unless and until these deficiencies are addressed, the Council currently considers that there will be a **negative** impact on above-ground heritage assets as listed above.

Archaeology

16.16 The Council has an arrangement with Lincolnshire County Council for the provision of archaeological advice on behalf of NKDC. The Council supports the views of the LCC's Historic Environment (Infrastructure) Officer which are summarised below and set out in full in **Appendix C** to this LIR.

General approach

16.17 There is concern regarding the level of archaeological assessment undertaken to date. This concern is heightened given the range of developmental activities involved and their ground impacts including:

- heavy plant movements
- drainage works
- engineering works including piling
- cabling
- landscaping and ecological mitigation works such as soil inversion and deep-ripping of substrates to accept soil replacement.

16.18 Archaeology has been identified across the site, including some surviving at less than 30cm depth. This means that almost all ground works or plant movement have the potential to damage or destroy any archaeology which has not already been adequately evaluated or is the subject of mitigation measures appropriate to its significance. The large landscape scale of the development means that it is very likely that archaeology exists within the site but which has not yet been identified by the assessments carried out to date.

16.19 This means that areas of unknown potential should be the subject of adequate levels of evaluation in advance of the development commencing – otherwise further mitigation measures will be required to allow the archaeology to be investigated and recorded before the development (including site clearance) is allowed to commence.

Desk-based assessment and geophysical survey

16.20 As set out in the appended advice from LCC, assessment work to date has included a desk-based assessment and geophysical survey. However, geophysical survey of the land is incomplete. Unsurveyed areas will need to either be evaluated in more detail now; or subjected to stronger archaeological mitigation at a later date because their potential has not yet been established.

Trenching

16.21 An agreed Written Scheme of Investigation (WSI) forms Appendix 7-H to the ES chapter 2; and some targeted evaluation trenching is on-going as the first phase of that WSI. However, as set out in the appended LCC reply this provides only limited data in relation to identifying the presence, nature and significance of surviving archaeology within the site, and does not include trial trenches to explore areas where other techniques (such as geophysical survey) have not identified remains.

Conclusions

16.22 In short, the baseline of information is not sufficient to properly show how the assessments have supported the design of either the development or an appropriate archaeological mitigation strategy, as advised at section 3.1 of the EIA Scoping Opinion (APP-119). It is much preferred that sufficient trial trenching is undertaken across the full Order Limits to provide the essential baseline evidence to design a reasonable and fit-for-purpose mitigation strategy. Post-consent trenching leaves a high degree of risk, with the potential for archaeological works to impact the construction programme and budget.

16.23 The ES concludes that no significant residual effects on cultural heritage are predicted during the construction of the development. The Historic Environment (Infrastructure) Officer's view is that, based on the information gathered to date, this is incorrect. Potential buried archaeological remains have yet to be located, identified and characterised, as there is not yet sufficient baseline evidence for an informed understanding of the significance of surviving archaeology within the Order Limits. The worst case scenario at present is that currently unknown significant archaeology is destroyed without being recorded, contrary to national and local policy. In the absence of a full mitigation strategy informed by an adequate baseline, the construction measures proposed – including low-level piling and avoidance of key areas of archaeology when constructing the solar arrays - are considered insufficient.

16.24 Further examples of gaps in information relating to the different development activities, their potential adverse effects, and mitigation proposals are set out in the full response of the Historic Environment (Infrastructure) Officer at **Appendix C** to this LIR. Subject to these gaps in information being adequately addressed, the Council considers that the draft DCO wording for Requirement 11 would be appropriate and acceptable, should Fosse Green Energy be consented.

16.25 However, on the basis of the information supplied to date, the Council considers that there is a **negative** impact on below-ground heritage assets.

17 Rights of Way and Permissive Paths

- 17.1 The development has potential to impact the existing network of public rights of way and permissive paths in North Kesteven.
- 17.2 EN-1 advises that the Secretary of State '*... should consider imposing requirements to ensure the functionality and connectivity of the green infrastructure network is maintained in the vicinity of the development and that any necessary works are undertaken, where possible, to mitigate any adverse impact and, where appropriate, to improve that network and other areas of open space including appropriate access to National Trails and other public rights of way and new coastal access routes.*' (paragraph 5.11.24).
- 17.3 Paragraph 5.11.30 says the Secretary of State should expect applicants not just to take appropriate mitigation measures to address adverse effects, but also to consider opportunities to improve or create new access. The use, character, attractiveness and convenience of rights of way affected are highlighted as relevant considerations.
- 17.4 Section 2.10 of EN-3 makes a number of recommendations in relation to accessibility and public rights of way, advising that applicants should keep, as far as is practicable and safe, all public rights of way that cross the proposed development site open during construction and protect users accordingly (paragraph 2.10.41). They are also encouraged to minimise visual impacts for users; and to use the design the layout and appearance of the site to maximise opportunities to facilitate enhancements for public rights of way and inclusion. Such enhancements could include the adoption of new rights of way or the creation of permissive paths (paragraph 2.10.44).
- 17.5 CLLP policy S48: Walking and Cycling Infrastructure states that:

'Development proposals should facilitate active travel by incorporating measures suitable for the scheme from the design stage. Plans and evidence accompanying applications will demonstrate how the ability to travel by foot or cycle will be actively encouraged by the delivery of well designed, safe and convenient access for all both into and through the site. Priority should be given to the needs of pedestrians, cyclists, people with impaired mobility and users of public transport by providing a network of high quality pedestrian and cycle routes and green corridors, linking to existing routes and public rights of way where opportunities exist, that give easy access and permeability to adjacent areas.

Proposals will:

- a) *protect, maintain and improve existing infrastructure, including closing gaps or deficiencies in the network and connecting communities and facilities;*
- b) *provide high quality attractive routes that are safe, direct, legible and pleasant and are integrated into the wider network;*
- c) *ensure the provision of appropriate information, including signposting and way-finding to encourage the safe use of the network;*

d) encourage the use of supporting facilities, especially along principle cycle routes;

e) make provision for secure cycle parking facilities in new developments and in areas with high visitor numbers across Central Lincolnshire; and

f) consider the needs of all users through inclusive design. ‘

17.6 As set out in section 9 above, the Fosse Green energy solar farm is located in the Witham Valley Country Park (WVCP). Whilst the WVCP is not itself subject to a freestanding environmental designation (nor are impacts upon its role and function directly provided for in any policies of the CLLP), nevertheless it is notable for its number of accessible green spaces and contains a number of statutory and non-statutory ecological habitats and woodlands. This includes, within the Order Limits, Tunman Wood. The Council has identified that over the coming years the WVCP aims to connect green spaces into a unified network for active recreation, with new routes developed for walking, cycling, and horse riding, along with enhanced facilities for sports and leisure.

17.7 The application is accompanied by the following documents of particular relevance to rights of way and other walking paths:

- ES Chapter 12: Socio-Economics and Land Use ([AS-016](#))
- ES Chapter 13: Traffic and Transport ([APP-038](#))
- Framework Rights of Way Management Plan (Rev 1) ([APP-195](#))
- Framework Landscape and Ecological Management Plan ([AS-101](#))
- various figures including ES Figure 2-2 Public Rights of Way Plan (Rev 2) ([AS-020](#)) and ES Figure 3-3 Proposed Permissive Paths Plan (Rev 2) ([AS-024](#))
- the Streets Rights of Way and Access Plans ([APP-009](#))

17.8 ES Chapter 13 ([APP-038](#)) recognises the potential for a large number of rights of way to be affected during the construction and decommissioning phases. This is perhaps inevitable given the relatively spread out nature of the site, requiring construction access from a variety of points. However, the majority of rights of way will not require any diversions or closures, with 23 routes being affected to some degree, mostly having temporary diversions or construction route crossing controls. However, the following paths would be subject to permanent diversions:

- TOTH-13/1 – diversion of 164m in length, with no disruption to connectivity with other rights of way
- Aubo-13/1 – diversion of 434m in length, but less than 400m in addition to the existing route, with no disruption to connectivity with other rights of way
- ThuN-2/1 – diversion of 292m in length, but following a path commonly used in practice, so not considered different from existing route

17.9 In addition:

- a 128m length of path TOTH-12/1 will be used by construction traffic – which will be segregated from other path users
- paths TOTH-12/1, TOTH-12/2 and TOTH-12/3 will be used for emergency access if required during the operational phase
- parts of paths TOTH-12/3 and TOTH-7/2 would be used by site traffic during the operational phase, which will be segregated from other path users

17.10 Overall, the ES concludes that for the construction and decommissioning periods severance, pedestrian delay and user amenity impacts are assessed as being minor for five rights of way, and negligible for the remainder, and so are not considered to be significant – these are summarised in ES Appendix 13-C ([APP-165](#)).

17.11 ES Chapter 13 identifies existing permissive paths which might be affected. However, the Council has been unable to identify a plan showing where these existing permissive paths (numbered at paragraph 13.5.24) are located.

17.12 The application states that 9.5km of additional permissive paths are proposed, and proposals for these are described in some detail in section 6 of the Framework Landscape and Ecological Management Plan ([AS-101](#)). It is proposed to integrate rights of way and permissive paths with the design to provide set-backs between the paths and the solar arrays, and providing signage. Overall, the ES concludes that there would be a minor beneficial (though not significant) effect on users of public rights of way.

17.13 Some of these aspects of the scheme are welcome in principle, however:

- a) the Proposed Permissive Paths shown on Fig 3-3 ([AS-024](#)) are not secured beyond the duration of the operational phase of the development; and
- b) it is not clear from Figure 3-3 which of the paths are already in place, and which would be genuinely additional due to the development
- c) it is not clear whether existing permissive paths would be adversely affected by the construction and decommissioning phases
- d) a 5m separation either side of a path between solar arrays (10m width in total) may assist in reducing the “tunnelling” effect on views and user amenity, but is unlikely to remove it entirely.

17.14 The Council considers that despite the mitigation measures proposed, there will be some residual adverse effects on the rights of way network for users, particularly in terms of the amenity of routes over the 60 year duration of the operational phase of the development, when there will be substantial changes to the character of the surrounding landscape; and adverse impacts on views currently enjoyed by users during the operational phase.

17.15 The Council in large part defers to Lincolnshire County Council as highway authority for the whole of the statutory rights of way network across the county. However, the Council has identified a particular issue in relation to walking

routes which it promotes for a variety of reasons, including the economic (tourism) and health (active travel) benefits which they can help to deliver.

17.16 Over the past 20 years or so, the Council has developed the 'Stepping Out' network of 28 footpaths across the District. This network is promoted and maintained on the Council's behalf by a third party (Hill Holt Wood) to encourage public use.

17.17 The North Kesteven Active Travel Strategy 2025 - 2030 aims to increase participation in walking, wheeling and cycling by all. One of 3 'Priority Outcomes' of the Strategy is to 'Increase all residents' awareness of active travel and its associated health, wellbeing and environmental benefits'; and the proposed actions to implement this priority include:

Work with partners to further develop and extend our 'Stepping Out' routes with information for walking and wheeling.

17.18 The development would affect three of the Stepping Out routes, which, as above are also located within the WVCP, namely;

- Thorpe on the Hill and Tunman Wood – see Appendix E1
- Marton and Tunman Wood – see Appendix E2
- Bassingham Villages Circular – see Appendix E3

17.19 The main impacts would include disruption of use, noise and visual intrusion during the construction and decommissioning phases; adverse visual impacts during the operational phase. These impacts would likely involve interruption of longer, open and undeveloped views, replacing them with more urbanised and semi-industrial views of the landscape. Users would in some places be walking close to significant areas of solar panel arrays, and sometimes tunnelled along paths with panels on both sides. The Council suggests that all of this would negatively affect the user experience significantly.

17.20 These impacts would not only affect members of the local community, but also potentially visitors to the area who make a contribution to the local economy. Walking is identified as a key reason for visiting North Kesteven in the Council's Tourism Strategy 2024- 2029; and the promotion of walking routes is an action of the Council's Tourism Action Plan alongside being a noted priority for further enhancement as part of the WVCP. Research indicates that the target group most likely to visit North Kesteven have a preference for rural destinations with walking opportunities and a focus on natural beauty. The Council suggests that such users are likely to be particularly sensitive to the changes in the user experience along the Stepping Out walking routes and associated promoted sites within the WVCP.

17.21 The Council considers that the application submissions have not properly addressed the adverse impacts of the development on these three walking routes. The routes are not identified as recreational facilities within paragraphs 12.7.27 – 28 of ES Chapter 12: Socio-Economics and Land Use ([AS-016](#)). Paragraphs 12.7.29 – 12.7.34 do not appear to fully consider public rights of

way in terms of the local community or tourist user experience during the operational phase of the development.

17.22 In conclusion, the Council considers that there will be a net adverse effect on the users of the rights of way and permissive path network due to the development which has not been fully assessed or mitigated. This is not least because the assessments have not taken a fully holistic approach to consider the full range of amenity, recreation, health, and economic benefits of the existing provision. Further, opportunities to deliver enhancements to that network have not been properly identified or taken into account through the proposals. This is highlighted in relation to the Stepping Out walk network discussed above and the WVCP. Without prejudice the Council will be seeking additional measures seeking to mitigate these impacts, and make compensatory provision where necessary. These measures might include:

- Permanent dedication of routes which are currently proposed as temporary permissive paths as statutory rights of way – especially where these could close existing gaps in the footpath network
- Enhanced waymarking and information boards
- Improved surfacing, gates and stiles where appropriate
- Contributions to maintenance
- Assistance with promotional activities and guided walks

17.23 Therefore the Council considers that there is a **negative** impact on rights of way and other recreational paths arising from the development.

18 Water Resources and Flood Risk

18.1 Sections 5.8 and 5.16 of EN-1 focuses on flood risk as well as water quality and resources. In the decision-making process, the SoS should note that all activities that discharge to the water environment are subject to pollution control. Moreover, the SoS will '*...generally 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 Environment (Water Framework Directive)..*' (paragraph 5.16.12).

18.2 EN-1 also states that the SoS '*... should consider proposals to mitigate adverse effects on the water environment and any enhancement measures put forward by the applicant and whether appropriate requirements should be attached to any development consent and/or planning obligations are necessary.*' (paragraph 5.16.16).

18.3 Paragraph 5.8.6 of EN-1 notes that a key aim of planning policy is to steer development to areas with the lowest risk of flooding. Paragraph 5.8.7 of EN-1 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.

18.4 Paragraphs 5.8.9 and 5.8.10 confirm the requirement for the flood risk Sequential Test and (where applicable) the exception test to be applied, referring the reader to footnote 213 which is a link to Government guidance on the sequential approach to the location of development. Within that guidance, it is advised³ that the Sequential Test should be applied to development in areas of flooding, with limited exceptions.

18.5 NPPF paragraph 174 states that development should not be permitted if there are reasonably available sites appropriate for the development in areas with a lower risk of flooding. However, paragraph 175 states that:

'The sequential test should be used in areas known to be at risk now or in the future from any form of flooding, except in situations where a site-specific flood risk assessment demonstrates that no built development within the site boundary, including access or escape routes, land raising or other potentially vulnerable elements, would be located on an area that would be at risk of flooding from any source, now and in the future (having regard to potential changes in flood risk).'

18.6 In relation to this, the Government guidance states that:

'In applying paragraph 175 a proportionate approach should be taken. Where a site-specific flood risk assessment demonstrates clearly that the proposed layout, design, and mitigation measures would ensure that occupiers and users would remain safe from current and future surface water flood risk for the lifetime of the development (therefore addressing the risks identified e.g. by Environment Agency flood risk mapping), without increasing flood risk elsewhere, then the sequential test need not be applied.'

18.7 EN-1 confirms that the Exception Test should only be engaged where "... the Sequential Test has identified reasonably available, lower risk sites appropriate for the proposed development where, accounting for wider sustainable development objectives, application of relevant policies would provide a clear reason for refusing development in any alternative locations identified" (paragraph 5.8.10). The examples of such 'relevant policies' which would provide a clear reason for refusing potential alternative sites are those relating to landscape, heritage and nature conservation designations, for example National Landscapes, SSSIs and World Heritage Sites.

18.8 Paragraph 5.8.23 also states that *'All projects should apply the Sequential Test to locating development within the site.'*

18.9 Paragraph 2.10.60 of EN-3 also set out that applicants for solar generating stations will need to consider several factors when considering the design and layout of sites, including "... ability to mitigate environmental impacts and flood risk".

18.10 Paragraph 2.10.84 notes that where a Flood Risk Assessment has been carried out this must be submitted alongside the applicant's ES and will need to

³ Paragraph: 027 Reference ID: 7-027-20220825 Revision date: 17 09 2025

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*”.

- 18.11 Paragraph 2.10.154 also notes that 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*”
- 18.12 Paragraph 2.3.2 of NPS EN-5: ‘Electricity Networks Infrastructure’ expects electrical connection infrastructure to be resilient to the effects of climate change, including any increased risk of flooding.
- 18.13 CLLP policy S21 ‘Water Efficiency and Sustainable Water Management’ sets out that in addition to the wider flood and water related policy requirements contained in policy S21, all residential development or other development comprising new buildings with outside hard surfacing, must ensure such surfacing is permeable unless technical considerations dictate otherwise.
- 18.14 CLLP policy S14 ‘Renewable Energy’ supports proposals for renewable energy schemes, including ancillary development, where the direct, indirect, individual and cumulative impacts are or can be made acceptable, which with reference to point (i) includes flood risk, albeit there are no further references to flood risk under the ‘Additional matters for solar based energy proposals’ subheading.
- 18.15 CLLP policy S20 ‘Resilient and Adaptable Design’ requires design proposals to be adaptable to future social, economic, technological and environmental requirements in order to make buildings both fit for purpose in the long term and to minimise future resource consumption, including that they are resilient to flood risk, from all forms of flooding.
- 18.16 CLLP policy S21 ‘Flood Risk and Water Resources’ requires all proposals that are likely to impact on surface or ground water to consider the requirements of the Water Framework Directive and that with specific relevance to flood risk that they will be considered against the NPPF, including application of the sequential and, if necessary, the exception test.
- 18.17 Amongst other things proposals are required to demonstrate that they are informed by and take account of the best available information from all sources of flood risk and by site specific flood risk assessments where appropriate; that the development will be ‘safe’ during its lifetime taking into account the impacts of climate change, that flood defence integrity is not impacted, that wider scope for flood risk reduction has been considered and that where appropriate they have incorporated Sustainable Drainage Systems (SuDS).
- 18.18 Finally CLLP policy S59 ‘Green and Blue Infrastructure Network’ states that proposals that cause loss or harm to the green and blue infrastructure network will not be supported unless the need for and benefits of the development demonstrably outweigh any adverse impacts.
- 18.19 The applicant’s Site Selection Report used flood risk as a major component of its identification and evaluation of alternative locations which might connect to the proposed NGNS. It was concluded that none of the available sites solely in Flood Zone 1 would satisfy the main criteria for the development in terms of

factors such as size, regularity of shape and proximity to airbases. The site selection process also identified those potentially suitable sites which have already been taken up by other NSIP solar farm developers in the area – Springwell (awaiting a decision) and Leoda (not yet submitted for examination).

- 18.20 Once potentially available sites containing areas of Flood Zones 2 and 3 were included in the search, four candidates were identified for further assessment, including the current Fosse Green land (Site 9). Two sites (Site 6 Harmston, and Site 7 Bassingham Fen) scored a 'red' rating for flood risk due to the substantial areas of these sites within Flood Zone 3. Site 8 (Scopwick Heath – around Navenby, Boothby Graffoe and Wellingore in the west, and Scopwick and Ashby de la Launde in the east) does contain areas of Flood Zone 3 in its south eastern corner, but has no main watercourses, and received an overall 'green' rating for flood risk. This compares with the Fosse Green site, which contains some land within Flood Zones 2 and 3, including land forming parts of the floodplains of the River Brant and River Witham – leading to an overall rating of 'amber' for flood risk.
- 18.21 On this basis, it could be argued that Site 8 Scopwick Heath is sequentially preferred in terms of flood risk. However, there are some question marks over whether or not Site 8 is a reasonably available alternative, given that compared with Fosse Green it is more fragmented (less contiguous) and in multiple ownerships, both of which could impact the ability to deliver a viable project. Additionally, the policy framework in EN-1, NPPF and associated government guidance allows consideration of any site-specific Flood Risk Assessment findings when deciding whether and how the Sequential Test should be applied – this is discussed further below.
- 18.22 The submitted ES Appendix 9-C Flood Risk Assessment (FRA) ([APP-146](#)) has evaluated multiple sources of flooding and has identified that for flooding from rivers, the majority of the Principal Site is within Flood Zone 1, where there is a less than 1 in 1000 annual probability of flooding. The northern part of the site (from Thorpe on the Hill down to Haddington / Witham St Hughs) is almost entirely in Flood Zone 1, with the exception of a relatively small area of the site in the far west, near Morton which is within Flood Zone 2.
- 18.23 In the middle and eastern parts of the Principal Site areas of Flood Zone 2 and 3 are associated with the River Witham and River Brant floodplains.
- 18.24 Areas of Flood Zone 2 and 3 continue as the Cable Corridor progresses east, but the remainder of the route to the proposed NGNS is largely in Flood Zone 1.
- 18.25 Areas of medium and high risk of flooding from surface water are more scattered across the site, but most of the land within the Order Limits is at low risk.
- 18.26 The Flood Risk Assessment (FRA) ([APP-146](#)) notes that for flooding from rivers, almost all of the solar arrays would be located in areas of Flood Zone 1 land. For instance, the identified area of Flood Zone 2 near Morton in the north west of the site would not be used for solar panels or other above ground infrastructure, and instead is proposed to be retained in agricultural use.

18.27 However, the application proposals do include three fields of solar arrays which would be within Flood Zone 2 or Flood Zone 3a⁴. However, further assessment via the FRA concludes that the development in these locations would not itself be at risk of flooding, and would not increase the risk of flooding elsewhere. The FRA also indicates that confidence in this could be enhanced if single-axis tracker panels were installed, as these could be rotated to sit higher than the minimum 0.8m ground clearance.

18.28 No other above-ground infrastructure in the Principal Site is planned within Flood Zones 2 or 3 and as such the Council agrees that this does not raise significant issues of flood risk from rivers.

18.29 In terms of the risk of surface water flooding, despite the development adding impermeable surfaces such as the panels themselves, it is considered that in nearly all cases this would transfer to natural ground. Additionally, it is proposed to create a system of swales in solar array fields, which could further reduce flood risk from this source; and indeed could add some benefit in terms of surface water drainage as well as other benefits such as to biodiversity.

18.30 The submitted Framework Surface Water Drainage Strategy (ES App 9-D, [APP-147](#)) sets out what is proposed; and Requirement 10 in the draft DCO ([APP-016](#)) ensures that no part of the development can commence until full details of proposals for dealing with foul and surface water in that part have been submitted and approved by the lead local flood authority (Lincolnshire County Council). The Council agrees that the development is unlikely to increase the risk of surface water flooding over its operational life.

18.31 As described above, the Sequential Test seeks to direct development to areas of lowest flood risk which are reasonably available and suitable. The Site Selection Report did identify one potential alternative location (Site 8: Scopwick Heath) which had a lower, green rating for flood risk than the medium, amber rating for Fosse Green, though there are question marks over the suitability and deliverability of Site 8. The Planning Statement goes on to state that, when other competing constraints were taken into account, there were no alternative locations available in Flood Zone 1 within the site; and the use of the three fields within Flood Zone 2/3a is necessary in order to maximise the delivery of low carbon renewable energy ([AS-099](#), paragraph 6.3.71).

18.32 Taking the breadth of the policy framework and guidance into account, the Council concludes that the overall site selection process represents a reasonable and proportionate application of the Sequential Test, having:

- identified this site as one which is appropriate for the development and largely within Flood Zone 1;
- prepared a scheme layout which has largely avoided higher risk areas;
- prepared a scheme design that would remain safe for the lifetime of the development and not increase the risk of flooding elsewhere.

⁴ The submitted documents refer to the risk level of land variously as being Flood Zone 2 and Flood Zone 3a

18.33 However it is not entirely clear why the solar arrays proposed for the three fields in question are essential and/or could not have been placed on other land in Flood Zone 1. This same issue has also been raised by the Examining Authority (ExA) in relation to a small component of the Springwell solar farm (specifically in Springwell East) and where the ExA is essentially seeking removal of those panels from the project. It is noted and accepted that the arrays from these three fields in the Fosse Green scheme represent a very small proportion of the generating capacity of the site; however out of consistency of approach with the Springwell project the ExA might wish to satisfy themselves that sufficient justification for the siting of panels in the flood zone has been provided.

18.34 Notwithstanding this, the Council accepts that the development proposed on the Principal Site would not present an unacceptable risk in terms of flooding from rivers.

18.35 Parts of the Cable Corridor are also with Flood Zones 2 and 3. The Cable Corridor works are considered to be a low risk even in areas of Flood Zone 2 or 3 because these will be buried, with no above ground development once installed. The Council agrees that this does not represent a significant flood risk.

18.36 Sites involving development on higher flood risk areas may need to be subject to the Exception Test. As set out above, EN-1 paragraph 5.8.10 states that:

'The Exception Test is only appropriate for use where the Sequential Test alone cannot deliver an acceptable site. It would only be appropriate to move onto the Exception Test when the Sequential Test has identified reasonably available, lower risk sites appropriate for the proposed development where, accounting for wider sustainable development objectives, application of relevant policies would provide a clear reason for refusing development in any alternative locations identified. Examples could include alternative site(s) that are subject to national designations such as landscape, heritage and nature conservation designations, for example Areas of Outstanding Natural Beauty (AONBs), SSSIs and World Heritage Sites (WHS) which would not usually be considered appropriate.'

18.37 The Council considers that Sequential Test has been applied correctly, and (in flood risk terms) can deliver an acceptable site; that and no reasonably available, lower risk sites for the development have been identified. Clearly the ExA will need to satisfy themselves on this matter and with deference to the Environment Agency, the LLFA and the Internal Drainage Board where necessary.

18.38 Moving to the application of the 'Exception Test', the development proposed falls within the category of "Essential infrastructure", and so applying Table 3 in the NPPF leads to the conclusion that this project is appropriate in Flood Zones 1 and 2; and possibly appropriate in Flood Zone 3a, subject to the Exception Test being passed. The applicant has gone on to engage the Exception Test, which requires that:

- development that has to be in a flood risk area will provide wider sustainability benefits to the community that outweigh flood risk, and

- b. 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.

18.39 The conclusions on the applicant's use of the Exceptions Test are summarised in paragraphs 6.3.74 (and 6.3.75 of the Planning Statement. It is worth bearing in mind that the Council agrees that the level of flood risk presented by the development is small – this provides the overall context for the Exception Test.

18.40 The NPPG (paragraph: 036 Reference ID: 7-036-20220825) provides some examples of 'wider sustainability benefits to the community' and which could include:

- The re-use of suitable brownfield land as part of a local regeneration scheme;
- An overall reduction in flood risk to the wider community through the provision of, or financial contribution to, flood risk management infrastructure;
- The provision of multifunctional Sustainable Drainage Systems that integrate with green infrastructure, significantly exceeding National Planning Policy Framework policy requirements for Sustainable Drainage Systems;

18.41 None of the above appear to engage here and the NPPG does not expressly state that the supply of renewable energy from the development and consequent decarbonisation should be considered to be 'benefits to the community' in the context of the Exception Test, however ultimately this is a matter for the ExA to consider and apply. As set out above, the Council's view is that in principle the provision of permissive paths for the operational phase of the development could when taken in isolation represent a net benefit to the community – however this as mitigation which does not fully address the effects on the rights of way network. This might be addressed if enhancements to the Stepping Out network are proposed. Nevertheless, the Council does accept that there is the potential for some employment, economic and biodiversity benefits to be realised. Given the overall low flood risk posed by the development within the Principal Site, the Council accepts that this would be outweighed by these benefits.

18.42 In addition, the Council also notes the assessment of resilience of the arrays which would be placed in the higher flood risk fields in the event of flooding. Consideration should be given to installing single-axis tracker panels in these areas at the detailed design stage to increase this resilience. In conclusion, the Council considers that, subject to confirmation and clarification on scheme design issues, the development would have a **Neutral** on flooding.

Water Quality

18.43 No parts of the Principal Site is located in a Source Protection Zone. However, the Cable Corridor passes through a Groundwater Source Protection Zone 3 (SPZ3) and is above a Principal Aquifer. The Council notes that it is proposed to:

- apply precautionary measures when installing the cables, in line with the Framework CEMP ([APP-189](#));

- remove all cables in the SPZ and Principal Aquifer during decommissioning (ES Chapter 9: Water Environment, paragraph 9.4.9).

18.44 The Council also notes the comments of the Environment Agency (EA) in their Relevant Representation. Subject to satisfaction of the EA's concerns, the Council considers the risk associated with water quality are **Neutral**.

19 Access and Traffic

19.1 On matters of highway safety and management, the Council generally defers to Lincolnshire County Council who are the Local Highway Authority for the area. Nevertheless, the Council offers the following comments.

19.2 Paragraph 5.14.18 to 5.14.20 of EN-1 sets out the that the Secretary of State 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...

... 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 transport networks arising from the development ...

Development consents should not be withheld provided the applicant is willing to enter into planning obligations for funding new infrastructure or requirements can be imposed to mitigate transport impacts.'

19.3 With regards to mitigation, 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 (paragraph 5.14.14).

19.4 Section 2.10 of EN-3 makes a number of recommendations in relation to accessibility and public rights of way, noting 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. With reference to public rights of way, EN-1 advises that applicants should keep, as far as is practicable and safe, all public rights of way that cross the proposed development site open during construction and protect users accordingly. Applicants are also encouraged to design the layout and appearance of the site to ensure continued recreational use of public rights of way, where possible during construction, and in particular during operation, and to provide enhancements to public rights of way and the adoption of new public rights of way through the site. This matter is addressed above with reference to the Stepping Out walks.

19.5 CLLP Policy S47 'Accessibility and Transport' requires development to contribute towards an efficient and safe transport network and that proposals should demonstrate, where appropriate, that they have had regard to the need to minimise additional travel demand through the use of measures such as travel planning, safe and convenient public transport, walking and cycling links and integration with existing infrastructure. The policy also sets out that any development that has severe transport implications will not be granted planning permission unless deliverable mitigation measures have been identified, and arrangements secured for their implementation, which will make the development acceptable in transport terms.

19.6 As the Fosse Green development is spread out over a wide area, rather than on one concentrated site, there is no single point of access, and no bespoke main roadway from the public highway into the site. Notwithstanding this, it is proposed that during construction there would be one main construction compound, as well as a series of smaller, satellite compounds around the site.

19.7 This would involve a total of 19 access points around the site, along with an internal network of access tracks (involving upgrading of existing tracks where possible) to reach all parts of the development. For the Principal Site there would be four accesses on Haddington Lane, two accesses on each of Fosse Lane, Bassingham Road and Clay Lane, and one access on each off The Avenue, Stone Lane and Moor Lane. For the Cable Corridor there would be a further seven access points. These access provisions would require:

- works both within and outside the site to alter road layout, markings and signage;
- management of vegetation including some hedgerow removal;
- the closure of some existing field accesses (which would return to use after the development is decommissioned);
- temporary closures of some parts of local roads.

19.8 There will be no direct access off the A46, local roads will be used instead. During site operation, the above will be reduced to seven access points for maintenance; along with three accesses reserved for emergencies. Internal access tracks would be 6m in width from the public highway to construction compounds, to allow heavy goods vehicles to pass; and for the remainder generally 5m in width with passing places.

19.9 These measures are considered necessary to enable safe access during the construction, operational and decommissioning phases, including to facilitate large and wide load movements.

19.10 Chapter 13 of the ES ([APP-038](#)) considers traffic and transport effects. This has assessed the scheme on the basis of the construction phase being at the lower end of the anticipated duration, 24 months, so as to represent a 'reasonable worst case' scenario. It is predicted that there would be a daily peak of 575 construction workers travelling to and from the Principal Site – a shuttle bus would be used for the roughly 25 workers on the Cable Corridor to reduce impacts on local roads. There would also be a daily two-way trip peak of 25 LGVs and 50 HGVs associated with the Principal Site, and 12 LGVs and 16 HGVs for the Cable Corridor.

19.11 During the operational phase, it is anticipated that traffic would generally be much less intensive than during construction. Even during replacement of the solar panels (and possibly the BESS), management of these activities is expected to be only approximately 40% of the HGV activity and approximately 10% of car/van movements generated during the peak of initial construction.

19.12 The potential impacts of construction traffic are proposed to be dealt with through measures which will be set out in detail for each part of the scheme, in accordance with the submitted Framework Construction Traffic Management Plan (CTMP) ([AS-102](#)) and the Framework Construction Environmental Management Plan ([APP-189](#)). The CTMP would be used, for instance, to control the transport routes for HGVs visiting the development. Each part of the development would have to provide detailed decommissioning proposals (in accordance with the submitted Framework Decommissioning Environmental Plan ([APP-191](#))), which would include a Decommissioning Traffic Management Plan and a Decommissioning Worker Travel Plan to deal with effects at that time.

19.13 The ES concludes that the construction period impacts due to traffic and transport will be negligible or minor adverse and so not significant in EIA terms. The impacts during operation are assessed as 'negligible'. The ES states that the decommissioning phase is too far in the future to predict traffic flows at the present time.

19.14 The Council generally defers to Lincolnshire County Council as the local highway authority on matters of traffic and transport. However, it is noted that in their Relevant Representation, Lincolnshire County Council expressed general agreement with the methodology and assessment of traffic impacts set out in the ES; and indicated that the impacts on the road network would be acceptable, subject to the delivery of the mitigation measures proposed. On that basis the Council therefore concludes that the proposed development would have a **neutral** impact on access and traffic.

20 Noise and Vibration

20.1 Paragraph 5.12.15 of EN-1 states that developments should demonstrate good design through selection of the quietest cost-effective plant available; optimisation of plant layout to minimise noise emissions; and, where possible, the use of landscaping, bunds or noise barriers to reduce noise transmission.

20.2 The NPS also states that the decision maker should not grant development consent unless it is satisfied that the proposals will avoid significant adverse impacts on health and quality of life from noise, mitigate and minimise other adverse impacts on health and quality of life from noise and where possible, contribute to improvements to health and quality of life through the effective management and control of noise.

20.3 Moreover the decision maker should consider if mitigation methods are needed for construction and operational noise over and above any which may form part of the project application. The mitigation methods may include consideration of

layout to ensure adequate distance between source and noise-sensitive receptors; incorporating good design to minimise noise transmission through screening by natural barriers, or other buildings and administrative controls such as restricting activities allowed on the site including specifying acceptable noise limits.

- 20.4 EN-3 includes construction (including traffic and transport noise and vibration) as a specific factor to consider. The accompanying text does not however identify specific effects related to noise (aside from the volume of traffic potentially associated with construction activities).
- 20.5 CLLP policy S14 'Renewable Energy' supports the principle of new renewable energy schemes, including ancillary development, subject to the direct, indirect, individual and cumulative impacts on (inter alia) the amenities of sensitive neighbouring uses (including local residents) by virtue of matters such as noise, dust, odour, shadow flicker, air quality and traffic being satisfactorily addressed.
- 20.6 CLLP policy S53 'Design and Amenity' requires all development, including extensions and alterations to existing buildings, to achieve high quality sustainable design that contributes positively to local character, landscape and townscape, and supports diversity, equality and access for all. Under the 'Uses' sub-heading of the policy, this includes a requirement for development to 'not result in adverse noise and vibration taking into account surrounding uses nor result in adverse impacts upon air quality from odour, fumes, smoke, dust and other sources'.
- 20.7 In addition, the value of retaining trees and hedgerows in terms of reduced noise impacts from development is recognised in paragraph 11.7.2; the preface to CLLP policy S66 'Trees and Hedgerows'.
- 20.8 ES Chapter 11: Noise and Vibration ([APP-036](#)) looks at the potential noise impacts of the proposals across the construction, operation and decommissioning of the scheme, including effects from construction traffic moving to and from the site. Noise and vibration could result from a range of construction activities such as excavation and piling; horizontal direct drilling (HDD) to cross roads and watercourses. Operational noise could arise from maintenance activities, and the operation of equipment such as the BESS, transformers and the on-site substation.
- 20.9 A programme of noise monitoring was carried out to establish the baseline situation in the area and for potentially sensitive receptors, including residential properties. In looking ahead, the ES has assumed that although new developments in the area may lead to increases in the baseline, these are likely to be localised and not significant across the wider area of the proposals. Therefore the study assumes no change from these other developments, which represents a conservative approach to assessing impacts from the solar farm. The construction noise assessment does include allowance for the general growth in traffic - which provides the dominant noise source in the area - to the construction years (within 2031 – 2033). The construction noise assessment also assumes that all parts of the development are being constructed at the same time, whereas it is likely that a phased approach will be taken – this

therefore also ensures the noise assessment is likely to be conservative in its approach.

20.10 The ES takes into account the mitigation measures for noise and vibration which are embedded in the project. These include standard 'Best Practical Means' such as the use of modern, inherently quiet and well maintained plant and machinery; as well as routeing of traffic to avoid sensitive locations where possible. Another example is that 'percussive' piling works within 400m of residential properties would be limited to two periods of 4 hours between the times of 8am and 6pm each day, with at least one hour break in between. This is covered in the submitted control documents, including:

- Framework Construction Environmental Management Plan (fCEMP) - which requires development of a construction noise monitoring scheme)
- Framework Construction Traffic Management Plan (fCTMP)
- Framework Decommissioning Environmental Management Plan (fDEMP)

20.11 More detailed plans are required to be submitted and approved under these frameworks at appropriate stages of the development. Where noise generating activities are planned outside the core daytime hours, an application under s.61 of the Control of Pollution Act 1974 will be made, as these requirements have not been disappplied in the draft DCO. Particular attention will be paid in the detailed plans to measures associated with the HDD activities, which will not be finalised until a contractor has been appointed for this specialist activity.

20.12 During the operational phase mitigation includes careful plant selection, and the design of solar station, BESS and on-site substation equipment to minimise noise generation. The applicant has committed in the submitted Framework Operational Environmental Management Plan (fOEMP) that if the final location of noise generating plant in the detailed design is closer to sensitive receptors than the monitoring positions covered in the ES, then it will ensure that the noise levels are no higher than those predicted as part of the assessment.

20.13 The assessment also refers to community liaison as an effective way to limit the perception and increase tolerability of increased noise levels – for instance by warning residents when particular activities are planned to take place.

20.14 The ES concludes that vibration levels during construction are predicted to result in significant adverse effects at three receptors if driven piling is undertaken at a distance of 60m or closer:

- R26 - Grange Cottage, Bassingham Road
- R35 - Housham Grange, Newark Road
- R50 - 19 Park Crescent, Morton

20.15 The ES also identifies:

- One property (R35) which would be significantly affected by construction noise – though additional temporary noise mitigation screening could reduce this to below the Significant Observed Adverse Effect Level (SOAEL)

- No properties are significantly affected by the Cable Corridor construction activities
- No properties are significantly affected by plant during the operational phase (including the BESS, whether centralised or distributed)
- Decommissioning noise effects are likely to be similar in nature to those for construction; vibration from equipment such as vibratory rollers is unlikely to have any significant effects.

20.16 Noise from construction traffic is predicted to lead to at most minor adverse effects, which are not considered significant.

20.17 The Council's Environmental Health Officer has reviewed the submitted documents, and is satisfied that the noise assessment methodology, including background noise monitoring/receptor locations. The EHO also concurs with the findings of the assessment and notes that the largest residential area that could be impacted by noise levels is Auburn; but the noise impact assessment shows that the effects would fall into the Lowest Observable Effect Level category, and the predicted sound levels are relatively low.

20.18 The Environmental Health Officer notes that there are three receptor locations (as above) where there could be an impact from construction noise associated with piling after mitigation. However, this construction noise would be temporary, and it is considered appropriate to rely on 'Best Practical Means', to be secured through the detailed CEMPs.

20.19 The Environmental Health Officer is generally satisfied with the mitigation measures covered in the Framework Construction Environmental Management Plan, the Framework Operational Environmental Management Plan, and the Framework Decommissioning Environmental Management Plan. However, he does recommend working hours are brought into line with the Council's guidelines which state that:

'Generally, where residential occupiers can be disturbed, the following working hours should be adopted: 0700 to 1800 hours Monday to Friday and 0800 to 1300 hours on Saturdays with no noisy construction work Sundays or Public Holidays.'

20.20 On the basis that these hours of working are adopted, and the mitigation in the Framework Management Plans is implemented through more detailed plans, the Council considers that the impact of noise and vibration is **neutral**.

21 Climate

21.1 Section 4.10 of EN-1 addresses climate change adaptation in energy infrastructure development. It notes that the SOS should take the effects of climate change into account when developing and consenting infrastructure, referring also to the potential long-term impact of climate change.

21.2 EN-1 further states that new energy infrastructure will typically need to remain operational over many decades, in the face of a changing climate. Consequently, applicants must consider the impacts of climate change when planning the location, design, build, operation and, where appropriate, decommissioning of new energy infrastructure (paragraph 4.10.8).

21.3 The SoS should be satisfied that applicants for new energy infrastructure have considered the potential impacts of climate change using the latest UK Climate Projections available at the time the ES was prepared to ensure they have identified appropriate mitigation or adaptation measures. This should cover the estimated lifetime of the new infrastructure (EN-1 paragraph 4.10.13).

21.4 EN-1 notes the energy NPSs should speed up the transition to a low carbon economy and thus help to realise UK climate change commitments sooner than continuation under the current planning system.

21.5 EN-3 (paragraphs 2.10.65 and 2.10.149), requires the applicant to consider the design life of solar panel efficiency over time when determining the period for which consent is required. An upper limit of 40 years is typical, although applicants may seek consent without a time-period or for differing time-periods of operation.

21.6 CLLP Policy S11 'Embodied Carbon' requires schemes to reduce the development's embodied carbon content, through the careful choice, use and sourcing of materials. Policy S11 also requires applicants to demonstrate that they have considered options and opportunities for the use of lower embodied carbon materials; and which gains weight from 1 January 2025, with a further requirement to take opportunities to minimise embodied carbon.

21.7 CLLP policy S14 'Renewable Energy' sets out the position that renewable energy schemes will be supported where the direct, indirect, individual and cumulative impacts on the following considerations are, or will be made, acceptable. The criteria-based sections of the policy, including under the sub-heading of 'Additional matters for solar based energy proposals' are considered elsewhere in this LIR.

21.8 The supporting text to policy S14, at paragraph 3.3.4 sets out that in Central Lincolnshire, 'the aim of the Joint Committee that prepared this Plan is to maximise appropriately located renewable energy generated in Central Lincolnshire, as confirmed in Policy S14 below. The Policy sets no floor or cap on the scale of renewable energy targeted to be generated, preferring, instead, an approach which supports all appropriate proposals that meet the policy requirements set out.'

21.9 In addition, and with particular relevance to the BESS, paragraph 3.3.19 sets out that 'in order to support a move to a zero carbon Central Lincolnshire there is a need to move away from fossil fuels (gas, petrol, diesel, oil) towards low carbon alternatives and this transition needs to take place with increasing momentum in order to stay within identified carbon saving targets'. Continuing, it sets out that 'Energy storage including battery storage, consideration of existing and new electricity substations and energy strategies for large

developments are required to help support the future energy infrastructure needs for Central Lincolnshire'.

- 21.10 CLLP policy S16 'Wider Energy Infrastructure' notes that the Joint Committee is 'committed to supporting the transition to net zero carbon future and, in doing so, recognises and supports, in principle, the need for significant investment in new and upgraded energy infrastructure'. The policy offers support for proposals which are necessary for, or form part of, the transition to a net zero carbon sub-region, including energy storage facilities and upgraded or new electricity facilities (such as transmission facilities, sub-stations or other electricity infrastructure).
- 21.11 However, the policy caveats that any such proposals should take all reasonable opportunities to mitigate any harm arising, not only in terms of the appropriate locations for such facilities but also design solutions (cross referring to CLLP Policy S53) which minimises harm arising.
- 21.12 The 'green thread' running through the NKDC the Climate Action Plan (CAP) 2025 - 2026, the Climate Response Strategy (latest version July 2025), its Environment Policy, the NK Plan 24-27 and its Community Strategy is the Council's vision for a sustainable carbon reduction transition by 2030 for both North Kesteven District Council (NKDC) and the District of North Kesteven, supported by mitigation measures to reduce emissions and adaptation measures to improve resilience to the effects of climate change.
- 21.13 The Council's Climate Response Strategy is the corporate strategy for the Council's carbon reduction ambitions within North Kesteven. 'Aim 2' of the Climate Response Strategy is to:
'support the district of North Kesteven to move towards a 95% reduction in carbon emissions from energy compared to 2005 levels, by 2030, with offsetting and/or negative emissions technologies to be used only for the final 5% of emissions from hard to eliminate sources'.
- 21.14 ES Chapter 6 Climate Change ([APP-031](#)) assesses the lifecycle greenhouse gas (GHG) emissions arising directly from construction, operation (including maintenance and replacement) and decommissioning of the proposed development. It also assesses indirect GHG emission embedded in the materials used, transport, and wastes generated.
- 21.15 The ES concludes that construction will lead to emissions of GHG totalling 280,682 tCO₂e (tonnes of CO₂ equivalent). This includes among other things manufacturing of the panels and other equipment including inverters and BESS, and is assessed as being a minor adverse (not significant) effect, representing just 0.016% of the UK's carbon budget emissions. There would be a minor adverse effect in these terms during decommissioning, including waste activities, which would involve emissions of approximately 2,869tCO₂e.
- 21.16 The ES also concludes that overall there will be a significant beneficial effect through the operational phase when 19,438,499 MWh of renewable energy will be produced – leading to a net saving (compared to the national grid average

in 2025) of 3,302,906tCO₂e over the 60-year life of the scheme. The calculation of this net saving allows for emissions related to maintenance activities and planned replacements of solar panels and equipment during the operational phase.

21.17 Additionally, the applicant sets out that there will be carbon savings arising from the use of BESS of 2,242,089 tCO₂e over the lifetime of the scheme. Paragraph 6.4.76 of ES Chapter 6 states that '*as the lifetime generation figure of the BESS is significantly less than that of the Proposed Development, it is reasonable to assume that the battery will only store and discharge energy generated by the Proposed Development.*'

21.18 Therefore the ES concludes that there is a significant overall net benefit in climate change effects of the proposed development. The Council's Climate Change Manager is generally satisfied that the ES has taken an appropriate approach. The reference to carbon sequestration by soils and its role in providing soil stability during flooding events is welcomed – which further emphasises the imperative to ensure good soil handling and site management through the life of the development, in addition to the points highlighted in section 14 of this LIR.

21.19 It is recommended that the development should provide annual carbon reports of emissions produced and renewable energy generated, as best practice to ensure transparency in regard to how this proposal helps the national net zero/carbon reduction agenda and how this would be contributing over the 60-year period. This is especially relevant where it is recognised that the Greenhouse Gas assessments within the ES are dependent on the quality of data and in some cases estimates have a high degree of uncertainty built in.

21.20 Overall, the proposed methodology is reasonable and it is agreed that the proposal would have a **positive** impact in regard to meeting the Council's carbon reduction ambitions and the national net zero/carbon reduction targets.

22 Glint and Glare

22.1 EN-1 does not contain specific guidance on glint and glare in respect of solar farms. Paragraph 5.5.55 of EN-1 refers to the design of lighting in such a way that it avoids glare or dazzle to pilots and/or ATC and prevention of confusion with aeronautical lighting. Paragraph 2.10.159 of EN-3 states that '*... while there is some evidence that glint and glare from solar farms can be experienced by pilots and air traffic controllers in certain conditions, there is no significant evidence that glint and glare from solar farms results in significant impairment on aircraft safety.*'

22.2 At 2.10.102 of EN-3 states that '*Solar panels are specifically designed to absorb, not reflect, irradiation. However, solar panels may reflect the sun's rays at certain angles, causing glint and glare. Glint is defined as a momentary flash*

of light that may be produced as a direct reflection of the sun in the solar panel. Glare is a continuous source of excessive brightness experienced by a stationary observer located in the path of reflected sunlight from the face of the panel. The effect occurs when the solar panel is stationed between or at an angle of the sun and the receptor'. The main likely impacts of glint and glare would be on nearby homes, motorists, public rights of way and aviation infrastructure.

- 22.3 These points are reiterated in paragraphs 2.10.105 of EN-3, which also notes that glint and glare assessments should include consideration of whether fixed panels or tracking panels are proposed.
- 22.4 Policy S53: Design and Amenity, sub-section 8 (d) sets out that development proposals 'should not result in harm to people's amenity either within the proposed development or neighbouring it through overlooking, overshadowing, loss of light or increase in artificial light or glare'.
- 22.5 As identified in EN-3, Solar PV modules are specifically designed to absorb light rather than reflect it (2.10.158). Light reflecting from Solar PV modules results in the loss of energy output. Solar PV modules are dark in colour due to their antireflective coatings and are manufactured with low-iron, ultra-clear glass with specialised coatings and textures to enable maximum absorption. The combination of these factors significantly increases electrical energy production of the panels and at the same time significantly reduces reflected rays.
- 22.6 ES Appendix 14-D (parts 1-5) ([AS-092](#) to [AS-096](#)) addresses glint and glare, and is reported in section 14.3 of ES Chapter 14: Other Environmental Topics ([APP-039](#)). The assessment methodology takes into account that the solar panels proposed may be fixed south-facing, or single-axis trackers. Glint and glare at the construction stage was scoped out, with the assessment focussing on the operational phase.
- 22.7 The assessment identifies potential receptors; screens some out (for instance because the development would not be visible); and uses a geometric approach to examine whether a reflection could occur, and if so at what time of day, in relation to the location of direct sunlight which may in any case reach the receptor at that time. Finally, the assessment looks at the likely intensity of reflection, and comes to a conclusion as to whether or not there would be a significant detrimental effect in accordance with defined criteria. The assessment covers the possible impact upon key sensitive receptors comprising:
 - Residential receptors
 - Road and rail users
 - Bridleway users – as there is a safety element, and walkers will only be affected momentarily
 - Aviation receptors – bearing in mind the proximity of aerodromes in the area
- 22.8 Embedded mitigation measures to reduce the glint and glare impacts include:

- Location and design of the solar arrays
- Conserving vegetation patterns – such as retaining and managing trees and hedgerows
- New planting

22.9 Much of this mitigation is included in proposals contained in the Framework Landscape and Ecological Management Plan. The findings of the assessment are summarised below:

Residential Receptors: initial screening found that 178 of the 238 potential residential receptors could theoretically be subject to solar reflections. Taking into account actual local topography and broad scale screening, the ES found that glint and glare effects might be high at 11 receptors, and medium for 3 receptors – and low or negligible for the remaining receptors. Finally, taking into account screening such as field boundary hedgerows, overall impacts would be low for 36 receptors, and reduced to none for all remaining receptors. These results indicate that effects on residential receptors would be low or negligible, and therefore not significant.

Road Users: initial scoping identified 215 of the 217 potential road receptor points could theoretically be subject to solar reflections. Taking into account actual local topography and broad scale screening, the ES found that glint and glare effects might be high at 30 receptors, and low or negligible for the remaining receptors. Taking into account screening such as field boundary hedgerows, overall impacts would be reduced to none for all remaining receptors – concluding that effects on road users would not be significant.

Railway Operations and Infrastructure: initial scoping identified all 13 potential rail receptor points could theoretically be subject to solar reflections. Taking into account actual local topography and broad scale screening, the ES found that glint and glare effects would be reduced to none for all of these receptors. Therefore it was concluded that there would be no significant adverse effects.

Aviation activity: the Applicant has assessed the impact on 12 runway approach paths and control towers for RAF and private airfields. A number impacts were considered a possibility, but on detailed analysis, including consideration of hedges, trees, buildings, and ground elevation, the glare impacts were assessed as negligible or none. Overall, therefore it was concluded that impacts would not be significant.

Bridleway users: initial screening found that all of the 79 potential bridleway receptors could theoretically be subject to solar reflections. Taking into account actual local topography and broad scale screening, the ES found that glint and glare effects might be high at 65 receptors, and reduced to low for the remaining 14 receptors. Finally, taking into account screening such as field boundary hedgerows, overall impacts would be low for 10 receptors, and reduced to none for all remaining receptors. These results indicate that effects on bridleway receptors would be low or negligible, and therefore not significant.

22.10 Based on this assessment, no further mitigation measures have been recommended in the assessment. However, the Council has residual concerns that some of detailed assessments of residential receptors may have placed greater reliance on screening vegetation to mitigate potential glint and glare effects than is warranted.

22.11 The applicant identifies that mitigation is required due to the impacts found for residential receptors 97, 98, 101, 102, 148, 155, 157 – 160, 196 and 197, road receptors 13 - 16, 45, 78 - 80, 82 – 84, 98 – 104, 113, 144 - 148 and 177 - 182 and bridleway receptors 2 – 6, 8 – 11, 14 – 16, 27 – 38, 54 – 62 and 65 – 71 all being 'High' or 'Medium'. However, the precise locations of these receptors are difficult to identify owing to the level of mapping provided by the applicant which lacks clarity.

22.12 Therefore whilst on the basis of the ES the Council currently considers that the proposals would have a **neutral** impact in respect of glint and glare, nevertheless there appears to be a strong reliance on landscaping to mitigate impacts to a relatively large number of receptors; the locations of which are imprecise. The Council reserves the right to make further representations on this topic during the course of the examination, if necessary, once more detail is available and therefore a precautionary stance of '**negative**' may be more appropriate.

23 Socio Economics

23.1 Paragraph 5.13.9 of EN-1 states that the decision maker '*... should have regard to the potential socio-economic impacts of new energy infrastructure identified by the applicant and from any other sources that the Secretary of State considers to be both relevant and important to its decision*'. EN-1 goes on to say the decision maker '*... should consider whether mitigation measures are necessary to mitigate any adverse socio-economic impacts of the development*' (5.13.18).

23.2 EN-1 makes reference to an extended list of potential impacts to consider as relevant, including (at paragraph 5.13.4) creation of jobs and training opportunities, contribution to low-carbon industries, provision of additional local services and improvements to local infrastructure, any indirect beneficial impacts for the region, effects on tourism, impact of a changing influx of workers, and cumulative effects.

23.3 Furthermore, EN-1 also makes reference (5.13.7) to the need to consider development of accommodation strategies, if appropriate, to address any potential impacts during the construction and decommissioning phases. In addition, it also refers to the potential for the SoS to require the approval of an employment and skills plan detailing arrangements to promote local employment and skills development opportunities, and additionally consideration of solar and potential for associated socio-economic effects is referenced in respect of the potential for socio-economic benefits of the site infrastructure being retained after the operational life of solar photovoltaic generation.

23.4 CLLP policy S10 'Supporting a Circular Economy' recognises the high energy and material use consumed on a daily basis, and, consequently, is fully supportive of the principles of a circular economy. As such, proposals will be supported, in principle, which demonstrate their compatibility with, or the furthering of, a strong circular economy in the local area.

23.5 CLLP policy S20 'Resilient and Adaptable Design' requires design proposals to be adaptable to future social, economic, technological and environmental requirements in order to make buildings both fit for purpose in the long term and to minimise future resource consumption.

23.6 CLLP policy S28 'Spatial Strategy for Employment' requires employment related proposals to be consistent with meeting the overall spatial strategy for employment. The strategy is to strengthen the Central Lincolnshire economy offering a wide range of employment opportunities focused mainly in and around the Lincoln urban area and the towns of Gainsborough and Sleaford, with proportionate employment provision further down the Settlement Hierarchy.

23.7 The preface to the CLLP 'employment' policies notes at paragraph 5.1.2 that Central Lincolnshire is located within the Greater Lincolnshire Local Enterprise Partnership (GLLEP) area and represents roughly 30% of the GLLEP area's population, employment and business base. Greater Lincolnshire has an economy of £20.7bn with an ambition to grow the Gross Value Added (GVA) by £3.2bn by 2030, and boasts a mix of traditional manufacturing, a comprehensive agri-food sector, energy and services, and is strong in health and care and the visitor economy.

23.8 ES Chapter 12: Socio Economics and Land Use ([AS-016](#)) states that the construction phase is anticipated to require a peak of 600 direct full time equivalent (FTE) employment jobs on site per day, with an average of 350 FTE over the 24 – 30 months. Some workers will come from outside of the area, and there will be some displacement of related jobs in the Study Area. On the other hand, there is anticipated to be a multiplier effect whereby further economic activity associated with the additional local income, supplier purchase and longer-term development effects will occur.

23.9 No significant impacts on hotels, bed and breakfast and other similar accommodation business are anticipated during construction. Overall, it is anticipated that the development will support, on average, 394 total net jobs per annum during the construction period. Of these, 177 jobs per annum will be expected to be taken up by residents within the Study Area. This job creation and the resultant Gross Added Value (GVA) of £27.4m - £12.3m of which would be in the local area – is considered to be a minor beneficial effect, but not significant.

23.10 During the operational phase, the ES anticipates that the development will generate four direct jobs in maintenance. The ES reports that landowners involved in the scheme expect no overall job losses from the use of the agricultural land, with additional revenues diverted to support diversification. This is considered to be a neutral and not significant effect. Employment effects

during the decommissioning phase are anticipated to be similar in nature to the construction phase, though at a lower level – assessed as minor beneficial and not significant, even allowing for the loss of the four direct operational jobs on site.

23.11 The Council broadly agrees with the assessment provided in the ES Chapter on Socio-Economic effects. It is agreed that the economic impact of the construction phases in terms of direct employment will be minimal and that the jobs created will be temporary, the majority imported due to low levels of unemployment in North Kesteven.

23.12 Despite the lack of significant economic effects, the application includes a Framework Employment, Skills and Supply Chain Plan (fESSCP) ([APP-197](#)) has been submitted. Draft DCO Requirement 19 requires the submission of detailed ESSCP for each part of the development. The fESSCP identifies opportunities across three main themes:

- Development of Skills
- Access to Employment
- Supporting the Supply Chain

23.13 Actions would include provision for training, recruitment to priorities local employment, and apprenticeships. However, the fESSCP does not mention funding.

23.14 The Council considers that the fESSCP requires a financial contribution to enable its delivery. The relatively consented Longfield and Heckington Fen DCOs were subject to s106 Agreements which provide for a £50,000 index-linked payment per annum (in the case of the latter) for increasing employment, education and skills opportunities in the local areas for individuals in the renewable energy, sustainable farming/agricultural diversification, ecology and sustainable development sector and which may include the provision of training and apprenticeships and education bursary payments. The Council seeks a similar contribution for the Fosse Green Energy DCO, which is also in line with its approach to the Springwell and Beacon Fen Solar DCO examinations and where this contribution will be secured via a s106 Agreement (at an advanced stage of preparation) in relation to the former. The Council will raise further points regarding the fESSCP in its Written Representations.

23.15 Despite the ES finding that there will be no adverse effects in relation to tourism – including on the availability of serviced visitor accommodation across the District - the cumulative impacts of a number of NSIP and other TCPA solar projects in North Kesteven is of concern to the Council. Tourism is a key growth sector for the District and a significant net contributor to the local economy worth £201m and growing just over 5% in 2023. One of the Council's Tourism Strategy's aims is to continue to increase the length of visitor stay and thereby expenditure, while at the same time reducing emissions by cutting the volume of day trips. In order for this goal to be achieved there is a need to increase the volume of serviced accommodation in the District, which both STEAM (a

tourism economic modelling tool) and the Council's own recent Hotel Study (2024) show are insufficient to meet current, let alone future, levels of demand. There are shortages at key times of the year. Any upside in construction worker spend will potentially be cancelled out by loss of visitor numbers and therefore visitor spend in the District with additional direct impacts on visitor attractions.

23.16 The Council have already commented on the potential effects on the Stepping Out Network of walking routes earlier in this LIR. The Council regularly monitors the footfall on the Stepping Out Network while visitor numbers are captured by STEAM. Longer-term impacts on the attractiveness of significantly changed rural landscapes to visitors may be adverse in nature.

23.17 The Council has further key areas of concern for the local economy, specifically:

- **The cumulative impact of land take on the Agri food sector locally both in terms of Food Security and land use:** It is possible that a significant proportion of land in the District (up to 10% of the total area of NK - roughly 100,000ha) will be given over to NSIP solar energy production. Agriculture accounts for 90% of land use in the District and so the impact will be proportionately greater. Impacts on the agri-food sector and its supply chains are considered relevant here. The 'de facto' replacement of agricultural production with energy generation may have far-reaching impacts on the local economy, GVA, skills, future land values as well as more generally countywide in the construction and agri-food sectors. The move towards the 'monetisation' of the environment and biodiversity suggested by subsidy regimes and Biodiversity Net Gain legislation will allow the value of land and its potential outputs to be measured in different ways. Solar energy generation (in lieu of agricultural production) to drive profitability, productivity, or resilience both alongside and instead of primary agricultural production should therefore be considered.
- **Aggregating direct economic benefits:** North Kesteven has a nationally significant role in feeding and defending the nation. In the future, mindful of the number of projects being proposed, it may have a similarly significant role in powering the nation. The value of the electricity produced could be of considerable direct economic benefit over time to impacted businesses and communities, the wider District and Greater Lincolnshire. Given that the Council is concerned with measuring the cumulative impacts of NSIP developments, it is logical to explore the case for aggregating the cumulative financial benefits of a large number of such schemes in order to assess the potential to contribute to strategic economic and socio-economic goals, particularly in respect of green infrastructure growth, carbon reduction and the building of green capital in the rural economy.
- **Future Energy needs:** Solar Farms typically have a lifespan of 25-40 years, and Fosse Green is proposed to be operational for 60 years. This

raises questions about how decommissioning could be staggered across the Grid and how energy produced will be replaced if output is to be maintained and what will the land take be in 60 years' time given that energy demands are likely to increase.

- 23.18 In conjunction with the cumulative impacts on footpaths across North Kesteven from other large scale solar farm developments, the Council considers that there is potential for the change in the landscape from predominantly agricultural to solar energy generation which will have an unforeseen effect on the attractiveness of the District for walking and hence on the tourism economy, as well as the health of local residents.
- 23.19 Given the commitment to improving skills, employment and the local supply chain and provision of a new permissive path but potential adverse cumulative impacts on the tourism economy and visitor accommodation, the Council considers the overall socio-economic impacts of the development to be **neutral**.

24 Air Quality

- 24.1 Paragraph 5.2.16 of EN-1 states that '*The Secretary of State should give air quality considerations substantial weight where a project would lead to a deterioration in air quality. This could for example include where an area breaches any national air quality limits or statutory air quality objectives. However, air quality considerations will also be important where substantial changes in air quality levels are expected, even if this does not lead to any breaches of statutory limits, objectives or targets.*'
- 24.2 In all cases the decision maker must take account of any relevant statutory air quality limits (5.2.19).
- 24.3 The UK Air Quality Strategy (AQS) identifies nine ambient air pollutants that have the potential to cause harm to human health and two for the protection of vegetation and ecosystems. The AQS defines objectives for these pollutants that aim to reduce the impacts of these pollutants to negligible levels. The objectives are not mandatory but rather targets that local authorities should try to achieve.
- 24.4 CLLP Policy S14 'Renewable Energy' states that whilst renewable energy scheme will be supported, this is subject to an assessment as to whether the impacts are acceptable on the amenity of sensitive neighbouring uses (including local residents) by virtue of matters including dust and air quality.
- 24.5 CLLP Policy S53 'Design and Amenity' requires that all development will not result in adverse noise and vibration taking into account surrounding uses nor result in adverse impacts upon air quality from odour, fumes, smoke, dust and other sources.

24.6 The quality of the air at the site is generally good, based on the review of North Kesteven District Council air quality monitoring data, and there is not a designated Air Quality Management Area declared within the District.

24.7 The NKDC Air Quality Strategy 2024 to 2029 confirms that historically, air quality within North Kesteven has complied with the AQS objectives, with no exceedances of the NO₂ annual mean reported in the last five years. Therefore, due to this consistent compliance, no AQMA's have been declared and no AQAP has been published. The Strategy does however confirm the Council's commitment to taking actions that improve air quality to further reduce, and mitigate, pollution concentrations to ensure that no exceedances arise within the District in the future.

24.8 Air Quality is addressed as a section of ES Chapter 14: Other Environmental Topics ([APP-039](#)). Following EIA scoping, the focus of the assessment is mainly concerned with the potential effects of dust emissions during the construction and decommissioning phases of the development, including traffic. ES Chapter 14 is accompanied by Appendix 14-B Dust Risk Assessment ([APP-169](#)), which identifies receptor locations and zones of influence on Figure 14-1 Dust Risk Assessment Zones ([AS-075](#)). Sensitive receptors include residential locations, public rights of way and ecological sites.

24.9 The ES finds that existing dust levels around the site are typical of an agricultural area. The assessment identifies the following potential risks during construction:

- Dust soiling - medium risk from track out (vehicle movements), but low risk from earth works and construction activities.
- Human health – medium risk from trackout (vehicle movements), but low risk from earth works and construction activities.
- Ecology – Low risk from all sources

24.10 Using a conservative approach, the overall risk level is assessed as 'Medium Risk' for dust effects, mainly associated with trackout. This emphasises that mitigation measures embedded in the design centre around standard good site practices set out in the Framework Construction Environmental Management Plan ([AS-102](#)) need following, with particular attention to measures such as road sweeping and dampening access routes in dry weather. With this mitigation in place, the impact of the construction phase in terms of dust is assessed as 'negligible', and not significant. This would need to be followed through during the operational phase, including periods of panel replacement, via the detailed proposals which will be submitted for each part of the development, in line with the submitted Framework Operational Environmental Management Plan ([APP-190](#)).

24.11 Dust effects during decommissioning are anticipated to be similar in nature, though likely smaller in magnitude, to the construction phase. The submitted Framework Decommissioning Environmental Management Plan (fDEMP) and draft DCO require that detailed DEMPs are submitted for approval prior to decommissioning of any part of the development; and the fDEMP states that a Dust Risk Assessment and Dust Management Plan should form part of DEMPs.

24.12 The Council's Environmental Health Officer is satisfied with the assessment methodology, receptor locations and findings of the ES in relation to air quality. On the basis of the proposed mitigation measures are successfully implemented, the Council considers that the effects of the development in relation to air quality are **neutral**.

25 Other Environmental Topics

25.1 In addition to the issues of air quality, glint and glare which are covered above, ES Chapter 14: Other Environmental Topics ([APP-039](#)) covers other topics including Ground Conditions; Materials and Waste; Major Accidents and Disasters; Telecommunications, Television and Utilities; Electric and Electromagnetic Fields (EMF). In addition, arboriculture is covered to some extent in Chapter 10: Landscape and Visual Amenity, but the Council has set out its thoughts on this particular topic in this section of the LIR.

25.2 **Arboriculture:** The Council's Tree Officer has considered the submitted documents which relate to the impacts on, planting and management of trees and hedgerows affected by the proposals. These include:

- ES Appendix 10-H Arboricultural Impact Assessment ([APP-155](#))
- Framework Construction Environmental Management Plan ([APP-189](#))
- Framework Operational Environmental Management Plan ([APP-190](#))
- Framework Landscape and Ecological Management Plan ([AS-101](#))

25.3 The application does not propose the removal of any ancient or veteran trees, or any trees subject to Tree Preservation Orders, or any ancient woodland. Overall the Tree Officer is satisfied that the submitted documents provide good protection for trees and hedgerows whilst allowing the development to proceed. However, it is requested that:

- a) Details of the assessments of the ancient and veteran trees identified as being within and adjacent to site are provided. This will assist both in future monitoring of tree impacts, and in assessing the correct baseline for the Biodiversity Net Gain calculation (see section 15 of this LIR).
- b) The dDCO or project commitments are amended to require that 14 days notice is given of any works proposed to any tree which may become subject of a new TPO during the 60-year lifespan of the development (see section 27 of this LIR)

25.4 **Ground Conditions:** section 14.4 of ES Chapter 14 covers ground conditions, including geology, hydrogeology and contamination issues. The ES concludes that, subject to good site construction and operation management, there would be no significant effects on ground conditions. However, this does not appear to address issues related to the handling and storage of waste materials at the decommissioning stage. The Council raises a concern regarding potential contamination from solar panels during decommissioning particularly if they are damaged and stored during this phase.

25.5 The Council recommends that a schedule of the condition of the land is prepared prior to decommissioning works being commenced. This should include some soil testing comprising a Phase II contaminated land assessment after decommissioning is completed and before the site is returned to agricultural use. Intrusive sampling can be carried out to determine the risk, from which remediation and verification (if needed) can be carried out to address any concerns.

25.6 **Waste Management:** the Council defers to the views of Lincolnshire County Council as the relevant Waste Planning Authority. The Council requests that the outline Decommissioning Management Plan includes a protocol for the disposal of solar panels. The Council would support an additional Requirement to fix the replacement rate of solar panels and other equipment to that set out in the DCO application.

25.7 **Major Accidents and Disasters:** Paragraph 1(8) of Schedule 4 to the EIA Regulations requires consideration to be given to the risks of major accidents and disasters but does not include a definition of these terms. The regulations, however, specifically refer to effect on human health. On this topic, the Council is principally concerned with the BESS and fire safety.

25.8 EN-1, EN-3 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.

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

25.10 Part (7) of CLLP policy S53 'Design and Amenity' requires development to avoid adverse impacts associated with noise, dust and air quality, and part (9) requires schemes to minimise the need for resources both in construction and operation of buildings and be easily adaptable to avoid unnecessary waste production.

25.11 CLLP policy S54 seeks to ensure that where any potential adverse health impacts are identified the developer will be expected to demonstrate how these will be addressed and mitigated.

25.12 In 2023 the National Fire Chiefs Council produced 'Grid Scale Battery Energy Storage System planning – Guidance for FRS' (Fire and Rescue Services), an update for which was published in draft form for consultation in summer 2024. A final version of the update is expected to be published this year, but for the time being the 2023 guidance remains in force. The 2023 guidance applies only to grid-scale BESS which use Lithium-ion batteries.

25.13 In addition, in light of the rapidly growing volume of BESS facilities across the country, it has been recognised that appropriate health and safety standards are required and in recent years, new guidance has been emerging. In March 2024, the guidance document 'Health and Safety in Grid Scale Electrical Energy Storage Systems' was published on behalf of the Department for Energy

Security and Net Zero. In August DEFRA carried out a consultation on integrating grid-scale battery energy storage systems into the Environmental Permitting Regulations, to determine whether more robust regulatory and operational oversight is required. The results of that consultation area awaited.

25.14 To date, the applicant has identified two options for the BESS with no current commitment either way, namely;

- Work No. 2: a single, centralised, BESS - likely AC-coupled, and which would be located in a compound near to the site of the on-site substation; or
- Work No.3: a distributed BESS - DC-coupled, co-located in individual solar station compounds located close to the panel arrays, each of which would accommodate smaller BESS units.

25.15 The applicant has submitted a Framework Battery Safety Management Plan (FBSMP) ([APP-198](#)); and Design Approach Document contains Design Principle 11:

'The Proposed Development will ensure that battery safety is managed through appropriate siting away from sensitive receptors and ensuring the inclusion of embedded design mitigation (FBSMP) measures to minimise risks.'

25.16 The FBSMP is intended to form the basis for a final BSMP, to be submitted and approved prior to commencing either at the centralised BESS (Work No.2) or the distributed BESS (Work No.3). Currently, the BESS is anticipated to include approximately 328 battery enclosures – either centralised or distributed across the site – however the final number of enclosures is not set. The FBSMP states that for the centralised BESS, the closest offsite structure is approximately 790m from the BESS enclosures. For the distributed BESS, the closest residential off site structure would be required to be a minimum of no closer than 200m (see Development Parameters ([APP-187](#)) – though the Council has not yet identified this Parameter). It is stated that these distances exceed the recognised separations for explosion debris impacts and evacuation of buildings.

25.17 The FBSMP argues that the design of the internal layout of the BESS elements, and their relationships to other infrastructure within the site will also ensure safety standards are maintained. Other provisions include fire suppression water storage tanks at the BESS site; and each BESS enclosure would have its own heating, ventilation and air conditioning system. The Council notes that Lincolnshire Fire and Rescue Service (LFRS) have been consulted and the relevant legislation has influenced the proposal design.

25.18 Paragraphs 14.6.45 onwards in ES Chapter 14 assess the potential for fire related to the BESS element of the development; and references the FBSMP, together with Appendix 14-G: Unplanned Emissions Assessment ([APP-176](#)), which assesses the proposed BESS for smoke and toxic gas hazards in the event of a thermal runaway incident and fire. The ES concludes that, with the previously discussed mitigations in place, significant risk of fire is unlikely.

25.19 The Unplanned Emissions Assessment concludes that even if a large scale fire were to break out (which it considers unlikely), "... hydrogen fluoride

concentrations at the closest receptors would be below the levels that UKHSA has identified as resulting in notable discomfort to members of the general population’ (paragraph 4.1.7). Section 5.1.5 of the FBSMP makes a commitment to undertake a further unplanned emissions assessment at the detailed BESS design stage to demonstrate that the impacts associated with an unplanned fire would not exceed the effects outlined in the Unplanned Emissions Assessment or cause any significant adverse health effects to the local community.

25.20 Notwithstanding these separation distances and design aims, the Council has strong concerns about the potential risk to human health arising from fire related accidents at BESS developments. The ES notes that there are several battery storage technologies available to system designers, and the exact technology and system will be determined at the detailed design stage. The applicant states though that for the purposes of preparing the FBSMP, the use of Lithium Iron Phosphate (LFP) cells is assumed, a popular type of chemistry within the lithium-ion battery type, and used on other sites being developed in the UK market. The applicant suggests that this is a ‘reasonable worst-case’ scenario for the purposes of evaluating BESS toxic gas emission and explosion risk (which can result from ‘thermal runaway’ leading to fire).

25.21 The degree to which the Planning Act (2008) can compel what is essentially and ultimately a matter of customer choice in relation to battery technology is unclear. Section 105 of the Planning Act (2008) requires SoS decisions to have regard both to ‘any local impact report’ and ‘any other matters which the Secretary of State thinks are both important and relevant to the Secretary of State’s decision’. The scope of material planning considerations is wide and must have a planning purpose that relates to the character and use of the land, and it must fairly and reasonably relate to the proposed development under consideration.

25.22 In that regard the Council’s view is that the ‘perception of harm’ to public amenity, safety and wellbeing associated with an incident at the BESS is capable of being a material planning consideration. As such the Council consider that there is a need to consider the battery type proposed within the BESS as part of the requirement to agree the BSMP in view of the changing market trends and the need to minimise the impact on human health following any major accident or disaster, and the ‘perception of harm’ to public amenity, safety and wellbeing as a material planning consideration.

25.23 Research suggests that LFP cells have an advantage over other lithium-ion chemistries in relation to thermal and chemical stability, which improves battery safety, as well as having a higher charge/discharge cycle life. The Council will defer to comments from LFRS to be provided as part of LCC’s LIR and also advise the ExA to have regard to advice from the UK Health Security Agency (UKHSA). However, the Council’s view is that the ExA should consider this BESS safety issues through the Examination, including the selection of batter technology type.

25.24 Currently, the Council considers that there would be a **negative** impact as a result of fire safety risk on human health until it has been confirmed that all of LFRS’s requirements are agreed; including securing a monitoring contribution through the DCO.

25.25 **Utilities Telecommunications and Television Reception:** no comments

25.26 **Human Health:** comments have been made in respect of air quality, noise and vibration, climate change, BESS safety and socio-economics above. The Council would also defer to the views of Lincolnshire County Council in respect of public health more generally.

25.27 **Electromagnetic Fields:** no comment

25.28 **Health and Safety Executive (HSE):** no comment on presence of Major Accident Hazard Pipeline and defer to the views of the HSE.

25.29 **Extended Period of Outage:** In line with another DCO decision in North Kesteven (Heckington Fen solar farm) and a DCO that has recently completed examination (Springwell Solar Farm), the Council suggests that provision is made for periods of extended outage. In line with the provision made within Heckington Fen solar farm outline Operational Environmental Management Plan (oOEMP), the Council suggests that such a provision would cover a situation whereby, should the development stop generating electricity for a continuous period of 12 months for non-maintenance reasons, the applicant would be required to provide details on the steps it is taking to rectify the issue along with an expected timeframe for when generation is predicted to re-commence operation.

25.30 The Council does not anticipate that the provision would be triggered by a force majeure event or if the outage occurred as a result of the National Grid undertaking any activities to the connection substation and/or transmission network. The Council would welcome discussions with the applicant on this matter as to whether this should be included in the Framework Operational Management Plan, the Framework Decommissioning Management Plan, or as an additional Requirement in the DCO.

25.31 Also, it is not clear to the Council that provision has been made within the applicant's Funding Statement ([AS-014](#)) for decommissioning nor an extended period of outage. The Council consider that funding for decommissioning is not suitably addressed within the draft DCO. The Council notes that the submitted Funding Statement, while it may be adequate for compulsory acquisition purposes, does not include evidence for the funding of decommissioning. The scheme thus does not provide sufficient security that decommissioning could and would be funded by the applicant. Consequently, the Council would support an additional Requirement requiring the provision for funding (by way of a bond or other form of security) for decommissioning both as a result of an extended period of outage and at the end of the lifespan of the development.

25.32 This matter is considered particularly important given the extended, 60-year operational lifespan for the development sought in the application. The Council would draw the ExA's attention to the following NSIP examples where this matter has been considered:

- **Helios Renewable Energy Project (under Recommendation):** p37 of the draft DCO, Requirement 5(3) includes provision for notification to the local planning authority that the undertaker has put in place the

requisite decommissioning security. This was required as the Funding Statement did not include provision for decommissioning funding.

Requirement 5(3) states '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.'

[EN010140-001078-3.1 Draft Development Consent Order \(Clean\).pdf](#)

- **Oaklands Farm Solar Park (determined):** p8 paragraph 4.22 of the SOS's decision letter 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 not suitably covered within the 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.

[Decision Letter - Oaklands Farm Solar Park - 19.06.2025](#)

25.33 The Council considers that there would be a **negative** impact on the landscape until the provisions are made for unexpected cessation of energy generation and decommissioning are made as part of the DCO; including through an amendment to the Funding Statement.

26 Cumulative Effects

26.1 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.*'

26.2 EN-1 states at paragraph 4.1.5:

'In considering any proposed development, in particular when weighing its adverse impacts against its benefits, the Secretary of State should take into account:

- *its potential benefits including its contribution to meeting the need for energy infrastructure, job creation, reduction of geographical disparities, environmental enhancements, and any long-term or wider benefits*
- *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'*

26.3 EN-3 states that '*... applicants should consider the cumulative impacts of situating a solar farm in proximity to other energy generating stations and infrastructure.*' (Paragraph 2.10.26).

26.4 CLLP policy S14 supports proposals for renewable energy schemes where the direct, indirect and cumulative impacts on the following consideration are met or will be made acceptable. The following tests will have to be met:

- The impacts are acceptable having considered the scale, siting and design, and the consequent impacts on landscape character; visual amenity; biodiversity; geodiversity; flood risk; townscape; heritage assets, their settings and the historic landscape; and highway safety and rail safety; and
- The impacts are acceptable on aviation and defence navigation system / communications; and
- The impacts are acceptable on the amenity of sensitive neighbouring uses (including local residents) by virtue of matters such as noise, dust, odour, shadow flicker, air quality and traffic.

26.5 The ES cumulative assessment has considered:

- a) intra-project effects - different environmental topics interacting in combination, such as traffic and noise impacts of the development; and
- b) inter-project effects – aspects of the interaction of this development with other development projects in the area.

26.6 In considering inter-project cumulative effects, the ES considered both a long-list and a short-list of projects after consultation with the Council and others (Appendix 15A ([APP-177](#)) and Table 15-8 in ES Chapter 15: Cumulative Effects and Interactions ([APP-040](#)) respectively). The Council placed emphasis on including other significant solar farm proposals in the area, along with the proposed NGNS in those lists.

26.7 The short list of cumulative sites included a total of 27 developments: 4 NSIP projects and 23 other existing or proposed developments such as residential developments, solar parks, quarry extensions, industrial and employment parks and infrastructure; together with BESS and the NGNSS.

26.8 Each of the following ES topic chapters includes an assessment of cumulative intra-project and inter-project effects:

- Climate
- Cultural Heritage
- Ecology and Nature Conservation
- Water (including flooding)
- Landscape and Visual Amenity
- Noise and Vibration
- Socio-economics and Land Use – including soils / agriculture
- Traffic and Transport
- Other Environmental Effects

26.9 For the majority of the above topics, ES Chapter 15 ([APP-040](#)) reports that no likely significant intra-project effects were found in addition to impacts that had already been identified for the Fosse Green Energy development on its own; and the potential adverse effects of the development would not be made greater by the presence of the other identified projects in the area. However, ES Chapter 15 does identify the following cumulative effects:

Intra-project cumulative effects:

- Temporary significant effects due to the combined effect of visual, transport and access, socio-economic, noise and vibration impacts during construction and decommissioning
- Long term (but reversible) significant effects due to the combined effect of noise and vibration, landscape and visual amenity impacts on residential properties, businesses and community facilities

Inter-project cumulative effects:

- Major adverse, significant effects on landscape character of the North Kesteven District landscape sub-area Witham and Brant Vales during construction, together with changes to the visual amenity of users of the Viking Way public right of way
- Moderate adverse, significant effects on landscape character of North Kesteven landscape sub-area Limestone Heath due to the construction of the development together with Springwell Energy Farm, and Leoda Solar Farm.
- However, in both cases the ES concludes that by year 15 of the operation of the Fosse Green Energy scheme, there would be no difference between the landscape effects of the development on its own and the cumulative landscape effects of the development together with these other solar farms.

26.10 The Council disagrees with some of the conclusions set out in ES Chapter 15. As stated in section 13 of this LIR, the cumulative landscape and visual effects of the Fosse Green Energy solar farm proposals present a further concern, both with other ES topics and together with other renewable energy and infrastructure projects across the county and into adjacent counties.

26.11 Some of the individual cumulative effects of this project on its own are considered to have been understated – for instance in terms of the scale and significance of landscape and visual effects on rights of way users, with particular cross-cutting effects on topics such as recreation, health and the related economic tourism issues. This is exemplified by the absence of proper consideration of effects on the Stepping Out walking network.

26.12 In addition, the scale of other NSIP 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, and also in the perception and experience of the landscape, particularly for visual receptors travelling through the landscape and experiencing sequential effects. The Council considers that this represents a clear, marked and potentially extensive alteration of the regional landscape character.

26.13 The Council therefore concludes that there would be **negative** effects on cumulative grounds, in particular in relation to the potentially extensive alteration of the regional landscape character.

27 Draft Development Consent Order and Planning Obligation

27.1 With reference to the Draft Development Consent Order, in addition to the comments provided above, the Council wishes to raise the following points on a 'without prejudice' basis.

a. Part 1 (Interpretation)

Decommissioning

27.2 The Council notes that the definition of '*date of final decommissioning*' in article 2 of the dDCO is set as being no later than 60 years following the date of final commissioning. In turn, the '*date of final commissioning*' is defined in Schedule 2 as being '*... the date on which each part of the authorised development commences operation by generating electricity on a commercial basis ...*' (following the commissioning and testing periods).

27.3 The term 'each part of the authorised development' is not defined in the DCO, although paragraph 2 of Schedule 1 states that:

'The nationally significant infrastructure project comprises one generating station with a gross electrical output capacity of over 50 megawatts comprising all or any of the works numbers in this Schedule or any part of any work number in this Schedule'

27.4 The Framework DEMP (APP-191) envisages separate DEMPs for different parts of the development – see e.g. 1.1.9. Framework DEMP 1.1.4 says:

'Decommissioning comprises the process of removing all solar PV array infrastructure including modules, mounting structures, cabling inverters and transformers and concrete foundations to those elements, for recycling or disposal in accordance with good practice and market conditions at that time.'

27.5 Therefore it appears that 'each part' of the development (as yet undefined) may have its own date of final commissioning; and consequently also its own date for the commencement of decommissioning works. It is also noted that some of the Works comprised in the authorised development do not generate electricity themselves. If the term 'each part' is linked to the Works, this could mean that these 'parts' do not have a date of final commissioning, and so there is no trigger for the date of commencement of decommissioning.

27.6 NKDC seeks clarification on these points and possibly amendments to the wording of the DCO to ensure that at the end of the operational life of the development – which could be over 60 years hence – it is clear to those present

at the time when the triggers and deadlines for decommissioning plans and works fall.

Replacement of solar panels

27.7 The Council also considers that the definition of 'maintain' in article 2 of the dDCO is too broad in that it would allow for the wholesale replacement of up to 99% of solar panels at any point; and replacement of all of the panels (Work No. 1) more than once over the life of the development. These scenarios would bring potential significant environmental effects. It would be difficult for the relevant authority to monitor ongoing panel replacements unless provisions were put into place within the DCO such as an additional requirement to limit the replacement of panels to a lower percentage each year; and to require a replacement panel reporting scheme, where deviations from the approved plans are reported to the relevant planning authority on an annual basis.

b. Part 6 (Miscellaneous and General), Article 40

27.8 **Article 40** provides a blanket approval to fell or lop any tree within or overhanging the land within the Order subject to a TPO made after a predefined date if it believes it necessary to do so for the construction, maintenance, or operation of the development; or constitutes a danger to people using the development land (such as walkers). This date is not yet specified.

27.9 Whilst such a provision is also common to the other solar NSIP schemes in North Kesteven, the Council is concerned at the open ended nature of this provision and the lack of a date, and which at present does not fully cater for the future safeguarding of valuable trees within and adjacent to the Order Limits over the very long (60 year) duration of the development. It is possible that the Council may wish to make relevant TPOs within the Order Limits within such a timeframe as will need to be specified, especially given the ancient and veteran trees identified by the submitted documents. Whilst the Council does not seek to wholly restrict the undertaker's powers to carry out works to such trees, it does ask that this article is amended to require that 14 days advance notice is given to enable consideration and discussion regarding the works.

27.10 **Article 46** provides for a time period of 8 weeks for determination of any consent, agreement or approval required. The Council considers that a time period of 10 weeks would be more consistent with the timeframe for the discharge of requirements.

c. Schedule 2 – Requirements

27.11 The Council provides comments on the draft requirements in the table on the next page

No.	Requirement	NKDC Suggested Amendment
17 18	Permissive Path Public Rights of Way	For the avoidance of doubt North Kesteven District Council (as a 'relevant planning authority') must be consulted on the details submitted in the discharge of these Requirements
20	Decommissioning	<p>NKDC 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.</p> <p>NKDC seeks clarification and possible rewording of this requirement, together with the definitions of 'date of final commissioning' in paragraph 1 of Schedule 2, and of 'decommissioning' in article 2 to ensure that there is no doubt when the relevant triggers fall and to which parts of the development they apply.</p>
New	Replacement Panels	NKDC suggest an additional Requirement to limit the replacement of panels to a programme to be approved, and a replacement panel monitoring reporting regime should be agreed with the Relevant Planning Authority
New	Grid connection / proposed NGNS	NKDC seeks an additional Requirement to the effect that no part of the development (including pre-construction site clearance and preparation works) shall commence unless and until planning permission has been granted for the proposed National Grid Navenby Substation

d. Schedule 15 Procedure for Discharging Requirements, paragraphs 1 – 4

27.12 No suggested amendments.

e. Schedule 15 Procedure for Discharging Requirements, paragraph 5 – Fees

27.13 The Council considers that the proposed fee structure would not cover the Council's reasonable costs in discharging Requirements. The Council recommends that the fee structure provided within a number of recent Lincolnshire NSIPs, allowing for a corresponding increase in line with the increase in national planning fees introduced in April 2025, is followed. An example of the most up-to-date fee structure and amounts can be found within the Springwell solar farm draft DCO, final version referenced [dDCO Springwell](#).

[\(REP5-004\)](#), schedule 16 on page 147. The Requirement discharge fees for the Fosse Green dDCO therefore need to be increased to £2,578 (first application) from £2,535. The fees at schedule 16 (5) (1) (b) and (c) should be increased to £588 and £298 per Requirement respectively.

27.14 In addition, in order to be consistent with precedents elsewhere (including the dDCO for Springwell solar farm), Requirements 7 (Battery safety management), 10 (Surface and foul water drainage), 14 (Construction traffic management plan) and 15 (Soil Management Plan) will need to be charged at the £2,578 rate (first application).

Proposed s106 Planning Obligations

27.15 The Council would welcome further discussions with the applicant to progress a s106 planning obligation to secure funding for reviewing the applicant's BNG monitoring (via a wider Ecological Steering Group) and a skills and education package. With reference to the review of the applicant's BNG monitoring the Council will provide an indicative BNG monitoring fee based on the broad principles contained in the adopted Central Lincolnshire BNG monitoring fee schedule, with precedent examples in negotiation elsewhere on other solar NSIP schemes in the District, and once the applicant has responded to the information gaps relating to BNG as set out above.

27.16 With reference to skills and education funding, the Council would recommend that an annual funding contribution of £50,000, for the lifetime of the development, is made to assist the delivery and implementation of the applicant's Framework Employment, Skills, and Supply Chain Plan (FESSCP). The plan, from paragraph 3.2.1 onwards sets out potential opportunities for young people and adults to develop skills relevant to the proposed development through interventions such as apprenticeships, vocational qualifications, and early careers support which could be pursued by the applicant.

27.17 A similar contribution has been provided by way of a s106 Agreement in relation to the Longfield and Heckington Fen solar farms and has been agreed, in principle, as part of the Springwell solar farm examination with the draft s106 Agreement securing such a contribution at an advanced stage of preparation. As above the purpose of the funding would be help support the initiatives identified within the FESSCP such as the implementation and provision of apprenticeships, training workshops, bursaries, courses and qualifications.

27.18 With reference to the formation of an Ecological Steering Group (ESG), the Council, alongside LCC, would welcome the formation of such a group to, amongst other things, monitor progress of the FLEMP and the subsequent detailed LEMPs for each part of the development; and to consider and recommend remedial measures where objectives are not being met, especially in the initial years of establishment. The group would enable cross-referencing with other large scale solar farms where similar species or habitats are impacted, or mitigation is being provided. The Council considers that a key

function of the ESG (and occupying a significant proportion of its time and resource) will be reviewing the applicant's BNG monitoring reports.

27.19 The Council welcomes ongoing and early 'without prejudice' discussions in relation to the above two matters and, given that we consider that these contributions are necessary to comply with the provisions of NPPF paragraph 58/ Regulation 122(2) of the Community Infrastructure Levy Regulations 2010, we raise concern at the lack of s106 Agreement heads of terms at this stage.

28 Grid Connection – General

28.1 Finally, as set out above the Fosse Green Energy solar farm is reliant upon the National Grid constructing a new substation at Navenby (the NGNS) to enable a point of connection to be made to the National Electricity Transmission System. EIA screening and scoping has concluded and an application under the TPCA (1990) as expected to be submitted to North Kesteven District Council in 'early 2026' according to National Grid.

28.2 The application documents confirm that the solar farm applicant has secured a grid connection agreement (up to 240MW export capacity) with the National Energy System Operator (NESO). Construction of the Fosse Green solar farm is anticipated to take from 2 - 2.5 years commencing in 2031. The latest timeline provided by the National Grid estimates completion of the NGNS by 'late 2029' assuming a projected planning application determination timeframe – but which the Council observes ought to have further contingency applied.

28.3 Consistent with its approach to the Springwell solar farm, the Council also suggests that the delivery of the NGNS and alignment with the construction of the Fosse Green energy solar farm is a crucial matter upon which the Examining Authority should satisfy itself. Whilst there is now an increased amount of publicly available information in relation to the NGNS, and the applicant may have secured a grid connection, the NGNS cannot be delivered until a planning permission first has been secured and any and all pre-commencement conditions have been discharged.

28.4 As set out above, EN-1 advises that the connection of a proposed electricity generation plant to the electricity network is an important consideration for applicants wanting to construct a generation plant such as a solar farm. It envisages that '*... wherever reasonably possible, applications for new generating stations and related infrastructure should be contained in a single application to the Secretary of State or in separate applications submitted in tandem which have been prepared in an integrated way, as outlined in EN-5. This is particularly encouraged to ensure development of more co-ordinated transmission overall.*' (paragraph 4.11.7). Paragraph 4.10.8 then requires that (where separate applications are proposed) '*... 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.*'

28.5 Page 234 of the applicant's Planning Statement deals with this very simplistically, noting that 'whilst the proposed National Grid substation near Navenby does not form part of this DCO application and is subject to a separate decision-making process under the Town and County Planning Act 1990, there is no indication that this development will not come forward, with the website for the project stating planning submission will be in "Late 2025" (at the time of writing)'.

28.6 Paragraph 3.4.3 of the applicant's Grid Connection Statement then sets out that 'given the generally supportive national and local policy position, and on the basis that NGET take a responsible approach to siting, design and mitigation, following the Horlock Rules, there are no obvious reasons known to the Applicant why consent for the Navenby substation and associated overhead lines to connect it into the national grid would be withheld'. Continuing it notes that 'NGET has stated to the Applicant that should consent not be granted the fall back is to appeal any such refusal to the Secretary of State and await determination'.

28.7 Whilst the Council accepts the currently projected time lag between the proposed completion of the NGNS ('late 2029') and the applicant's grid connection date of 2033 (which in this regard is materially different to the respective timescales for the proposed Springwell solar farm) the Council does not consider that such high level commentary is sufficient to evidence that there are 'no obvious reasons' why the NGNS application will not be refused (as per paragraph 4.10.8 of EN-1) and we would suggest that this a key matter for the Examining Authority to engage with.

29 Summary and Conclusion

29.1 The Fosse Green Energy solar farm will have several impacts on the North Kesteven District Council area. This report has highlighted the positive, neutral and negative impacts of the scheme that have been identified in the Environmental Statement (ES), within the context of its knowledge and understanding of the area. 8 of the 14 topics/chapters have been identified to generate negative effects, 6 identify neutral effects and 2 identify positive effects.

29.2 It provides a summary of those impacts, an identification of relevant policies, plans and guidance applicable to this project and where relevant the degree to which the project aligns with those documents. The LIR also considers the cumulative effects of other proposed schemes (primarily NSIP-scale solar projects) in the North Kesteven but also those in the surrounding parts of Lincolnshire.

29.3 It is noted that the delivery of renewable energy of this nature and of this scale is in accordance with the strategic policies of the Central Lincolnshire Local Plan (2023); most notably CLLP policies S14 'renewable energy' and S16 'wider energy infrastructure'. Underpinning the Plan is the overarching vision and strategy, and a series of policies, to address the challenges relating to climate change to ensure that the District and Central Lincolnshire is fit for a zero-

carbon future, contributes to the transition to a net-zero carbon society, and is responsive to a changing climate.

29.4 These green threads also run through the NKDC Climate Response Strategy (CES) and Framework, the Climate Action Plan (CAP), its Environment Policy, the NK Plan 24-27 and its Community Strategy. Together these also comprise the Council's vision and strategy for a sustainable transition to meeting its carbon reduction goals by 2030, supported by mitigation measures to reduce emissions and adaptation measures to improve resilience to the effects of climate change.

29.5 It is not unexpected, for a project of this scale and nature, that there are negative impacts identified for the majority of the ES topics. This creates a degree of tension, of varying degrees, with elements of EN-1 and EN-3 along with the associated policies contained in the CLLP and where applicable the equivalent policies in the 'made' Bassingham, Coleby and Thorpe on the Hill Neighbourhood Plans. The Council does not 'weight' those negative impacts on a sliding scale and reserves the right to make further Written Representations submissions in relation to all matters set out in this LIR. The seven topic areas and associated impacts of greatest concern are in relation to:

- Impacts on Best and Most Versatile (BMV) agricultural land
- Landscape and Visual Impact including Residential Visual Amenity
- Cultural Heritage impacts (above and below ground)
- Ecology, Biodiversity and Biodiversity Net Gain (specifically BNG)
- Rights of Way/Recreation
- Grid Connection Deliverability
- Battery Energy Storage System (BESS) and Fire Safety

29.6 The table on the next page provides a tabulated form of all the impacts by topic/issue, also taking account of any cumulative impacts related with that topic. The Council requests that the Secretary of State for Energy Security and Net Zero has regard to this Local Impact Report when making his decision.

29.7 In light of the direct, indirect, individual and cumulative impacts and policy tensions identified above, the Council cannot currently support the principle of the development, nor confirm the presumption in favour of development with reference to the strategic renewable energy policy CLLP S14.

High Level Summary of Positive, Negative and Neutral Impacts

ES Chapter/Issue	Positive	Neutral	Negative	CLLP Policy
Landscape and Visual/RVAA			x	S14, S53, S66
Ecology including Biodiversity Net Gain	x		x	S14, S59, S60, S61, S66
Cultural Heritage			x	S14, S53, S57
Access and Traffic		x		S14, S47, S53
Noise and Vibration		x		S14, S53
Water Resources and Flood Risk		x		S12, S14, S20, S21
Climate Change	x			S11, S14, S16
Glint and Glare		x	x	S14, S53
Soils and Agricultural Land			x	S14, S67
Socio-economics		x		S10, S20, S28
Air Quality		x		S14, S53
BESS/Fire Safety Extended Period of Outage			x	S14, S53, S54, S66
Cumulative Effects			x	Various
Rights of Way and Permissive Paths			x	S48



Application by Fosse Green Energy Ltd for an order granting development consent for the Fosse Green Energy solar farm

Local Impact Report: APPENDICES A-D

North Kesteven District Council

[REDACTED])

NKDC reference: 23/0325/NSIP

Planning Inspectorate reference: EN010154

January 2026



**Application by Fosse Green Energy Ltd for
an order granting development consent for the
Fosse Green Energy solar farm**

**Local Impact Report:
APPENDIX A
AAH Landscape and
Visual Impact (LVIA)**

North Kesteven District Council

[REDACTED])

NKDC reference: 23/0325/NSIP

Planning Inspectorate reference: EN010154

January 2026

CONTENTS

Appendix A – AAH Landscape and Visual Impact (LVIa) – AAH
November 2025

Appendix B – Biodiversity report - Lincolnshire County Council
November 2025

Appendix C – Archaeology - LCC's Historic Environment
(Infrastructure) Officer

Appendix D – Review of Fosse Green Solar Project ES
Chapter Soils and Agriculture - Landscape
October 2025

Appendix E – Details of Stepping Out Walks

Appendix F – Planning History

Appendix G – Development Plan Policies



Application by Fosse Green Energy Ltd for an order granting development consent for the Fosse Green Energy solar farm

Local Impact Report

APPENDIX A –

**AAH Landscape and Visual Impact (LVIA) –
AAH November 2025**



Application by Fosse Green Energy Ltd for an order granting development consent for the Fosse Green Energy solar farm

Local Impact Report

APPENDIX B –

**Biodiversity report - Lincolnshire County
Council November 2025**



Application by Fosse Green Energy Ltd for an order granting development consent for the Fosse Green Energy solar farm

Local Impact Report

APPENDIX C – Archaeology - LCC's Historic Environment (Infrastructure) Officer



Application by Fosse Green Energy Ltd for an order granting development consent for the Fosse Green Energy solar farm

Local Impact Report

APPENDIX D –

**Review of Fosse Green Solar Project ES
Chapter Soils and Agriculture -
Landscape October 2025**



Application by Fosse Green Energy Ltd for an order granting development consent for the Fosse Green Energy solar farm

Local Impact Report

APPENDIX E – Details of Stepping Out Walks



Application by Fosse Green Energy Ltd for an order granting development consent for the Fosse Green Energy solar farm

Local Impact Report

APPENDIX F –

Planning History



Application by Fosse Green Energy Ltd for an order granting development consent for the Fosse Green Energy solar farm

Local Impact Report

APPENDIX G – Development Plan Policies



**LANDSCAPE AND VISUAL REVIEW
OF THE DEVELOPMENT CONSENT ORDER (DCO) APPLICATION
FOR FOSSE GREEN ENERGY
FOR
LINCOLNSHIRE COUNTY COUNCIL
AND
NORTH KESTEVEN DISTRICT COUNCIL**

Landscape and Visual Review

Quality Assurance – Approval Status

Version	Date	Prepared by	Checked by	Approved by	Version Details
1	28/11/25				Draft Issued for comment
2	19/01/26				Issued for LIR

Landscape and Visual Review

Contents

1.0	Introduction	4
2.0	Presentation of the LVIA	6
3.0	Methodology and Scope	9
4.0	Appraisal of Landscape Baseline and Effects	13
5.0	Appraisal of Visual Baseline and Effects	19
6.0	Appraisal of Cumulative Landscape and Visual Effects and Residential Visual Amenity Assessment	25
7.0	Mitigation and Design	29
8.0	Conclusions and Recommendations	32

Appendices:

Appendix A: AAH Consultation documents:

- TM01 Viewpoint Comments 04-04-24
- TM02 Viewpoint Comments 25-09-24
- TM03 PIER Comments 14-11-24
- TM04 Relevant Representation Landscape and Visual Comments 10-11-25

Appendix B: Landscape Institute Technical Guidance
Note 1/20 (10 Jan 2020)
: *Reviewing Landscape and Visual Impact Assessments (LVIA) 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 the Fosse Green Energy (the '**Development**'), submitted to the Planning Inspectorate in July 2025 and accepted for Examination in August 2025, on behalf of Lincolnshire County Council (**LCC**) and North Kesteven District Council (**NKDC**). This follows on from AAH providing landscape and visual consultation with the applicant on behalf of LCC and NKDC 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 (LVIA) 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 and NKDC 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 Oliver Brown, who is a Chartered Landscape Architect within AAH with over 20 years' experience in landscape design and assessment, and

considerable experience in landscape and visual matters associated with solar NSIP and associated DCO Applications.

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/EN010154/documents>

The information downloaded and initially reviewed is based on the document: *Fosse Green Energy Examination Library UPDATED – 18 September 2025*. **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 and NKDC. 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 (AVRs), 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

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 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

2.1 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, predominantly disagreements of some of the findings, that we have provided narrative on below, and the DCO Examination provides an opportunity to explore these in more detail.

2.2 The LVIA clearly draws a distinction between **landscape effects** and **visual effects**, with the main chapter focussing on likely '**Significant**' effects. Paragraph 10.4.33 of the LVIA clarifies that "*Major and moderate residual effects (both beneficial and adverse) are considered to be likely significant in EIA terms. Residual effects found to be minor or negligible are considered to be not significant in EIA terms.*". This is acceptable, and provides a clear and transparent threshold to identifying Significant landscape and visual effects.

2.3 Paragraph 1.3.1. of Appendix 10-B clarifies 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, however it is important that the application of this judgement be explained and transparent throughout.

2.4 The ES presents an assessment of a 'worst case' scenario of the Development, based on design parameters presented in ES *Chapter 3: The Proposed Development*. Section 5.2 goes on to describe the project parameters that the LVIA have assessed, and clarifies in para. 3.2.5 that to "*ensure a robust assessment of the likely significant environmental effects, the Environmental Impact Assessment (EIA) has been undertaken adopting the principles of the 'Rochdale Envelope'*". The LVIA goes on to clarify in paragraph 10.4.34 that the LVIA "*represents a realistic worst case based on the Rochdale Envelope Approach, as set out in Chapter 3: The Proposed Development*".

2.5 Vegetation removal is described within the LVIA at paragraphs 3.4.47 to 3.4.50 and clearly identified on Figure 3.17. Protection of retained vegetation and trees is set out in Appendix 10-H: Arboricultural Impact Assessment. Paragraph 3.4.50 clarifies that "*No veteran or ancient trees or ancient woodland are to be removed.*" and "*No trees subject to Tree Preservation Order (TPO) or within a Conservation Area (CA) are to be removed*". However, if proposed mitigation areas and existing retained vegetation proposals are changed in later, detailed design stages, the findings of the LVIA are likely to also 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.

2.6 The LVIA assesses landscape and visual effects at the main phases: **construction; operation** and **decommissioning**, with the operation phase considered with and without landscape

mitigation (year 1 effects and year 15 effects). The main phases of the project are detailed within *Chapter 3*. The LVIA considers the scheme in isolation, and Section 10.10 of the LVIA considers the scheme **cumulatively**.

LVIA Appendices

2.7 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 10.1.6 of the LVIA, and are referenced throughout the report to support the findings and provide additional information.

LVIA Figures

2.8 The Figures produced as part of the LVIA are appropriate in the level of detail provided and clarity of information presented. The figures are clearly listed within section 10.1.5 of the LVIA, and are referenced throughout the report to support and illustrate the findings.

3.0 Methodology and Scope

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

3.1 The LVIA Methodology is presented in section 10.4 of the LVIA and *Appendix 10-B: Landscape and Visual Impact Assessment Methodology*. Reference is made in section 1.1.4 of *Appendix 10-B* 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.

3.2 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 1.1.3 of *Appendix 10-B* as: Peak construction activity in winter, Year

1 of operation, Year 15 of the operation, assuming the proposed planting has established (winter and summer as applicable) and decommissioning).

- 3.3 The study area selection and establishment are explained in detail within paragraphs 10.4.4 and 10.4.5 of the LVIA. The Study area is illustrated in Figure 10-1. The radius of the study area of 2km from the Order Limits has been defined for the LVIA, which is a reduced area to that initially used. The process and rational of reducing the initial 5km Area of Search to 2km is laid out in paragraph 10.4.5, summarising in paragraph 10.4.7 that it is judged that "*a 2km radius of the DCO Site Boundary was a proportionate and representative geographic area to identify the likely significant landscape and visual effects.*". Paragraph 10.4.8 goes on to clarify that "*Beyond the 2km distance there would not be significant adverse landscape and visual effects due to the intervening distance and vegetation patterns*".
- 3.4 We have not identified anything on Site that would contradict the statement that there would not be Significant effects beyond 2km, and typically distance reduces the likelihood of this occurring. However, at the construction phase (and potentially operation with maintenance and replacement operations) traffic movement to and from the Site may have effects beyond 2km.
- 3.5 The baseline conditions (Section 10.5 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 by Chartered landscape architects (as identified in *Table 1: Technical Leads of Appendix 1-C: Statement of Competence*).
- 3.6 The methodology in *Appendix 10-B* is clear, with paragraphs 1.2.12 to 1.2.30 covering landscape effects and paragraphs 1.2.31 to 1.2.51 covering visual effects. Section 1.3 of *Appendix 10-B* 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.
- 3.7 Tables 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.

- 3.8 The assessment methodology has been carried through into the main assessment and used consistently.
- 3.9 The assumptions made on plant growth rates in Paragraph 10.4.39 bullets d. and e. are generally acceptable for a fifteen-year period: fifteen years being the period that residual effects have been assessed in the LVIA. We would query as to whether the plant growth rates allow for issues during the establishment period, and allow for any plant replacements to be carried out along with planting establishing should there be plant failures or lack of acceptable growth. These plant growth rates are dependent upon the successful implementation of a robust and well considered LEMP, which is covered in further sections of this review.
- 3.10 We also have concerns regarding hedgerows being maintained at 3m, as outlined in paragraph 10.4.39, bullet e. of the LVIA, as these tall hedgerows are likely to appear out of character with the generally low hedgerows evident in the wider character area (refer paragraph 10.5.75 regarding LCT4a: Unwooded Vales, which describes the area as having "*low, well maintained hedgerows*"). Effects of mitigation planting is discussed further in section 5.0 of this review.
- 3.11 Given the stated operational time of 60 years, there is a concern regarding any assumptions of reversibility and duration. Having reviewed the sections relating to this from GLVIA3 and other related guidance, it is clear that this project is long term. Given that 60 years is comparable to at least two generations, there is some considerable strength to the consideration that this would amount to a permanent project, as opposed to a temporary one, especially considering the average lifespan of building design is circa 50 years. If deemed a permanent Development, which it is our position, this needs to be clarified by the applicant and as to whether the assessment of effects takes this into account.
- 3.12 We would also recommend that the applicant consider fully that in this 60-year timescale, the panels, inverters, batteries and other associated elements will be replaced. It is stated in the ES within paragh 3.5.1 of Chapter 5 that this would likely include periodic replacement of components, and design life of key equipment is provided in Table 3-11. Given the pace of

technology, it should be considered if it is likely that 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

3.13 The process of modelling Zones of Theoretical Visibility (ZTVs) and subsequent presentation on Figures 10-6 and 10-7 is summarised in paras. 1.2.31 to 1.2.35 of Appendix 10-B. The methodology, execution and presentation on Figures 10-6 and 10-7 is acceptable, with elements modelled to their maximum parameters and provides a useful tool to understand potential visibility across the Study Area.

Visualisation Methodology

3.14 The process of delivering visualisations is presented within paras. 1.2.39 to 1.2.43 of *Appendix 10-B*. This states that they were prepared in accordance with the Landscape Institute *TGN 06/19 Visual Representation of Development Proposals*. Paragraph 1.2.43 of Appendix 10-B clarifies that photomontages have been presented to demonstrate a ‘worst case’ scenario, which we assume is to the maximum allowed parameter heights, provided within *Chapter 3: The Proposed Development*, 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 10.5 of the LVIA, with Figure 10-1 illustrating the Scheme Location, DCO Site Boundary and 2km Study Area. The Principle Site and Cable Corridor covers approximately 1,368ha of predominantly agricultural land.

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 10-C Landscape Baseline*. Paragraphs 10.5.3 to 10.5.15 provide a narrative on the existing landscape baseline of the Site, with paragraphs 10.5.16 to 10.5.54 covering the Study Area. Designations located within the Site and Study area are covered in paragraphs 10.5.55 to 10.5.63.

4.3 The LVIA acknowledges the low lying and relatively flat, agricultural and open character of the Site and Study area.

4.4 Published landscape character assessments are considered from paragraphs 10.5.68 to 10.5.89 and illustrated in Figure 10-4a National Landscape Character Areas, Figure 10-4b East Midlands Regional Landscape Character Areas, and Figure 10-4c North Kesteven Landscape Character Areas), with further detail provided in *in Appendix 10-C Landscape Baseline*. The published character assessments identify that this is a “*low lying area and*

where tree cover is limited", and also identifies views from within the Study area to the Cliff AGLV, and from within the AGLV are important, stating: "Views both towards the cliff and in particular, views out over the vale from the cliff, are of considerable scale. The views from the cliff present possibly the most important vistas within the district. When travelling from the plateau in the west, the treescape and gently convex ridge obscures the view of the lower vale until emerging from the trees and beyond the crest itself. The view then opens up dramatically to reveal the expanse of the low vale."

- 4.5 We have assumed the author acknowledges that the Site and Study Area reflect the boundaries and characteristics of the published character assessments, however a clear statement on this would clarify.
- 4.6 As these published character areas are predominantly at a large scale, and as aligned with guidance within GLVIA3, more detailed, or fine grain, assessments have been carried out by the author as part of the LVIA. Subsequently, a Local Landscape Character Areas have been identified, and subsequently assessed. This is summarised within sections 10.5.87 to 10.5.89 of the LVIA. This process resulted in sixteen Local Landscape Character Areas at varying scales that were identified as landscape receptors to assess the effects of the Development. These are illustrated on Figure 10-5 Local Landscape Character Areas.
- 4.7 The Future baseline from construction to decommissioning in the year 2093 is covered in paragraph 10.5.102. The Development of solar farm projects in the area is not acknowledged to be a factor in the future baseline, with the author judging that the existing baseline would remain as it is presently. We disagree with this position as this is a landscape undergoing extensive change to land-use, predominantly changing from agriculture to one containing large scale solar Development. The LVIA identifies in its short list of cumulative developments four NSIP scale solar developments within the local area (Springwell, Leoda, Great North Road and One Earth) as well as multiple TCPA scale energy projects, as shown on Figure 15-3. Subsequently, we have concerns regarding effects on the regional landscape character and pressures from renewables development at an unprecedented scale. Navenby Substation is currently in the planning process with an application due, likely, in the next year, and if approved would provide connection for three NSIP solar projects, and has the potential to open this area up to additional pressures from connecting to the grid. 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 solar would combine over time to create a greater perception of change.

- 4.8 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 solar 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 and if the new substation at Navenby is approved, we would assume several additional applications may be forthcoming.
- 4.9 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 10-9 and include a variety of scales. Table 10-9 goes on to summarise the assessment of Landscape Value, Susceptibility and subsequently Sensitivity of all identified receptors. Further detail of the landscape baseline, and judgements of Landscape Value, Susceptibility and Sensitivity is contained within *Appendix 10-C*.

Landscape Assessment

- 4.10 The Landscape Assessment is detailed within section 10.7 of the LVIA, which refers to *Appendix 10-E 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. The landscape assessment commences with construction effects at paragraph 10.7.2 and Table 10-11, with Year 1 of Operation Landscape Effects at paragraph 10.7.4 and Table 10-12, and Year 15 Operation Landscape Effects at paragraph 10.7.6 and Table 10-13.
- 4.11 In line with the methodology, the assessment of the landscape effects considers the change to the identified landscape receptors at construction, operation (both years 1 and 15) and

decommissioning. This includes Landscape Character Effects within the Order Limits, which would be direct, and are separated for the Principle Site and Cable Corridor, Landscape Effects within Published Landscape Character Areas, and effects on the identified Local Landscape Character areas, which would be both direct and indirect.

4.12 The LVIA identifies Significant landscape effects at the phases of **construction, operation (year 1), operation (year 15),** and **decommissioning** phases. 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:
 - **Major adverse effects: Significant** for:
 - The Principle Site
 - Cable Corridor
 - LLCA 03: Tunman Hill
 - LLCA 08: Thurlby Fenland
 - **Moderate adverse: Significant** for:
 - Sub-area 2: Terrace Sandlands
 - Sub-area 5: Witham & Brant
 - Vales
 - LLCA 13: Low Fields South
 - LLCA 14: Low Fields North
 - LLCA 15: Lincoln Cliff
- At **Operation (Year 1)** the following receptors were assessed as having the following significant landscape effects:
 - **Major adverse effects: Significant** for:
 - The Principle Site
 - LLCA 03: Tunman Hill
 - LLCA 08: Thurlby Fenland
 - **Moderate adverse: Significant** for:
 - Sub-area 2: Terrace Sandlands
 - Sub-area 5: Witham & Brant Vales
- At **Operation (Year 15)** the following receptors were assessed as having the following significant landscape effects:
 - **Moderate adverse effects: Significant** for:
 - Principle Site
 - LLCA 03: Tunman Hill

- LLCA 08: Thurlby Fenland

4.13 These ‘Significant’ effects represent direct effects on the landscape of the entirety of the Site. At year 15, the Order Limits (entirety of the 1,368 hectare Site) has been assessed as having a Significant Residual effect even when mitigation planting has established. The local landscape character areas of LLCA 03: Tunman Hill and LLCA 08: Thurlby Fenland have also been judged by the author as having Significant Residual effects, even when mitigation planting has established.

4.14 This accounts for a direct Significant effect on these landscape receptors. This equates to a considerable change to landscape character across an extensive area; introducing a mass of development with industrial characteristics in an open agricultural landscape, affecting the sense of openness, seasonal rhythm of farming practices and rural tranquillity currently experienced.

4.15 However, other landscape character areas that will also have direct effects at all phases have not been judged to have Significant residual effects. This appears inconsistent with the findings of effects to the Principle Site and LLCA 03: Tunman Hill and LLCA 08: Thurlby Fenland, and we would judge that all landscape character areas directly affected by the Development would have residual Significant effects – primarily through a change of land-use.

4.16 The regional LCT 4a: Unwooded Vales, which contains the site has been judged as having Minor Adverse effects at all phases. We are unclear as to why this landscape receptor would experience a reduction in effect over other directly affected landscape receptors. There will still be a direct large-scale change, albeit over a small to medium extent of the character area, however the scheme will replace the open agricultural fields, a key characteristic of this landscape, affecting openness and rural qualities that typify the area. We judge the effects on LCT 4a: Unwooded Vales would be Moderate and Significant at all phases.

4.17 At Construction, Sub-area 6: Lincoln Cliff is judged in the LVIA as having Minor Adverse effects. We are unclear as to why this landscape receptor would experience a reduction in effect over other directly affected landscape receptors from the cable installation, such as LLCA 15: Lincoln Cliff which is judged to have Moderate Adverse and Significant effects. There will still be a direct change, and therefore we judge the effects on Sub-area 6: Lincoln Cliff would be as LLCA 15: Lincoln Cliff and Moderate and Significant at all phases.

4.18 At year 15 Sub-area 2: Terrace Sandlands and Sub-area 5: Witham and Brant Vales have been judged to reduce in effect from Moderate Adverse at operation Year 1, to Minor Adverse at operation year 15. We are unclear as to why these landscape receptors would experience a reduction in effect over other directly affected landscape receptors, such as LLCA 03: Tunman Hill and LLCA 08: Thurlby Fenland which are judged to have Moderate Adverse and Significant effects. There will still be a direct change, and therefore we judge the effects on Sub-area 2: Terrace Sandlands and Sub-area 5: Witham and Brant Vales would be as LLCA 03: Tunman Hill and LLCA 08: Thurlby Fenland and Moderate and Significant at operation year 15.

4.19 Reductions in effects at the operation phase for areas within the cable corridor are expected as all works will be below ground and it is proposed to return all areas to their previous condition. However, this is dependent upon the retention and protection of existing vegetation. Any removals have the potential to adversely effect the landscape character areas.

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 10-5 of the LVIA, and paragraph 10.5.92 describes the process of identifying visual receptors through desk-based review, including analysis of ZTVs and field surveys

5.2 Paragraph 10.5.96 provides a useful summary overview of the visual baseline, and paragraph 10.5.98 identifies the following visual receptors likely to experience views of the construction or operation of the Site: Residents; Recreational users on PROW, Promoted Walking Routes and Cycle Routes; People travelling on roads; and Commercial users.

5.3 Paragraph 10.5.99 goes on to identify focussing on visual receptors and using reference to the thirty-five representative viewpoints to support the narrative. *Table 10-10* identifies visual receptors for the assessment of effects on them by the Development and identifies the associated representative viewpoint.

5.4 *Table 10-10* goes on to 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 10-D Visual Baseline*.

5.5 The thirty-five representative viewpoints are presented as baseline photographs within *Figure 10-8 Viewpoint Photography*. The baseline follows the LVIA methodology and considers the consultation undertaken at the pre-application stage.

Visualisations/Photomontages

5.6 Viewpoints representative of the visual receptors were identified through consultation. This baseline process resulted in the identification of eleven viewpoints to be developed as Type 3 (photomontages) visualisations and presented in *Figure 10-10 Photomontages*. A methodology for photography and visualisations is provided in *Appendix 10-2: Landscape*, which clarifies that the photomontages have been prepared to *Landscape Institute's TGN 06/19*.

Visual Assessment

5.7 The Visual Assessment is presented within section 10-7 of the LVIA and detailed within *Appendix 10-F Visual Assessment*. The assessment of value and susceptibility, and subsequently the sensitivity of visual receptors is summarised within *Table 10-11* and detailed within *Appendix 10-F*, which is aligned with the criteria provided within the methodology.

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

5.9 The LVIA identifies Significant landscape effects at the phases of **construction, operation (year 1), operation (year 15), and decommissioning** phases. The following significant effects upon identified visual receptors are identified in the LVIA:

- **At Construction:**

- **Major adverse effects: Significant** for:

- Residents of Church Farm and Low Barn
- Recreational users of PRoW west of Thorpe on the Hill (TOTH/7/2, TOTH/21/1, TOTH/6/2, TOTH/6/3)
- Recreational users of Aubo/12/2
- Recreational users of Aubo/8/1
- Recreational users of TOTH/11/1
- Recreational users of TOTH/12/3
- Recreational users of TOTH/15/1
- Recreational users of Aubo/10/1
- **Moderate adverse effects: Significant for:**
 - Residents of Thorpe on the Hill
 - Residents of Scotland Farm
 - Residents of Housham Wood Farm
 - Residents of Eagle Barnsdale
 - Residents of Morton
 - Residents of High Walks Farm
 - Residents of Witham St. Hughs (east)
 - Residents of River Farm (north)
 - Residents of Tonge's Farm
 - Residents of Bassingham
 - Residents of Coleby
 - Residents of Boothby Graffoe
 - Residents of Thurlby
 - Residents of Malborough
 - Residents of North Field Farm
 - Residents of Grange Cottage
 - Recreational users of TOTH/6/1 and TOTH/6A/1
 - Recreational users of TOTH/18/1
 - Recreational users of Viking Way (PRoW Cole/2/1 and BooG/2/2)
 - Recreational users of Bass/1/1, NoDi/1/2, NoDi/4/1, ThuN/5/1
 - Recreational users of ThuN/2/1
 - Recreational users of Bass/22/1, Bass/21/2, Bass/20/1
 - Users of Clay Lane and Bassingham Road

These are typically identified for receptors on the road and PROW network, along with numerous residents that are in close proximity to the Development with limited or absent screening allowing for clear views. These **Moderate** and **Major 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.

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

- **Major adverse effects: Significant for:**
 - Recreational users of PRoW west of Thorpe on the Hill (TOTH/7/2, TOTH/21/1, TOTH/6/2, TOTH/6/3)
 - Recreational users of Aubo/8/1

- Recreational users of TOTH/12/3
- **Moderate adverse effects: Significant** for:
 - Residents of Housham Wood Farm
 - Residents of Church Farm and Low Barn
 - Residents of Grange Cottage
 - Recreational users of TOTH/6/1 and TOTH/6A/1
 - Recreational users of Aubo/12/2
 - Recreational users of Bass/1/1, NoDi/1/2, NoDi/4/1, ThuN/5/1
 - Recreational users of Thun/2/1
 - Recreational users of TOTH/11/1
 - Recreational users of TOTH/15/1
 - Recreational users of Bass/22/1, Bass/21/2, Bass/20/1
 - Recreational users of Aubo/10/1
 - Users of Clay Lane and Bassingham Road

These represent a reduction in receptors experiencing Significant effects, predominantly from the completion of the Cable Corridor works as the proposals are underground and subsequently not visible. Any mitigation planting is yet to establish and is subsequently providing limited or no screening or integration of the Development.

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

- **Major adverse effects: Significant** for:
 - Recreational users of PRoW west of Thorpe on the Hill (TOTH/7/2, TOTH/21/1, TOTH/6/2, TOTH/6/3) – winter
 - Recreational users of Aubo/8/1 – winter and summer
- **Moderate adverse effects: Significant** for:
 - Residents of Grange Cottage – winter
 - Recreational users of PRoW west of Thorpe on the Hill (TOTH/7/2, TOTH/21/1, TOTH/6/2, TOTH/6/3) – summer
 - Recreational users of TOTH/11/1 – winter
 - Recreational users of TOTH/12/3 – winter

These represent a further reduction in receptors experiencing Significant effects through the establishment of mitigation planting over 15 years from planting. The LVIA therefore identifies that several sensitive visual receptors will still experience Significant adverse effects over the remaining 45 years of the development.

5.10 The Development has been identified in the LVIA as resulting in a Significant change to a variety of visual receptors during construction and in the early years of operation and

maintenance, with Significant *residual* visual effects much reduced in number, which suggests a potential over reliance upon mitigation planting to screen the proposals without full attention to the potential impact of this screening on the landscape. These residual Significant effects have been identified as arising from sensitive users on the PROW network, along with residents that are in close proximity to the Development. The reduction in Significant visual effects relies upon the successful establishment of the mitigation planting scheme and a robust LEMP that is carried out for a suitable period of time.

- 5.11 Several PROW receptors are identified in the LVIA as likely to experience Significant residual visual effects. This is a concern, and indicates that the scale and extent of Development makes impossible to mitigate all visual effects on sensitive receptors. We also have concerns that the mitigation planting itself has the potential to cause adverse visual effects through blocking or foreshortening currently open views, appearing out of character or creating a perception of enclosure in an open landscape. Further detail is provided in the mitigation section below, but the mitigation planting must be well considered at any detail design stage, and not simply put in place to screen views of development.
- 5.12 Several of the PROW judged to experience significant adverse effects also form parts of the Stepping Out Walks of Thorpe on the Hill, and Morton and Tunman Wood. The Stepping Out Walks are a series of routes on PROW promoted in NKDC, and subsequently have increased recreational value locally. The Bassingham and Villages Circular trail does not appear to be considered in the LVIA, however will pass alongside the southern order limits and close by a considerable section of solar arrays, and subsequently users will have close range and open views of the panels, and we would judge adverse visual effects from the development. The Stepping Out Walks are not identified or acknowledged in the applicants LVIA, however these routes are indirectly covered by the identification of PROW and subsequent visual effects on users of these.
- 5.13 We also note the Proposed Permissive paths identified on the Layout Plans, however while these provide additional opportunities for alternative walking routes in the area, these appear in close proximity to panels and other above ground development and would query their actual value to users, as receptors traveling along these routes will have continued sequential views of a solar development. So, while clearly an improvement to the extent or length of footpath provision, the inclusion of these will not reduce the adverse visual effects

experienced by users of existing PROW, and would not judge these to have any mitigating effect on the identified landscape and visual effects from the scheme.

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 10.10 of the LVIA, which provides a brief but clear assessment of the cumulative landscape and visual effects associated with the scheme. Chapter 15 provides additional detail, however we have focussed on the information presented within the LVIA.

6.2 The Cumulative Study Area for landscape and visual is identified in paragraph 10.10.1 which clarifies that a 2km zone of influence (ZoI) from the order limits has been considered for cumulative Landscape and Visual matters and schemes considered as part of the cumulative assessment are listed out, which includes several energy schemes. In addition to these, four nearby solar DCO schemes (Springwell Energy Farm, Great North Road Solar, One Earth Solar Farm, and Leoda Solar Farm) are identified but fall outside the 2km ZoI. However these

schemes have been included within the cumulative assessment, which we welcome and feel is an appropriate approach considering the scale and proximity of these developments.

6.3 Paragraph 10.10.3 provides a clear approach to assessing cumulative landscape effects, with paragraph 10.10.4 detailing the approach to cumulative visual 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 In regards to the list of non-DCO schemes, the majority were identified as not having cumulative effects with Fosse Green. However, at the construction phase, in addition to *ID 95. Application Reference: PL/0087/23. North Hykeham Relief Road* the Fosse Green development is judged to have a significant adverse landscape effect on the North Kesteven District landscape sub-area Witham and Brant Vales and significant adverse visual effect on receptors using the Viking Way.

6.5 In regards to the consideration of Fosse Green in addition to the four adjacent solar DCO schemes, we have concerns regarding landscape effects through extensive change to land use, changing from agricultural to energy infrastructure, and subsequently openness and tranquillity of the area, as well as sequential views for receptors traveling through this landscape. The LVIA identifies significant construction landscape effects on North Kesteven District landscape sub-area Limestone Heath for Fosse Green in addition to both the Springwell Solar and Leoda Solar. Beyond this, no other significant landscape and visual cumulative effects have been identified in the LVIA.

6.6 We have concerns regarding cumulative effects on the region from multiple solar projects both approved and also in the system, having the potential to be constructed across the Nottinghamshire and Lincolnshire regions. While this has been identified in our baseline review when considering the future baseline, it is important to re-iterate this point.

6.7 The mass and scale of several NSIP scale DCO energy 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 potentially regional area, may 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 predominantly

agricultural. This would also be an issue when experienced sequentially for visual receptors travelling through the landscape and experiencing these schemes across potentially several kilometres, albeit with gaps of several KM between the schemes. However repeated views and presence of large scale solar would undoubtably increase the susceptibility of receptors to changes in view.

Residential Visual Amenity and Settlements

6.8 Residential Visual Amenity has been considered as part of the LVIA, with individual or groups of residential properties identified in the baseline and subsequently assessed. *Table 10-1: Scoping Opinion Responses (LVIA)* clarifies on page 10-15 that: “*The LVIA has assessed the impacts on the visual amenity of residents with reference to Landscape Institute’s related Technical Guidance Note (TGN 2/19). However, the iterative design process has sought to embed mitigation such that the Residential Visual Amenity Threshold has not been met, i.e. no residential receptors were found to have major adverse effects at year 15, and therefore a specific Residential Visual Amenity Assessment has not been undertaken.*”

6.9 Paragraphs 10.5.29 to 10.5.45 provide an overview of settlements (as well as land use) which describes residential properties in relation to the Site. Table 10-10 subsequently identifies Residential receptors which includes 29 individual properties, groups of properties or settlements. These have subsequently been assessed in detail within *Appendix 10-F Visual Assessment*, where at paragraph 1.2.2 *Table 1 Visual Receptors and Representative Viewpoints* lists the residential visual receptors within the Study Area and the viewpoint which represents them (as applicable). Tables 2 to 30 in Appendix 10-F provide a detail baseline and subsequent assessment of views from the residents.

6.10 Residential Visual Amenity Assessment (**RVAA**) is a stage beyond Landscape and Visual Impact Assessment and focuses exclusively on private views and private visual amenity, whereas the LVIA process is typically associated with public views from public areas. The Landscape Institute’s Technical Guidance Note 2/19: ‘*Residential Visual Amenity Assessment*’ provides further detail and that the Residential Visual Amenity Threshold (**RVAT**) is reached when the change to visual amenity of residents in individual properties identified as “*having the greatest magnitude of change*”. On this scheme, due to the scale and extents, as well as height of some elements such as Sub stations we would anticipate that some

residents will experience Significant adverse visual effects from several properties, and it is unlikely that properties will reach the RVAT through the Development of Fosse Green.

- 6.11 The LVIA does identify multiple residents of properties that would experience significant adverse effects, which is a concern, however we agree with the findings of the LVIA in regards to it being unlikely that any would reach the RVAT.

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 10.6.1 which states that: *“Good design has been a key consideration for the Proposed Development from the outset. The LVIA has informed the iterative design process which has been guided by design principles and in response to policy requirements.”*. It is noted that the layout appears to respond to issues and LVIA findings, and considerable areas have been set aside for habitat creation. However, a key criticism of the layout and site selection is the number and extent of PROW users that are significantly adversely affected by the scheme, which identifies insufficient offsets and development in too close proximity resulting in close range views from multiple PROW locations.

7.2 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 varied, as indicated by the numerous significant landscape and visual effects that are identified in the LVIA.

Mitigation Measures

7.3 Landscape and Ecology proposed as part of the Scheme is covered by Works No. 9, which is subsequently located according to the Works Plans (Figure 2.2).

7.4 Paragraphs 10.6.7 and 10.6.24 of the LVIA describes the mitigation measures of the scheme, including principles and embedded mitigation which aims to avoid, where practicable, adverse effects on the landscape and views.

7.5 The *Framework Landscape and Ecological Management Plan (LEMP)* provides information regarding the establishment and maintenance of the planting associated with the Development, as shown on *Figure 15-1: Landscape Mitigation Plan* within Appendix A of the LEMP.

7.6 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 existing 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. The long-term reduction in landscape and visual effects, presented in the LVIA, are based on the long-term success of the landscape mitigation, and therefore the management plan should cover at least this period, and should be in place and actively managed for the lifetime of the project. Similarly, any early planting (pre-construction) should be included in the maintenance plan as the reduction in effects described in the LVIA are also based on the assumption that this too will have established as planned.

7.7 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 challenging climatic conditions when it comes to establishing new planting. The updating of the management plan 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 years period.

7.8 While the submission includes landscape proposals, as shown on *Figure 15-1: Landscape Mitigation Plan*, these are of a high level and it would be expected that if the project proceeds much more detailed plans would 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. The mitigation illustrated on *Figure 15-1* within Appendix A of the LEMP, secured via Works No. 9 on the Works Plans and DCO, has been utilised to assess the landscape and visual effects of the scheme, therefore we would expect any detailed landscape proposals to consist of the area and extent shown on these plans as a minimum.

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. While residual visual effects have been assessed as reducing at 15 years through mitigation planting, this is completely dependent upon the successful establishment of the planting and it growing in a manner that is anticipated within the LVIA, and illustrated on the accompanying visualisations. This is always going to be a risk, and if the planting does not establish as anticipated, the residual effects will likely be higher than judged.

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. It is noted that appropriate development offsets, and with careful design, will go some way to address the matter raised. Examples of where views have been foreshortened for receptors and open views adversely affected, despite planting screening proposals, include the following visualisations that are contained within *Figure 10-10 Photomontages*: VP11, VP22, VP32, VP33, VP34, and VP35.

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 (LVIA) 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 clearly identifies the main potential effects arising from construction, operation (Years 1 and 15) and decommissioning phases.
- 8.4 By reason of its mass and scale, the Development would 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). 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 development, affecting the current openness, tranquillity and agricultural character that are identified as defining characteristics of the area. We also judge that this would likely be classed as a permanent project in regards to landscape and visual matters, spanning several 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). The assessment recognises that the Development would transform the Principle Site and areas within the Local Landscape Character Areas (LLCA), including LLCA 03: Tunman Hill and LLCA 08: Thurlby Fenland, resulting in direct and long-term impacts.

8.6 While mitigation would partially reduce effects over time, the predicted benefits are dependent on successful implementation, establishment and ongoing long-term management of new planting. 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. The key areas of disagreement have been identified with elements of the LVIA, primarily regarding:

- The extent and permanence of effects on directly affected landscape character areas, where reductions in significance are presented for certain sub-areas but would more appropriately remain Significant due to land-use change across the Order Limits;
- The treatment of LCT 4a: Unwooded Vales, which is judged in the LVIA as experiencing only Minor adverse effects despite clear direct alteration of its defining characteristics (openness, agricultural land use);
- The conclusion that some Local Landscape Character Areas would reduce to non-significant levels by Year 15, which is inconsistent with other directly affected areas;
- The conceptual treatment of the Development's operational duration as temporary needs clarifying, whereas its 60-year lifespan is more akin to a permanent change in landscape terms.

8.7 The visual assessment identifies numerous receptors experiencing Significant adverse visual effects during construction and early operation, notably users of key PROW networks and residents in proximity to the Development. Some residual significant effects would remain at Year 15 despite mitigation, indicating that full visual integration is not achievable due to the scheme's scale and proximity to these receptors.

8.8 The visual effects on recreational users is of particular concern. Several of the PROW identified as experiencing Significant adverse effects form part of promoted walking routes in the local area, including the Stepping Out Walks at Thorpe on the Hill, and Morton and

Tunman Wood, which attract increased levels of use due to their recreational value. In addition, while not specifically identified in the LVIA, the Bassingham and Villages Circular Trail passes alongside the southern Order Limits and would be subject to clear, close-range views of the Development, resulting in adverse visual effects that are not explicitly recognised in the assessment. The proposed permissive paths, while providing additional route connectivity, are located in close proximity to the solar infrastructure and would offer continuous sequential views of the scheme. As such, they would not serve to reduce or offset the adverse effects on users of existing PROW and we would not consider this as meaningful mitigation to visual effects.

- 8.9 Cumulative effects are acknowledged within the LVIA; however, the scale and extent of existing and potential future energy developments across the district and region are likely to lead to a more transformative combined impact than suggested. We consider regional landscape character may be fundamentally altered, and sequential visual effects across multiple solar schemes may be underplayed.
- 8.10 Residential Visual Amenity has been addressed within the LVIA, and although no properties are assessed as exceeding the Residential Visual Amenity Threshold (RVAT), several are expected to experience Significant adverse effects, particularly in the early years of operation. This should be interrogated further during Examination, but we agree that the RVAT is unlikely to be met.
- 8.11 While the submission includes landscape proposals (as shown on *Figure 15-1: Landscape Mitigation Plan* within Appendix A of the LEMP, secured via Work No. 9. on the Works Plans and DCO, these are of a high level and it would be expected that if the project proceeds much more detailed plans would be submitted and subsequently agreed with the appropriate authority prior to the commencement of any works and secured through Requirements 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. The mitigation illustrated on the *Landscape Mitigation Plan* has been utilised to assess the landscape and visual effects of the scheme; therefore, we would expect any detailed landscape proposals to consist of the area and extent shown on these plans as a minimum.

APPENDIX A

AAH Technical Memos

Technical Memorandum 1 (AAH TM01)

Lincolnshire County Council Fosse Green Solar Project

An initial consultation document issued and received via email 6th March 2024. A site visit is scheduled for April 2024. The following comments collate the information received and following a desk-based appraisal.

Study Area

The study area is identified as 3kms within figure 1, yet residential properties have been limited to 2kms. The memo does not detail why residential properties beyond 2kms have been excluded at this stage. The design is developing, it is noted that there are no specific details provided in this document relating to the specific design elements of the development, consequently, the exact parameters of the study area will likely evolve.

Identification of receptors

The methodology for identifying and assessing potential viewpoints has utilised ZTV analysis (which is shown in figure 1) supported by on-site observations. Visual receptors have been identified in four categories; Residents, People travelling along PROW, workers and people using local roads. Each of the identified receptors is collated in table 1.

We provide the following comments on the proposed selection as presented:

- The design is evolving and key, larger-scale elements have not been fixed as yet, so whilst this is an initial list of selected receptors, we would expect on-going consultation as the design progresses.
- The ZTV shown in Figure 1 shows potential for visibility in areas where viewpoints are limited, for example north of the current VP1. This needs further consideration; we would seek to review this area when undertaking the initial site visit.
- Given the preliminary nature of the design, it appears too premature to select the photomontage viewpoints, however the current selection appears well considered. As the development progresses, we would welcome on-going dialogue to appraise the selection of photomontage viewpoints.

Following this, we have the following general comments and requests:

1. Comments provided are based on the information provided to AAH and AAH desk-based assessment carried out to date. Therefore, any comments are based on the layouts currently provided, which are confirmed as illustrative and 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 wholesale changes, the layout is undergoing design development and subject to the final layouts presented, additional viewpoints or information may be requested. This is particularly pertinent for taller/larger elements such as sub stations or battery storage, which due to their mass will likely be more conspicuous in the landscape.

2. When available/agreed, please could further details be provided about the final PV Arrays selection. The final dimensions should also be clarified at this point and the ZTV updated accordingly;
3. When available/agreed, please could further details be provided about the final Inverter selection. The final dimensions should also be clarified at this point and ZTV updated accordingly (and if appropriate);
4. The locations of ancillary elements, such as fencing, Battery Storage, Inverters, Transformers and Switchgears will be important in reducing visual impacts as these may appear more conspicuous than uniform PV arrays – their location should be carefully considered in relation to visual receptors, but also relating to the PV 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;
5. Please could further details be provided about the on-site substation and control buildings including location, size/massing, and height. As at this stage we do not have this information, the location of this would likely have visual impacts that would require additional viewpoints beyond those initially identified;

Finally, additional viewpoints may be required depending on confirmation of further details relating to the development, in particular the location, extent and appearance of taller/larger elements proposed.

██████████ CMLI
AAH Landscape
██████████ @aahplanning.com
██████████

4th April 2024

Technical Memorandum 2 (AAH TM02)

Lincolnshire County Council, Fosse Green Solar Project

A memorandum from the applicant was received via email on 15th August 2024, and follows from a previous memorandum, which was considered in AAH TM01, issued April 2024. The second memorandum: *Fosse Green Energy Visual Receptors and Representative Viewpoints has been reviewed* based on our desk based and site-based knowledge of the study area and development site, and our comments are as follows:

Introduction

The parameters of the development are introduced in section 1, detailing the location and energy capacity, and goes on to confirm that the development falls within the scope of a Nationally Significant Infrastructure Project (NSIP), therefore requiring a Development Consent Order (DCO). This is in line with the previous parameters of the development.

We welcome the opportunity, presented in the introduction, to continue dialogue towards the PEIR submission. We acknowledge the declaration that statutory consultation shall commence at the end of October 2024.

Visual Receptors

Section 2 provides detail regarding the selection of visual receptors; these are summarised in table 1. 34 viewpoints are selected by the applicant based on residents, people travelling on PRoW, commercial users and people travelling on local roads. We accept the use of the four broad criteria of receptors to establish the viewpoints.

The April memorandum presented a 3km study area, however figure 1 highlights a 2km buffer zone. The ZTV in figure 1 shows theoretical visibility that pushes up to and, in all likelihood, extends beyond the 2km study area. There is no detail in this memorandum as to why the study area has compressed. From site and desk-based studies it is evident that there is potential for views of the development beyond the 2km buffer.

It is an omission to have no viewpoints beyond the 2km buffer zone. It is important to show that views diminish beyond the 2km study area and as a result we would need to see representative viewpoints beyond the 2km area to examine the extent of visibility or lack of visibility.

Areas to the east of VP6 and to the north of VP10 and VP12 should be examined, even if simply to scope out. We would need to see more detail on the methodology for viewpoint selection beyond the broad categories for selection.

Overall, the viewpoints appear concentrated and, in many cases, potentially too close to offer diversity of appraisal. For example, VP2 and VP3 appear to potentially duplicate the information. VP6 appears to point away from the development. There are no views selected to the far southeast of the development despite the ZTV highlighting potential for visibility. Similarly, there is a concentration of views to the south, VP20 to VP25, yet none are significantly beyond the site

boundary. This despite the presence of residential receptors at Carlton-le-moorland, south east of VP23.

11 viewpoints, have been selected for type 3 photomontages, these are summarised in table 2. Whilst the selection of most appears sound, we question some of the selections, and would seek further clarification. For example, VP11 looks away from the development towards the edge of the order limits, a better alternative appears to be VP17 or VP12. Most are located at the edge of the order limits looking towards the development and this appears sensible, however with some anomalies for example why VP15 over VP16 and why VP29 over VP30. We would need this to be detailed in the PEIR.

There are some inconsistencies between the figures, for example VP2 VP11 and VP14 appear to be focused in different directions from figure 1 and 2. We would expect these anomalies to be rectified at the PEIR stage of the application.

Preliminary design

The details of the current design for the development are considered in section 4, this is useful information in anticipation of the PEIR submission. We welcome the design details shown in figure 3 which identifies the location of the design elements of the development. We have assumed that the latest ZTV incorporates all of the design details explained in this section.

The section details the parameters of the solar panels, the solar stations, the battery storage system, the substation and control buildings and the ancillary features such as fencing.

Conclusions

The memorandum presents a detailed explanation about the project progression to date. There are some anomalies between the figures, which need rectified. We do believe there is potential for visibility beyond 2km and the omission of viewpoints exploring this needs to be rectified. Some viewpoints appear to duplicate information, being too close together. We also question some of the locations.

We welcome that 11 type 3 photography viewpoints have been included. Generally, we agree with the location of these on the edges of the site boundary, however we consider that some could be changed to offer a better representative view of the development.

We note the design resolution of the development elements, at this stage, they provide useful information to help examine the viewpoint selection rationale and examine the ZTV. Given these details we do need more detail as to why no viewpoints have been located beyond the 2km buffer zone.

[REDACTED] CMLI

AAH Landscape

[REDACTED] @aahplanning.com

25th September 2024

Technical Memorandum 3 (AAH TM03)

Lincolnshire County Council (LCC) & North Kesteven District Council (NKDC). Fosse Green Energy: PEIR Landscape and Visual Comments

Introduction

AAH Consultants have reviewed the Fosse Green Energy: *Preliminary Environmental Information Report (PEIR)*, on behalf of Lincolnshire County Council (LCC) & North Kesteven District Council (NKDC), in relation to Landscape and Visual matters. Information downloaded from: www.fossegreenenergy.co.uk/documents and the documents that have been referenced, are as follows:

- Chapter 1: Introduction
- Chapter 2: The Site and Surroundings
- Chapter 3: The Proposed Development
- Chapter 4: Alternatives and Design Evolution
- Chapter 5: EIA Methodology and Consultation
- Chapter 10: Landscape and Visual Amenity
 - Chapter 10: Appendices 10-A to 10-F
 - Chapter 10: Figures 10-1 to 10-8

The review takes into account previous AAH comments (Refer to AAH Technical Memos TM01 and TM02), 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.

Summary of AAH TM02 September 2024

Following a consultation email from the applicant, which focused on the visual receptors and representative viewpoints, AAH provided comments in AAH TM02. Thirty four viewpoints were presented within a 2km study area around the scheme, and it was noted that the study area had reduced from 3km to 2km since issuing AAH TM01. It was noted in AAH TM02 there was no explanation as to why the reduction in study area had occurred. As there were no viewpoints identified beyond 2km, clarification was sought that views or potential significant effects were not expected beyond the 2km extent. Three viewpoints (6, 10 and 12) were identified which it was recommended should be examined further in order to scope out potential effects beyond 2km.

It was also identified that, overall, there was a concentration of viewpoints in some areas, with some potentially duplicating information, for example viewpoints 2 and 3 as well as viewpoints 20 and 25.

Eleven of the viewpoints were selected for Type 3 photomontages, and again, issues were raised regarding these including the accuracy of the figures, where in some cases the direction of view was shown as pointing away from the scheme. It was also considered that other viewpoints not selected for photomontages would have been better selections.

We welcomed the design details, which were considered in section 4 of AAH TM02. It was assumed that the preparation of the ZTV had been utilised in the current layouts and parameters.

PEIR Landscape and Visual Comments

A. Main Overarching Comments on the PEIR:

1. Chapters 1-5 of the PIER succinctly introduce the project, the site and the legislative context. The project is proposed to generate in excess of 50MW of energy, which will be exported to the proposed Navenby substation. Comprising approximately 1426Ha of land, where 1065Ha is classified as 'Principal Site'. It is located 9km to the south and south west of Lincoln City Centre. Close to the villages of Thorpe on the Hill, Witham St Hughs, Haddington, Thurlby, Navenby and Bassingham.
2. The PEIR is prepared in advance of submission of the DCO, forming part of the pre-application process, and follows on from consultation periods. AAH Consultants have subsequently provided consultation feedback to both the applicant, LCC and NKDC.
3. Chapter 1 introduces the scheme and describes the structure of the PEIR. The PIER is the publication of initial findings considering the preliminary *likely* significant effects of the project. Feedback from the PIER will then inform the preparation of the final Environmental statement (**ES**) which will be submitted as part of the DCO application. Our response to the PIER will be used to assist in the delivery of the final ES, and we welcome additional opportunities to consult with the applicant throughout the process, which may include collaborative site visits to finalise viewpoint selections or further design workshops.
4. The landscape and visual sections of the PIER comply with best-practice principles by undertaking a baseline study, before identifying the potential environmental constraints alongside opportunities, which are used to inform the design evolution of the project to minimise and mitigate adverse effects as well as identifying opportunities to enhance the environment. The final stage of the PIER utilises technical environmental assessments to determine the potential environmental effects across all of the project life stages- construction, operation and decommissioning. However, as stated previously, as the design of the scheme is evolving and not fixed at this stage, we have not reviewed the preliminary findings or initial assessments.
5. The Site is described in detail in Chapter 2, with the Site details highlighted in Figures 1.1, 1.2 and 2.1. The Site encompasses land within the district of North Kesteven. A number of villages alongside isolated properties and hamlets are identified as receptors. The list is comprehensive and covers the properties, within the study area, however there is no analysis of properties beyond 2km, and considering the design is evolving, it needs to be clear that the project will not have a detrimental impact on properties beyond 2km. Key transport features encompassing strategic roads as well as public rights of way are identified. Existing features of the Site are briefly described. The energy produced will connect to the National Grid at the proposed Navenby substation (separate application). A feature within the Site boundaries and local area are numerous pylons and overhead power lines.
6. The Proposed Development is considered briefly in Chapter 3, providing an overview before stating the need to decarbonise energy production amid the global context. Throughout the PEIR, the Site is analysed as three elements, firstly, the Principal Site, secondly, the Cable Corridor and finally the Study Area. The connectivity to the proposed Navenby National Grid Substation provides justification for the locality of the Proposed Development. Paragraph 3.3.3 identifies the components that make up the Proposed Development, including the Solar PV panels, the Battery Energy Storage System (BESS), Inverters, Transformers and the

onsite substation. Ancillary elements such as fencing, access tracks and access tracks are also listed. The construction phase will require one main compound, several secondary compounds and the formation of access tracks; these are shown on figure 3-1. The chapter then describes in detail the different elements, for each, given the evolving design, and the adoption of the Rochdale Envelope approach, the assessment of likely effects is based upon a worst-case scenario.

7. Chapter 4 considers both the alternatives (in terms of site and other forms of energy production) considered and the design progression following the consultation process. A range of changes and amendments have been made to the project layout. It is stated that the consideration of alternatives is in accordance with Paragraph 2 of Schedule 4 of the EIA regulations. Other forms of energy generation such as wind or nuclear have been discarded for the Site, as have fossil fuel generation given the need to de-carbonise the energy supply. The need for the scheme is reiterated in regard of achieving net zero by 2050. The chapter reinforces the necessity for providing new electricity infrastructure as well as the need for battery storage.

Section 4.3 considers in detail the site selection methodology which included site topography, grid connection, proximity to residential dwellings, agricultural land classification, accessibility and the proximity to PROWs. In regards the proximity to residential dwellings, the objective was to avoid urban areas, sensitive landscapes (areas of great value- for example west of Navenby) green belt, ecology and heritage designations. A key focus was also to avoid glint and glare to individual properties close to the Principal Site. Within the principal site, alternative layouts were considered and these are detailed in section 4.5. similarly in section 4.6 there is an analysis of the alternative cable corridor routes, at the scoping stage, three were proposed, the overhead line option has been removed in favour of underground.

The design layout iterations are summarised in table 4.2, this is useful in tracking the design evolution as the proposal has progressed to the PEIR stage.

8. Given the continuing evolving nature of the project, the design is not fixed and consequently the Rochdale Envelope principle is applied to the PIER. Within the PEIR a set of broad design principles which include the sensitivity of the local environment, the impact of local communities, supporting the natural and built environment, as well as enriching the ecosystem and identifying opportunities to add value to the local community. We have discussed these in detail in **Section C** below. As the design evolves, we welcome opportunities to discuss the assessment parameters including viewpoint selection and proposed mitigation. The design parameters must be clearly identified within the ES, and subsequently it must be clear and transparent within the LVIA those parameters that have been assessed. This should include not only the height and size/mass of elements of the scheme, but also areas or zones they will be located, such as on works or parameter plans.
9. The project will be operational for 60 years, despite the longevity there is no detail of the number of times the elements of the scheme will be replaced during the operational period. Similar Developments have stated that elements will in all likelihood be replaced once in the operational period. We would welcome dialogue on this matter and clarification regarding if replacements were anticipated and if so, would this be a phased replacement over a number of years or a task to be completed over a period of time comparable with the construction phase of the project, which is currently predicted to span 2 years. The effects predicted during construction, for example the lorry movements within the local road network and the

need for wider access points at various locations across the Site, would be replicated to accommodate the reconfiguration of the panels. The Outline Construction Environmental Management Plan (oCEMP) will be issued as part of the DCO Application, we welcome opportunities to liaise with the application team as the project progresses towards the application stage.

10. Given the stated operational time of 60 years, there is the question of reversibility and duration. Having reviewed the sections relating to this from GLVIA3 and other related guidance, it is clear that this project is long term. Given that 60 years is comparable to two generations as a minimum, there is some strength to the consideration that this would amount to a permanent project, especially considering the average lifespan of building design is circa 50 years. There is clearly potential for significant landscape and visual impacts, especially considering that in this timescale, the panels will be replaced. It is stated in the PEIR that this would be once, but given the pace of technology, it should be considered if it is likely that 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.
11. Decommissioning is considered within the PEIR as a whole and the LVIA chapter. Our assumption is that this will include all aspects of the project. Permissive paths would be removed, but underground cables may remain. Figure 3.1 clarifies the access points to the Site, which will be used during all phases of the project. These will be accessed from existing and upgraded strategic points on the public road network. At this stage the impact of the access points appears vague and would need to be clarified further as the design evolves, we welcome further dialogue on this matter.
12. Access is an important consideration, given the potential for vegetation removal, road reconfiguration and the large vehicles on a local road network. Figure 3.1 identifies a number of access points and we note that some of these c
13. orrelate with selected viewpoints. Continuing on-Site assessment and dialogue will be useful as the design evolves. The masterplan in the current iteration highlights numerous access points and compounds, however the chapter is light on the extent of vegetation loss expectant of the movement of large and numerous vehicles over a significant period of time. Similarly, as mentioned previously, the anticipated panel replacement is not addressed; the potential to change a significant proportion of the Development throughout the 60-year lifespan of the Development would recreate an unexplained proportion of the construction period at least once and possibly more given the pace of technological Development. We would anticipate that, as the design evolves towards the DCO submission, that the impact of the reconstruction, the mitigation measures to be implemented and the number of reconstructions anticipated throughout the lifespan of the Development is clarified fully.
14. Chapter 5 considers the overall methodology of the PEIR; this is further considered in the Landscape and visual impact assessment LVIA (Chapter 10) and in Appendix 10-1. All three will be discussed in **Section B** below. It is useful to first assess the overall methodology and then to digest the individual chapter methodology.

B. Detailed Comments on PEIR:

Legislation and planning policy

Policy and legislation are considered in Appendix 10-A. Section 10-2 of the LVIA summarises the key pieces of national legislation and national to local policy relevant to the LVIA.

The Central Lincolnshire Local Plan, adopted 2023, sets out policies to guide development across Central Lincolnshire up to 2040. Other policies of relevance include; Thorpe on the Hill neighbourhood plan, adopted 2018, with particular reference to Policy 5; Landscape and views and Bassingham neighbourhood plan, adopted 2017 with policy ES4 relating to landscape and countryside surrounding the villages.

Methodology

The overall PEIR methodology is considered in Chapter 5, we have assessed this in conjunction with specific landscape and visual methodology within Chapter 10, section 10:4.

The PEIR methodology confirms in paragraph 5.1.5 that each of the technical assessments follows a systematic approach with the following steps; assessing the baseline, assessing likely significant effects, identifying appropriate mitigation, assessing the residual effects and then assessing the cumulative effects. We accept this approach and find that it confirms to best practice principles. This approach is also consistent with the visual receptors and viewpoints report, which we assessed in our TM02. We welcome that the approach has remained consistent.

Following the Scoping Opinion, landscape and visual matters were taken forward to the PEI report, we agree with this, given the scale of the Development and the likely impacts on both landscape and visual amenity.

Paragraph 5.1.16 reiterates the use of a common chapter structure throughout the EIA. We confirm that the structure used in chapter 10 of the EIA conforms to best practice and we accept this approach.

At this stage, the project technical parameters are not yet finalised, such is the evolving market for solar voltaic and Battery Energy Storage Systems (BESS) and the specific requirements of the UK energy market. It is therefore acceptable that the 'Rochdale Envelope' approach has been applied. This is in accordance with the Planning inspectorate's advice note 9. We consider this, alongside a worst-case scenario for assessment to be acceptable at this stage of the assessment process.

Section 5.4 details the methodology for determining the baseline conditions, utilising online/digital resources, data searches, on-site surveys alongside the review of information submitted as part of other planning applications within the study area of the Proposed Development. This is an acceptable process for determining the baseline.

Section 5.5 considers the Proposed Development design and sets out the rationale to avoid, reduce or prevent likely significant effects on the environment. The first expectation is to avoid or prevent, where effect is unavoidable, mitigation measures will seek to reduce the significance of the effect. Where it is considered that the effects can be neither avoided nor mitigated the final approach would seek to offset impacts. We accept this approach as best practice; however, we would seek reassurances that mitigation measures had strong and robust long-term management strategies to ensure successful establishment. We also seek to ensure that mitigation is not

overly relied upon to the detriment of the baseline character of the landscape within the study area. We shall address these further in the following sections of this review.

Section 5.6 identifies three project stages where likely effects have been assessed, these being; construction, operation and decommissioning. The effects for the operational stage have been further categorised into the following; short term, medium term, long term, reversible long term and permanent effects. We accept this approach as providing the best practice methodology. The Proposed operational life of the Development is stated as 60 years. It is not stated how replacement parts for the Development will be introduced, there could be period(s) of replacements on the scale of construction as technology is upgraded. We would seek clarification on the process of replacement to both the photovoltaics and the larger equipment on site throughout the life of the Development.

The baseline year has been stated as 2023/24, the construction years are expected to be 2031-2033, with a future baseline being 2048, we agree with this approach, given that the application is expected early 2025, and providing a period of 15 years for mitigation planting to mature. We would welcome management policies to ensure the establishment of the planting extend to 2048 and then will be reviewed to address mature planting management. As mentioned previously we would need to consider the impact of equipment replacement during the lifespan of the Development.

Section 5.7 considers the criteria for determining effect significance. Paragraph 5.7.2 details the seven criteria that each topic has developed and agreed, these are Extent and magnitude, duration of effect, nature of effect, are the effects in isolation or cumulative, sensitivity of the receptor and compatibility with environmental policies. We agree with this approach, we welcome the commonality across the different disciplines and confirm that for the landscape and visual chapter they do follow best practice principles.

Paragraphs 5.7.3 to 5.7.7 detail the process related to determining significance, we agree with this approach and accept the table presented (table 5.1) which classifies significance as best practice. We agree with the determination of moderate and above as being classed as 'significant'. Table 5.2 describes the four descriptions (major, moderate, minor and negligible) presented in table 5.1. The baseline effect is then re-assessed following the expected impact of the mitigation measures to determine residual effect.

Construction and decommissioning have been assessed on a worst-case basis. It is stated that decommissioning will follow the process of construction but likely comprising a shorter duration. We agree with this approach, but do consider that over the period of 60 years there are likely to be numerous construction and decommissioning phases. These intermediate stages are likely to be of shorter duration, but it is considered to be of a scale that would have adverse impacts on the landscape and visual amenity. We would welcome some discussion regarding the renovation of the Development as technology advances.

Cumulative effects are considered from paragraph 5.8.12, the methodology follows Planning Inspectorate's guidance Advice on Cumulative Effects Assessments (Ref 5-6), this is a four-stage approach. We welcome this approach and accept its robustness and appropriateness in assessing the cumulative effect on landscape and visual amenity.

LVIA methodology

Within the landscape and visual amenity chapter, the LVIA methodology is detailed in section 10.4, and considers the overall methodology in Chapter 5 as discussed above, providing a unified approach across each discipline. Section 10.4 begins by detailing the methodology for

determining the study area. This has been divided into two parts, the first being the principal site and the second being the cable corridor. We agree with the approach of differentiating the two elements of the project.

Paragraph 10.4.5 addresses the reduction of the initial study area from 5km to 2km. this has reduced due to desk and site-based studies including the bare earth ZTV (figure 10.6) and the barrier earth with viewpoints ZTV (figure 10.7), while we accept that the effects will diminish beyond 2km we would wish to see viewpoints that confirm this judgement. The exclusion of viewpoints beyond 2km is, in our opinion, an omission in establishing the robustness of assessment. It is also an omission that the ZTV hatching (figure 10.7) does not continue beyond the 2km boundary when it is clear that potential visibility would extend beyond 2km to the north, south and west of the principal site.

Paragraph 10.4.10 commences a commentary on the assessment methodology, beginning by cross-referencing to Appendix 10-B, a detailed appraisal of this appendices can be found in section D of this memorandum.

Paragraph 10.4.11 states the guidance used to prepare the LVIA methodology, we confirm it is robust and current best-practice. Following on from this, the section details the process in establishing the baseline. The differences between the visual baseline and the landscape baseline are explained in detail. References are made to the appendices and the figures to clarify the methodology process.

The next paragraphs, commencing 10.4.24 assess the sensitivity and magnitude criteria, before identifying three categories of duration of effects; Short-term (0-2years), Medium-term (2-5 years) and long-term being over 5 years. We agree with this approach and it provides a robust basis of assessment. The level of effect is presented in table 10.1, this is the combination of sensitivity of receptor and the magnitude of effect. It is correctly highlighted that this process is based upon professional judgement. As stated previously, we agree with the findings that any determination moderate or above is to be classified as 'significant'.

The principal of the Rochdale Envelope is clarified in paragraph 10.4.28, again this was introduced in the overall methodology within Chapter 5 and discussed earlier. We agree, that at this stage, given the evolving design of the development, the approach of assessing the worst-case scenario should be adopted. We would welcome further discussion and clarification to reduce some uncertainty as the design progresses towards submission and assessment.

Many of the assumptions identified from paragraph 10.4.30 have been introduced elsewhere in the PEIR, including the date of survey and likely timeframe of construction and operation. We find that these are plausible timeframes. For construction impacts we welcome the worst-case scenario of winter assessment as stated in paragraph 10.4.37. We do however, consider that across the lifespan of the development a series of construction periods, potentially not all of equal intensity are likely as technology progresses and necessitates replacement of core elements of the Development. We would seek some clarification on how these potential phases would be considered as part of the assessment process.

Baseline conditions

The baseline conditions are considered in section 10.5. This is a summary of the matters considered in Appendix 10-C. Both sections describe the existing and anticipated future baseline conditions for the landscape and visual assessment.

The assessment identifies two distinct areas for consideration; the Principal Site and the Cable Corridor. It is very useful to split the development in such a way as they are two distinct elements. The characteristics of the two 'sites' are described in detail, considering matters such as the presence of any designations, land use, recreational value.

The section then considers the wider study area, which is set at 2km from the principal site. The assessment here, follows best-practice methodology by considering aspects like landform and watercourses, vegetation, settlement pattern and land use, infrastructure, public rights of way (PRoW), designations, character of the night sky and tranquillity. For each assessment the text is thorough, concise and follows a logical process of examination. The section provides a very detailed description of the baseline.

Published Landscape Character Assessments are described in detail, commencing with a national level. There are two relevant National Landscape Character Areas, NCA 47: Southern Lincolnshire Edge and NCA 48: Trent and Belvoir Vales, both are shown in figure 10-4a.

Regionally, the East Midlands Regional Landscape Character Assessment and the North Kesteven District Landscape Character Assessment are considered. The descriptive text includes dialogue regarding guidelines for energy Developments, in the case of East Midlands study, it is stated that guidelines seek to protect the character of the landscape by appropriately siting and designing energy installations. Tree planting is also noted as being able to integrate new Development into the landscape.

Two Landscape Character Groups within the East Midlands Regional Landscape Character Assessment are located within the study area, these are shown on figure 10-4b.

- LCG 4: Lowland Vales (LCG4) covering the western and central parts of the study area, most of the Proposed Development.
- LCG 6: Limestone Farmlands (LCG 6) covering the eastern parts of the study area.

Three Landscape Character Types are identified as of relevance from the North Kesteven District Landscape Character Assessment, these are shown in figure 10-4c

- LCT: Trent & Witham Vales covering the western part of the study area and the solar PV Proposed Development.
- LCT: Lincoln Cliff covering the dipslope in the eastern part of the study area
- LCT: Central Plateau covering the eastern part of the study area between the top of the dipslope and the A15

The section then details 16 Local Landscape Character Areas within the study area (LLCA), these are shown in figure 10-5 and appendix 10-C. for each, the location is described.

Table 10-2 presents an assessment of landscape sensitivity which is derived from an assessment of landscape value and landscape susceptibility. This assessment is in line with GLVIA3 and is described in appendix 10-E. The table is clear, as it allocates a value for each of the receptors identified from the Site, to national to regional and then at a local level. We accept that these definitions are based on professional experience and find the allocated values to be generally acceptable.

The section then turns to the existing visual baseline with reference to visual receptors and representative viewpoints. The section states that the assessment is a combination of desk

based with a ZTV and then field work to verify the findings of the ZTV. Appendix 10-B describes the methodology for the preparation of the ZTV, the bare earth ZTV is shown in figure 10-6 and the Barrier earth ZTV is figure 10-7. The ZTV and field work has determined that significant impacts are unlikely beyond 2km, paragraph 10.5.95 states that views towards the Principal Site east of the A607. Whilst we agree, effects will diminish over distance, we do not agree with no assessments carried out beyond 2km. The ZTVs show potential for views beyond the 2km boundary and it would be useful to identify receptors identified beyond 2km that have been scoped out due to no impact.

Table 10-3 follows the pattern of table 10-1 in allocating a value of the view, the susceptibility of the view to determine visual sensitivity. The table assesses many more receptors than represented by the thirty-four representative viewpoints, however we note that all of the receptors are within the 2km extent; in this table it would have been useful to include receptors beyond 2km for confirmation of the judgement that no significant effects are expected beyond 2km.

The section concludes by considering the future baseline, this is based on an anticipated construction date of 2031-2033. Operation commences (year 1) in 2033 and the future baseline is set at year 15 (2048). Given the expected growth rates of mitigation planting, we find the 15-year baseline as acceptable. Given this, we would expect all management plans to cover an initial establishment period of 15 years, with a revision for the management of mature vegetation afterwards.

Embedded mitigation measures

Section 10-6 considers embedded mitigation and states that the onus is to be on 'good design'. The LVIA has informed the design process. Three design principles of the Development are considered relevant to landscape and visual matters:

- Respect for the wider landscape and the intrinsic value of the natural environment.
- Reduce the environmental impact through a sensitively designed Proposed Development that seeks to fit into the landscape while exploring opportunities to mitigate potential visual impacts.
- Respect the distinctive and unique character of the countryside.

The design process, it is stated, has responded to published guidance, refer to previous comments regarding national, regional and local Landscape Character Assessments. This has also included referencing Statements of Environmental Opportunities (SEO). Two SEO's are identified for NCA 47 and three for NCA 48.

As a result, a landscape strategy that seeks a development that integrates, and where possible, enhances existing nature networks and green infrastructure. The development it is stated will respond to the existing landform whilst responding to and seeking to enhance the landscape character. We find that these objectives along with the process of evaluating the SEO's is in line with best practice and is an acceptable basis for the design of the Proposed Development.

From the above objectives, a set of mitigation measures are Proposed, these are detailed below;

- Careful siting in the landscape- the use of the existing field pattern, will protect existing vegetation. Important cross valley views will be preserved, larger onsite elements will be carefully sited to reduce visual exposure, there will be set-backs from exiting settlement boundaries, the local road network and PROWs. We accept these design strategies.

- Conserving existing vegetation patterns- distinct offsets from trees, woodlands, watercourses and hedgerows. We find this approach acceptable, however we have reservations regarding blanket offsets and would seek a more individual approach, with these stated distances being a minimum standard.
- Sensitive design in regards form and materials- we welcome the avoidance of the sensitive landscape of Lincoln Cliff. We also welcome the careful consideration of the impact of lighting on the landscape character of the study area.

Management of the mitigation is referenced in paragraph 10.6.23, whilst we accept the status of the design and the application, we do expect a robust and detailed long-term management strategy that will focus on establishment prior to moving to the effective management of a mature landscape in the latter years of the Proposed Development. We would welcome collaborative involvement in the preparation of management documents.

Preliminary assessment of effects

The assessment of effects considers the three phases of the Proposed Development; construction, operation and decommissioning. Each phase is considered in detail, with the expected impacts on landscape and visual receptors identified. Table 10.4 summarises the effects during construction. The landscape and visual receptors are listed separately in logical order alongside a summary of the potential impacts. Reversibility and duration are determined with the likely significance given a classification. We accept the findings of the table as robust and representative of professional judgement based upon desk and field work. However, as the design continues to evolve, we would expect to see a revision and update to this table and the overall assessment process. We welcome the use of a clear table for digesting this assessment rather than a lot of text.

The same process is repeated for operation and maintenance effects with year 1 initially assessed and then followed by year 15, which is the stated future baseline following the maturity of mitigation planting. Finally, the decommissioning phase, which has an anticipated date of 2093, is assessed.

We do consider it likely that throughout the operation period, there will be elements of reconfiguration, replacement and removal as technology advances or elements become obsolete. Whilst we accept this is a difficult process to quantify, we do consider that, in a worst-case scenario these stages of intervention would parallel the effects of construction and decommissioning. The PEIR has not addressed this matter and we do seek this as a discussion thread prior to application submission. We would also need to see details of how mitigation planting is protected across the lifespan of the development, especially in times of replacement of elements during operation.

During construction, we consider that the effects of large-scale vehicular movements will have a significant impact on the local road network beyond the 2km study area, and reiterate the reservations we have for not including receptors beyond 2km when the original study area was 5kms.

Additional mitigation and enhancement

Following consultation and given the findings presented in the PEIR, the design proposes the integration of additional mitigation. It is stated that this will be practicable, appropriate and proportionate to fit the context, we agree that additional mitigation is useful but we do stress that it should be carefully considered so that the character of the study area, and wider context

is not compromised, for example careful consideration of the retention and enhancement of cross valley views referenced in the design objectives.

Residual effects

We agree that most significant effects will be experienced during the construction phase. However, we repeat the point that across the operation stage, which spans 60-years, there is potential for intermittent periods of replacement, within which potential large and numerous elements of the Development could be replaced. This has not been considered within the PEIR, we would welcome dialogue to discuss this further.

Cumulative effects

Cumulative effects are considered in section 10-10 of the LVIA, cumulative developments are also considered in chapter 15 of the PEIR. Paragraph 10.10.1 lists the proposed developments that were considered to have the potential to result in significant cumulative landscape and visual effects. Within the initial list three DCO solar schemes, which given the scale and typology have been included;

- EN010149 Springwell energy Farm
- EN010162 Great North Road Solar Limited
- EN010159 One Earth Solar Farm

Cumulative effects are stated as either impacting the physical fabric of the landscape when multiple Developments effect landscape components like hedgerows or the perceptual qualities like tranquillity. Similarly, character can be impacted where multiple developments introduce new features into the landscape.

Cumulative impacts on visual amenity can result from combined visibility or sequential impacts. These include visibility of two or more Developments from one viewpoint either in combination or succession

The cumulative landscape and visual effects are considered for each of the development stages; construction, operation and decommissioning. The assessments are concise and cover most of the key aspects. We do reiterate the point raised regarding the likelihood of intermittent replacement of equipment, which could be akin to construction. So potentially there could be multiple construction phases.

We agree that it is difficult to sequence when other developments will be constructed and decommissioned. But with this in mind, there could be significant periods of construction for the study area and the wider landscape as different developments reach operation at different timescales. Given the local road network within the study area and the rural character of this network (for example soft verges) multiple developments constructed over a significant period of time could amplify the effects significantly and diminish the effects of mitigation measures to minimise effects.

C. Detailed Comments on PEIR Supporting Figures (Chapter 10 LVIA):

- 10.1 LVIA study area
- 10.2 Topography & watercourses
- 10.3 Designations
- 10.4a National landscape character areas

- 10.4b Regional Landscape Character areas
- 10.4c District landscape character areas
- 10.5 Local landscape character areas
- 10.6 ZTV (bare earth)
- 10.7 Barrier earth with viewpoints
- 10.8 Viewpoint photography

Overall, the figures are clear and concise, they inform the reader of the details of the site and the Proposed Development in significant detail. It is useful that in some, for example 10-1 and 10-3 significant elements located beyond the 2km study area are shown. In the case of PRoWs, it is an omission that no viewpoints are located beyond the 2km study area despite the continuation of the routes beyond the 2km mark.

It is an omission that figures 10-6 and 10-7 do not show any detail beyond the 2km extent, yet it is clear that there is potential for visibility from the information presented. This is particularly pertinent when considering the residential areas of North Hykeham to the north and north east of the Proposed Development. In order to fully assess the validity of the viewpoint selection it is an omission that we recommend is rectified.

Figure 10.8 takes each viewpoint in turn and presents summer photography. Overall, the quality of the images is acceptable, there are some views overly dominated by vegetation and it is possible that finer grain selection of position could have yielded a more useful visual representation. It would be useful to see a contrast between summer and winter views. It would also be useful to have a small location image for ease of reference for each viewpoint to avoid cross referencing with figure 10.7.

In figure 10.7, some viewpoints appear very close to each other and some rationalisation could be achieved to avoid duplication. This would enable the selection of different viewpoints, for example some beyond the 2km boundary to test the hypothesis that there are no significant effects beyond 2km or additional ones to the east of the Proposed Development. Alternatively, it would be useful to have a review of viewpoints which have been scoped out of the assessment with an explanation of the reasoning behind their rejection.

D. Review of Appendices

A) Appendix 10-A Landscape and visual amenity Policy and legislation

This appendix identifies the legislation, policy and supporting guidance considered relevant to the assessment of likely significant landscape and visual effects from the Proposed Development. Policy that could influence the determination of important landscape and visual features as well as policy that could influence the methodology of the LVIA are identified for consideration.

National and local legislation are considered in detail within section 2 of the appendix, section 3 considers local and national policy. Table 1 is useful in identifying the policy and legislation and referencing to the relevant sections of the PEI report.

B) Appendix 10-B Landscape and visual impact assessment methodology

This appendix sets out the methodology applied to the Landscape and Visual Impact Assessment (LVIA). Initially the interrelationship of Landscape effects and visual effects are considered, they are also clarified in paragraph 1.1.2. The appendix reconfirms the stages of methodology and the assessment periods, these are in line with the overall EIA and adopt a worst-case scenario, with,

for example, the assessment of construction and decommissioning undertaken in winter. The impact of Proposed mitigation is assessed at year 15 of operation. We welcome this approach in assessing as a worst-case scenario.

The appendix reiterates the methodology, including;

- the determination of the study area,
- the establishment of the baseline,
- the fieldwork undertaken,
- the landscape baseline and receptors,
- the visual baseline and visual receptors,
- the determination of representative viewpoints
- sensitivity of receptors

The appendix repeats the information presented within chapter 10 of the PEIR and for each of these, the methodology has followed best-practice advice contained within GLVIA3 so we accept this approach as robust and appropriate.

A series of tables (1 to 9) provide a descriptive methodology for assessing the significance of effect, these adhere to the guidance within GLVIA3 and again, we accept these as a robust and thorough methodology.

Section 2-9 provides additional information and detail into the process of producing a ZTV, including identifying the software used. A bare earth ZTV is supplemented by a detailed screened ZTV with assumed heights for buildings being set at 12m and 7.5m. A viewing height of 1.6m. The Development elements including photovoltaics, BESS containers and the onsite substation are assessed based on a worst-case scenario. This is inline with EIA methodology presented in Chapter 5 and the LVIA methodology from chapter 10.

C) Appendix 10-C Landscape character baseline

The appendix considers the character of three elements of the Development; the Principal site, the Cable corridor and the study area. Each of these are considered in detail prior to an assessment of the published landscape character assessments. The appendix considers national, regional and then local character studies. This is a robust approach and conforms with best-practice methodology. Section 4 considers 16 Local Landscape Character Areas (LLCA). Each is placed in context within national and regional character areas before an explanation of the key characteristics. It is a robust assessment and provides useful insight in the methodology in determining viewpoints. However, some of the text does strengthen the idea that visual effects will extend beyond the 2km study area, and highlights the assertion that some viewpoints should have been placed outside of the 2km boundary.

D) Appendix 10-D Visual baseline

The appendix considers the thirty-four representative viewpoints selected for the LVIA. It is stated that these do not represent an exhaustive list and have been selected from publicly accessible land and representative of views experienced by receptors and could include sequential views, for example along public rights of way. Whilst sequential views are useful and

do explain the close proximity of some of the viewpoints it is noted that some views being close together whilst there are areas, notably to the east where there are relatively few viewpoints.

Each viewpoint is described in turn with an explanation of the receptors and the visibility of the Site. This is useful to be read in conjunction with Figure 10.8.

E Appendix 10-E Landscape character assessment

This appendix presents a series of tables which present details of the landscape effects of the Proposed Development with respect to Landscape Character Areas (LCAs) or Relevant Landscape Character Types (LCTs) across the study area. The effects are considered across all phases of the Development; construction, operation and decommissioning. All effects are considered in winter and represent a worst-case scenario. A summer assessment is included in year 15 to fully assess the effects given the establishment of the Proposed planting. Each category is coded to clarify the different stages of the assessment, refer to paragraph 1.1.5, page 2. The tables are clear and concise, presenting a range of information in a clear way that aids the reading of chapter 10 and clarifies some of the information presented in Figure 10.8 as well as other chapter 10 figures. For each the scale and context are described, then the duration and reversibility for each phase of the Development before determining a level of effect and significance.

The order of the tables commencing in the Principal Site, then the cable corridor before proceeding with national, regional and then local landscape character areas is clear and concise. It would have been useful to have a concluding table that drew together the information from each of the tables or if this information could have been represented on a map of the study area. It is a little lengthy, but there is a lot of useful information presented.

F Appendix 10-F Visual assessment

The same approach as for appendix 10-E is adopted in this appendix for each of the thirty four representative viewpoints. Table 1 identifies the broad receptor groups for the viewpoints which include residents (within 2km), recreational users (on PRoW, promoted walking routes and cycleways), motorists, and commercial users. The previous comments made for appendix 10-E are valid for 10-F.

AAH Landscape

14th November 2024

Technical Memorandum 4 (AAH TM04)

Lincolnshire County Council and North Kesteven District Council, Fosse Green Energy: Relevant Representation Landscape and Visual Comments

Introduction

AAH Consultants, on behalf of Lincolnshire County Council (**LCC**) and North Kesteven District Council (**NKDC**), has reviewed the relevant Landscape and Visual elements of the Fosse Green Energy Application to provide initial comment to be incorporated within a Relevant Representation statement from LCC and NKDC.

Fosse Green Energy, which is proposed on 1,368 hectares of land within the administrative area of North Kesteven District Council, located approximately 9km south and south west of Lincoln City Centre, for the development of PV panels, substation, BESS, cable connection corridor, and associated infrastructure.

The Fosse Green Energy (Reference: EN010154) Application documents that have been accessed and reviewed are available on the Planning Inspectorate Website at:

<https://national-infrastructure-consenting.planninginspectorate.gov.uk/projects/EN010154/documents>

This Technical Memorandum (**TM**) includes initial comments, and a full review of the landscape and visual elements of the scheme is currently being carried out. This full review will be included within the individual Local Impact Reports (**LIR**) submitted by LCC and NKDC 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 (LVAs) and Landscape and Visual Appraisals (LVAs)*, 10th January 2020, by the Landscape Institute (**LI**).

By reason of its mass and scale, we judge that the proposed development would lead to Significant Adverse effects upon the existing landscape and visual baseline, which is reflected within the submitted Landscape and Visual Impact Assessment (**LVIA**).

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. We are particularly concerned about the landscape character effects through changes to the land use over an extensive area of agricultural land, as identified in Section 10.7 of the LVIA chapter. The LVIA chapter identifies a *“change in land use and character due to the solar panels and associated equipment introducing structures within an arable landscape”*. This should be considered in regards to affecting a vast area of land.

Significant landscape effects are subsequently identified within the LVIA chapter with the identification of Significant adverse effects to the Principal Site (the area of the order limits covered by PV panels) and Published Landscape Character Areas, at Construction, Year 1 Operation and Year 15 Operation. Significant Residual landscape effects largely arise from character areas directly affected (where the development is located within these areas).

The scale and extent of development would also lead to Significant Adverse effects on views from visual receptors, changing from views experienced within an agricultural or rural landscape to that of a landscape containing large scale solar development.

The development has been identified in the LVIA chapter as resulting in a Significant change to a variety of visual receptors at Construction, Year 1 Operation and Year 15 Operation. Significant Residual visual effects largely arise from sensitive users in close proximity to the development where it is not possible to sufficiently screen views of the development.

While we acknowledge new planting and habitat creation will add valuable assets across this area, this is through the introduction of a large-scale solar development in an agricultural landscape. The planting, if establishes as predicted, will also go some way in screening and integrating proposals in views. However, we do note that the reduction in Significant landscape and visual effects predominantly relies upon the successful establishment of the planting scheme.

The cumulative landscape and visual effects of the proposed development are considered in Chapter 15 of the ES and Section 10.10 of the LVIA. While a 2km ZOI has been utilised for schemes to be considered for cumulative landscape and visual effects, four large scale solar projects that are located beyond this distance have also been shortlisted to be considered against Fosse Green Energy for cumulative landscape and visual effects, as identified in paragraph 10.10.2:

- ID 63. Application Reference: EN010149. Springwell Energy Farm.
- ID 87. Application Reference: EN010162. Great North Road Solar
- ID 88. Application Reference: EN010159. One Earth Solar Farm.
- ID 103. Application Reference: EN0110016. Leoda Solar Farm

Of the projects listed within paragraph 10.10.1 and 10.10.2 to be considered in the cumulative assessment, Significant cumulative landscape and visual effects judged to be limited to the scheme and:

- ID 95. Application Reference: PL/0087/23. North Hykeham Relief Road: Significant landscape and visual effects are identified in the LVIA;
- ID 63. Application Reference: EN010149. Springwell Energy Farm: Significant landscape and visual effects are identified in the LVIA;
- ID 103. Application Reference: EN0110016. Leoda Solar Farm: Significant landscape and visual effects are identified in the LVIA.

Due to the extent and proximity of additional NSIP scale solar schemes in the area, we would suggest the examination is utilised to explore the potential for Significant effects from these additional schemes, above those identified in the LVIA. These large-scale solar schemes occupy some of the same landscape character areas as Fosse Green Energy Solar. The mass and scale of these projects combined has the potential to lead to adverse effects on landscape character over an extensive area, across the region, which may be completely altered over the operational period, particularly when experienced sequentially for visual receptors travelling through the landscape and experiencing these schemes across potentially several kilometres, albeit with gaps between schemes. These schemes combined, if built, would clearly require the update of any published landscape character assessment, including the NCA's, so as to include large scale solar as a defining land use characteristic as well as agriculture.

The Fosse Green Energy scheme would evidently deliver landscape and ecological improvements through mitigation areas and planting. However, this will be dependent upon the information set out in the Outline Landscape and Ecology Management Plan (shown on Figure 7.15-1 Landscape Mitigation plan within the OLEMP at Appendix A) which illustrates the mitigation, which should be further explored, and would need to be refined at the detailed design stages.

The *DCO* should include for approval of any subsequent detailed landscape and ecological mitigation scheme (planting works), as referenced in Schedule 2 of the *DCO*. This should clearly link to any landscape mitigation that is submitted as part of the scheme, and subsequently that which has been assessed as part of the *LVIA*. This should not just be a management plan, but a detailed landscape scheme clearly identifying plant species, numbers and specifications along with planting details.

The *DCO* should also include for an appropriate period of landscape maintenance, currently referenced at article 30(8), that ties into a period of time identified in the Outline Landscape and Ecology Management Plan, and would expect an initial 15-year period of management and maintenance as a minimum, which would align with the assessed residual landscape and visual effects. This would subsequently be regularly reviewed and monitored at a reasonable period, such as every 3 to 5 years and implemented for the lifetime of the project. This should include for a reasonable plant replacement program, such as following a significant loss or failure to thrive, to ensure the planting scheme meets the aims and objectives laid out in the submission.

Proposed vegetation removal is identified within the Draft *DCO* and Appendix 10-H Arboricultural Impact Assessment. Clear vegetation removal processes should be put in place to ensure any vegetation loss is aligned with these plans and schedules and further removal or works is agreed with the relevant parties prior to any works being carried out. This should clearly relate to vegetation removal plans and *AIA*, and this must also include vegetation removal or works to facilitate wider highways and access works, such as for abnormal loads.

[REDACTED] CMLI
AAH Landscape

[REDACTED] @aahplanning.com
[REDACTED]

10 October 2025

APPENDIX B

Landscape Institute Technical Guidance Note 1/20 (10 Jan 2020): Reviewing Landscape and Visual Impact Assessments (LVIA) and Landscape and Visual Appraisals (LVAs)

Reviewing Landscape and Visual Impact Assessments (LVIA)s 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 LVIA's 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 LVAs 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 LVAs, 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 LVAs. 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* LVAs/LVAs, this document provides guidance on how to *review* LVAs 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 LVAs 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 Mark¹ 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 EIA²contains useful tests to help judge the landscape and visual effects content of Environmental Statements...”*

In addition, European Commission guidance on ES review³, 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: <http://www.iema.org.uk> [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> [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 LVIA 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 LVIAs, 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 LVIA 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/glia3-panel/>

Authored by Mary O'Connor FLI on behalf of the GLVIA Panel and approved by LI Technical Committee
Nov 2019

Landscape Institute
85 Tottenham Court Road
London
W1T 4TQ

www.landscapeinstitute.org

Document history
Edited for publication by Simon Odell CMLI 10 Jan 2020



**North Kesteven
DISTRICT COUNCIL**

**Application by Fosse Green Energy Ltd for
an order granting development consent for the
Fosse Green Energy solar farm**

Local Impact Report:

APPENDIX B

**Biodiversity report -
Lincolnshire County
Council**

North Kesteven District Council

[REDACTED])

NKDC reference: 23/0325/NSIP

Planning Inspectorate reference: EN010154

January 2026

CONTENTS

Appendix A – AAH Landscape and Visual Impact (LVIa) – AAH
November 2025

Appendix B – Biodiversity report - Lincolnshire County Council
November 2025

Appendix C – Archaeology - LCC's Historic Environment
(Infrastructure) Officer

Appendix D – Review of Fosse Green Solar Project ES
Chapter Soils and Agriculture - Landscape
October 2025

Appendix E – Details of Stepping Out Walks

Appendix F – Planning History

Appendix G – Development Plan Policies



Application by Fosse Green Energy Ltd for an order granting development consent for the Fosse Green Energy solar farm

Local Impact Report

APPENDIX A –

**AAH Landscape and Visual Impact (LVIA) –
AAH November 2025**



Application by Fosse Green Energy Ltd for an order granting development consent for the Fosse Green Energy solar farm

Local Impact Report

APPENDIX B –

**Biodiversity report - Lincolnshire County
Council November 2025**



Application by Fosse Green Energy Ltd for an order granting development consent for the Fosse Green Energy solar farm

Local Impact Report

APPENDIX C – Archaeology - LCC's Historic Environment (Infrastructure) Officer



Application by Fosse Green Energy Ltd for an order granting development consent for the Fosse Green Energy solar farm

Local Impact Report

APPENDIX D –

**Review of Fosse Green Solar Project ES
Chapter Soils and Agriculture -
Landscape October 2025**



Application by Fosse Green Energy Ltd for an order granting development consent for the Fosse Green Energy solar farm

Local Impact Report

APPENDIX E – Details of Stepping Out Walks



Application by Fosse Green Energy Ltd for an order granting development consent for the Fosse Green Energy solar farm

Local Impact Report

APPENDIX F –

Planning History



Application by Fosse Green Energy Ltd for an order granting development consent for the Fosse Green Energy solar farm

Local Impact Report

APPENDIX G – Development Plan Policies

Lincolnshire County Council ecology and biodiversity comments for the Fosse Green Energy Local Impact Report

The Council has reviewed the submitted information concerning the assessment of potential ecological effects of the proposed development. APP-033 (6.1 Environmental Statement Chapter 8: Ecology and Nature Conservation) and associated appendices set out the biodiversity and ecological elements of the Applicant's Environmental Statement. The Council considers that information included in (APP-033) 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

There are no internationally important sites designated for biodiversity within 10km of the proposal and two nationally important sites designated for biodiversity within 5km of the Order limits. The location of these sites is shown in AS-042.

Non-Statutory Designated Sites

There are 29 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 AS-043.

Sections of two Local Wildlife Sites (LWS) fall within the proposed DCO boundary and will therefore potentially be directly affected by the proposals. These are The River Witham, Aubourn to Beckingham LWS and Navenby, Green Man Road Verges LWS. Table 8-13 of APP-033 sets out proposed mitigation for potential impacts which includes using trenchless methods to cross the River Witham and soil storage and habitat restoration using locally sourced seed for the impacted length of road verge. These mitigation proposals are considered acceptable and are secured in the Framework CEMP (APP-189). 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

A Habitats Regulations Assessment report (APP-181) has been prepared which assesses potential pathways for Likely Significant Effects on European sites. There are no European sites present within 10km of the DCO Site boundary, and no European sites are designated for birds (within 20km) or bats (within 30km). The Wash SPA/Ramsar and the Wash and North Norfolk Coast SAC are hydrologically connected to the Proposed Development via the River Witham, however they are approximately 70km downstream of the Proposed Development. APP-181 concludes that at this distance there are no potential impact pathways. APP-181 therefore concludes that there will be no significant effects on any European site.

The Council agrees with the Applicant's conclusion that a Habitats Regulations Assessment is not required however, The Planning Inspectorate will need to satisfy itself that sufficient information has been submitted by the Applicant to enable this conclusion to be reached.

Existing biodiversity value

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-033 and associated appendices. A suite of habitat types of up to national importance were identified. The Council is of the opinion that the level of survey effort, survey methods and desk-study research undertaken to identify important habitats and establish the baseline biodiversity value is appropriate.

APP-033 identifies a range of ecological impacts across all phases of the development. These potential impacts include both permanent and temporary or damage to habitats, species mortality and disturbance 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.

The Applicant has prepared a Framework Construction Environmental Management Plan (CEMP) (APP-189), a Framework Operational Environmental Management Plan (OEMP) (APP-190), a Framework Landscape and Ecological Management Plan (LEMP) (AS-101) and a Framework Decommissioning Environmental Management Plan (DEMP) (APP-191). A Commitments Register (APP-183) has been prepared which provides a helpful summary of the how mitigation identified for the Project including embedded and additional mitigation measures are secured.

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 secured in the DCO. The Council has the following specific comments to make in relation to impacts on the suite of habitats present on the site:

- **Ancient Woodland and Veteran and Ancient trees:** the applicant's Arboricultural Assessment (APP-155) states that there are no areas of ancient woodland identified within the proposed DCO boundary however Tunman and Housham Woods are immediately adjacent to the DCO boundary, and these are identified on as Ancient Replanted Woodlands on Priority Habitat Mapping on the MAGIC website.

APP-155 identifies 126 trees considered likely to be veteran and two trees considered likely to be ancient. No veteran or ancient trees are proposed to be removed to facilitate the development, and appropriate buffers will be implemented to ensure their protection. Clarification is required however in relation to how trees have been classified as veteran or ancient as this will have an impact on the site's baseline biodiversity value as calculated by the Statutory Biodiversity Metric.

The Council considers that measures aimed at the protection of ancient woodlands and veteran or ancient trees set out in the Framework CEMP (APP-189) are appropriate.

- **Arable field margins and scarce arable flora:** the Council notes that Field AF29 has been assessed as being of national importance for scarce arable flora and fields AF17 and AF72 are assessed as being of County Importance for scarce arable flora. Prior to construction, seed from these fields will be harvested and seeded in cultivated field margins within retained arable fields close to these fields. In addition to this following the cessation of arable farming these fields will be subject to the provision of disturbed field margin strips to ensure that suitable conditions remain for these species. The Council considers that this proposed mitigation is appropriate and is effectively secured within the Framework LEMP (AS-101) at 4.1.18 and 5.3.88.

Protected and priority species

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-043) and associated appendices. The Council has reviewed the application in accordance with Natural England's standing advice for protected species. Having considered (APP-043) The Council considers that the survey methods used, and the survey effort deployed were appropriate.

Without mitigation, the proposed development has the potential to result in negative effects on the populations of a number of species / species groups.

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.

The Council has the following specific comments to make in relation to impacts on protected and priority species:

- **Terrestrial invertebrates:** The Council notes that the presence of two notable butterfly species has been detected in the study area. Habitat mitigation and enhancement proposals should take account of the species presence and any opportunities to bolster their populations. An example of this could be ensuring that any elm present in the site are retained as far as possible and included in any plating which will benefit White-letter hairstreak.
- **Breeding birds:** breeding bird surveys described in APP-179 have detected an assemblage of breeding birds of County importance. The presence of three Scheule 1 breeding birds has also been detected.

The proposed development will result in the loss of considerable areas of arable habitats which are of value to ground nesting species such as lapwing and skylark. Both species are recorded within the proposed DCO area. 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.

At 8.12.19 to 8.12.26 of APP-033 and in Figure 8-5: Bird Mitigation Land Allocation (AS-046), the Applicant has set out proposed measures designed to reduce the effect of the proposed development on ground nesting farmland birds. Measures include the provision of areas of undeveloped grassland and retained arable within the development area. Within these areas, skylark plots will be established which will be managed to provide the species' favoured nesting conditions. The Council welcomes this approach, and the proposed measures are secured in the Framework LEMP (AS-101).

Subject to the above and measures relating avoiding vegetation clearance during the nesting season and undertaking pre-commencement ecological surveys set out in the CEMP (APP-189), The Council agrees that the proposed mitigation measures are appropriate and should ensure that significantly negative effects on breeding birds are avoided.

- Bats: Surveys described in AS-088 have identified the presence of at least 10 species of bat. This includes the nationally rare barbastelle and serotine which is rare in Lincolnshire. The Council notes the Applicant's intention to avoid impacts to roosts or potential roost features and to undertake additional pre-construction surveys to update data 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.

- Riparian mammals: AS-089 sets out the results of riparian mammal surveys. Populations of both otter and water vole have been detected with the proposed DCO boundary. The Council consider that mitigation measures set out in Table 3 of the Framework CEMP (APP-189) 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.

Biodiversity Net Gain (BNG)

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% Biodiversity Net Gain (BNG). The Applicant has set out their approach to BNG in APP-194. Based on current calculations the Proposed Development is predicted to result in a net gain of 30.64% for area habitat units, 50.62% for hedgerow units, and 11.83% for watercourse units. The Council welcomes this level of BNG delivery. Details of establishment and management required to achieve the predicted levels of BNG will need to be provided prior to construction.

In addition to comments made in The Council's Relevant Representation, there are further areas of the Applicant's BNG assessment that require additional information or clarification.

- At APP-194, 2.33, the Applicant states "*Where habitat condition data was not recorded on-site, for example due to access restrictions, habitat conditions were assumed to be 'good' as a precautionary, 'worst-case' measure.*" This does not appear to be the case in all instances of assumed condition e.g. Metric sheet A1 rows 28, 31, 34 etc. The Applicant should review the metric and clarify the position in relation to assumed habitat condition where field surveys were not undertaken. Where condition has been assumed the Applicant should adhere to the precautionary principle by assuming the highest possible condition where uncertainty exists.
- Confirmation is required that the habitat baseline reflects habitat condition prior to any degradation since January 2020 (or August 2023 for extant permissions).
- In the Applicant's Biodiversity Metric, for on-site area habitats, the total area of lost habitat was found to be 680.27 ha, and the total area of created habitat was found to be 680.29 ha. These areas should be equal.
- Clarification is required on the implications of using either fixed or tracker panels. If habitat loss or shading implications are higher for one system type than the other, a precautionary approach using the most impactful scenario should be adopted.

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

There are a number of development proposals of varying scales in the vicinity of this proposal. These range from small scale housing developments to NSIP scale energy developments. Details of the approach to the assessment of cumulative effects and a list of projects considered are presented in APP-040 and section 8.15 of APP-033.

Cumulative effects on sensitive ecological receptors are considered for sensitive ecological receptors including Navenby Green Man Road Verges LWS, rivers and ditches, ground nesting birds and bats. The Council notes however that Table 8-19 of APP-033 includes an empty row relating to impacts on Veteran and Ancient Trees.

The assessment concludes that given mitigation proposed for this development and likely standard / good practice mitigation proposed for other nearby developments there will be no significant adverse effects on these receptors arising from cumulative impacts. Assuming that proposed mitigation for this proposal is adequately secured in the DCO, The Council agrees with the applicant's conclusions in relation to cumulative effects on ecology.

Ecological Steering Group

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.

Establishing such a group 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.

Overall impact of the development on ecology and biodiversity

The Applicant's Environmental Statement 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.

The Applicant has also signalled an 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 overall, 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.



Application by Fosse Green Energy Ltd for an order granting development consent for the Fosse Green Energy solar farm

Local Impact Report:

APPENDIX C

Archaeology - LCC's Historic Environment

Officer

North Kesteven District Council

(REDACTED)

NKDC reference: 23/0325/NSIP

Planning Inspectorate reference: EN010154

January 2026

CONTENTS

Appendix A – AAH Landscape and Visual Impact (LVIa) – AAH
November 2025

Appendix B – Biodiversity report - Lincolnshire County Council
November 2025

Appendix C – Archaeology - LCC's Historic Environment
(Infrastructure) Officer

Appendix D – Review of Fosse Green Solar Project ES
Chapter Soils and Agriculture - Landscape
October 2025

Appendix E – Details of Stepping Out Walks

Appendix F – Planning History

Appendix G – Development Plan Policies



Application by Fosse Green Energy Ltd for an order granting development consent for the Fosse Green Energy solar farm

Local Impact Report

APPENDIX A –

**AAH Landscape and Visual Impact (LVIA) –
AAH November 2025**



Application by Fosse Green Energy Ltd for an order granting development consent for the Fosse Green Energy solar farm

Local Impact Report

APPENDIX B –

**Biodiversity report - Lincolnshire County
Council November 2025**



Application by Fosse Green Energy Ltd for an order granting development consent for the Fosse Green Energy solar farm

Local Impact Report

APPENDIX C – Archaeology - LCC's Historic Environment (Infrastructure) Officer



Application by Fosse Green Energy Ltd for an order granting development consent for the Fosse Green Energy solar farm

Local Impact Report

APPENDIX D –

**Review of Fosse Green Solar Project ES
Chapter Soils and Agriculture -
Landscape October 2025**



Application by Fosse Green Energy Ltd for an order granting development consent for the Fosse Green Energy solar farm

Local Impact Report

APPENDIX E – Details of Stepping Out Walks



Application by Fosse Green Energy Ltd for an order granting development consent for the Fosse Green Energy solar farm

Local Impact Report

APPENDIX F –

Planning History



Application by Fosse Green Energy Ltd for an order granting development consent for the Fosse Green Energy solar farm

Local Impact Report

APPENDIX G – Development Plan Policies

Fosse Green relevant rep response, Archaeology

Having reviewed the submitted documents, the Council continues to have concerns regarding the level of archaeological assessment undertaken to inform the Applicant's DCO application, particularly given the lack of site-specific impacts for a range of developmental impacts which will have extensive ground impacts including drainage, engineering works, the amount and layout of cabling and landscaping as well as the potential for impacts in ecological mitigation areas such as soil inversion.

The Planning Inspectorate stated that '*The ES should contain information on how the results of the desk based and field-based assessments and surveys have informed the ongoing design development and supported the design of an appropriate mitigation strategy.*' (6.3 ES Appendix 1-B EIA Scoping Opinion, APP-119, section 3.1 Cultural Heritage)

We acknowledge the applicant's assessment work to date, including a desk-based assessment (DBA) and geophysical survey (magnetometry). Some targeted evaluation trenching is currently ongoing. The agreed trenching WSI is for the first phase of trenching (6.3 ES Appendix 7-H Written Scheme of Investigation for an Archaeological Evaluation, APP-131, Section 1.1)

There is currently then a limited data set from trenching results for identifying the presence, depth, date, character, location, state of preservation and significance of archaeology which currently survives across the redline boundary. The current programme of trenching does not include trenches to test areas where these previous techniques have not been successful in identifying archaeological remains.

Some areas have not been subject to geophysical survey and while we appreciate there will be access issues there must at some point be access so that the scheme can be built. These unsurveyed areas will need higher levels of evaluation to compensate for the lack of information or else be subject to stronger archaeological mitigation as the potential has not been determined.

Any areas of unknown potential will need adequate levels of evaluation in advance of any works including plant movement which may damage or destroy currently surviving but unknown archaeology, otherwise mitigation measures will be required to allow the archaeology to be planned, investigated and recorded before the groundworks can commence. It is therefore much preferred that sufficient trenching is undertaken across the full Order Limits to provide the essential baseline evidence to design a reasonable and fit for purpose mitigation strategy.

Some habitat creation requires ground preparation which would damage or destroy surviving archaeology particularly in land previously in agricultural use where surviving archaeology may be close to the current ground surface. These areas therefore need to be included in the evaluation work and the results can be used to inform the design process effectively.

Other significant groundwork impacts from developmental activities will need to inform what further evaluation may be required in order to provide sufficient baseline evidence for a reasonable fit for purpose agreed mitigation strategy to effectively deal with the impact on currently surviving archaeology.

Examples of such major impacts are available in a number of the submitted documents. 7.10 **Framework Soil Management Plan (Rev 1) APP-192** for example lists the potential uses for soil including '*General use within cut/fill proposals.*(section 6.2.3) as well as use '*within the creation of wetlands or SuDS features*' (section 6.4.1). There's also the preliminary works in advance of soil

placement: '*The receiving surface (in-situ layer of soil) must be de-compacted first prior to placement and spreading. In some instances this receiving layer may require deep ripping.*' (section 6.8.2)

We note with great interest that this document also states that there will be a '*Topographic survey – determine site levels, changes in elevation, earmark cut and fill locations.*' (section 7.2.2) This type of information is critically useful for understanding the site-specific developmental impacts across the scheme, we recommend such technical information be shared as soon as available in order to inform the archaeological evaluation and mitigation process.

Table 7-2: Statutory Consultation Responses (Cultural Heritage) pp7-31 to 7-56 in **6.1 ES Chapter 7 Cultural Heritage (APP-32)** lists the concerns expressed by Lincolnshire County Council and while some of these issues have been noted we remain concerned. The Council maintains that the applicant's submission for buried heritage and the proposed developmental impacts upon it lacks consistency and necessary detail in some areas.

Now to concerns regarding specific issues in this scheme's submission documents.

2.2 Works Plans APP-008 states that Works no 9 includes '*landscaping, biodiversity and ancillary works.*' We are seeing proposed amendments to draft Development Consent Order (DCO) wording from Applicants on other Lincolnshire solar NSIPs for these works they wish to undertake in advance of the main work programme to be specifically excluded from the Archaeological Requirements. We would strongly oppose any proposed DCO wording which excludes any such works.

6.1 ES Chapter 9 Water Environment APP-034 lists a variety of developmental impacts during decommissioning as well as construction phases for this scheme: '*Construction activities such as earthworks, excavations, site preparation, levelling, and grading operations result in the disturbance of soils*' (section 9.7.4) and also '*Potential impacts from the decommissioning of the Principal Site are similar in nature to those during construction, as some ground works would be required to remove infrastructure installed.*' (section 9.7.140)

This would of course destroy any currently surviving archaeology in the areas of these works. This is contrary to statements elsewhere in the submission documents that there will be no decommissioning impacts or even construction impacts to archaeology.

Rather stunningly **6.1 ES Chapter 16 Summary of Environmental Effects, APP-041** states there will be '*No significant residual effects on Cultural Heritage are predicted during the construction of the Proposed Development.*' (Table 16-1: Summary of significant effects during the construction phase of the Proposed Development, and again in Table 16.2 of the operation phase)

This single line is inadequate and incorrect. This proposed development may be for a long-term temporary scheme but any developmental impacts across the Order Limits on currently surviving archaeology will be permanent impacts on the non-renewable archaeological resource.

6.3 ES Appendix 9-D Framework Surface Water Drainage Strategy APP-147 makes reference to lined swales, '*infiltration swales lining the boundaries of these seven fields*' (section 4.1.10), edge swales which '*will be sized and located accordingly to capture as much excess overland surface water runoff that can be reasonably accommodated*' (section 4.1.12) and '*a new open green ditch.*' (section 4.1.13)

There will be over 6 hectares of '*the proposed impermeable areas*' (Section 4.2.2), swales will be approximately 0.6m deep (section 4.4.8) and for the seven fields which will need edge swales there are spaces '*suitable for up to 300m, 6m wide and 0.6m deep.*' (section 4.5.5)

Archaeology survives across this scheme at less than half that depth. These and all the other substantial ground impacts from proposed development works will need reasonable evaluation and where necessary appropriate mitigation measures to effectively deal with impacts on surviving archaeology.

6.4 Environmental Statement Non-Technical Summary (Rev 1) APP-180 states that '*The significance of the potential effects on known and potential buried archaeological remains (including late prehistoric/Roman remains, medieval remains and agricultural features) before additional mitigation ranged from neutral to moderate adverse. However, following the implementation of the embedded and additional mitigation measures, it is considered that in the worst-case scenario, the residual effect on buried archaeological remains would be a neutral (not significant).*' (section 6.3.10)

We do not agree. Trenching evaluation is ongoing and the full report on the findings has yet to be produced. Some mitigation options have been listed but there is no site-specific fit for purpose mitigation strategy. Having undertaken site monitoring visits during the trenching fieldwork certainly there are areas of significant surviving archaeology within the Order Limits of this scheme. The potential effects cannot be said to be '*neutral to moderate*' when '*potential buried archaeological remains*' have yet to be located, identified or characterised. This is a reductive assumption, and until there is sufficient baseline evidence for an informed understanding of the significance of surviving archaeology within the Order Limits we recommend that potential effects be '*high*' until proven otherwise.

The worst-case scenario would not be '*neutral*' as stated above, rather it would be that currently unknown significant archaeology is destroyed by development works without recording. This is contrary to national policy and guidance including the Central Lincolnshire Local Plan which states that '***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.***' (Policy S57 The Historic Environment, p126)

Section 6.3.10 of the **Non-Technical Summary** goes on to state that: '*Additional mitigation comprising a programme of archaeological investigation and recording would deliver benefits which would offset the loss of remains and allow for this already non-significant adverse effect to be further reduced or potentially avoided completely.*'

The ability to record archaeology which is destroyed by development is not a '*benefit*' it is simply preservation by record rather than preservation in situ of archaeological remains. NPPF states that '***the ability to record evidence of our past should not be a factor in deciding whether such loss should be permitted.***' (para 218) National policy and guidance and professional standards have a presumption in favour of preservation in situ. The Central Lincolnshire Local Plan for example states that '***Wherever possible and appropriate, mitigation strategies should ensure the preservation of archaeological remains in-situ.***' (p125)

Sections 6.3.14 and 6.3.15 of the **Non-Technical Summary** state there will be no impacts to below ground archaeological remains during the operational and maintenance phases of the development nor during decommissioning activities. This does not agree with a number of the submission documents which list specific impacts for every phase of this scheme, examples of which are included in this response.

6.5 Environmental Commitments Register (Rev 1), APP-183, Cultural Heritage makes reference to '*low level piling and avoidance of archaeology from key areas of impact within Solar PV Areas (such as Solar stations or access tracks)’ and ‘small exclusion zones (around remains of particular significance) or no-dig solutions such as ballast footings (to be discussed with the archaeological advisor) to avoid piling completely, or areas where cabling is excluded (to reduce any impacts to the low level piling only).*' . (pp9-10)

These measures are insufficient. The use of low level piling will make similar detrimental impacts to standard piling in archaeology that's 30 to 50cm from the current ground surface, for example on burials and structured deposition in discrete features. Any proposed mitigation measure must be informed by an understanding of the state of preservation and the nature of the surviving archaeology. On another Lincolnshire solar NSIP unexpected Saxon burials were found 20cm from the ground surface in a very delicate state of preservation. Use of any of these proposed measures would destroy them without identification or recording.

In the event of preservation in situ mitigation, the full extent of the archaeological areas must be determined and each area must be fenced off and subject to a programme of monitoring throughout the construction and the decommissioning phases. There will be no ground disturbance whatsoever which may disturb or affect the archaeological remains, including plant movement or storage. The proposal for 'no-dig solutions' requires a full understanding of the depth, extent, importance and significance of archaeology. Any proposal in archaeologically sensitive areas will require a firm evidence base proving that any proposed work including decommissioning will have no impact upon the archaeology including not only direct destructive impact through groundworks, compaction or reduction in the depth of soil necessary for protecting the archaeology but also through environmental changes which would be detrimental to the surviving archaeology.

7.7 Framework Construction Environmental Management Plan (Rev 1) APP-189 states that '*Where exclusion zones or non-intrusive methods are required, the detailed CEMP(s) will include a strategy which will detail appropriate good practice measures during construction (such as use of appropriate equipment or limiting avoiding heavy plant movements during inclement weather on sensitive areas to avoid damage to below ground remains etc.) and ways of monitoring of this.*' (3.3 Cultural Heritage, Table 2: Cultural Heritage, CH-C1)

This is absolutely unacceptable. No works whatsoever will be undertaken in known archaeologically sensitive areas whether they are 'exclusion zones' or areas using non-intrusive mitigation measures. Archaeology is known to survive here less than 30cm from the ground surface as seen in the evaluation trenching. Machine tracking alone will destroy archaeological deposits where there is insufficient depth of soil to protect the remains from compaction and wheel ruts.

Please see paragraph above in response to **6.5 Environmental Commitments Register (Rev 1), APP-183.**

Regarding **7.9 Framework Decommissioning Environmental Management Plan (Rev 1) APP-191**, we do not agree with the statement that '*The decommissioning phase is not expected to result in any impact beyond the already-disturbed footprint of the Proposed Development. Therefore, it is not anticipated that decommissioning activities will have a direct physical impact upon buried archaeological remains.*' (3.3: Cultural Heritage, Table 2, CH-D1, p13) There is no information on how hundreds of thousands of piles will be dealt with to restore land to its previous agricultural use.

There are also references in the **Framework DEMP** to: '*measures to avoid animals being injured or killed within decommissioning working areas*' which states that excavations should not remain open overnight and if so that '*ramps will be provided to allow animals a means of escape.*' (Table 3: Ecology and Nature Conservation, ECO-D1 part b, p14) and that '*Measures may include use and maintenance of temporary lagoons, tanks, bunds*' and that '*Where practical, any earthworks will be undertaken during the drier months of the year*' (3.5 Water Environment, Table 4, WAT-D2, p21)

7.9 Framework Decommissioning Environmental Management Plan (Rev 1) APP-191 does however include Environmental and Ecological Clerks of Works in section 2.2.1 *Key roles and responsibilities*. An Archaeological Clerk of Works will also be required as well as an agreed Archaeological Management Plan which will remain in place for the lifetime of the scheme until the end of the scheme's decommissioning phase to ensure that impacts on archaeological and unevaluated areas are dealt with in a reasonable and enforceable way with appropriate archaeological mitigation where required.

The air photo and LiDAR report '*has identified tentative evidence for an Iron Age and/or Roman settlement on the east bank of the River Brant, extensive medieval or post medieval agricultural landscapes, and a small number of (WWII) military buildings, structures and other features.*' (**6.3 ES Appendix 7-F Air Photo and LiDAR Mapping and Interpretation, APP-129**)

The geophysical survey report results show a '*Potentially Bronze Age through to Post Medieval agricultural landscape with IA/Roman and Medieval settlements and activity.*' (**6.3 ES Appendix 7-G Detailed Gradiometer Survey Report, APP-130**)

The interim trenching report states that '*Based on preliminary dating evidence, the majority of the activity appears to date to the later prehistoric and Roman periods, with some possible evidence for medieval, post-medieval and modern activity across the Principal Site.*' (Section 4.1, **6.3 ES Appendix 7-I Trial Trenching Report (Interim), APP-132**) And while the trenches are proving the geophysical survey results they are also ground-truthing further activity with the discovery of features not identified through geophysical survey. (Section 4.2, as above) The interim trenching report also recorded that '*relatively thin topsoil cover was observed in many of the fields.*' (Section 4.1, as above)

Archaeology has been identified across the Order Limits and trenching has demonstrated that archaeology survives at less than 30cm from the ground surface. This scheme is on a landscape scale: at 1368 hectares there will undoubtedly be currently unknown surviving archaeology. Virtually any groundworks or plant movement would damage or destroy any surviving archaeology here which has not been adequately evaluated or identified for mitigation measures appropriate to its significance.

Post-consent trenching leaves a high degree of risk pushed into the post-consent phase with the potential for archaeological works to impact the work programme and budget. It is essential therefore that archaeological work including field evaluation as well as mitigation phases can be dealt with by future commitments through the documentation including approved WSIs and the production of an agreed Archaeological Management Plan with an Archaeological Clerk of Works for the lifetime of the scheme.

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.



Application by Fosse Green Energy Ltd for an order granting development consent for the Fosse Green Energy solar farm

Local Impact Report: APPENDIX D

Review of Fosse Green Solar Project ES Chapter Soils and Agriculture - Landscope

North Kesteven District Council

[REDACTED])

NKDC reference: 23/0325/NSIP

Planning Inspectorate reference: EN010154

January 2026

CONTENTS

Appendix A – AAH Landscape and Visual Impact (LVIa) – AAH
November 2025

Appendix B – Biodiversity report - Lincolnshire County Council
November 2025

Appendix C – Archaeology - LCC's Historic Environment
(Infrastructure) Officer

Appendix D – Review of Fosse Green Solar Project ES
Chapter Soils and Agriculture - Landscape
October 2025

Appendix E – Details of Stepping Out Walks

Appendix F – Planning History

Appendix G – Development Plan Policies



Application by Fosse Green Energy Ltd for an order granting development consent for the Fosse Green Energy solar farm

Local Impact Report

APPENDIX A –

**AAH Landscape and Visual Impact (LVIA) –
AAH November 2025**



Application by Fosse Green Energy Ltd for an order granting development consent for the Fosse Green Energy solar farm

Local Impact Report

APPENDIX B –

**Biodiversity report - Lincolnshire County
Council November 2025**



Application by Fosse Green Energy Ltd for an order granting development consent for the Fosse Green Energy solar farm

Local Impact Report

APPENDIX C – Archaeology - LCC's Historic Environment (Infrastructure) Officer



Application by Fosse Green Energy Ltd for an order granting development consent for the Fosse Green Energy solar farm

Local Impact Report

APPENDIX D –

**Review of Fosse Green Solar Project ES
Chapter Soils and Agriculture -
Landscape October 2025**



Application by Fosse Green Energy Ltd for an order granting development consent for the Fosse Green Energy solar farm

Local Impact Report

APPENDIX E – Details of Stepping Out Walks



Application by Fosse Green Energy Ltd for an order granting development consent for the Fosse Green Energy solar farm

Local Impact Report

APPENDIX F –

Planning History



Application by Fosse Green Energy Ltd for an order granting development consent for the Fosse Green Energy solar farm

Local Impact Report

APPENDIX G – Development Plan Policies

Review of Fosse Green Solar Project ES Chapter Soils and Agriculture

**North Kesteven District
Council**

October 2025



Contents

1. Summary
2. Background
3. Agricultural Land and Soils
4. Cable Corridor
5. Summary of Effects

Review of Fosse Green Solar Project ES Chapter 12

1. Summary Position

Key Points

- A detailed base line ALC has been undertaken across 1,071 hectares, of mainly arable farmland, following Natural England consultation, in detail at a standard density of 1 auger bore per hectare.
- The ALC report has been prepared for the whole site. The grades of land are essentially a mixture of Grades 3a and 3b, with 77.5% being Grade 3b.
- 22.5% of the site is BMV quality, based on the detailed survey, BMV is mainly Grade 3a, extending to 241 hectares.
- The promoters state they have avoided siting on the highest-grade land based on data provided by Natural England.
- A Framework Soil Management Plan is provided and includes sections on construction, management and decommissioning. The decommissioning anticipates removal of equipment after 60 years and a Framework Decommissioning Environmental Management Plan is included.
- The cable routes have not been ALC surveyed in detail, but the methodology was agreed with Natural England. The cable routes are likely to be similar quality to the overall site.
- ES Chapter 12, Socio-Economics and Land Use envisages a PV panel arrangement designed to provide a minimum 0.8m ground clearance to facilitate sheep grazing under the panels, where practicable. How likely this is may depend on the economics of farming in the future.
- Removing intensive farming is considered to eliminate nitrates and phosphates, supporting soil health, biodiversity and improving water quality. However, there is limited detail as to how this will be maintained after the scheme ends. A Framework LEMP [EN010154/APP/7.15] has been prepared to accompany the DCO application which sets out the principles for how the land will be managed
- There is some soil health assessment and assessment of loss of land for food production and the impact on any agricultural holdings affected is also addressed. Overall the impact is considered low in all cases.
- The Fosse Green Site is intended to be developed in parts, over a 24 month period, with each part able to be commissioned separately and delivering electricity to the grid
- The temporary life of the project is indicated as 60 years, the 60 years being measured from the final commissioning date.
- There are separate decommissioning plans that could come forwards for each “part”. At this stage there is uncertainty regarding the types of panels, whether fixed or single axis tracker panels
- The BESS site is unconfirmed as to whether it will be one site or several smaller units.

2. Introduction and Background

- 2.1 The Proposed Development comprises the installation of solar photovoltaic (PV) generating modules, battery storage facilities, and grid connection infrastructure on 1,071 hectares with a capacity in the region of 342-385MW, in Lincolnshire.
- 2.2 The stated starting point for choosing the location of the solar farm was the availability of the grid connection. Agricultural land of lower quality was stated as sought and **Appendix 1** shows the ALC map and grades of land.
- 2.3 The agricultural assessment ES has been undertaken by AECOM and the Agricultural Land Classification (ALC) and soil survey has been undertaken by Roberts Environmental Ltd.

3. Agricultural Land and Soils

- 3.1 There is a need to minimise the use of BMV agricultural land, which is classification Grades 1, 2, and 3a, however development is not prohibited from being located on BMV agricultural land. Under the ALC system, Subgrade 3a land would form BMV whereas Subgrade 3b would not.
- 3.2 With regards to agricultural land and soils, mapping of soils has been prepared based on surveys of the Principal Site and presented in the Agricultural Land Classification Report. The land is predominantly Grade 3b (moderate quality agricultural land) with some BMV land present, limited to areas of Grade 3a (good quality agricultural land). No areas of Grade 1 or 2 have been identified.

Overall Findings of ALC

Non-agricultural land 40ha	3.74%
Total BMV agriculture land 241ha	22.5%
Total Non-BMV agriculture land 790ha	77.5%

- 3.3 **Environmental statement Chapter 12: Agricultural Land** of the ES Report sets out findings with regard to Soils and Agriculture.

12.10.23 Effects on agricultural land would occur as long-term effects arising from the construction of the Proposed Development and hence have been reported for the construction phase. These were assessed as not significant. The solar NSIPs in Lincolnshire, considered cumulatively, will upon decommissioning be returned to agriculture with soil resources in a healthy condition. The cumulative effect of the Proposed Development is assessed to be not significant, neither in respect of the adverse withdrawal of land from agriculture nor the positive effect of improving soil health resulting from reduction in cultivation.

- 3.4 Land drainage is a key factor in assessing both land classification and the impact on land restoration particularly along any cable or grid connection route, where trenches are dug, or where soils are stripped even temporarily.
- 3.5 At present there is no settled consensus as to whether a long-term temporary use of land should be considered as not significant and therefore the loss of any BMV over the 20 hectare threshold may still be significant, even though the use is temporary.

Agricultural Land Classifications

3.6 The ES report confirms that the site has been assessed for ALC and maps and details are provided. A detailed ALC survey has now been completed. Field survey was undertaken between 2023 and 2024. In total 1,070 hectares (ha) of agricultural land has been surveyed. Other land outside the order limits was also surveyed, but is not shown.

3.7 Table 6 of the ES sets out the amounts and proportions of agricultural land according to Grade. Overall, the non BMV land is Grade 3b, moderate quality.

Table 6: ALC Grades

ALC Grade	Area (Ha)	Percentage
Grade 1	0.0	0.0%
Grade 2	0.0	0.0%
Subgrade 3a	241.0	22.50%
Subgrade 3b	790.0	73.76%
Grade 4	0.0	0.0%
Grade 5	0.0	0.0%
Non-Agricultural	40.0	3.74%
Total BMV	241.0	22.50%
Total Non-BMV	830.0	77.50%
Total Site Area	1071.0	100%

ALC Survey Methodology

3.8 The soil augering of the site has been undertaken in line with TIN 049 and the MAFF 1988 Guidelines, one auger point per hectare and with occasional soil pits particularly where soil types vary. Natural England agreed the methodology, and it is broadly in line with recommendations according to BSSS methodology ([Appendix 2](#)).

Soils

3.9 A Framework Soil Management Plan (SMP) has been provided, stated to minimise the effects on soils and land quality. The SMP identifies the soil types across the Site, and any sensitivities to being worked in wet weather. The SMP will provide guidance on the handling of soils, and the trafficking across soils, for all parts of the construction and operational works, and provide guidance for decommissioning.

The survey identified Four Soil Types across the entire site.

Soil Type 1 – Loamy Medium Sand topsoil, Wetness Class I

Soil Type 2 – Sandy Clay Loam topsoil, Wetness Class III

Soil Type 3 – Heavy Silty Clay Loam topsoil, Wetness Class III

Soil Type 4 – Heavy Clay Loam topsoil, Wetness Class III

3.10 The main limitations to ALC grade quality were Wetness Class for land classified as Grade 3b and Droughtiness and/or Wetness where it is 3a quality.

Soil Management Plan

3.11 The Framework SMP has be submitted with the ES. The practices set out in the SMP will be embedded in the construction methodology, operation and decommissioning.

Soil Structure

3.12 Soil structure can be significantly damaged during the construction phase of the process. There is a lot of trafficking of vehicles on the land to erect the panels and if this work is undertaken when soils are wet, there can be significant damage. Much of this damage can be remedied post construction but not all and it is possible that long term drainage issues occur on the site due to the construction. The SMP should address these issues. The Framework SMP attempts to address this issue but it should clearly state say that the detailed SMPs need to include restrictions to ensure construction traffic timings etc avoid unnecessary damage and have a suitable recording and feedback system in place.

Cumulative ALC Impacts

3.13 There are a number of small(er) and largescale Solar PV schemes in both Nottinghamshire and Lincolnshire, with others planned or proposed. There are many known solar project NSIP schemes; specifically in relation to impacts on agricultural land. The situation is a moving picture as new proposals come forward from time to time. Most of these sites are proposed on farmland. The local area in particular is an agricultural area with substantial amounts of land within the Best and Most Versatile category. Given that the site contains some BMV, the impact may be significant.

District and County ALC

3.14 For a project of this scale there is an impact, the project will tie up the land for up to many years. The area is large locally and if the quantities of BMV are as expected or similar then the impact will be reasonably large, and I would expect the impact to be significant at a District or County Level.

4. Cable Route Corridor

- 4.1 The Cable Corridor partly overlaps with the Principal Site, whereby the Cable Corridor covers approximately 351ha in total, overlapping approximately 53ha of the Principal Site. It has not been ALC surveyed in detail outside of the main site.
- 4.2 The cable route will be a temporary construction feature with soils reinstated, following cable burial.
- 4.3 The soil management plan considers the cable route in order to minimise the impact on soil structure, land drainage and ultimately soil quality. Guidance is available in published documents.
- 4.4 The route passes across and will be buried under mainly open countryside that is largely arable farmland.
- 4.5 The soil survey of a defined Cable Corridor is proposed to be undertaken post-consent, secured in the Framework CEMP [EN010154/APP/7.7] .
- 4.6 Two key groups of impacts have been identified for the purpose of defining receptor sensitivity and impact magnitude: .

- Land use and tenure: these are the potential impacts on human activity, including landowners, occupiers, local communities and other land users
- Agriculture: these are potential impacts on the soil resource, the surrounding environment and the agricultural productivity of the land.

4.7 Additional concerns include land drainage impact during construction and restoration of cable trenches. At other locations, the amount of dust created during construction and settling on crops can be an issue. This is more likely with sandy and silty soils.

Soil Health

4.8 If the land is used for biodiversity, it would not be available for agriculture. However, even if it is available for some form of cutting or grazing it is unlikely that the ALC grade will change significantly during the life of the project. There is some evidence that organic matter can build up in biodiversity areas at a faster rate than arable farmland and this may benefit the land, but it is not generally a factor in the assessment of ALC.

4.9 If enhanced soil health is to be given weight in the planning process there needs to be some indication of the longevity and/or permanence of the benefits beyond the life of the project, otherwise the soil health benefits are only temporary and cannot be given much weight.

4.10 At a local, site level, it can prove difficult to establish low fertility grassland on former arable land due to the higher levels of potassium and phosphate in soils.

5. Summary of Effects

5.1 From the construction phase, short-term and long-term temporary use of agricultural land will occur. The only permanent reduction in agricultural land will be for permanent habitat creation (mainly tree planting), where the soil resource will be maintained, outside of agriculture after decommissioning.

5.2 The reports summarise the main effects on agricultural land and soil below:-

12.7.44 Land permanently used is defined as the area of agricultural land disturbed during construction which is permanently taken out of agricultural use due to the Proposed Development. Given that the land within the Cable Corridor outside of the Principal Site will be returned to previous land use upon completion of construction, and all infrastructure within the Principal Site will be removed upon decommissioning, the only areas of agricultural land considered to be permanently lost due to the Proposed Development are areas of planting and habitat creation introduced as part of the Proposed Development. The extent of these areas amount to a total use of 4.6ha of agricultural land, of which 1.5ha is BMV land (Subgrade 3a). The change of land use is likely to be beneficial to the soil resource but the low magnitude withdrawal of land from agricultural production may be interpreted as a minor adverse effect, which is not significant.

12.7.82 An increase in soil organic matter content may occur during the lifetime of the Principal Site. The land will therefore be in the same or better condition than it currently is, as a result of the expected natural enhancement through being set aside for a long period of time. However, this is likely to be reversible and maintaining elevated soil organic matter will be dependent on good agricultural land management practices being adopted after decommissioning.

Effect on Agricultural Land

- 5.3 This is stated as a low magnitude impact and accordingly **minor adverse**, which is considered **not significant**. This is with reference to the loss of BMV to areas of hardstanding etc.
- 5.4 Temporary, reversible losses of soil related features are considered low magnitude of impact changes in the IEMA Guide. Low magnitude impacts on resources of high or medium sensitivity equate to **minor adverse** significance. The overall impact is therefore considered as minor adverse for the 60 year duration of the operational lifespan of the Development and **not significant**. Whilst the project life is long term, it is considered as temporary and in that scenario, if all of these areas are capable of full restoration back to the current status, then the impact is ultimately low.
- 5.5 The cumulative or wider impact compares the local area to the national and county wide BMV statistics. The argument is made that the impact is low at local and regional level.

Effects on Soils

- 5.6 The potential effects on soils is considered alongside the effects on agricultural land in the assessment. The disturbance to soils is generally viewed as temporary and limited, on the basis that the use is temporary albeit long term. The soils within the Order Limits are of medium (mostly) and low sensitivity.
- 5.7 Large areas are identified for bird mitigation habitat, potentially half the main site – some of which is BMV land. This is to offset environmental concerns, but will still remove the land from effective farming during the life of the project, except where conservation grazing is practiced.

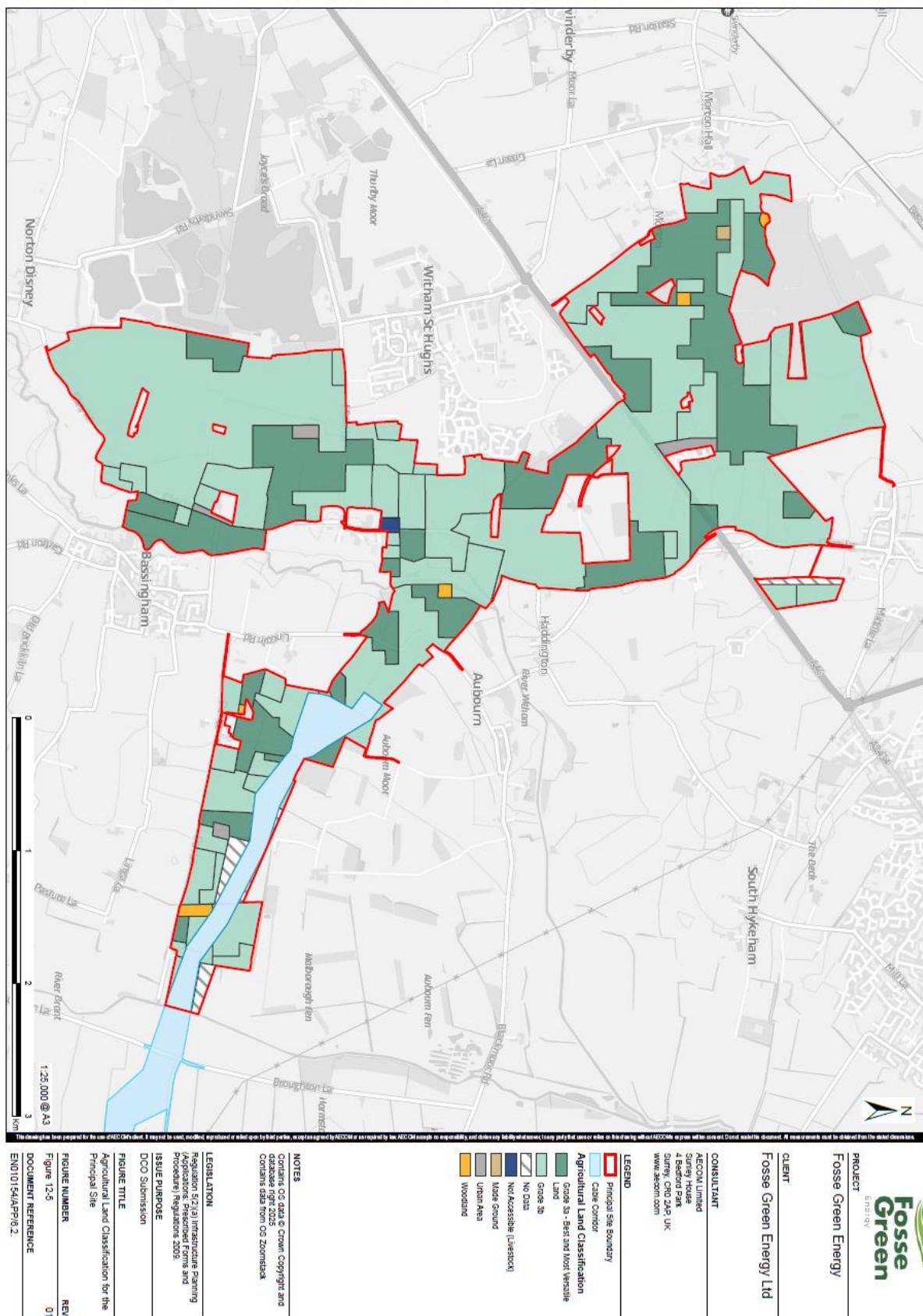
██████████ BSc (Hons) MSc FBIAC PIEMA MISoilSci

Landscape Land and Property Ltd

October 2025

Appendix 1

Project No.: 60700987 Drawn: HW Checked: AM Approved: LB Date: 2025-06-18



Appendix 2

Landscape Checking the ALC Report to the British Society of Soil Science checklist

BSSS ALC Checklist			P/C/F	Comment	PASS	PASS
Background					PASS	PASS
Is the company / author a specialist in ALC?			PASS	Considered to be a specialist	FAIL	FAIL
Have published soil maps been mentioned?			PASS	Yes	CONCERN	CONCERN
Climate data						
Is interpolated climate data included for the site (esp. Field Capacity Days (FCD), Moisture Deficits (MD) and Maximum grade on climate)?			PASS	Yes		
Is the data consistent with that expected for the area?			PASS	Yes		
Site and standalone limitations						
Have gradients, micro-relief and flooding been considered / acknowledged?			PASS	Yes, mainly Flood Zone 1 & some FZ3		
Soils and interactive limitations						
Have topsoils and subsoils been field surveyed? References to soil pits, auger samples & lab samples should be included.			PASS	No lab samples provided, but data not disputed		
Are the soil types clearly described, including reference to gleying, slowly permeable layers (SPL), soil wetness class (SWC) and drought?			PASS	Yes		
Have the reasons for ALC grading been clearly described?			PASS	Yes		
Have soil structure and porosity been described?			PASS	Yes		
Have soils been described using Soil Survey Field Handbook (Hodgson 2022)?			PASS	Yes		
Have soils been described using Munsell soil colour notations?			PASS	Yes		
Conclusions and references						
Is there a table clearly showing areas of ALC grade(s)?			PASS	Yes		
Is there a list of references (normally including Soil Survey of England and Wales mapping, the MAFF 1988 ALC guidelines, Munsell soil colour charts and the Soil Survey Field Handbook – Hodgson 2022)?			PASS	Yes		
Have the limitations been justified when concluding the ALC grade(s) on the site?			PASS	Yes		
Schedule of auger borings and soil pits						
Has a map of auger boring & soil pit locations been included?			PASS	Pit shown on map and photos		
Have laboratory analyses been included to confirm topsoil particle size distribution?			PASS	Yes		
Has a schedule of auger boring information been provided?			PASS	Yes		
Do the auger borings show horizon depths, colours & textures?			PASS	Yes		
Do the auger boring records clearly show soil wetness class?			PASS	Yes		
Do the auger boring records clearly show topsoil stone content?			PASS	Yes		
Do the auger boring records clearly show depth to gleying and depth to slowly permeable layer (SPL)?			PASS	Yes - generally SPL is present in WCIII		
Do the auger boring records clearly show moisture balance (MB) values for drought (Wheat & Potatoes)?			PASS	Yes		
Has detailed soil pit information been provided in the report and do the pit descriptions show horizon depths, colours and textures?			PASS	Yes		
Do the soil pits / pit clearly show soil wetness class (WC)?			PASS	Yes		
Do the soil pits / pit clearly show moisture balance (MB) values for drought?			PASS	Yes		
Do the soil pit / pits clearly show soil structure and porosity in the subsoil?			PASS	Yes		

CONTENTS

Appendix A – AAH Landscape and Visual Impact (LVIa) – AAH
November 2025

Appendix B – Biodiversity report - Lincolnshire County Council
November 2025

Appendix C – Archaeology - LCC's Historic Environment
(Infrastructure) Officer

Appendix D – Review of Fosse Green Solar Project ES
Chapter Soils and Agriculture - Landscape
October 2025

Appendix E – Details of Stepping Out Walks

Appendix F – Planning History

Appendix G – Development Plan Policies



Application by Fosse Green Energy Ltd for an order granting development consent for the Fosse Green Energy solar farm

Local Impact Report

APPENDIX A –

**AAH Landscape and Visual Impact (LVIA) –
AAH November 2025**



Application by Fosse Green Energy Ltd for an order granting development consent for the Fosse Green Energy solar farm

Local Impact Report

APPENDIX B –

**Biodiversity report - Lincolnshire County
Council November 2025**



Application by Fosse Green Energy Ltd for an order granting development consent for the Fosse Green Energy solar farm

Local Impact Report

APPENDIX C – Archaeology - LCC's Historic Environment (Infrastructure) Officer



Application by Fosse Green Energy Ltd for an order granting development consent for the Fosse Green Energy solar farm

Local Impact Report

APPENDIX D –

**Review of Fosse Green Solar Project ES
Chapter Soils and Agriculture -
Landscape October 2025**



Application by Fosse Green Energy Ltd for an order granting development consent for the Fosse Green Energy solar farm

Local Impact Report

APPENDIX E – Details of Stepping Out Walks



Application by Fosse Green Energy Ltd for an order granting development consent for the Fosse Green Energy solar farm

Local Impact Report

APPENDIX F –

Planning History



Application by Fosse Green Energy Ltd for an order granting development consent for the Fosse Green Energy solar farm

Local Impact Report

APPENDIX G – Development Plan Policies



Application by Fosse Green Energy Ltd for an order granting development consent for the Fosse Green Energy solar farm

Local Impact Report: APPENDICES E - F

North Kesteven District Council

[REDACTED])

NKDC reference: 23/0325/NSIP

Planning Inspectorate reference: EN010154

January 2026



Application by Fosse Green Energy Ltd for an order granting development consent for the Fosse Green Energy solar farm

Local Impact Report:

APPENDIX E1

Details of Stepping Out Walk E1 - Thorpe on the Hill

North Kesteven District Council

[REDACTED])

NKDC reference: 23/0325/NSIP

Planning Inspectorate reference: EN010154

January 2026

STEPPING OUT:

THORPE ON THE HILL



Easy Terrain



**3 Miles
Circular
2 hour**

200519



Access Notes



- The walk is fairly flat, with just a couple of gentle gradients.*
- It follows a mixture of farm tracks, grass paths and woodland paths, some of which can get muddy, so good boots are a must. There are no stiles on route, but you will need to negotiate two kissing gates.*
- The vast majority of the farmland is arable, but you will cross one small grass paddock at the start of the route. This was empty when we walked, and there was no sign it had been used for livestock recently, but it may be used again in the future. You are likely to come across gamebirds.*
- The route skirts Tunman Wood. Please note, between October and January there may be shooting activity in and around the wood. Please remember the Countryside Code. Some paths are provided by kind permission of the landowner, please only use the waymarked paths.*
- Where young stock may be present, please make sure your dog is under firm control in these areas.*
- OS Map Explorer 271.*

A 3 mile (4.5km) circular walk from the village of Thorpe on the Hill near Lincoln in Lincolnshire.

The walk performs a simple loop through woodland and open countryside with lots of hedgerow birds and lovely views back to the village. This walk is part of the Stepping Out network, published through a collaboration between Kesteven District Council to inspire more people to enjoy the district's landscapes, ancient woodland, historic buildings and charming villages.

If you are looking for refreshments, the Railway Inn pub is located just north of the village or there is another pub in nearby Eagle. Nearby attractions include Doddington Hall and Gardens and Whisby Nature Park.

Getting there

Thorpe on the Hill is located about 6 miles south-west of Lincoln and just one mile north of the A46. The walk starts and finishes on the footpath that begins on Main Street.

Approximate post code LN6 9BG.

If you are coming by car, there is no village car park, so please find a safe roadside parking space, with respect for the local residents. Main Street is too narrow to park along, but there are usually some roadside spaces on Lincoln Lane. If you are coming by public transport, the village bus stops are located on Fosse Lane. For information on bus transport, call Traveline on 0871 2002233 or visit www.lincolnshire.gov.uk/busrailtravel.

Walk Sections



Start to Barn



Get the AllTrails App for a smarter walking experience. 75K walking guides in the palm of your hand with live maps that show your progress as you walk. Say goodbye to wrong turns.

alltrails.com



The walk starts and finishes from the signed public footpath that begins on Main Street, between houses 13 and 13a. Follow this footpath between a fence and hedgerow, to reach a kissing gate into a grass paddock. Maintain your line to cross this small grass field and exit via the metal kissing gate at the far side. Turn left to join the stone farm track, signed as a public footpath, heading towards a large barn.

1 ➔ 2 Barn to Housham Wood Farm



Just before you reach the barn, follow the track as it bends right to continue with a hedgerow on your left and a crop field on your right. The track becomes steadily more grass and less stone, before continuing as a grass path with a hedgerow on your right. Part way along this stretch, the path dog-legs right (through a hedge gap) and then left to continue with the hedgerow now on your left and a crop field on your right. Keep a sharp eye out for the numerous hedgerow birds to be found on this walk including finches, buntings and a variety of tits.

At the end of this first crop field on your right, you will see a small waymarker post on your left. If you wish to take a short-cut at this point, you can turn right here and follow the field edge as it bends right again to reach the end of Stocking Wood (from where you can pick up the main route).

For the full route, go straight ahead with the hedgerow on your left and a second crop field on your right. At the end of this second field, go ahead to cross a ditch and you will emerge into the corner of a meadow, with a lone property, called Housham Wood Farm, visible ahead.

2 ➔ 3 Housham Wood Farm to Stocking Wood Exit



Turn right at this meadow corner, passing the end wooden pylon

on your right and then following the line of a hedgerow (also on your right). Stay along this field boundary grass path to reach the woodland at the far corner. Continue ahead on the obvious path, with the ditch and open field to your right and the woodland to your left.

The path swings right and then leads you to a path junction, with a fingerpost on your left and a belt of woodland running away to your right. Turn right to join the public footpath which runs through the centre of this woodland belt, known as Stocking Wood. As you emerge from the trees, you will reach a T-junction with a field-edge track, with a fingerpost on your left. It is at this point, that those following the short-cut will rejoin the main route.

3 ➔ 4 Stocking Wood Exit to Green Lane



With your back to the exit of Stocking Wood, turn left to join the field-edge track, passing the end of the woodland on your left, with a crop field on your right. Across to your right you will have a good view of the village of Thorpe on the Hill, on top of the rise.

This corner of North Kesteven, once known as the Soke of Eagle, is geologically distinctive. Here, to the west of Lincoln, the curve of the Liassic clay vale is terraced with gravel deposits. Settlements were established on these terraces and so parish boundaries do not follow the classic grid-iron pattern.

After 500 metres, you will pass by a vehicle barrier to reach a T-junction with a stone and grass track (known as a green lane).

4 ➔ 5 Green Lane to End



Turn right onto this green lane and follow the pleasant tree-lined lane bordered by hedgerows. After the first long straight stretch, the lane bears right and begins to climb gently towards the village. At the top of the rise, follow the track as it swings left,



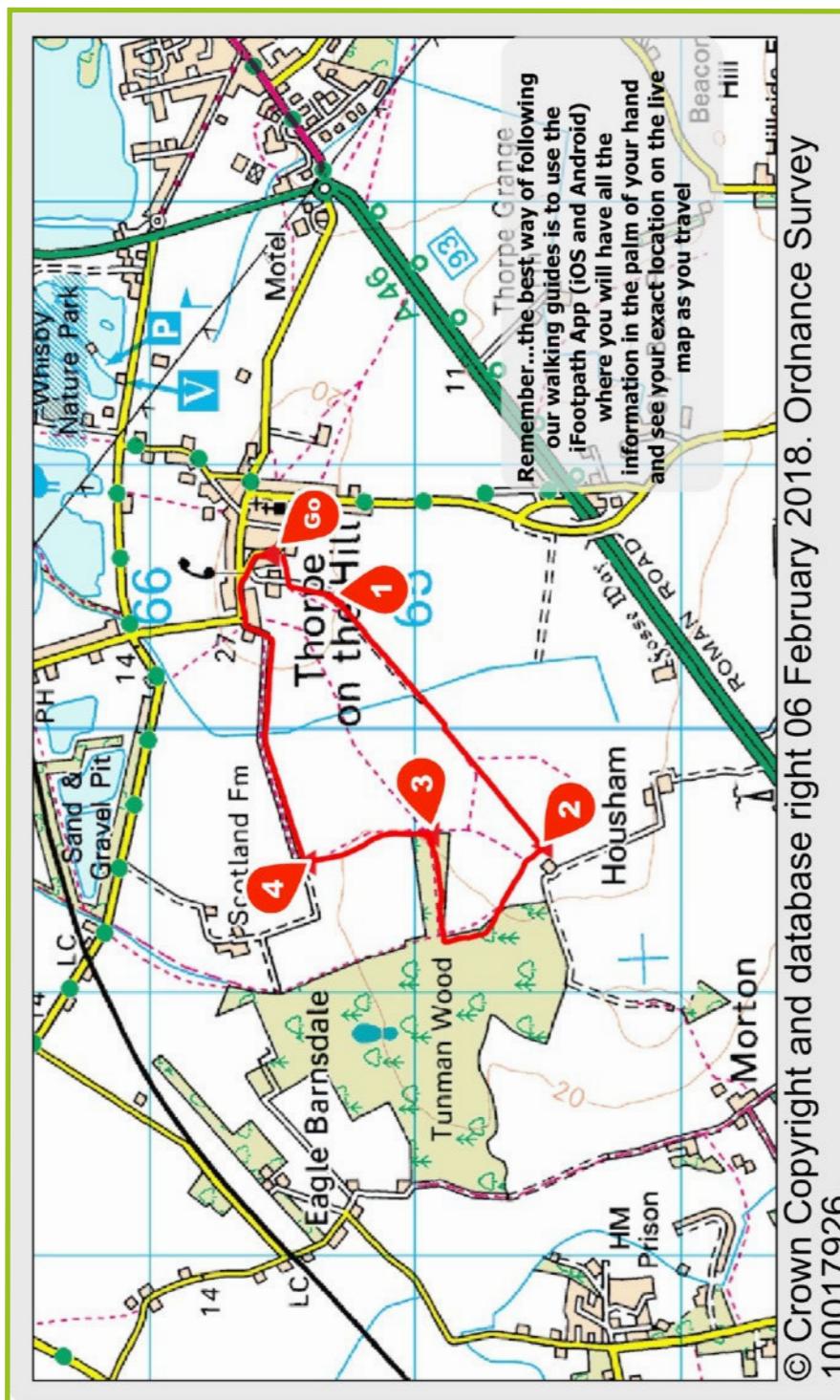
leading you through the yard of Home Farm and out to a junction with Station Road. Cross over to the far pavement with care and turn right along this. It will lead you back into the village of Thorpe on the Hill, soon passing the large brick meeting rooms on your right, at the junction with Main Street. This marks the end of your walk, from where you can head back to your car or to the village bus stops.

Disclaimer

This walking route was walked and checked at the time of writing. We have taken care to make sure all our walks are safe for walkers of a reasonable level of experience and fitness. However, like all outdoor activities, walking carries a degree of risk and we accept no responsibility for any loss or damage to personal effects, personal accident, injury or public liability whilst following this walk. We cannot be held responsible for any inaccuracies that result from changes to the routes that occur over time. Please let us know of any changes to the routes so that we can correct the information.

Walking Safety

For your safety and comfort we recommend that you take the following with you on your walk: bottled water, snacks, a waterproof jacket, waterproof/sturdy boots, a woolly hat and fleece (in winter and cold weather), a fully-charged mobile phone, a whistle, a compass and a map of the area. Check the weather forecast before you leave, carry appropriate clothing and do not set out in fog or mist as these conditions can seriously affect your ability to navigate the route. Take particular care on cliff/mountain paths where steep drops can present a particular hazard. Some routes include sections along roads – take care to avoid any traffic at these points. Around farmland take care with children and dogs, particularly around machinery and livestock. If you are walking on the coast make sure you check the tide times before you set out.





Application by Fosse Green Energy Ltd for an order granting development consent for the Fosse Green Energy solar farm

Local Impact Report:

APPENDIX E2

Details of Stepping Out Walk Morton and Tunman Wood

North Kesteven District Council

([REDACTED])

NKDC reference: 23/0325/NSIP

Planning Inspectorate reference: EN010154

January 2026

STEPPING OUT

MORTON AND TUNMAN Wood

Easy Terrain

4 Miles
Circular
2 hours

200519



Access Notes

1. The walk is relatively flat, with very little gradient.
2. It follows a mixture of stone access tracks, farm tracks and woodland paths.
3. The surfaces are generally very good, but a few stretches can be muddy after rain and in the winter months.
4. There are no stiles, steps or gates on route, but you will need to negotiate one narrow squeeze gap.
5. There is no livestock on route, but you are likely to see plenty of gamebirds. Between October and January there may be shooting activity in and around Tunman Wood.
6. Please remember the Countryside Code. Some paths are provided by kind permission of the landowner, please only use the waymarked paths. Where young stock may be present, please make sure your dog is under firm control in these areas.
7. OS Map Explorer 271



A circular walk of around 4 miles (6km), just outside Thorpe on the Hill in Lincolnshire.

The route takes you on a peaceful journey, through open countryside and beautiful woodland. Tunman Wood is a Local Nature Reserve, is recognised as being ancient woodland (an area where specific plant species are found) and supports diverse plant, bird and insect populations. This walk is part of the Stepping Out network, published through a collaboration with North Kesteven District Council to inspire more people to enjoy the district's landscapes, ancient woodland, historic buildings and charming villages.

If you are looking for refreshments, the pub at the start of the walk is currently closed (correct 2017), but there are alternative pubs and cafes a short drive away in Thorpe on the Hill, Eagle or Swinderby. Nearby attractions include Doddington Hall and Gardens and Whisby Nature Park.

Getting there

The walk starts and finishes alongside The Dovecote pub (currently closed), just off the A46 about 8 miles southwest of Lincoln.

The post code **LN6 9HN** will take you towards the Halfway House roundabout on the A46.

From this roundabout, take the exit signed to Swinderby and then turn immediately right into a small access road. This road leads you directly to the pub. Please do NOT use the pub car park, instead park along the access road itself.

Walk Sections



Start to Tunman Wood

Walk to the end of the access road (past The Dovecote on your left) and follow the road as it bends left, to join the stone track bridleway, leading you directly away from the A46. After 680 metres, you will pass a low waymarker post on your left. The path to your right is the one along which we will return later. For this outward leg, keep straight ahead along the main track which leads you into the hamlet of Morton.

Ignore the restricted byway signed to the left, instead keep ahead on the main track which leads you between the cottages, farm buildings and Morton Grange, all in the



Get the AllTrails App for a smarter walking experience. 75K walking guides in the palm of your hand with live maps that show your progress as you walk. Say goodbye to wrong turns.

alltrails.com





hamlet of Morton. This north-western corner of North Kesteven was once dominated by the Knights Templar at Eagle Hall and there were Templar granges (tied farms) here at Morton and also in Swinethorpe and Eagle Woodhouse.

Beyond the hamlet, stay with the track as it leads you ahead between open fields. The track leads you directly to the corner of Tunman Wood, with an overgrown vehicle barrier ahead.

1 ➡ 2 Tunman Wood to Stocking Wood Junction



Pass through the gap to the left of the vehicle barrier to join the narrow footpath which runs through the left-hand edge of the woodland. As you emerge from the trees, you will see a small group of brick cottages ahead. Look to your right and you will see a wooden gate, marked as the entrance for Tunman Wood local nature reserve.

Turn right to pass through the squeeze gap alongside this gate and follow the grass and stone track directly ahead through the woodland. Tunman Wood was bought by a partnership (comprising Lincolnshire County Council, North Kesteven District Council and Lincolnshire Wildlife Trust) in 2009, to ensure continued access, to safeguard the walking route and for conservation. Please stick to the footpaths to protect the woodland. Although Tunman Wood was planted with coniferous trees from the 1940s, there are still areas dominated by native species including ash, beech, birch and oak. Wildflowers thrive in the open rides, margins and woodbanks. In the spring months, walkers can enjoy primrose, bluebell, water avens, dogs mercury, wild arum, red campion and celandine.

Keep ahead, ignoring any side paths and tracks each side. At the far end, you will reach a junction of paths (with a footbridge into a field ahead, and paths both left and right). Do NOT take the footbridge, instead turn right to continue around the woodland boundary. Further along, the woodland edge path reaches a junction with a grass track. Bear right to join this

grass track and, about 100 metres later, you will come to a fingerpost on your right marking the next footpath junction. The woodland belt running away to your left is known as Stocking Wood.

2 ➡ 3 Stocking Wood Junction to Hardstanding Area



Do NOT take the footpath left into Stocking Wood, instead keep straight ahead on the grass track with woodland to your right and open fields to your left. Shortly, where the path splits, stay on the right side of the ditch and follow the woodland edge path. The path swings left before emerging to the corner of a meadow, with a single house visible at the far side.

Turn right here, to continue with the woodland on your right and the meadow on your left. At the end of the meadow, turn right through the hedge gap to reach a junction with a stone farm track. Turn right to join the track, still following the woodland edge on your right. Follow the track as it bears right twice and then turns left, leading you directly away from the woodland. The track leads you between open fields to reach an area of hardstanding on your left.

3 ➡ 4 Hardstanding Area to End



Immediately after the hardstanding area, follow the track left and then right to reach the corner of a smaller area of trees. Follow the track as it swings left, passing this small woodland on your right. At the end of the woodland, the track swings right and then continues ahead, finally emerging to a T-junction with the bridleway track that you followed on the outward leg. Turn left at this junction and follow the stone track all the way back to the access road where the walk began.



Disclaimer

This walking route was walked and checked at the time of writing. We have taken care to make sure all our walks are safe for walkers of a reasonable level of experience and fitness. However, like all outdoor activities, walking carries a degree of risk and we accept no responsibility for any loss or damage to personal effects, personal accident, injury or public liability whilst following this walk. We cannot be held responsible for any inaccuracies that result from changes to the routes that occur over time. Please let us know of any changes to the routes so that we can correct the information.

Walking Safety

For your safety and comfort we recommend that you take the following with you on your walk: bottled water, snacks, a waterproof jacket, waterproof/sturdy boots, a woolly hat and fleece (in winter and cold weather), a fully-charged mobile phone, a whistle, a compass and a map of the area. Check the weather forecast before you leave, carry appropriate clothing and do not set out in fog or mist as these conditions can seriously affect your ability to navigate the route. Take particular care on cliff/mountain paths where steep drops can present a particular hazard. Some routes include sections along roads – take care to avoid any traffic at these points. Around farmland take care with children and dogs, particularly around machinery and livestock. If you are walking on the coast make sure you check the tide times before you set out.



© Crown Copyright and database right 06 February 2018. Ordnance Survey 100017926.





Application by Fosse Green Energy Ltd for an order granting development consent for the Fosse Green Energy solar farm

Local Impact Report:

APPENDIX E3

Details of Stepping Out Walk Bassingham and Villages Circular

North Kesteven District Council

[REDACTED])

NKDC reference: 23/0325/NSIP

Planning Inspectorate reference: EN010154

January 2026

Bassingham and villages circular

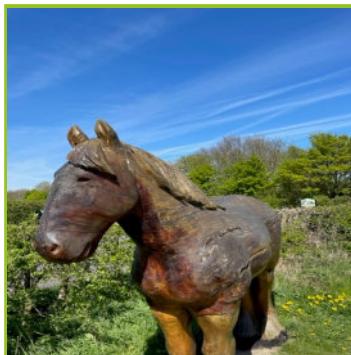
A 6.5 mile circular route taking in the villages of Bassingham, Carlton Le Moorland, Stapleford and Norton Disney in Lincolnshire.



Moderate Terrain

**6.5
Miles
Circular
3 hours**

080323



Access Notes

1. The walk is almost entirely flat and follows a mixture of pavements, tarmac paths, quiet lanes, grass tracks and field paths.
2. The route crosses several crop fields so these paths can be narrow in part and can also be muddy depending on the time of year.
3. There are a couple of sections of road walking that need care.
4. You will need to negotiate some gates with electric fencing hooks that you undo and re connect, styles and kissing gates.
5. There are fields with cattle grazing, dogs to be kept on leads at all times and follow farmers instruction signage when accessing through their land.
6. OS Map Explorer 272 Lincoln.
7. Please remember the Countryside Code.



IMPORTANT NOTE: This is a circular route and does involve walking through fields with cattle, styles and sections of road walking along quiet country roads.

This walk takes you through four delightful villages, each with churches, plentiful history and community artwork to enjoy, plus beautiful open expanses of arable farmland in between.

FACILITIES: Refreshments are available at the various pubs in the villages including The Bugle Horn and Five Bells in Bassingham. Booking is advisable if you are wanting food. The Green Man in Norton Disney also serves food and drink. We recommend checking opening times prior to your walk to avoid disappointment.

Getting there

The walk starts at Hammond Hall car park which is on Lincoln Road. This is a good sized car park but please bear in mind that this can get busy as it is used by the hall, school and for the playing fields. There is also on street parking and we advise you to park legally and respectfully.

Approximate post code of Hammond Hall is **LN5 9HQ**.



Get the AllTrails App for a smarter walking experience. 75K walking guides in the palm of your hand with live maps that show your progress as you walk. Say goodbye to wrong turns.

alltrails.com



Walk Sections



1 Start to Carlton Le Moorland



As you come to the end of the foot path you will come to a metal silhouette cyclist, worker and cow art piece. Continue along the path until you come to the staggered crossroad junction.

At this point you will carefully cross the road and head across the road entering Vicarage Lane. You are now in Carlton Le Moorland.

Starting in the main entrance into Hammond Hall car park, turn left and walk along the footpath. This will take you past Bassingham Primary School on your left and the Bugle Horn pub on your right. Continue along the pathway crossing over a small side road (Torgate Lane) you will see the start of the Sustrans cycle and path way which runs along side Carlton Road, separated by a thick hedge. As you walk along this stretch of pathway you will pass several art pieces including a Hare, Shire horse and carriage and numerous decorative benches.



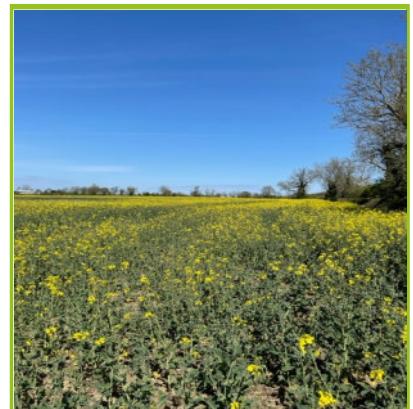
Vicarage Lane to High Street

Continue along Vicarage Lane and follow the road around to the right where the road becomes Church Street, you will then have St. Mary's church on your left hand side. Continue along the road until you come to a T – Junction, turn left onto the High Street.



High Street to Clay Lane

Follow the High Street which will bend round to your right where the road becomes Clay Lane which is a quiet road. As you walk along leaving the village the footpath ends but leaves very wide grass verges to walk along. As you walk along Clay Lane you will be surrounded by fields and the open countryside.



Clay Lane to field Footpaths

Continue along Clay lane and enjoy the views of the open countryside as you walk along the road for a good ten minutes. The road will then bend sharply to the left and after another few minutes walking you will come to a public footpath sign to your right where you walk over a wooden bridge and enter a field.



4 → 5

Field footpaths to Stapleford Church

Once you have crossed over the wooden bridge keep to the right hand side of the field with the hedge on your right continue to the end of the field where you will then turn left and walk along the top of the field until you see a public footpath sign to your right where you will cross into the field (this field has crops growing so depending on the time of the year depends on how high the crops are) and then walk on to the opposite side of the hedge for a few metres before then following the labelled footpath diagonally across the field. At the end of the path you will cross a wooden bridge with a metal gate on the opposite side. Carefully open the gate which requires you to unhook the electric fence so you can enter the field which usually has sheep in but this could change throughout the year. Please close the gate and reattach the hook for the fence.

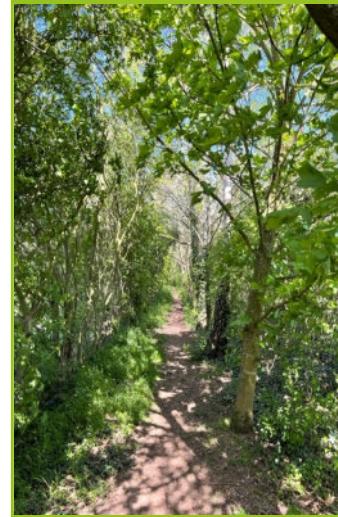
Walk diagonally to your right across the field where you will go through another metal gate. Turn right and follow the track which will take you over an open sided concrete bridge. Once across you will see the All Saint's church ahead.



6 → 7

Stapleford to Norton Disney

Continue following this grass footpath as it bends round to the left and continues straight for a good while and then bends left again. Once you come to the end of the pathway you will take a right turn over a wooden bridge and go through a metal gate on the opposite side. The field you are entering often has sheep in. continue through the field and at the end you will go through a kissing gate and then enter a wooded footpath. Continue along this and then when you come out you will have the wooded area to your right and open field. Continue along this pathway until you come to a kissing gate. As you enter you will see some glamping pods on your left and the Green Man pub, Norton Disney straight ahead. This is an ideal place to stop for a bite to eat or drink. Check opening times prior to your walk.



5 → 6

Stapleford Church through village

Walk towards the church and enter the churchyard through the gate and public footpath sign post. Once you have walked through the church yard take the footpath down to your right and you will be entering the village of Stapleford.

As you enter the village turn right to the T-junction and then turn right on to Norton Road, cross the road carefully so you are walking on the left hand side with the road to your right and continue along the road which will then bend round to the left. Keep on the left hand side of the road as there is a public footpath but as you leave the village the footpath disappears and at this point carefully cross to the opposite side of the road so you are on the right with the road to your left and continue along the road out of the village.

Once you have left the village you will see the road bends round to the right at this point you will see straight ahead of you a public footpath sign straight ahead, carefully cross the road and turn right to follow the public footpath which will take you to the right along the hedgerow which separates you from the road.



7 ➔ 8 Norton Disney to Bassingham

When you leave the pub you are on the Main Street in Norton Disney, turn right and follow the road out of the village.

You will then come to a junction where you will take the left turning down Clay Lane (single track lane). You will continue along this road for a good while. The road will bend round to the left, and right several times and you will have open fields either side. The further along the road you go you will start to see Bassingham church tower in the distance. As you take the last left bend you will pass a large, dead tree at the edge of the road and ahead you will see some large conifers which edge a water works plant. As you come to the water works you will turn right and follow the public footpath. The water works will be on your left. Continue you along the footpath and go across the concrete bridge which will lead you back in the village of Bassingham. After crossing the bridge continue along the footpath which will bring you out on to Newark Road where you will see a brick monument opposite, cross over the road and turn left and take the next right turn onto Lincoln road. You will have a nursing home on your right. At the end of the road you will come to a T-junction, turn left and follow the road back to Hammond Hall car park. You will have the school on your right and the Bugle Horn pub on your left.



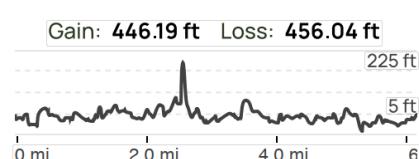
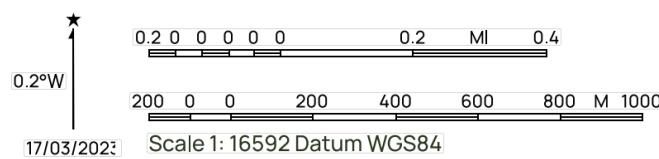
Disclaimer

This walking route was walked and checked at the time of writing. We have taken care to make sure all our walks are safe for walkers of a reasonable level of experience and fitness. However, like all outdoor activities, walking carries a degree of risk and we accept no responsibility for any loss or damage to personal effects, personal accident, injury or public liability whilst following this walk. We cannot be held responsible for any inaccuracies that result from changes to the routes that occur over time. Please let us know of any changes to the routes so that we can correct the information.

Walking Safety

For your safety and comfort we recommend that you take the following with you on your walk: bottled water, snacks, a waterproof jacket, waterproof/sturdy boots, a woolly hat and fleece (in winter and cold weather), a fully-charged mobile phone, a whistle, a compass and a map of the area. Check the weather forecast before you leave, carry appropriate clothing and do not set out in fog or mist as these conditions can seriously affect your ability to navigate the route. Some routes include sections along roads – take care to avoid any traffic at these points. Around farmland take care with children and dogs, particularly around machinery and livestock.





AllTrails





Application by Fosse Green Energy Ltd for an order granting development consent for the Fosse Green Energy solar farm

Local Impact Report: APPENDIX F Planning History

North Kesteven District Council
[REDACTED])

NKDC reference: 23/0325/NSIP
Planning Inspectorate reference: EN010154
January 2026

Reference Number	Description and Location	Status	Date
14/1003/FUL	Development of a solar photovoltaic power generating installation with associated inverter cabinets, transformers, switchgear, internal access tracks, security fencing and cameras - Land associated with Ewerby Thorpe Farm Ewerby Thorpe Sleaford NG34 9PR	Approved	3/10/14
14/1034/EIASCR	Request for EIA Screening Opinion - Erection of solar array with generating capacity of up to 28 MW and associated infrastructure - Land associated with Ewerby Thorpe Farm Ewerby Thorpe Sleaford NG34 9PR	Screening Opinion Issued	18/8/14
04/0679/FUL	Conversion of redundant farm barn to residential dwelling - Barn off Ewerby Fen Ewerby Waithe (known as 'Gashes Barn')	Approved	1/7/04

CONTENTS

Appendix A – AAH Landscape and Visual Impact (LVIa) – AAH
November 2025

Appendix B – Biodiversity report - Lincolnshire County Council
November 2025

Appendix C – Archaeology - LCC's Historic Environment
(Infrastructure) Officer

Appendix D – Review of Fosse Green Solar Project ES
Chapter Soils and Agriculture - Landscape
October 2025

Appendix E – Details of Stepping Out Walks

Appendix F – Planning History

Appendix G – Development Plan Policies



Application by Fosse Green Energy Ltd for an order granting development consent for the Fosse Green Energy solar farm

Local Impact Report

APPENDIX A –

**AAH Landscape and Visual Impact (LVIA) –
AAH November 2025**



Application by Fosse Green Energy Ltd for an order granting development consent for the Fosse Green Energy solar farm

Local Impact Report

APPENDIX B –

**Biodiversity report - Lincolnshire County
Council November 2025**



Application by Fosse Green Energy Ltd for an order granting development consent for the Fosse Green Energy solar farm

Local Impact Report

APPENDIX C – Archaeology - LCC's Historic Environment (Infrastructure) Officer



Application by Fosse Green Energy Ltd for an order granting development consent for the Fosse Green Energy solar farm

Local Impact Report

APPENDIX D –

**Review of Fosse Green Solar Project ES
Chapter Soils and Agriculture -
Landscape October 2025**



Application by Fosse Green Energy Ltd for an order granting development consent for the Fosse Green Energy solar farm

Local Impact Report

APPENDIX E – Details of Stepping Out Walks



North Kesteven
DISTRICT COUNCIL

**Application by Fosse Green Energy Ltd for an
order granting development consent for the
Fosse Green Energy solar farm**

Local Impact Report

APPENDIX F –

Planning History



Application by Fosse Green Energy Ltd for an order granting development consent for the Fosse Green Energy solar farm

Local Impact Report

APPENDIX G – Development Plan Policies



Application by Fosse Green Energy Ltd for an order granting development consent for the Fosse Green Energy solar farm

Local Impact Report

APPENDIX G – Development Plan Policies



Application by Fosse Green Energy Ltd for an order granting development consent for the Fosse Green Energy solar farm

Local Impact Report: APPENDIX G1 Central Lincolnshire Local Plan policies

North Kesteven District Council

[REDACTED])

NKDC reference: 23/0325/NSIP

Planning Inspectorate reference: EN010154

January 2026

CENTRAL LINCOLNSHIRE

Local Plan



**Adopted
April 2023**



2. Spatial Strategy

2.1. Settlement Hierarchy

2.1.1. The Central Lincolnshire spatial strategy seeks to concentrate growth on the main urban areas of Lincoln, Gainsborough and Sleaford, and in settlements that support their roles, with remaining growth being delivered elsewhere in Central Lincolnshire to support the function of other sustainable settlements, particularly where these are well connected by public transport or where the main centres can be accessed by active travel means.

2.1.2. This approach makes the most of existing services and facilities, delivering growth to where it is most needed. It also provides associated opportunities to regenerate urban areas, provide new jobs and new homes in accessible locations, and focus infrastructure improvements where they will have the greatest effect.

2.1.3. Through minimising the need to travel by locating development at the main urban centres and reducing the need to deliver new facilities the approach to delivering growth in this plan is also aligned to reducing the carbon being produced in Central Lincolnshire.

2.1.4. Outside of the main urban areas of Lincoln, Gainsborough and Sleaford, Central Lincolnshire's smaller towns and villages vary in size, demography, accessibility, facilities, character, constraints and opportunities. This Local Plan determines how each community can contribute to the delivery of a sustainable Central Lincolnshire, which may include proportionate and appropriate development.

2.1.5. The scale of growth directed to each settlement has been established in three steps:

1. Preparation of a Settlement Hierarchy, based on factual information, together with a strategic policy steer as to what level of development would be appropriate for settlements within each level of the hierarchy (see Policy S1);
2. Determination of the overall level of growth for Central Lincolnshire, and at the same time determination of a strategic split of that growth across Central Lincolnshire (see Policy S2); and
3. Establishing what site allocations may be appropriate for each settlement, by way of a consideration of the specific context of each settlement in terms of the ability to accommodate growth and the connectivity with the main urban areas, before considering the constraints and opportunities of individual sites.

2.1.6. The Settlement Hierarchy is set out in Policy S1. Three separate documents detail the journey to defining the Settlement Hierarchy and choosing where allocations would be appropriate, namely: the Settlement Hierarchy Methodology Report (May 2020), the Services and Facilities Methodology Report (May 2020) and the Site Allocations Settlement Analysis (June 2021). Each of these are available on the Central Lincolnshire website. It should be noted that the Local Plan (and associated Policies Map) does not include defined 'settlement boundaries' around any settlements in Central Lincolnshire, and instead relies primarily on allocations and then the policy below to determine appropriate locations for development.

2.1.7. The Settlement Hierarchy provides a framework for neighbourhood plans to shape their own settlements through a detailed locally-led review, site allocations, if necessary introduction of settlement boundaries, or other tools to manage how a village will grow.

Policy S1: The Spatial Strategy and Settlement Hierarchy

The spatial strategy will focus on delivering sustainable growth for Central Lincolnshire that meets the needs for homes and jobs, regenerates places and communities, and supports necessary improvements to facilities, services and infrastructure.

Development should create strong, sustainable, cohesive and inclusive communities, making the most effective use of previously developed land and enabling a larger number of people to access jobs, services and facilities locally.

Development should provide the scale and mix of housing types and a range of new job opportunities that will meet the identified needs of Central Lincolnshire in order to secure balanced communities.

Decisions on investment in services and facilities, and on the location and scale of development, will be assisted by the Central Lincolnshire Settlement Hierarchy.

The hierarchy is as follows:

1. Lincoln Urban Area

To significantly strengthen the role of Lincoln, both regionally and within Central Lincolnshire, and to meet Lincoln's growth objectives and regeneration needs, the Lincoln urban area (defined as the current built up area of Lincoln, which includes the City of Lincoln, North Hykeham, South Hykeham Fosseway, Waddington Low Fields and any other developed land adjoining these areas) and the sites allocated in this Local Plan on the edge of the Lincoln urban area will be the principal focus for development in Central Lincolnshire, including housing, retail, leisure, cultural, office and other employment development. In addition to sites being allocated in the Local Plan or a neighbourhood plan, development proposals in accordance with *Policy S3* and other relevant development plan policies will be viewed positively.

2. Main Towns

To maintain and enhance their roles as main towns, and to meet the objectives for regeneration, Sleaford and Gainsborough will, primarily via sites allocated in this Local Plan and any applicable neighbourhood plan, be the focus for substantial housing development supported by appropriate levels of employment growth, retail growth and wider service provision. In addition to sites being allocated in the Local Plan or a neighbourhood plan, development proposals in accordance with *Policy S3* and other relevant development plan policies will be viewed positively.

3. Market Towns

To maintain and enhance their roles as market towns, Caistor and Market Rasen will be the focus for significant, but proportionate, growth in housing, employment, retail and wider service provision. This growth will primarily be through sites allocated in this Local Plan and any applicable neighbourhood plan. In addition to sites being allocated in the Local Plan or a neighbourhood plan, development proposals in accordance with *Policy S3* and other relevant development plan policies will be viewed positively.

4. Large Villages

Large villages are defined as those with 750 or more dwellings at 1 April 2018. To maintain and enhance their role as large villages which provide housing, employment, retail, and key services and facilities for the local area, the following settlements will be a focus for accommodating an appropriate level of growth via sites allocated in this plan. Beyond site allocations made in this plan or any applicable neighbourhood plan, development will be limited to that which accords with *Policy S4: Housing Development in or Adjacent to Villages* or other policies relating to non-residential development in this plan as relevant.

Bardney	Heighington	Scoter
Billinghay	Keelby	Skellingthorpe
Bracebridge Heath	Metheringham	Waddington
Branston	Navenby	Washingborough
Cherry Willingham	Nettleham	Welton
Dunholme	Ruskington	Witham St Hughs
Heckington	Saxilby	

5. Medium Villages

Medium villages are defined as those with between 250 and 749 dwellings at 1 April 2018. Well connected or well served medium villages may receive some limited growth through allocations in this plan in order to achieve a balance between ensuring the vitality of the village and protecting the rural character. Beyond site allocations made in this plan or any applicable neighbourhood plan, development will be limited to that which accords with *Policy S4: Housing Development in or Adjacent to Villages* or other policies relating to non-residential development in this plan as relevant.

Bassingham	Greylees	Nocton
Blyton	Harmston	North Kelsey
Brant Broughton	Hawthorn Avenue ('Little Cherry')	Potterhanworth
Brookenby	Helpingham	Reepham
Burton Waters	Hemswell Cliff	Scampton (RAF)
Cranwell RAF	Ingham	Scothorn
Cranwell Village	Lea	Sturton By Stow
Digby	Leasingham	Sudbrooke
Dunston	Marton	Tealby
Eagle	Middle Rasen	Waddingham
Fiskerton	Morton	Welbourn
Great Hale	Nettleton	Wellingore

6. Small Villages

Small villages are defined as those with between 50 and 249 dwellings at 1 April 2018. Well connected or well served small villages may receive some limited growth, primarily through allocations in this plan in order to achieve a balance between ensuring the vitality of the village and the rural character. Beyond site allocations made in this plan or any applicable neighbourhood plan, development will be limited to that which accords with *Policy S4: Housing Development in or Adjacent to Villages* or other policies relating to non-residential development in this plan as relevant.

Anwick	Hemswell	Scotton
Ashby de la Launde	Holton le Moor	Scredington
Aubourn	Kexby	Searby
Aunsby	Kirkby Green	Silk Willoughby
Beckingham	Kirkby La Thorpe	Snitterby
Bigby	Knaith Park	South Kelsey
Bishop Norton	Langworth	South Kyme
Boothby Graffoe	Laughterton	South Rauceby
Branston Booths	Laughton	Southrey
Burton	Leadenham	Spridlington
Canwick	Lissington	Springthorpe
Carlton Le Moorland	Little Hale	Stow
Chapel Hill	Martin	Swallow
Claxby	New Toft	Swarby
Coleby	Newton On Trent	Swaton
Corringham	Normanby By Spital	Swinderby
Doddington	North Carlton	Tattershall Bridge

Dorrington	North Greetwell	Thorpe On The Hill
East Ferry	North Kyme	Threekingham
East Stockwith	North Owersby	Timberland
Ewerby	North Scarle	Torksey
Faldingworth	Norton Disney	Upton
Fenton	Osbourneby	Walcott
Fillingham	Osgodby	Walesby
Glenham	Owmby By Spital	Wickenby
Glentworth	Rothwell	Willingham By Stow
Grasby	Rowston	Willoughton
Great Limber	Scampton village	Wilsford
Hackthorn	Scopwick	

7. Hamlets

For the purposes of this Local Plan, a hamlet is defined as a settlement not listed elsewhere in this policy and with dwellings clearly clustered together to form a single developed footprint*. Such a hamlet must have a dwelling base of at least 15 units (as at 1 April 2018). Within the developed footprint* of such hamlets, development will be limited to single dwelling infill developments or development allocated through a neighbourhood plan.

8. Countryside

Unless allowed by:

- a) policy in any of the levels 1-7 above; or
- b) any other policy in the Local Plan (such as Policies S4, S5, S34, or S43) or a relevant policy in a neighbourhood plan, development will be regarded as being in the countryside and as such restricted to:
 - that which is demonstrably essential to the effective operation of agriculture, horticulture, forestry, outdoor recreation, transport or utility services;
 - delivery of infrastructure;
 - renewable energy generation; and
 - minerals or waste development in accordance with separate Minerals and Waste Local Development Documents.

* The definition of “developed footprint” as used throughout this policy is provided in the Glossary.

2.2. Growth Levels and Distribution

- 2.2.1. As required by the NPPF, this Local Plan must define the overall level of growth in Central Lincolnshire within the plan period of 2018 to 2040.
- 2.2.2. The PPG makes clear that the starting point for identifying the minimum number of homes expected to be planned for is the nationally derived standard method for assessing local housing need. However, it also sets out a number of scenarios where it is appropriate to plan for a higher housing figure than that identified through the standard method where evidence suggests a higher level to be more appropriate.
- 2.2.3. Evidence produced in support of this plan has looked at the housing market and population projections, and job and economic projections. The Housing Needs Assessment (HNA) (2020) identifies that at that time the standard method resulted in a

* The definition of “appropriate locations” as used throughout this policy is provided in the Glossary.

** The definition of “developed footprint” as used throughout this policy is provided in the Glossary.

2.5. Countryside

2.5.1. Whilst development is focused within the urban areas and to a lesser extent in villages there will be occasions where development is proposed within the countryside areas. For most uses there are strong reasons why such development would be contrary to the overall strategy of this plan and would not result in sustainable development, however, some proposals and some uses will be wholly appropriate in some scenarios.

2.5.2. A criteria-based policy approach will be used to determine applications for residential and non-residential development within the countryside. Similar to residential development, non-residential development within the countryside must be sustainable and respectful to its setting. Commercial enterprises where a rural location can be justified to maintain and enhance the rural economy (for example, establishment of a farm shop) will be supported providing all other relevant criteria are met.

2.5.3. More widely, the rural nature of Central Lincolnshire and the significant role that agriculture plays in the economy of this area means that agricultural land and other rural land-based activities have a notable presence in the landscape and forms an attractive backdrop to the various settlements. Development needed to directly support such uses is important to foster a successful rural economy, but it can also have an impact on the landscape if not properly managed. As such it is important that such development is located and designed appropriately to minimise adverse impacts or even benefit the countryside.

2.5.4. Specific natural features or characteristics such as landscape character and best and most versatile agricultural land are addressed in the Natural Environment Chapter.

Policy S5: Development in the Countryside

Part A: Re-use and conversion of non-residential buildings for residential use in the countryside

Where a change of use proposal to residential use requires permission, and where the proposal is outside the developed footprint of a settlement listed in the Settlement Hierarchy or the developed footprint of a hamlet, then the proposal will be supported provided that the following criteria are met:

- Comprehensive and proportionate evidence is provided to justify either that the building can no longer be used for the purpose for which it was originally built, or the purpose for which it was last used, **or** that there is no demand (as demonstrated through a thorough and robust marketing exercise) for the use of the building for business purposes; and
- The building is capable of conversion with minimal alteration, including no need for inappropriate new openings and additional features; and
- The building is of notable architectural or historic merit and intrinsically worthy of retention in its setting.

Part B: Replacement of a dwelling in the countryside

The replacement of an existing dwelling outside the developed footprint of a settlement will be supported provided that:

- a) The residential use of the original dwelling has not been abandoned;
- b) The original dwelling is not of any architectural or historic merit and it is not valuable to the character of the settlement or wider landscape;
- c) The original dwelling is a permanent structure, not a temporary or mobile structure;
- d) The replacement dwelling is of a similar size and scale to the original dwelling;
- e) It is located on the footprint of the original dwelling unless an alternative position within the existing residential curtilage would provide notable benefits and have no adverse impact on the wider setting; and
- f) It satisfies the requirements of Policy S11: Embodied Carbon.

Part C: Mobile homes within the countryside

Applications for temporary and mobile homes will be considered in the same way as applications for permanent dwellings. The exception to this is cases when a temporary or mobile home is needed during the construction of a permanent dwelling on site or on a nearby site: in such cases more flexibility will be applied. Permission granted in such instances will be subject to time restrictions.

Part D: New dwellings in the countryside

Applications for new dwellings will only be acceptable where they are essential to the effective operation of existing rural operations listed in tier 8 of Policy S1. Applications should be accompanied by evidence of:

- a) Details of the rural operation that will be supported by the dwelling;
- b) The need for the dwelling;
- c) The number of workers (full and part time) that will occupy the dwelling;
- d) The length of time the enterprise the dwelling will support has been established;
- e) The commercial viability of the associated rural enterprise through the submission of business accounts or a detailed business plan;
- f) The availability of other suitable accommodation on site or in the area; and
- g) Details of how the proposed size of the dwelling relates to the needs of the enterprise.

Any such development will be subject to a restrictive occupancy condition.

Part E: Non-residential development in the countryside

Proposals for non-residential development will be supported provided that:

- a) The rural location of the enterprise is justifiable to maintain or enhance the rural economy **or** the location is justified by means of proximity to existing established businesses or natural features;
- b) The location of the enterprise is suitable in terms of accessibility;
- c) The location of the enterprise would not result in conflict with neighbouring uses; and
- d) The development is of a size and scale commensurate with the proposed use and with the rural character of the location.

Part F: Agricultural diversification

Proposals involving farm based diversification to non-agricultural activities or operations will be permitted, provided that the proposal will support farm enterprises and providing that the development is:

- a) In an appropriate location for the proposed use;
- b) Of a scale appropriate to its location; and
- c) Of a scale appropriate to the business need.

Part G: Agricultural, forestry, horticultural or other rural land-based development

Proposals which will help farms modernise and/or adapt to funding changes or climate change will be supported in principle and any such proposals will be considered against relevant design, landscape and natural environment policies in this plan.

Where permission is required, development proposals for buildings required for agriculture or other rural land based development purposes will be supported where:

- a) It is demonstrated that there is a functional need for the building which cannot be met by an existing, or recently disposed of, building;
- b) the building is of a scale that is proportionate to the proposed functional need;
- c) the building is designed specifically to meet the functional need identified;
- d) the site is well related to existing buildings in terms of both physical and functional location, design and does not introduce isolated structures away from existing buildings; and
- e) significant earthworks are not required, and there will be no harm to natural drainage and will not result in pollution of soils, water or air.

Reducing Energy Consumption – Circular Economy

3.2.20. A circular economy is an alternative economic model which focuses on waste minimisation and product reuse: it is a direct challenge to the current linear “make, use and dispose” model of consumption.⁴

3.2.21. A circular economy is about maximising the use of materials and resources through recycling, reusing, repairing and sharing as much as possible. The ultimate aim of this is to reduce the production, consumption and disposal of materials and resources, thereby reducing energy use and carbon consumption. Circular economies can therefore help to preserve resources and reduce the damaging environmental impacts that result from production, consumption and waste disposal.

3.2.22. A circular economy can also be positive for the local economy, as it can create jobs in a local area to serve the circular economy, rather than support a consumption economy which relies on imports from outside the area (including international imports).

3.2.23. A circular economy is based on three fundamental principles:

1. Designing out waste and pollution;
2. Keeping products and materials in use; and
3. Regenerating natural systems.

The first principle requires businesses and organisations to rethink their supply chain and identify ways that they can avoid creating waste and pollution through their operations. The second principle centres around maximising the recycling, reusing, refurbishing, repairing, sharing and leasing of resources. The third principle requires businesses and organisations to consider how they can not only protect the natural environment, but improve it. The circular economy principles can be applied at all scales- globally, locally and at individual business level.

3.2.24. Policy S10 aims to support development proposals which will contribute to the delivery of circular economy principles. Examples of such proposals include:

- Proposals which have been designed to reduce material demands and enable building materials, components and products to be disassembled and re-used at the end of their useful life;
- Proposals which incorporate sustainable waste management onsite;
- Proposals which make specific provision for the storage and collection of materials for recycling and/ or re-use; and
- Proposals for the colocation of two or more businesses/ services for the purpose of sharing resources or maximising use of waste products.

Policy S10: Supporting a Circular Economy

The Joint Committee is aware of the high energy and material use consumed on a daily basis, and, consequently, is fully supportive of the principles of a circular economy.

⁴ <https://wrap.org.uk/about-us/our-vision/wrap-and-circular-economy>

Accordingly, and to complement any policies set out in the Minerals and Waste Development Plan, proposals will be supported, in principle, which demonstrate their compatibility with, or the furthering of, a strong circular economy in the local area (which could include cross-border activity elsewhere in Lincolnshire).

Reducing Energy Consumption – Embodied Carbon

3.2.25. A significant proportion of a building's lifetime carbon is locked into its fabric and systems. Embodied carbon means all the carbon dioxide (and other greenhouse gases) emitted in producing materials so in the case of buildings means all the emissions from the sourcing and construction of building materials, the construction of the building itself, all the fixtures and fittings inside and, arguably, the deconstruction and disposal at the end of a building's lifetime. Embodied carbon figures have been calculated for different dwelling types across Central Lincolnshire with the average embodied carbon figure of 45 tonnes of CO₂ per dwelling. Put another way, a brand-new home has already emitted 45 tonnes of CO₂ before it has been occupied. That's about the same as a typical petrol or diesel car emits over 10 years of average use. Addressing the embodied carbon can provide cost-effective potential for carbon savings and cost savings over and above those traditionally targeted through operational savings. Much of the low-hanging fruit of embodied carbon abatement is yet to be taken advantage of. It therefore provides a significant opportunity to reduce the carbon impact of the business and increase organisational carbon savings.

3.2.26. Reduction in embodied carbon is also not subject to ongoing building user behaviour in the way that operational carbon savings are. As a result, embodied carbon benefits can be more accurate and identifiable than predicted operational carbon reductions, particularly when the final occupant of the building is not known at the time.

3.2.27. Embodied carbon savings made during the design and construction stage are also delivered today. This contrasts with operational emissions savings which are delivered over time in the future. Indeed, a Kg of CO₂ saved over the next 5 years has a greater environmental value than a kg saved in say 10 or more years' time.

3.2.28. Embodied carbon assessment can also contribute to other sustainability targets and priorities beside carbon. For example, use of recycled content, recyclability of building materials, and reduced waste materials to landfill can all result from a focus on reducing embodied carbon and also contribute to waste reduction targets. Similarly, benefits to the local community can accrue from reduced on-site energy generation and cleaner fabrication processes which mitigate the impact of the development site on the local area; the use of more local sourcing and local supply chains can also support jobs and the economy in the local area (or if not local, at regional or national level).

3.2.29. This Local Plan supports measures to reduce embodied carbon through encouraging developers to demonstrate how developments over a specified floor area have reduced embodied carbon.

Policy S11: Embodied Carbon

All development should, where practical and viable, take opportunities to reduce the development's embodied carbon content, through the careful choice, use and sourcing of materials.

Presumption against demolition:

To avoid the wastage of embodied carbon in existing buildings and avoid the creation of new embodied carbon in replacement buildings, there is a presumption in favour of repairing, refurbishing, re-using and re-purposing existing buildings over their demolition. Proposals that result in the demolition of a building (in whole or a significant part) should be accompanied by a full justification for the demolition. For non-listed buildings demolition will only be acceptable where it is demonstrated to the satisfaction of the local planning authority that:

1. the building proposed for demolition is in a state of such disrepair that it is not practical or viable to be repaired, refurbished, re-used, or re-purposed; or
2. repairing, refurbishing, re-using, or re-purposing the building would likely result in similar or higher newly generated embodied carbon than if the building is demolished and a new building is constructed; or
3. repairing, refurbishing, re-using, or re-purposing the building would create a building with such poor thermal efficiency that on a whole life cycle basis (i.e. embodied carbon and in-use carbon emissions) would mean a lower net carbon solution would arise from demolition and re-build; or
4. demolition of the building and construction of a new building would, on an exceptional basis, deliver other significant public benefits that outweigh the carbon savings which would arise from the building being repaired, refurbished, re-used, or re-purposed.

Applications within the countryside relating to the re-use or conversion of existing buildings will only be acceptable where they also meet the requirements of Policy S5, S34, or S43 as applicable.

Major development proposals:

All major development proposals should explicitly set out what opportunities to lower a building's embodied carbon content have been considered, and which opportunities, if any, are to be taken forward.

In the period to 31 December 2024, there will be no requirement (unless mandated by Government) to use any specific lower embodied carbon materials in development proposals, provided the applicant has at least demonstrated consideration of options and opportunities available.

From 1 January 2025, there will be a requirement for a development proposal to demonstrate how the design and building materials to be used have been informed by a consideration of embodied carbon, and that reasonable opportunities to minimise embodied carbon have been taken. Further guidance is anticipated to be issued by the local planning authorities on this matter prior to 1 January 2025.

Reducing Energy Consumption – Water Efficiency

3.2.30. The supply and disposal of water has a significant carbon impact. Whilst the bulk (90%) of water-related carbon emissions come from the heating of water, the process of treating and pumping water to homes also has an impact (10%). Reducing water use (supply and disposal) therefore can have a significant carbon impact, even more so if that water is heated. Even small measures, such as a water butt, can make a difference – each time a 100l water butt is filled with rainwater, and used to water garden plants instead of using mains water, it saves 79g/CO₂ (Source: Water UK, which estimates the carbon footprint of 1 litre of domestic water is 0.79g/CO₂/l). That's a carbon saving on top of the wider water environment benefits of using rainwater rather than mains treated tap water.

existing homes (rather than new development, or home extensions) it is a key document in a framework of new and existing standards on how to conduct effective energy retrofits of existing buildings. It covers how to assess dwellings for retrofit, identify improvement options, design and specify Energy Efficiency Measures (EEM) and monitor retrofit projects.

- 3.2.37. The standard drives the 'whole house approach' including the 'fabric first' methodology. It defines the qualifications and responsibilities of individual retrofit roles and respective activities required prior and post EEM installation. TrustMark Registered Businesses carrying out work within its scope are required to be compliant with its requirements, so if you are planning to have work done on your home, you may wish to ask about PAS 2035 and whether the builder is a TrustMark registered business.
- 3.2.38. Further details available here: www.trustmark.org.uk/ourservices/pas-2035/
- 3.2.39. In the context of all of the above, the following policy aims to assist in improving the energy efficiency of existing buildings, complementing the wider policies of this Plan which are primarily aimed at new buildings. Further advice on energy efficiency measures that may be appropriate in historic buildings and regarding the avoidance of maladaptation can be found in Historic England published advice such as at <https://historicengland.org.uk/advice/technical-advice/energy-efficiency-and-historic-buildings/>.

Policy S13: Reducing Energy Consumption in Existing Buildings

For all development proposals which involve the change of use or redevelopment of a building, or an extension to an existing building, the applicant is encouraged to consider all opportunities to improve the energy efficiency of that building (including the original building, if it is being extended)*.

Proposals which do consider and take such viable opportunities will, in principle and subject to other material considerations, be supported. In particular, residential properties which, following an extension or conversion, will achieve an improved EPC rating overall will, in principle, be supported. To gain this in principle support, a pre-development EPC should be provided as part of the application, together with evidence as to how a completed development EPC is likely to be rated.

More generally, for any work on a residential property, the use of the PAS 2035:2019 Specifications and Guidance (or any superseding guidance) is encouraged.

*Note: for any heritage asset, improvements in energy efficiency of that asset should be consistent with the conservation of the asset's significance (including its setting) and be in accordance with national and local policies for conserving and enhancing the historic environment.

3.3. Theme 2 - Increase Renewable Energy Generation

- 3.3.1. The second section of this chapter focusses on what the Local Plan can do to facilitate an increase in renewable energy generated in Central Lincolnshire, as part of a transition towards a net-zero carbon future. It does this by proactively encouraging investment in renewable energy infrastructure, encouraging and supporting the delivery of wider transformation infrastructure (such as energy storage), and requiring certain infrastructure

as part of new development where there is reasonable certainty that a net-zero carbon society would depend on such infrastructure.

Generating Renewable Energy

3.3.2. The generation and use of renewable energy reduces demand for fossil fuels, thus reducing harmful greenhouse gas emissions. Renewable energy technologies include:

- Photovoltaic solar panels- for electricity generation
- Thermal solar panels- for heating
- Wind turbines- for electricity generation
- Ground source heat pumps – for heating
- Air source heat pumps – for heating

3.3.3. Not only does the use of renewable energy reduce carbon emissions, and thus help address climate change, but it also has many other benefits too, namely:

- It is sustainable- renewable energy will not run out, unlike fossil fuels which are finite;
- The renewable energy sector creates jobs in the short and long term, for example, project planning, installation, operation and maintenance;
- Onshore wind offers the most cost-effective choice for electricity in the UK and these cost savings can be passed onto the consumer;
- Onshore wind technology is getting more efficient whilst maintaining the same footprint, and land between wind turbines can be used for other productive purposes, such as food production.

3.3.4. In Central Lincolnshire, the aim of the Joint Committee that prepared this Plan is to maximise appropriately located renewable energy generated in Central Lincolnshire, as confirmed in Policy S14 below. The Policy sets no floor or cap on the scale of renewable energy targeted to be generated, preferring, instead, an approach which supports all appropriate proposals that meet the policy requirements set out.

Wind Energy

3.3.5. In June 2015 Government issued a Written Statement⁶ on wind energy development, stating that, *when determining planning applications for wind energy development involving one or more wind turbines, local planning authorities should only grant planning permission if:*

- *the development site is in an area identified as suitable for wind energy development in a local or neighbourhood plan; and*
- *following consultation, it can be demonstrated that the planning impacts identified by affected local communities have been fully addressed and therefore the proposal has their backing.*

3.3.6. This position is transcribed in national policy (NPPF (2021) footnote 54). Whether a proposal has the backing or support of the local community is a judgement the local planning authority will have to make on a case by case basis.

⁶ <https://www.parliament.uk/globalassets/documents/commons-vote-office/June-2015/18-June/1-DCLG-Planning.pdf>

3.3.7. As mentioned in the introduction to this chapter, this Local Plan must be radical, and do more than merely ‘encourage’ action against climate change. As applications for wind turbines can (in accordance with the above national policy) only be approved if they are in a location identified as suitable for wind energy development, this Local Plan therefore identifies potentially suitable areas for wind turbine development. The alternative (i.e. not identifying any potentially suitable areas) would mean that wind turbine applications in Central Lincolnshire could only be approved if an area was identified in a neighbourhood plan: this could result in no or very limited wind turbine development, which would not be in line with Central Lincolnshire's ambition to facilitate a net zero carbon future and would be a barrier to this Local Plan making a legally required meaningful contribution to addressing the climate change crisis. Not identifying potentially suitable areas for wind turbine development would also make the goal of net zero carbon, whether by 2050 (UK legal requirement) or earlier (stated ambition of many authorities) harder to achieve, and result in greater pressure to adopt more revolutionary measures elsewhere. In principle, therefore, this Local Plan supports and helps facilitate the delivery of wind turbines.

3.3.8. Policy S14 below differentiates between small to medium scale turbines and medium to large turbines. This Local Plan establishes that the whole of the Central Lincolnshire area is potentially suitable for small to medium wind turbine development, while only the limited area shown indicatively on Map 2 (and defined on the Policies Map) is potentially suitable for the development of medium to large scale turbines.

3.3.9. Full details of the approach used to identify areas potentially suitable for medium to large wind turbine development are set out in a separate evidence document available on our website, but the following paragraphs provide a summary of our approach:

3.3.10. **Considering wind opportunity** – For wind turbines to be effective, there must be wind to power them. The East Midlands Low Carbon Energy Study (2011) highlighted that wind speeds in Central Lincolnshire are generally feasible for large-scale wind development and that wind speeds across Central Lincolnshire are consistently above 5.5m/s (the general threshold for economic viability). It is not considered that any material changes will have occurred since 2011 to impact this position, so it is maintained that, in principle, the opportunity for wind turbine development remains across the whole Central Lincolnshire area.

3.3.11. **Mapping of principal constraints** – The next step is identifying and mapping strategic level constraints to broadly identify the areas potentially suitable for wind turbine development. These constraints have been identified as:

- All settlements over 50 dwellings identified in the Settlement Hierarchy and settlements over 50 dwellings outside Central Lincolnshire (plus 2km buffer)
- Lincolnshire Wolds Area of Outstanding Natural Beauty
- Areas of Great Landscape Value
- Sites of Special Scientific Interest; Special Protection Areas; Special Areas of Conservation; Ramsars; National Nature Reserves; Local Wildlife Sites; Ancient Woodland
- Protected Battlefields; Scheduled Monuments; Historic Parks and Gardens; Conservation Areas
- 5km exclusion zone around airports and airfields, namely: Humberside; RAF Waddington; RAF Coningsby; RAF Barkston Heath, Kirton Lindsey airfield; Sturgate airfield; Wickenby Aerodrome; and Temple Bruer Airfield.

3.3.12. For most of the constraints identified above, no additional ‘buffer zone’ around them has been included. To do so was deemed inappropriate, as the required distance between a wind turbine and a constraint may vary significantly depending on the specifics of the site and nature of the proposal: as such, proximity to the identified principal constraints will be a matter for detailed consideration at the time of application.

3.3.13. **Map of areas potentially suitable for wind turbine development** – When all of the principal constraints are combined the result provides a number of areas which are not constrained by a ‘principal constraint’ and therefore potentially suitable in principle for medium-large scale wind turbines as shown on the indicative Map 2 below, and set out in detail on the Policies Map. All areas coloured purple are potentially suitable for medium-large wind turbine development.

3.3.14. As well as the principal constraints discussed above, there is, of course, the potential for numerous other site specific constraints, such as: landscape character; visual amenity; biodiversity; geodiversity; flood risk; townscape; heritage assets and their settings and the historic landscape; and highway safety. However, again, the impact of these constraints may vary significantly depending on the specifics of the site and the nature of the proposal, and therefore were not used to sieve out additional areas which are deemed unsuitable in principle for medium to large turbines.

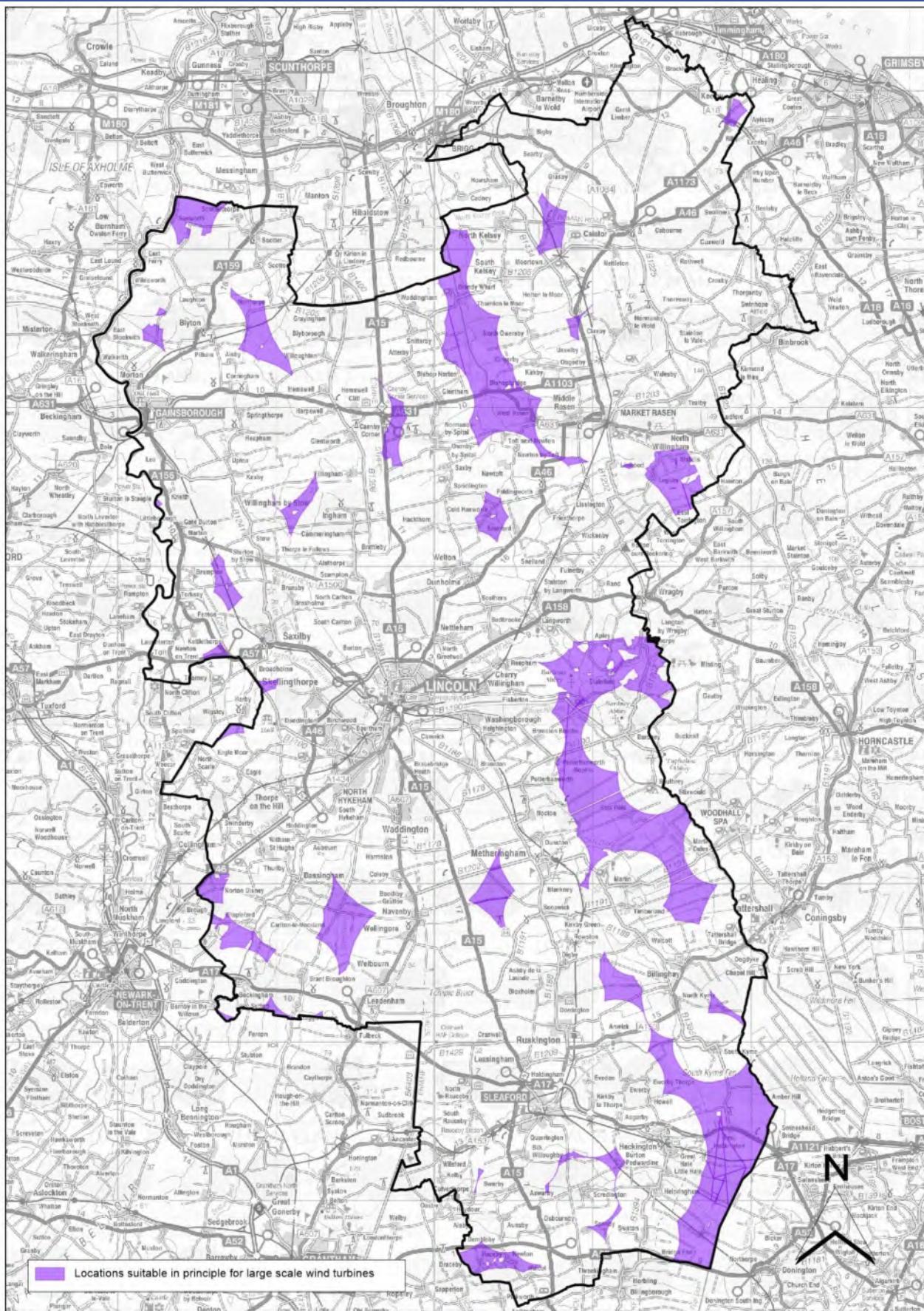
3.3.15. To illustrate the above point, the Witham Fen north of the Heckington Eau is a historic landscape potentially sensitive to the introduction of wind turbines; both because it is a shared setting to the numerous scheduled monuments sited around it and because of its importance in key views to Lincoln Castle / Cathedral and Tattershall Castle. Whilst this historic landscape area has not been applied as an absolute constraint to medium-large scale wind turbines, any wind turbine proposals in that area would have to carefully consider the impact on the historic landscape and the heritage assets associated with it.

3.3.16. **Detailed assessment of applications** – It is important to stress that the areas on Map 2 and the Policies Map are only ‘*potentially suitable*’ for medium-large scale wind turbines: being within these locations does not mean that an application for a wind turbine or turbines would automatically be approved. It is not possible to easily and comprehensively map qualitative considerations, so such matters are considered at the point of application: all applications for wind turbines will be assessed against the detailed policy criteria set out in Policy S14 below, and all other relevant policies in this Local Plan, as well as policies in any relevant Neighbourhood Plan.

3.3.17. In addition, applicants will also have to demonstrate that any planning impacts identified by affected local communities have been fully addressed, in order to satisfy national policy⁷.

⁷ See NPPF (2021) paragraph 158 and footnote 54.

Map 2: Map of area suitable in principle, subject to detailed assessment, for the development of medium to large wind turbines. Areas marked in purple are potentially suitable for medium to large wind turbines. Smaller turbines are, in principle (and subject to detailed assessment), supported throughout Central Lincolnshire.



Contains OS data © Crown copyright and database rights 22 December 2022. OS Licence No. LA 100017926.

Policy S14: Renewable Energy

The Central Lincolnshire Joint Strategic Planning Committee is committed to supporting the transition to a net zero carbon future and will seek to maximise appropriately located renewable energy generated in Central Lincolnshire (such energy likely being wind and solar based).

Proposals for renewable energy schemes, including ancillary development, will be supported where the direct, indirect, individual and cumulative impacts on the following considerations are, or will be made, acceptable. To determine whether it is acceptable, the following tests will have to be met:

- i. The impacts are acceptable having considered the scale, siting and design, and the consequent impacts on landscape character; visual amenity; biodiversity; geodiversity; flood risk; townscape; heritage assets, their settings and the historic landscape; and highway safety and rail safety; and
- ii. The impacts are acceptable on aviation and defence navigation system/communications; and
- iii. The impacts are acceptable on the amenity of sensitive neighbouring uses (including local residents) by virtue of matters such as noise, dust, odour, shadow flicker, air quality and traffic;

Testing compliance with part (i) above will be via applicable policies elsewhere in a development plan document for the area (i.e. this Local Plan; a Neighbourhood Plan, if one exists; any applicable policies in a Minerals or Waste Local Plan); and any further guidance set out in a Supplementary Planning Document.

In order to test compliance with part (ii) above will require, for relevant proposals, the submission by the applicant of robust evidence of the potential impact on any aviation and defence navigation system/communication, and within such evidence must be documented areas of agreement or disagreement reached with appropriate bodies and organisations responsible for such infrastructure.

In order to test compliance with part (iii) above will require, for relevant proposals, the submission by the applicant of a robust assessment of the potential impact on such users, and the mitigation measures proposed to minimise any identified harm.

For all matters in (i)-(iii), the applicable local planning authority may commission its own independent assessment of the proposals, to ensure it is satisfied what the degree of harm may be and whether reasonable mitigation opportunities are being taken.

Where significant adverse effects are concluded by the local planning authority following consideration of the above assessment(s), such effects will be weighed against the wider environmental, economic, social and community benefits provided by the proposal. In this regard, and as part of the planning balance, significant additional weight in favour of the proposal will arise for any proposal which is community-led for the benefit of that community.

In areas that have been designated for their national importance, as identified in the National Planning Policy Framework, renewable energy infrastructure will only be permitted where it can be demonstrated that it would be appropriate in scale, located in areas that do not contribute positively to the objectives of the designation, is sympathetically designed and includes any necessary mitigation measures.

Additional matters for solar based energy proposals

Proposals for solar thermal or photovoltaic panels and associated infrastructure to be installed on existing property will be under a presumption in favour of permission unless there is clear and demonstrable significant harm arising.

Proposals for ground based photovoltaics and associated infrastructure, including commercial large scale proposals, will be under a presumption in favour unless:

- there is clear and demonstrable significant harm arising; or
- the proposal is (following a site specific soil assessment) to take place on Best and Most Versatile (BMV) agricultural land and does not meet the requirements of Policy S67; or
- the land is allocated for another purpose in this Local Plan or other statutory based document (such as a nature recovery strategy or a Local Transport Plan), and the proposal is not compatible with such other allocation.

Proposals for ground based photovoltaics should be accompanied by evidence demonstrating how opportunities for delivering biodiversity net gain will be maximised in the scheme taking account of soil, natural features, existing habitats, and planting proposals accompanying the scheme to create new habitats linking into the nature recovery strategy.

Additional matters for wind based energy proposals

Proposals for a **small to medium single wind turbine**, which is defined as a turbine up to a maximum of 40m from ground to tip of blade, are, in principle, supported throughout Central Lincolnshire (i.e. the whole of Central Lincolnshire is identified as a broad area potentially suitable for such a single turbine), subject to meeting the above criteria (i)-(iii) and the requirements of national planning policy. Under this paragraph, no dwelling or other operation (e.g. a farm or a business) may have more than one turbine at any one time in the curtilage of that dwelling or other operation.

Proposals for **medium (over 40m from ground to tip of blade) to large scale wind turbines (including groups of turbines)** will, in principle, be supported only where they are located within an area identified as a 'Broad Area Suitable for Larger Scale Wind Energy Turbines' as identified on the Policies Map and (indicatively) on Map 2. Such proposals will be tested against criteria (i)-(iii) and the requirements of national planning policy.

Medium to large scale wind turbines must not be within 2km of a settlement boundary of a settlement identified in the Settlement Hierarchy. However, where a proposal is within 2km of any residential property, the following matters will need careful consideration as to the potential harm arising:

- Noise
- Flicker
- Overbearing nature of the turbines (established by visual effects from within commonly used habitable rooms)
- Any other amenity which is presently enjoyed by the occupier.

In this regard, no medium to large scale wind turbine within 700m of a residential property is anticipated to be supported, and proposals between 700-2,000m will need clear evidence of no significant harm arising.

For the avoidance of doubt, any medium to large scale wind turbine proposals outside of the identified Broad Area Suitable for Larger Scale Wind Energy Turbines should be refused.

Decommissioning renewable energy infrastructure

Permitted proposals will be subject to a condition that will require the submission of an End of Life Removal Scheme within one year of the facility becoming non-operational, and the implementation of such a scheme within one year of the scheme being approved. Such a scheme should demonstrate how any biodiversity net gain that has arisen on the site will be protected or enhanced further, and how the materials to be removed would, to a practical degree, be re-used or recycled.

Protecting Renewable Energy Infrastructure

3.3.18. In addition to supporting the development of new renewable and low carbon energy schemes and installations, it is also important to protect existing schemes and installations, to ensure that their benefits to the environment and users (e.g., reduced heating bills) continue. Policy S15 therefore aims to safeguard such instalments.

Policy S15: Protecting Renewable Energy Infrastructure

Development should not significantly harm:

- a) the technical performance of any existing or approved renewable energy generation facility;
- b) the potential for optimisation of strategic renewable energy installations;
- c) the availability of the resource, where the operation is dependent on uninterrupted flow of energy to the installation.

Wider Energy Infrastructure

3.3.19. In order to support a move to a zero carbon Central Lincolnshire there is a need to move away from fossil fuels (gas, petrol, diesel, oil) towards low carbon alternatives and this transition needs to take place with increasing momentum in order to stay within identified carbon saving targets. The key implication of the move towards low carbon energy will be the increasing demand for electricity – demand for electrical energy is forecast to increase by 165% in Central Lincolnshire over the next 30 years. As a result, the infrastructure around energy, and in particular electrical infrastructure, will need to adapt and change to accommodate the increased need for the management and storage of electricity. Energy storage including battery storage, consideration of existing and new electricity sub-stations and energy strategies for large developments are required to help support the future energy infrastructure needs for Central Lincolnshire.

Policy S16: Wider Energy Infrastructure

The Joint Committee is committed to supporting the transition to net zero carbon future and, in doing so, recognises and supports, in principle, the need for significant investment in new and upgraded energy infrastructure.

Where planning permission is needed from a Central Lincolnshire authority, support will be given to proposals which are necessary for, or form part of, the transition to a net zero carbon sub-region, which could include: energy storage facilities (such as battery storage or thermal storage); and upgraded or new electricity facilities (such as transmission facilities, sub-stations or other electricity infrastructure).

However, any such proposals should take all reasonable opportunities to mitigate any harm arising from such proposals, and take care to select not only appropriate locations for such facilities, but also design solutions (see Policy S53) which minimises harm arising.

3.4. Theme 3 – Carbon Sinks

3.4.1. Peat and peat soil are increasingly being recognised as major carbon storage resources and when these are damaged or lost they can become a major source of greenhouse gas emissions. Less than 1% of England's deep peat has been identified as undamaged, with almost a quarter being under cultivation. As a result, countries are being encouraged to include peatland restoration as part of their commitments to global international agreements such as the Paris Agreement on climate change. As well as storing carbon, peat also provides important habitats for biodiversity and increasingly plays a major role in managing flood risk as part of natural flood management processes.

3.4.2. In Central Lincolnshire, existing peatland is classed as fen peat which has been identified and mapped and can be mainly found in low lying areas adjacent to waterways including near Gainsborough, Lincoln, North Kelsey and Sleaford. Although they make up a relatively small area of Central Lincolnshire they should be protected, preserved and enhanced wherever possible to ensure they continue to store carbon. The extent of peat soils in Central Lincolnshire, identified from geology and soils mapping by the British Geological Survey and Cranfield Soil and Agrifood Institute, can be seen in the maps in the Central Lincolnshire Local Plan: Climate Change Evidence Base Task L – Peat Soil Mapping (documents CLC011 and CLC012 in the local plan evidence base).

3.4.3. Carbon sequestration is the long-term removal, capture, or sequestration of carbon dioxide from the atmosphere to slow or reverse atmospheric carbon dioxide and to mitigate or reverse climate change. Carbon dioxide is naturally captured from the atmosphere through biological, chemical, and physical processes. These changes can be accelerated or decelerated through changes in land use. For example, land currently used for non-crop purposes (such as trees or grasslands) which is lost to other uses (such as development or intensive agriculture) can reduce or even stop carbon sequestration from happening on that land. Likewise, land which has no material carbon sequestration currently occurring can be converted, via alternative land use, to one which commences carbon sequestration. Overall, we need to protect land which has a role of positive carbon sequestration, and where possible create additional land fulfilling that function.

Policy S17: Carbon Sinks

Existing carbon sinks, such as peat soils, must be protected, and where opportunities exist they should be enhanced in order to continue to act as a carbon sink.

Where development is proposed on land containing peat soils or other identified carbon sinks, including woodland, trees and scrub; open habitats and farmland; blanket bogs, raised bogs and fens; and rivers, lakes and wetland habitats*, the applicant must submit a proportionate evaluation of the impact of the proposal on either the peat soil's carbon content or any other form of identified carbon sink as relevant and in all cases an appropriate management plan must be submitted.

1. How the design of the development minimises overheating and reduces demand on air conditioning systems, including considering:
 - a) orienting buildings to maximise the opportunities for both natural heating and ventilation and to reduce wind exposure; and
 - b) measures such as solar shading, thermal mass and appropriately coloured materials in areas exposed to direct and excessive sunlight;
 In considering the above, the balance between solar gain versus solar shading will need to be carefully managed.
2. The potential to incorporate a green roof and/or walls to aid cooling, add insulation, assist water management and enhance biodiversity, wherever possible linking into a wider network of green infrastructure; unless such roof space is being utilised for photovoltaic or thermal solar panels; or on a whole life cycle basis, it is demonstrated that a lower specification roof has a significantly lower carbon impact than a green roof; or the nature of the development makes it impracticable to incorporate a green roof.

Adaptable design

Applicants should design proposals to be adaptable to future social, economic, technological and environmental requirements in order to make buildings both fit for purpose in the long term and to minimise future resource consumption in the adaptation and redevelopment of buildings in response to future needs. To meet this requirement, applicants should undertake the following, where applicable:

3. Allow for future adaptation or extension by means of the building's internal arrangement internal height, detailed design and construction, including the use of internal stud walls rather than solid walls to allow easier reconfiguration of internal layout. Residential proposals which meet, as a minimum, Building Regulations M4(2) (accessible and adaptable dwellings) standard would be deemed to have complied with this criterion;
4. Identification on floor plans of internal space with potential to accommodate 'home working': this may include bedrooms where there is more than 1 bedroom proposed;
5. Provision of electric car charging infrastructure (see *Policy NS18*);
6. Infrastructure that supports car free development and lifestyles;
7. Having multiple well-placed entrances on larger non-residential buildings to allow for easier subdivision; and
8. Is resilient to flood risk, from all forms of flooding (see *Policy S21*).

3.7. Flood Risk and Water Resources

- 3.7.1. Central Lincolnshire's rivers and water resources are a valuable asset, supporting wildlife, recreation and tourism, as well as providing water for businesses, households and agriculture. Inland waterways are a multifunctional asset that can contribute towards many Local Plan objectives, including important opportunities for regeneration, tourism, and sustainable transport. Water resources require careful management to conserve their quality and value and to address drainage and flooding issues.

Flood Risk

- 3.7.2. In accordance with the NPPF and supporting technical guidance, Policy S21 seeks to ensure that development does not place itself or others at increased risk of flooding. All development will be required to demonstrate that regard has been given to existing and future flood patterns from all flooding sources and that the need for effective protection and flood risk management measures, where appropriate, have been considered as early on in the development process as possible. In allocating sites within this Local Plan,

addenda to the SFRA Level 1 and Level 2 has been undertaken and published, to inform the process.

- 3.7.3. A sequential risk based approach to the location of development, known as a 'sequential test,' will be applied to steer new development to areas with the lowest probability of flooding. If, following the application of the sequential test, it is not possible, consistent with wider sustainability objectives, for development to be located in areas with a lower probability of flooding, the exception test may be applied. The exception test, in line with NPPF, requires development to show that it will provide wider sustainability benefits to the community that outweigh flood risk, that it would be safe for its lifetime taking account of the vulnerability of its users, without increasing risk elsewhere and, where possible, will reduce flood risk overall.
- 3.7.4. Central Lincolnshire contains significant areas of low lying land for which a number of organisations are responsible for managing flood risk and drainage, including the Environment Agency (EA), Lincolnshire County Council as Lead Local Flood Authority (LLFA), Anglian Water and Severn Trent Water Companies, the Canal and River Trust, a number of Internal Drainage Boards (IDBs) and the three Local Authorities. Flood defences protect many of the existing built-up areas from river flooding to a currently acceptable standard, but it is anticipated that the risk of flooding will increase in the future as a result of climate change. These include predicted sea level rise, more intense rainfall and increased river flows.
- 3.7.5. Many of Central Lincolnshire's settlements were originally established adjacent to rivers or other water bodies. Over time these same settlements have grown into the main centres of population in Central Lincolnshire and now represent, in terms of wider sustainability criteria, the most sustainable locations for future development. A careful balance therefore needs to be struck between further growth in these areas to ensure their communities continue to thrive and the risk of flooding.
- 3.7.6. With the increased likelihood of more intense rainfall combined with further development in Central Lincolnshire, there will be an increase in the incidence of surface water runoff, placing greater pressure on existing drainage infrastructure. The discharge of surface water to combined sewer systems should be on an exceptional basis only. This will ensure that capacity constraints of existing systems are not put under severe pressure by placing unnecessary demands on existing sewage works and sewage systems which in turn could compromise the requirements of the Water Framework Directive. The discharge of surface water to combined sewer systems can also contribute to surface water flooding elsewhere.
- 3.7.7. Sustainable Drainage Systems (SuDS) are used to replicate, as closely as possible, the natural drainage from a site before development takes place without transferring pollution to groundwater. Developers should ensure that good SuDS principles consistent with national standards such as The SuDS Manual (C753 – CIRIA) are considered and incorporated into schemes as early in the development process as possible. A multi-functional approach to SuDS is encouraged that should take every opportunity to incorporate features that enhance and maintain biodiversity as part of a coherent green and blue infrastructure approach. The use of Integrated Water Management is encouraged for larger scale developments. Reference should be made to the Lincolnshire County Council Development Roads and Sustainable Drainage Design Guide and CIRIA guidance on Integrated Water Management. The Design Guide provides information on planning and adoption milestones and requirements and lists the essential technical

documents and information required at various stages of the planning and adoption process to enable the necessary processes to be progressed. When SuDS features which meet the legal definition of sewers are to be adopted by the relevant water company for the area, reference should be made to the Design and Construction Guidance.

Protecting the Water Environment

3.7.8. The Central Lincolnshire authorities work closely with water companies, the EA and other relevant bodies to ensure that infrastructure improvements to manage increased waste water and sewage effluent produced by new development are delivered in a timely manner, and to ensure that, as required by the Water Framework Directive, there is no deterioration to water quality and the environment.

3.7.9. Parts of Central Lincolnshire are currently constrained by the capacity of water recycling infrastructure, and will require coordinated timing between development and new or improved infrastructure provision. The predominantly rural nature of the area means that there are developments without mains drainage connection that will require careful design and management. The first presumption in such areas must be to provide a system of foul drainage discharging into a public sewer. Only where it can be shown to the satisfaction of the local planning authority that connection to a public sewer is not feasible, should non-mains foul sewage disposal solutions be considered.

3.7.10. Groundwater Source Protection Zones (SPZs) are areas of groundwater where there is a particular sensitivity to pollution risks due to the closeness of a drinking water source and how the groundwater flows. They are used to protect abstractions used for public water supply and other forms of distribution to the public such as breweries and food production plants. Development in the SPZs will be expected to comply with the EA's approach to groundwater protection (Feb 2018 v1.2) or any subsequent replacement.

3.7.11. Central Lincolnshire lies within the East Midlands area of serious water stress where drought is a cause for concern. This is a major challenge in the context of Central Lincolnshire's planned growth, and will require careful conservation and management of water resources to ensure that demand for water can be achieved in a sustainable manner. It also provides the justification to require, via this Local Plan, the higher water efficiency standard of 110 litres per day which can be achieved through the installation of water efficient toilets, showers and taps. Water re-use measures are encouraged wherever feasible in order to reduce consumption and demand on the mains water supply further.

3.7.12. The River Trent as it skirts the edge of Central Lincolnshire and runs adjacent to the main town of Gainsborough, from Cromwell Weir to the River Humber, is tidal and flows into the internationally important Humber Estuary. The River Witham passing through Central Lincolnshire and the City of Lincoln flows into the Wash, also of international importance. As such, any proposals that affect or might affect the marine area should make reference to and be guided by the Marine Policy Statement and supporting guidance or any subsequent replacement. The Marine Policy Statement provides a shared UK vision for clean, healthy, safe, productive and biologically diverse oceans and seas by ensuring a consistent approach to marine planning across UK waters. Development in this area should also make reference to the East Inshore and East Offshore Marine Plans.

3.7.13. To support the planning process and provide a better understanding of flood risk, drainage management and water management in the area, data from the EA, LLFA, IDBs and Water Resources East have been used to inform the SFRA Level 1 and 2, site allocations

and Local Plan policies. In preparing the Local Plan, the Joint Lincolnshire Flood Risk and Drainage Management Strategy, Partnership Approach to Catchment Management, Water Resources Management Plan and the GLLEP Water Management Plan have been referenced.

3.7.14. All relevant development proposals, where appropriate, should be discussed with the Local Planning Authority in liaison with the EA, Water Services Provider, IDBs and the LLFA at the earliest opportunity, preferably at pre-application stage. This should ensure flood risk and drainage solutions, particularly where required on site, can be factored into the development process as early as possible. Adequate mains foul water treatment and disposal should be evidenced through liaison with the Water/ Sewerage Company. The outcome of those discussions, the implications for the development and, where appropriate, a phasing plan should be provided in support of applications.

Policy S21: Flood Risk and Water Resources

Flood Risk

All development proposals will be considered against the NPPF, including application of the sequential and, if necessary, the exception test.

Through appropriate consultation and option appraisal, development proposals should demonstrate:

- a) that they are informed by and take account of the best available information from all sources of flood risk and by site specific flood risk assessments where appropriate;
- b) that the development does not place itself or existing land or buildings at increased risk of flooding;
- c) that the development will be safe during its lifetime taking into account the impacts of climate change and will be resilient to flood risk from all forms of flooding such that in the event of a flood the development could be quickly brought back into use without significant refurbishment;
- d) that the development does not affect the integrity of existing flood defences and any necessary flood mitigation measures have been agreed with the relevant bodies, where adoption, ongoing maintenance and management have been considered and any necessary agreements are in place;
- e) how proposals have taken a positive approach to reducing overall flood risk and have considered the potential to contribute towards solutions for the wider area; and
- f) that they have incorporated Sustainable Drainage Systems (SuDS)/ Integrated Water Management into the proposals unless they can be shown to be inappropriate.

Protecting the Water Environment

Development proposals that are likely to impact on surface or ground water should consider the requirements of the Water Framework Directive.

Development proposals should demonstrate:

- g) that water is available to support the development proposed;
- h) that adequate mains foul water treatment and disposal already exists or can be provided in time to serve the development. Non mains foul sewage disposal solutions should only be considered where it can be shown to the satisfaction of the local planning authority that connection to a public sewer is not feasible;
- i) that they meet the Building Regulation water efficiency standard of 110 litres per occupier per day or the highest water efficiency standard that applies at the time of the planning application (see also Policy S12);

- j) that water reuse and recycling and rainwater harvesting measures have been incorporated wherever possible in order to reduce demand on mains water supply as part of an integrated approach to water management (see also *Policy S11*);
- k) that they have followed the surface water hierarchy for all proposals:
 - i. surface water runoff is collected for use;
 - ii. discharge into the ground via infiltration;
 - iii. discharge to a watercourse or other surface water body;
 - iv. discharge to a surface water sewer, highway drain or other drainage system, discharging to a watercourse or other surface water body;
 - v. discharge to a combined sewer;
- l) that no surface water connections are made to the foul system;
- m) that surface water connections to the combined or surface water system are only made in exceptional circumstances where it can be demonstrated that there are no feasible alternatives (this applies to new developments and redevelopments) and where there is no detriment to existing users;
- n) that no combined sewer overflows are created in areas served by combined sewers, and that foul and surface water flows are separated;
- o) that development contributes positively to the water environment and its ecology where possible and does not adversely affect surface and ground water quality in line with the requirements of the Water Framework Directive;
- p) that development with the potential to pose a risk to groundwater resources is not located in sensitive locations to meet the requirements of the Water Framework Directive;
- q) how Sustainable Drainage Systems (SuDS)/ Integrated Water Management to deliver improvements to water quality, the water environment and to improve amenity and biodiversity net gain wherever possible have been incorporated into the proposal unless they can be shown to be impractical;
- r) that relevant site investigations, risk assessments and necessary mitigation measures for source protection zones around boreholes, wells, springs and water courses have been agreed with the relevant bodies (e.g. the Environment Agency and relevant water companies);
- s) that suitable access is safeguarded for the maintenance of watercourses, water resources, flood defences and drainage infrastructure; and
- t) that adequate provision is made to safeguard the future maintenance of water bodies to which surface water and foul water treated on the site of the development is discharged, preferably by an appropriate authority (e.g. Environment Agency, Internal Drainage Board, Water Company, the Canal and River Trust or local Council).

In order to allow access for the maintenance of watercourses, development proposals that include or abut a watercourse should ensure no building, structure or immovable landscaping feature is included that will impede access within 8m of a watercourse, or within 16m of a tidal watercourse. Conditions may be included where relevant to ensure this access is maintained in perpetuity and may seek to ensure responsibility for maintenance of the watercourse including land ownership details up to and of the watercourse is clear and included in maintenance arrangements for future occupants.

5. Employment

5.1.1. This section sets out how the Central Lincolnshire Authorities will assist the achievement of strong and sustainable local economic growth where entrepreneurship, innovation and inward investment are actively encouraged.

5.1.2. Central Lincolnshire is located within the Greater Lincolnshire Local Enterprise Partnership (GLLEP) area and represents roughly 30% of the GLLEP area's population, employment and business base. The draft Local Industrial Strategy (LIS) notes that Greater Lincolnshire has an economy of £20.7bn with an ambition to grow the Gross Value Added (GVA) by £3.2bn by 2030. The GLLEP area boasts a mix of traditional manufacturing, a comprehensive agri-food sector, energy and services, and is strong in health and care and the visitor economy. In these sectors and others the area benefits from a large number of small businesses – a distinctive feature of the economy. (Draft, LIS November 2019).

5.1.3. The GLLEP's priority sectors include; agri-foods, energy and water, health and care, visitor economy and ports and logistics, but this should not diminish the important roles of other sectors, including manufacturing and engineering, to the local economy. The Central Lincolnshire Authorities will play a key role in the delivery of the vision for most of these sectors. The policy set out in this Plan reflects these growth aspirations and addresses the specific needs of these diverse sectors.

5.1.4. An Economic Needs Assessment (ENA) update was completed in March 2020 and this projected that over half of new jobs will not be within premises for business, general industry or storage and distribution (previously within B use classes). This further demonstrates the diversity of the economy in Central Lincolnshire. The ENA also projects that around 6.5ha of land will be required for office space, a further 4.3ha for warehouse space and 0.9ha for industrial land in order to meet needs.

5.1.5. The 2017 Local Plan allocated over 111ha of land for employment across seven Strategic Employment Sites (SES), plus an additional 51ha was anticipated to come forward as employment development within Sustainable Urban Extensions (SUEs) – which was well in excess of the forecast need of 23 hectares at that time. Whilst development has occurred on some of these sites more than 90ha of this previously allocated land remains undeveloped.

5.1.6. Given this oversupply when compared to projected need and the remaining suitability of these sites as SES no further land has been allocated for employment development as the existing sites are in the right locations to meet the strategic needs - they provide adequate choice to enable flexibility for the market, and yet certainty for developers and investors. The Local Plan strategy and distribution of growth remains broadly similar to the 2017 Local Plan to ensure that the SUEs become thriving communities with a mix of uses including opportunities for employment creation.

5.1.7. In addition the Local Plan also designates existing Important Established Employment Areas (IEEA) which, whilst being well-established include some plots still available for development and offer further choice and flexibility to the market through intensification or redevelopment. The scale of all these existing consents, enterprise zones, provision within SUEs and vacant plots within established employment sites, is of such a degree that further new employment allocations on, for example, greenfield land, would not be effective or justified.

5.1.8. The SES, employment land within the SUEs and the IEEA make up the employment sites of strategic importance and these are all located at the main urban and most populated areas of Lincoln Urban Area, the Main Towns of Sleaford and Gainsborough and within SUEs which are a focus for growth in the plan period.

5.1.9. Beyond these sites of strategic importance, many smaller employment areas provide an important role for local communities across Central Lincolnshire. Their existence is vital in supporting smaller, and in particular rural, communities and providing local employment and services without the need to travel too far. In an effort to recognise the important role of these areas Policy S32 provides a policy framework for Local Employment Areas (LEA), which are not directly designated but are defined and are given a suitable level of protection and flexibility for intensification and redevelopment.

5.1.10. In the broadest terms Policies S28-S34 aim to meet the following objectives:

- Protect existing important employment sites and premises;
- Make it easier for our key growth sectors and fastest growing companies to achieve their potential;
- Encourage new inward investment and expansion;
- Support the growth of small and micro business;
- Encourage business start-ups – support the growth of entrepreneurial culture; and
- Encourage inward investment in accordance with the spatial strategy.

5.1.11. This local plan has been produced at a time of great uncertainty and change to the economy brought on by both the Covid 19 pandemic and the UK departing the European Union. The true impact to the commercial environment of these events are yet to be fully understood. The Central Lincolnshire Districts, the County Council and the Greater Lincolnshire Local Enterprise Partnership are working together to ensure the Central Lincolnshire economy is robust and will bounce back strongly. The objectives above and the following policies are consistent with achieving this immediate recovery and also to ensure adequate certainty, yet flexibility, for the longer term outlook in the local economy.

Policy S28: Spatial Strategy for Employment

In principle, employment related development proposals should be consistent with meeting the following overall spatial strategy for employment.

The strategy is to strengthen the Central Lincolnshire economy offering a wide range of employment opportunities focused mainly in and around the Lincoln urban area and the towns of Gainsborough and Sleaford, with proportionate employment provision further down the Settlement Hierarchy (see Policy S1).

Aligned to the Greater Lincolnshire Local Industrial Strategy, and as a key component of the Midlands Engine, there will be significant growth in a number of sectors, most notably agri-food, manufacturing, business services and the visitor economy, including accommodation and food services.

Land has been made available in appropriate locations in this plan to meet the strategic needs identified in Central Lincolnshire. Strategic Employment Sites (SES), and existing Important Established Employment Areas (IEEA) will be protected for their importance to the economy. Employment development will mainly be directed to these SES and IEEA and at Sustainable Urban Extensions (SUEs) as part of mixed use communities being created.

Elsewhere, policies will seek to protect Local Employment Areas (LEA) to help ensure there are jobs and services available to meet the local needs of the community and to allow enterprises to flourish at suitable sites across Central Lincolnshire.

Outside of existing employment areas and allocated sites, economic development will typically be limited to small-scale proposals which satisfy the requirements of Policy S33 or Policy S34.

Policy S29: Strategic Employment Sites (SES)

The following sites are categorised as SES:

Ref	SES Site name	Gross site size (ha)	Land undeveloped at January 2022 (ha)	Status (January 2022)
E1	Teal Park, North Hykeham	36	28.85	Outline planning permission granted for the whole site. Siemens Phase 1 and 2 completed and other plots benefiting from reserved matters consents.
E2	Lincoln Science and Innovation Park (LSIP), Lincoln	11.5	7.77	Brownfield site for redevelopment. Planning consent on plot by plot basis as per masterplan. A series of outline applications have been approved. LSIP phase 2 is partially built. A further full application has been approved and has started for the enabling works.
E3	St Modwen Park, Witham St Hughs	22.3	11.72	Masterplan approved, with planning permissions granted and being implemented across the site.
E4	Somerby Park, Gainsborough	11.6	11.0	Planning application for storage and distribution centre submitted in December 2021.
E5	Sleaford Enterprise Park	14.7	14.7	Hybrid application to deliver site infrastructure and development plots granted in March 2021 for the whole site.
E6	Hemswell Cliff Business Park Extension	26	26	Detailed pre-application now underway for development of full business park plus additional land take.
Total		122.1	100.04	

Part 1:

SES will meet large scale investment needs that requires significant land take. Proposals for the development of SES should be progressed through an agreed masterplan which includes a travel plan and associated infrastructure to promote sustainable modes of travel for the site as a whole wherever possible prior to or alongside a planning application. Small scale, ancillary and/or piecemeal development that prevents or otherwise detracts from the delivery of large scale investment on an SES will be refused.

transportation challenges and the proposal is identified as a primary infrastructure intervention in the Lincoln Transport Strategy.

8.1.3. A Preferred Route has been identified, as indicated on the Policies Map, and delivery mechanisms and funding is starting to be secured.

Policy S46: Safeguarded Land for Future Key Infrastructure

Development proposals on or near to the preferred route of the North Hykeham Relief Road, as indicated on the Policies Map, which will prejudice the efficient and effective delivery of the project will be refused.

8.2. Accessibility and Transport

8.2.1. The NPPF sets out the importance of sustainability in relation to transport, in particular the need to ensure that developments that generate significant movements are located where the need to travel will be minimised and the use of sustainable travel can be maximised.

8.2.2. As a predominantly rural area, there is a heavy reliance on car use across large parts of Central Lincolnshire. This can have a significant impact on the elderly, children, young people and those without access to a private car who can become isolated and find it difficult to access health, social and educational facilities. In the larger urban areas, there are different transport issues with Lincoln, and to a lesser extent Gainsborough and Sleaford, experiencing congestion at peak times.

8.2.3. Across Lincolnshire as a whole there are no motorways and only approximately 40 miles of dual carriageway. The key roads in Central Lincolnshire, including the A15, A17, A46, A158, A159 and A631 are essential for connecting communities and important routes for businesses, including local agricultural and food industries that use the network to move goods and freight to, from and across Central Lincolnshire.

8.2.4. Within the Lincoln area, the bus network is relatively good with most services operating commercially, whilst fully accessible “Into Town” services operate in Gainsborough and Sleaford. Across the rural areas, “InterConnect” services run on the key inter-urban corridors (e.g. Lincoln – Gainsborough – Scunthorpe), with demand responsive “CallConnect” services providing pre-bookable, flexible feeder services to local centres and to onward connections to the larger urban centres. Although progress has been made in expanding the bus network in recent years, outside of Lincoln services typically remain very limited in the evenings and at weekends.

8.2.5. The Great Northern Great Eastern Rail (GNGE) line runs through Central Lincolnshire, with stations at: Gainsborough Lea Road, Saxilby, Lincoln, Metheringham, Ruskington and Sleaford. Lincoln and Sleaford are the principal rail hubs, providing connections to the East Coast Main Line and destinations beyond. The GNGE line has recently been upgraded to provide increased freight capacity in order to take freight traffic away from the East Coast Main Line. These improvements should also offer the opportunity for improved passenger services. There is also a number of direct services from Lincoln to London via the East Coast Main Line. East Midlands Railway (EMR) run from Leicester, Nottingham and other parts of the East Midlands via Lincoln to Grimsby with stations at: Swinderby, Hykeham, Lincoln and Market Rasen. EMR also provide wider connections to Grantham,

Boston and Skegness in Lincolnshire. In addition, Northern Rail operate an hourly service between Lincoln and Sheffield which has been strengthened by the new Northern franchise. Investment in the parking and station facilities at North Hykeham station sought to encourage greater use of the rail service both into Lincoln and to Newark and Nottingham. Investment has also been made at Swinderby Station, with the construction of a new car park. However, the large number of level crossings in Central Lincolnshire has an impact on rail capacity as well as having an impact on other parts of the transport network with increased rail use, especially by freight services, increasing waiting times for road users and pedestrians. However, new footbridge provision over the railway in Lincoln city centre has eased the delays caused by the level crossing barrier downtime.

8.2.6. Central Lincolnshire's navigable rivers and canals were originally built to transport goods around the country and although many are now largely used for recreation and leisure there continues to be a role for freight movement by water. The River Trent runs through the North Midlands to Newark and along the edge of Central Lincolnshire, through Gainsborough and on to the Humber and is identified as a major freight waterway which can take large barges of several hundred tons. In recent years the focus has been on the movement of aggregates, containers, waste and recycling but interest has been growing as fuel costs have risen and awareness of the environmental benefits of moving freight by water, such as relieving road congestion and reducing exhaust emissions, has increased. The Fossdyke and Witham navigations are broad waterways which run through Lincoln and connect with the Trent and the sea via Boston. Potential also exists to expand the existing use of towpaths and river banks as useful routes for cycle and footpaths enhancing connectivity and providing a recreational resource.

8.2.7. The Local Transport Plan (LTP) sets out the overall strategy and delivery arrangements for transport across the whole of Lincolnshire, including supporting growth, tackling congestion, improving accessibility, creating safer roads and supporting the larger settlements. The LTP reflects the objectives of the latest Local Plan, and vice-versa, with each updated version aiming to complement one another. The objectives contained within the current strategy support the development of a sustainable, efficient and safe transport system, increasing the use of sustainable travel modes, protecting the environment, and improving access to key services.

8.2.8. The 4th Lincolnshire Local Transport Plan (LTP4) covers the period 2013/14-2022/23. At the time of writing, this is in the process of being replaced by the 5th Local Transport Plan (LTP5). This LTP5 is being produced under 6 key themes within which sit a number of objectives as follows:

Theme 1 – Supporting economic growth

- a) Improve connectivity throughout Lincolnshire and to the East Midlands, the rest of the UK and beyond.
- b) Ensure a resilient and reliable transport system for the movement of people, goods and services.
- c) Support the vitality and viability of our town centres and rural communities.
- d) Improve connectivity to jobs and employment opportunities.
- e) Provide a transport system that supports the priority sectors identified in the LIS.

Theme 2 – Future ready, green transport

- a) Support the introduction of low-carbon technologies and thus reduce reliance on fossil fuels.

- b) Develop and support communities to flourish locally and thereby helping reduce the need to travel.
- c) Deliver sustainable development by ensuring that new developments are designed to reduce the need to travel, minimise car use and support the use of more sustainable modes.
- d) Ensure the transport network is made resilient to climate change.

Theme 3 – Promote thriving environments

- a) Develop opportunities to both protect and enhance the built and natural environment.
- b) Minimise waste and make the best use of available resources.
- c) Provide sustainable access to Lincolnshire's wonderful environment and heritage.

Theme 4 – Supporting safety, security and a healthy lifestyle

- a) Improve road safety.
- b) Increase confidence in a safer and more secure transport network.
- c) Reduce the impacts of air quality, noise and light pollution.
- d) Improve the health of our communities through the provision for active travel.

Theme 5 – Promoting high aspirations

- a) Improve connectivity and access to education, healthcare and leisure.
- b) Improve the accessibility of the transport system and in particular access onto public transport.
- c) Encourage wider community participation in developing and delivering transport services.

Theme 6 – Improve quality of life

- a) To deliver on the first five objectives above.
- b) To improve the quality of place and reduce the overall negative impacts of transport on people's lives.

8.2.9. These key themes and objectives are consistent with the objectives of the Local Plan and its policies.

8.2.10. Transport Strategies for Lincoln, Gainsborough and Sleaford set out a range of local proposals to help tackle congestion and improve transport options in the main urban areas.

8.2.11. To demonstrate how accessibility, mobility and transport related matters have been considered and taken into account in the development of proposals, one or more of the following should be submitted with planning applications, with the precise need dependent on the scale and nature of development:

- a design and access statement (all proposals); and/ or
- a transport statement (typically required for developments of 50 - 80 dwellings); and/ or
- a transport assessment and travel plan (typically required for developments over 80 dwellings).

8.2.12. Advice on the level of detail required should be confirmed through early discussion with the local planning or highway authority.

Policy S47: Accessibility and Transport

Development proposals which contribute towards an efficient and safe transport network that offers a range of transport choices for the movement of people and goods will be supported.

All developments should demonstrate, where appropriate, that they have had regard to the following criteria:

- a) Located where travel can be minimised and the use of sustainable transport modes maximised;
- b) Minimise additional travel demand through the use of measures such as travel planning, safe and convenient public transport, car clubs, walking and cycling links and integration with existing infrastructure;
- c) Making allowance for low and ultra-low emission vehicle refuelling infrastructure.

Delivering Transport Related Infrastructure

All development proposals should have regard to the IDP, and, where necessary contribute to the delivery of the following transport objectives, either directly where appropriate (such as the provision of infrastructure or through the contribution of land to enable a scheme to occur) or indirectly (such as through developer contributions as set out in Policy S45).

For Strategic Transport Infrastructure:

- d) Improve and manage the strategic highway infrastructure for a range of users and increased capacity where appropriate and viable;
- e) Improve and manage the wider road infrastructure to benefit local communities including through the use of traffic management and calming initiatives where appropriate on rural roads, and key transport links in the towns and villages;
- f) Deliver opportunities for improved road and rail interaction, and avoiding impacts upon level crossings;
- g) Improve, extend and manage the strategic cycling network for a range of users;
- h) Support the enhancement of existing or proposed transport interchanges;
- i) Improve and manage the strategic highway infrastructure, wider road infrastructure and public rights of way network to deliver biodiversity net gain, including improved connectivity and extent of green infrastructure guided by local nature recovery strategy; and
- j) Explore opportunities to utilise waterways for transport, particularly freight.

For Public and Community Transport Infrastructure and Services:

- k) Assist in the implementation of infrastructure which will help all communities in Central Lincolnshire, including people living in villages and small settlements, to have opportunities to travel without a car for essential journeys;
- l) Improve the integration, efficiency, accessibility, safety, convenience and comfort of public transport stations, including both rail and buses;
- m) Deliver flexible transport services that combine public and community transport, ensuring that locally based approaches are delivered to meet the needs of communities;
- n) Assist in bringing forward one or more mobility hubs in the Lincoln area.

To demonstrate that developers have considered and taken into account the requirements of this policy, an appropriate Transport Statement/ Assessment and/ or Travel Plan should be submitted with proposals, with the precise form dependent on the scale and nature of development and agreed through early discussion with the local planning or highway authority and external bodies where relevant.

Any development that has severe transport implications will not be granted planning permission unless deliverable mitigation measures have been identified, and arrangements secured for their implementation, which will make the development acceptable in transport terms.

8.3. Walking and Cycling

- 8.3.1. Walking and cycling can have wide ranging benefits, from reducing congestion and pollution from exhaust emissions, to contributing to the improved health and physical fitness of the population. Walking and cycling can also play an important role in multi-modal journeys in combination with other sustainable travel modes, such as bus and rail services.
- 8.3.2. Improvements in the bus network continue to be made in the Lincoln area and bus operators were closely involved in the delivery of the Lincoln Transport Hub which now offers a significantly enhanced experience for users. The changes to the St Marys Street area of Lincoln City Centre as a part of the Transport Hub works have made a significant improvement to the pedestrian environment for those arriving by bus or rail, making multi modal journeys into the city centre more attractive. A number of other sustainable travel initiatives have, and are, being delivered by Central Lincolnshire partners. Significant work was undertaken, through the Access LN6 project, to improve sustainable transport options and achieve modal shift in the LN6 area of Lincoln and North Hykeham. This work, encouraging walking, cycling and public transport use as well as car sharing has since been continued by Access Lincoln.
- 8.3.3. The Lincoln Eastern By-pass has been designed and constructed to include dedicated walking and cycling provision along and across its route, maintaining connectivity with the city for those communities to the east of the new road.
- 8.3.4. The 2020 Lincoln Transport Strategy (LTS) identifies that the number of walking trips made is in decline, with almost a quarter of adults indicating that they do not walk for any purpose at all. The LTS also states that the cycle network in Lincoln is not comprehensive and is disjointed within the city centre, with provision limited in rural areas. The LTS aims to put a focus on walking and cycling for short journeys. With an objective to rebalance movement towards walking and cycling and multi-occupancy, shared mobility and passenger transport. A further objective states that the LTS will seek to enhance the health and wellbeing of communities through improved air quality, increased physical activity and safety.
- 8.3.5. Both the Sleaford Transport Strategy (2014) and Gainsborough Transport Strategy (2010) also identify that cycle route networks are disjointed and poorly connected with each other. As with the LTS, both the Sleaford and Gainsborough Transport Strategies place a focus on walking and cycling for short journeys and the improvements to the network that are needed to make walking and cycling easier and more attractive options. The Gainsborough and Sleaford Transport Strategies are expected to be updated in the life of this Local Plan
- 8.3.6. The COVID-19 pandemic provided a number of opportunities for sustainable travel, in particular walking and cycling. Lockdowns, and the need to distance from one another, resulted in an increase in active sustainable travel among those unable to work from home and also a notable increase in walking and cycling for leisure. In particular, sales of

9. Design and Amenity

9.0. Delivering Good Design

9.0.1. To design successful places, all development should meet the aspiration for quality and sustainability in their design and layout. In short, good design is inseparable from good planning and should be at the heart of every development.

9.0.2. High quality sustainable design is design that is of a notable standard, which, by its nature, features and usability, will sustain over the longer term as it is fit for purpose, is adaptable to changing needs, and enables occupiers / users to live more sustainably.

9.0.3. A fundamental part of achieving high quality sustainable design, and ultimately high quality sustainable places, is the need to develop a thorough understanding of the local character and the qualities which contribute to local distinctiveness.

9.0.4. Central Lincolnshire is made up of many locally distinctive places including high streets, market squares, industrial estates, urban neighbourhoods, rural villages, historic environments and landscapes, which, in combination with a variety of natural forms and features, contribute to the rich and varied character. The scale of Central Lincolnshire means that villages vary greatly from one another, as do larger settlements due to the differing roles and periods of growth experienced in our settlements. The Central Lincolnshire Local Plan is a strategic document and so is not the appropriate mechanism to undertake a detailed assessment of the character and heritage of every settlement, instead the Local Plan should provide a framework for applicants, decision makers and communities to undertake such assessments and deliver the right responses for the local context.

9.0.5. All development must make a positive contribution to the character and appearance of the environment within which it is located, having regard to its local context, without harming the amenity experienced by neighbours.

9.0.6. The Government promotes good design through the publication of its National Design Guide and National Model Design Code in January 2021 which are aimed at ensuring that the requirement for good design is embedded in planning policy and ultimately is delivered through the development being built and the places being created. The National Design Guide sets out the characteristics of well-designed places under ten themes:

<ul style="list-style-type: none">• Context• Identity• Built form• Movement• Nature	<ul style="list-style-type: none">• Public spaces• Uses• Homes and buildings• Resources• Lifespan
---	---

9.0.7. Policy S53 provides a clear set of standards and considerations under these ten themes that need to be deliberated when designing and making decisions on all schemes across Central Lincolnshire and it provides a framework for the development of local design guides or codes by communities, parish councils, applicants or individual District Councils in the future.

9.0.8. Good design is not only about the way a building looks, but it is also about the way a place functions, how it makes users feel, how it lasts and how it adapts. Policy S53 pulls together design specific requirements for all schemes but other policies throughout this plan, including, but not limited to, Policy S6, (Design Principles for Efficient Buildings) S7 and S8 (Reducing Energy Consumption), S20 (Resilient and Adaptable Buildings), Policy S54 (Health and Wellbeing) and Policy S57 (The Historic Environment) also set out requirements which are intrinsically linked to good design.

9.0.9. Developers will be expected to demonstrate how their proposal is good design, telling the story behind the scheme and explaining how the policy matters below have been addressed within their development proposals in supporting evidence such as in the Design and Access Statement submitted with their planning application. Development should be bespoke and respond positively to and be informed by local context and vernacular but without stifling innovation and new technologies which sympathetically complement or contrast with the local architectural style. ‘Standard’ house types or the repetition of layouts, development densities, and the use of construction materials mimicking schemes elsewhere (whether within or outside Central Lincolnshire) will seldom be acceptable.

9.0.10. To provide assessment and support to ensure high standards of design are achieved, the Central Lincolnshire authorities may use the design review services offered by Design:Midlands, the regional Design Review Panel as necessary, and, when appropriate, refer major projects for national design review by the Design Council.

Policy S53: Design and Amenity

All development, including extensions and alterations to existing buildings, must achieve high quality sustainable design that contributes positively to local character, landscape and townscape, and supports diversity, equality and access for all.

Good design will be at the centre of every development proposal and this will be required to be demonstrated through evidence supporting planning applications to a degree proportionate to the proposal. Design Codes may be produced for parts of Central Lincolnshire or in support of specific developments. The approach taken in these Design Codes should be informed by the National Model Design Code and where these codes have been adopted, developments will be expected to adhere to the Code.

Proposals for new buildings should incorporate the Design Principles for Efficient Buildings in Policy S6 at the centre of design.

All development proposals will be assessed against, and will be expected to meet the following relevant design and amenity criteria. All development proposals will:

1. Context

- a) Be based on a sound understanding of the context, integrating into the surroundings and responding to local history, culture and heritage;
- b) Relate well to the site, its local and wider context and existing characteristics including the retention of existing natural and historic features wherever possible and including appropriate landscape and boundary treatments to ensure that the development can be satisfactorily assimilated into the surrounding area;
- c) Protect any important local views into, out of or through the site;

2. Identity

- a) Contribute positively to the sense of place, reflecting and enhancing existing character and distinctiveness;
- b) Reflect or improve on the original architectural style of the local surroundings, or embrace opportunities for innovative design and new technologies which sympathetically complement or contrast with the local architectural style;
- c) Use appropriate, high quality materials which reinforce or enhance local distinctiveness;
- d) Not result in the visual or physical coalescence with any neighbouring settlement nor ribbon development;

3. Built Form

- a) Make effective and efficient use of land that contribute to the achievement of compact, walkable neighbourhoods;
- b) Be appropriate for its context and its future use in terms of its building types, street layout, development block type and size, siting, height, scale, massing, form, rhythm, plot widths, gaps between buildings, and the ratio of developed to undeveloped space both within a plot and within a scheme;
- c) Achieve a density not only appropriate for its context but also taking into account its accessibility;
- d) Have a layout and form that delivers efficient and adaptable homes in accordance with Policy S6 and Policy S20.

4. Movement

- a) Form part of a well-designed and connected travel network with consideration for all modes of transport offering genuine choices for non-car travel and prioritising active travel and where relevant demonstrate this through evidence clearly showing connectivity for all modes and a hierarchy of routes (also see Policy S47 and Policy S48);
- b) Maximise pedestrian and cycle permeability and avoid barriers to movement through careful consideration of street layouts and access routes both within the site and in the wider context contributing to the delivery of walkable and cyclable neighbourhoods in accordance with Policy S48;
- c) Ensure areas are accessible, safe and legible for all including people with physical accessibility difficulties;
- d) Deliver well-considered parking, including suitable electric vehicle charging points, with appropriate landscaping provided in accordance with the parking standards set out in Policy NS18 and Policy S49;
- e) Deliver suitable access solutions for servicing and utilities;

5. Nature

- a) Incorporate and retain as far as possible existing natural features including hedgerows, trees, and waterbodies particularly where these features offer a valuable habitat to support biodiversity, aligned with policies in the Natural Environment chapter of the Local Plan;
- b) Incorporate appropriate landscape and boundary treatments to ensure that the development can be satisfactorily assimilated into the surrounding area, maximising opportunities to deliver diverse ecosystems and biodiverse habitats, strengthening wildlife corridors and green infrastructure networks, and helping to achieve wider goals for biodiversity net gain, climate change mitigation and adaptation and water management;

6. Public Spaces

- a) Ensure public spaces are accessible to all, are safe and secure and will be easy to maintain with clear definition of public and private spaces;
- b) Form part of a hierarchy of spaces where relevant to offer a range of spaces available for the community and to support a variety of activities and encourage social interaction;
- c) Be carefully planned and integrated into the wider community to ensure spaces feel safe and are safe through natural surveillance, being flanked by active uses and by promoting activity within the space;
- d) Maximise opportunities for delivering additional trees and biodiversity gains through the creation of new habitats and the strengthening or extending wildlife corridors and the green infrastructure network in accordance with policies in the Natural Environment chapter;

7. Uses

- a) Create or contribute to a variety of complementary uses that meet the needs of the community;
- b) Be compatible with neighbouring land uses and not result in likely conflict with existing uses unless it can be satisfactorily demonstrated that both the ongoing use of the neighbouring site will not be compromised, and that the amenity of occupiers of the new development will be satisfactory with the ongoing normal use of the neighbouring site;
- c) Not result in adverse noise and vibration taking into account surrounding uses nor result in adverse impacts upon air quality from odour, fumes, smoke, dust and other sources;

8. Homes and Buildings

- a) Provide homes with good quality internal environments with adequate space for users and good access to private, shared or public spaces;
- b) Be adaptable and resilient to climate change and be compatible with achieving a net zero carbon Central Lincolnshire as required by Policies S6, S7 and S8;
- c) Be capable of adapting to changing needs of future occupants and be cost effective to run by achieving the standards set out in Policy S20;
- d) Not result in harm to people's amenity either within the proposed development or neighbouring it through overlooking, overshadowing, loss of light or increase in artificial light or glare;
- e) Provide adequate storage, waste, servicing and utilities for the use proposed;

9. Resources

- a) Minimise the need for resources both in construction and operation of buildings and be easily adaptable to avoid unnecessary waste in accordance with Policies S10 and S11;
- b) Use high quality materials which are not only suitable for the context but that are durable and resilient to impacts of climate change in accordance with the requirements of Policy S20;

10. Lifespan

- a) Use high quality materials which are durable and ensure buildings and spaces are adaptive; and
- b) Encourage the creation of a sense of ownership for users and the wider community with a clear strategy for ongoing management and stewardship.

Development proposals will be expected to satisfy requirements of any adopted local design guide or design code where relevant to the proposal.

9.1. Health and Wellbeing

- 9.1.1. The vital role of planning in creating and supporting strong, vibrant and healthy communities, in terms of physical and mental health, is well recognised and is a key element in delivering sustainable development.
- 9.1.2. Central Lincolnshire's health priorities and issues are set out in the latest Joint Health and Well Being Strategy for Lincolnshire; Joint Strategic Needs Assessment; and Public Health England Local Authority Health Profiles for Lincoln, North Kesteven and West Lindsey. The most significant issues include mental health and emotional wellbeing of children and young people, unpaid carers, obesity levels, adult mental health, dementia, increasing physical activity levels and the link between housing and health.
- 9.1.3. In addressing these priorities and issues, it is essential that community needs are supported through appropriate physical and social infrastructure, and by other facilities and key services which contribute to improving physical and mental health and wellbeing, and the overall quality of life experienced by residents.
- 9.1.4. Active Design, developed by Sport England and supported by Public Health England, provides a set of principles that promote activity, health and stronger communities through the way we design buildings, streets, neighbourhoods, towns and cities. The Active Design guidance¹⁹, which provides further details for each of the principles along with a set of case studies, can be found on Sport England's website. Developers may find it helpful to consider the guidance as the principles are cross cutting across other policy areas within this Local Plan.
- 9.1.5. Helping communities' experience a high quality of life is a key theme that cuts across many policies in this Local Plan.
- 9.1.6. The impacts of proposed development on health should be assessed and considered by the applicant at the earliest stage of the design process, to avoid negative health impacts and ensure positive health outcomes for the community as a whole. This includes developers consulting with health care commissioners at an early stage to identify the need for new or enhanced health care infrastructure. Guidance on preparing Health Impact Assessments is published on the Central Lincolnshire website.

Policy S54: Health and Wellbeing

The potential for achieving positive mental and physical health outcomes will be taken into account when considering all development proposals. Where any potential adverse health impacts are identified, the applicant will be expected to demonstrate how these will be addressed and mitigated.

The Central Lincolnshire authorities will expect development proposals to promote, support and enhance physical and mental health and wellbeing, and thus contribute to reducing health inequalities. This will be achieved by:

- a) Seeking, in line with the Central Lincolnshire Developer Contributions SPD, developer contributions towards new or enhanced health facilities from developers where

¹⁹ Available at <https://www.sportengland.org/how-we-can-help/facilities-and-planning/design-and-cost-guidance/active-design>

development results in a shortfall or worsening of provision, as informed by the outcome of consultation with health care commissioners;

- b) In the case of development of 150 dwellings or more, or 5ha or more for other development, developers submitting a fit for purpose Health Impact Assessment (HIA) as part of the application or master planning stage where applicable, and demonstrating how the conclusions of the HIA have been taken into account in the design of the scheme. The HIA should be commensurate with the size of the development;
- c) Development schemes safeguarding and, where appropriate, creating or enhancing the role of allotments, orchards, gardens and food markets in providing access to healthy, fresh and locally produced food; and
- d) Ensuring quality green infrastructure provides adequate access to nature for its benefits to mental and physical health and wellbeing and potential to overcome health inequalities.

Proposals for new health care facilities

Proposals for new health care facilities should relate well to public transport services, walking and cycling routes and be easily accessible to all sectors of the community. Proposals which utilise opportunities for the multi-use and co-location of health facilities with other services and facilities, and thus co-ordinate local care and provide convenience for the community, will be particularly supported.

9.2. Advertisements

9.2.1. The display of advertisements is subject to a separate consent within the planning system under the Advertisement Regulations²⁰. External advertising plays an important role in the built environment and for commercial activity, helping to identify uses and occupiers within a building or area and to advertise the goods and services they provide. However, advertising can look unattractive if poorly sited and designed. It can also clutter the street scene and detract from the character and local distinctiveness of an area. A balance needs to be met between commercial requirements and the impact on the environment, public safety and amenity. The amenity impacts and safety implications of advertisements requiring consent will be carefully considered, taking into account any cumulative impact on a specific area.

Policy NS55: Advertisements

All proposals for the display of advertisements must comply with relevant national regulations and guidance. Where advertisement consent is required, such consent will be permitted if the proposal respects the interests of public safety and amenity, subject to the following criteria:

- a) The design (including any associated lighting and illumination), materials, size and location of the advertisement respects the scale and character of the building on which it is situated and the surrounding area, especially in the case of a listed building or within a conservation area; and
- b) The proposal would not result in a cluttered street scene, excessive signage, or a proliferation of signs advertising a single site or enterprise; and
- c) The proposal would not cause a hazard to pedestrians or road users; and
- d) The proposal would not impede on any surveillance equipment and would contribute positively to public perceptions of security.

²⁰ Town and Country Planning (Control of Advertisements) (England) Regulations 2007 as amended.

10. Built Environment

10.0. Historic Environment

10.0.1. Central Lincolnshire has a rich historic environment. The rural countryside and historic towns and villages are attractive aspects of Central Lincolnshire as a whole, while within Lincoln's historic core are aspects of national and wider importance. The notable historic environment positively contributes to Central Lincolnshire's character, the quality of life experienced by residents, and its appeal as a destination for visitors and tourists. Within the area there are: over 2,300 listed buildings, more than 70 conservation areas, almost 200 scheduled ancient monuments, 13 national registered parks and gardens of special historic interest, and a wealth of nationally and locally significant archaeological remains. In addition, there are numerous other heritage assets that, whilst not designated, are considered to be nationally, regionally or locally significant.

10.0.2. Central Lincolnshire's local character is heavily influenced by Lincoln, a world class Cathedral City, which lies at its heart and, in part, by its roots in agriculture which resulted in the development of market towns. The landscape form has intrinsically influenced the area's development, from the Wolds and the Fens, to the development of settlements along the Lincolnshire Edge (and Lincoln Cliff). Transport infrastructure, both natural and man-made also provides an important legacy. This includes transport infrastructure dating from Roman times through to the 18th and 19th century developments of the roads and railways associated with the development of industry within the more major settlements. A more recent influence on Central Lincolnshire's character and development has been the 20th century development of the area for military operations.

10.0.3. Central Lincolnshire's heritage assets²¹ and their settings, including the significant historic building stock and archaeological resource, are irreplaceable and require careful management as the area evolves and undergoes significant growth and regeneration.

10.0.4. The opportunities to retain, enhance and improve Central Lincolnshire's historic environment include:

- Using the income generated from the growing local tourism economy to invest in the maintenance and upkeep of heritage assets;
- Ensuring development schemes enhance the setting of heritage assets and do not detract from their character and the appearance of the area;
- Supporting proposals for heritage led regeneration, ensuring that heritage assets are conserved, enhanced and their future secured.

10.0.5. Our positive strategy for the historic environment will be achieved through the implementation of Policy S57 and through:

- the preparation and maintenance of a local list of buildings, structures and other heritage assets of local importance, including those identified in local plans, the Lincolnshire Historic Environment Record (HER) and as part of the decision-making process on planning applications;
- safeguarding heritage assets at risk and taking steps to reduce the number of heritage assets in Central Lincolnshire: on the national Heritage at Risk Register, the

²¹ Refer to the National Planning Policy Framework (2021) for definition of 'heritage assets' and 'non-designated heritage assets'.

Lincolnshire Heritage at Risk Register and Grade II listed buildings at risk as identified by the local planning authority;

- encouraging the sympathetic maintenance and restoration of listed buildings, scheduled monuments (both structural and archaeological), historic shop fronts and historic parks, gardens and landscapes, based on thorough historical research and using traditional materials and techniques;
- strengthening the distinctive character of Central Lincolnshire's settlements, through the application of high quality design and architecture that responds to this character and the setting of heritage assets, including the historic evolution of those settlements as identified through local heritage strategies and studies;
- the preparation of conservation area appraisals and neighbourhood plans which identify non-designated heritage assets.

Scheduled Monuments

10.0.6. Scheduled Monuments are of national importance. Application for Scheduled Monument Consent (SMC) must be made to the Secretary of State for Digital, Culture, Media and Sport before any work can be carried out which may affect a monument, either above or below ground level.

Listed Buildings and their setting

10.0.7. A proposal to demolish a listed building, or to alter or extend it in a way that would affect its special character, requires Listed Building Consent. If the proposal also involves 'development', planning permission is required and, in that case, the Local Planning Authority will wish to consider applications for Listed Building Consent and planning applications concurrently.

10.0.8. Proposals to alter or extend any Listed Building will be assessed against the need to conserve the special architectural or historic interest which led to the building being listed. There is a general presumption in favour of the conservation of Listed Buildings, and consent to demolish or partly demolish such buildings will only be granted in exceptional circumstances.

10.0.9. The setting of a Listed Building may be affected by development. It is important that applications for planning permission for development affecting Listed Buildings, or their settings, include full details of the proposal so that an informed decision can be reached.

Conservation Areas and their setting

10.0.10. The effect of a proposed development on the character or appearance of a Conservation Area is always a material consideration in the determination of planning applications. All development should conserve or enhance the special character or appearance of the designated area and its setting. It is also important that the spaces around and within the conservation area are retained, where they add to its character.

10.0.11. Development within Conservation Areas and their setting must respect the local character through careful design and consideration of scale, height, massing, alignment, and use of appropriate materials. Keeping valued historic buildings in active and viable use is important for both the maintenance of the building concerned and the overall character of the Conservation Area. Proposals to change the use of a building might therefore be supported, where features essential to the special interest of the individual building are not lost or altered to facilitate the change of use.

- 10.0.12. Demolition within a Conservation Area should only be allowed in exceptional circumstances, and will normally be permitted only if the Council is satisfied that the proposal for redevelopment is acceptable and there is an undertaking to implement it within a specified period.
- 10.0.13. Conservation Areas are reviewed from time to time to provide more detailed information about the designated area. Conservation area appraisals and management plans have been prepared for many of the Conservation Areas and may be reviewed and updated as appropriate.

Registered Historic Parks and Gardens and their setting

- 10.0.14. Historic parks and gardens are an important historic, cultural and environmental asset within Central Lincolnshire. This plan aims to protect them from development that would harm their character. Historic England is responsible for compiling and maintaining the 'Register of Parks and Gardens of Special Historic Interest in England'. Registration of a site means that its significance must be taken into account when considering any proposed development that may affect the site or its setting.

Non-Designated Heritage Assets and their setting

- 10.0.15. Non-designated heritage assets cover a wide range of asset types, such as buildings and structures, but may also include parks, gardens, cemeteries, landscapes or known archaeological monuments or sites. They are not formally designated, but are identified locally as having a degree of significance because of their heritage, architectural or artistic interest. The Lincolnshire HER, the Local Heritage Listing campaign, conservation area appraisals and neighbourhood plans are important sources of information regarding non-designated heritage assets in Central Lincolnshire.

Archaeology

- 10.0.16. Local Planning Authorities may require developers to assess the potential impacts of their proposal on archaeological remains in order to reach a decision on a development proposal. Where archaeological impacts are indicated, developers are expected to work with the local planning authority to devise a scheme for mitigating such impacts, which may form part of a planning condition or a planning obligation. Such conditions are designed to ensure that such remains are either preserved in situ wherever possible, or recorded.
- 10.0.17. All archaeological work should be based on a thorough understanding of the available evidence, and of the local, regional and national contribution it makes. The known and potential archaeological heritage of the area is recorded by the Lincolnshire Historic Environment Record and, in Lincoln, by the Lincoln Heritage Database and the Lincoln Archaeological Research Assessment. These and other sources, such as Lincoln's online heritage information management system, ARCADE, the Lincolnshire Archives, The Lincolnshire Archaeological Handbook, the Lincolnshire Historic Landscape Characterisation, Conservation Area Appraisals, Local Lists and the Lincolnshire Extensive Urban Survey should be used to inform all proposals and decisions.²²

²² Information about Heritage Assets within Central Lincolnshire is available at the websites and archives hosted by a number of organisations. The Evidence Report for Policy S57 includes web links to all of the current sources of information.

Policy S57: The Historic Environment

Development proposals should protect, conserve and seek opportunities to enhance the historic environment of Central Lincolnshire.

In instances where a development proposal would affect the significance of a heritage asset (whether designated or non-designated), including any contribution made by its setting, the applicant will be required to undertake and provide the following, in a manner proportionate to the asset's significance:

- a) describe and assess the significance of the asset, including its setting, to determine its architectural, historical or archaeological interest; and
- b) identify the impact of the proposed works on the significance and special character of the asset, including its setting; and
- c) provide a clear justification for the works, especially if these would harm the significance of the asset, including its setting, so that the harm can be weighed against public benefits.

Development proposals will be supported where they:

- d) protect the significance of heritage assets (including where relevant their setting) by protecting and enhancing architectural and historic character, historical associations, landscape and townscape features and through consideration of scale, design, architectural detailing, materials, siting, layout, mass, use, and views and vistas both from and towards the asset;
- e) promote opportunities to better reveal significance of heritage assets, where possible;
- f) take into account the desirability of sustaining and enhancing non-designated heritage assets and their setting.

Proposals to alter or to change the use of a heritage asset, will be supported provided:

- g) the proposed use is compatible with the significance of the heritage asset, including its fabric, character, appearance, setting and, for listed buildings, interior; and
- h) such a change of use will demonstrably assist in the maintenance or enhancement of the heritage asset; and
- i) features essential to the special interest of the individual heritage asset are not harmed to facilitate the change of use.

Development proposals that will result in substantial harm to, or the total loss of, a designated heritage asset will only be granted permission where it is necessary to achieve substantial public benefits that outweigh the harm or loss, and the following criteria can be satisfied:

- j) the nature of the heritage asset prevents all reasonable uses of the site; and
- k) no viable use of the heritage asset itself can be found in the medium term through appropriate marketing that will enable its conservation; and
- l) conservation by grant-funding or some form of not for profit, charitable or public ownership is demonstrably not possible; and
- m) the harm or loss is outweighed by the benefit of bringing the site back into use.

Where a development proposal would result in less than substantial harm to a designated heritage asset, permission will only be granted where the public benefits, including, where appropriate, securing its optimum viable use, outweigh the harm.

Where a non-designated heritage asset is affected by development proposals, there will be a presumption in favour of its retention, though regard will be had to the scale of any harm or loss

and the significance of the heritage asset. Any special features which contribute to an asset's significance should be retained and reinstated, where possible.

Listed Buildings

Permission to change the use of a Listed Building or to alter or extend such a building will be granted where the local planning authority is satisfied that the proposal is in the interest of the building's conservation and does not involve activities or alterations prejudicial to the special architectural or historic interest of the Listed Building or its setting.

Development proposals that affect the setting of a Listed Building will, in principle, be supported where they make a positive contribution to, or better reveal the significance of the Listed Building.

Conservation Areas

Significant weight will be given to the protection and enhancement of Conservation Areas.

Development within, affecting the setting of, or affecting views into or out of, a Conservation Area should conserve, or where appropriate enhance, features that contribute positively to the area's special character, appearance and setting, including as identified in any adopted Conservation Area appraisal. Proposals should:

- n) retain buildings/groups of buildings, existing street patterns, historic building lines and ground surfaces and architectural details that contribute to the character and appearance of the area;
- o) where relevant and practical, remove features which have a negative impact on the character and appearance of the Conservation Area;
- p) retain and reinforce local distinctiveness with reference to height, massing, scale, form, materials and plot widths of the existing built environment;
- q) assess, and mitigate against, any negative impact the proposal might have on the townscape, roofscape, skyline and landscape; and
- r) aim to protect trees, or where losses are proposed, demonstrate how such losses are appropriately mitigated against.

Archaeology

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.

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.

Wherever possible and appropriate, mitigation strategies should ensure the preservation of archaeological remains in-situ. Where this is either not possible or not desirable, provision 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.

Any work undertaken as part of the planning process must be appropriately archived in a way agreed with the local planning authority.

11. Natural Environment

11.0. Green and Blue Infrastructure

11.0.1. Green and blue infrastructure can be defined as a strategically planned and delivered network of multi-functional, green and blue (water) spaces and other natural features, and the connections between them, in both urban and rural areas, which is capable of delivering a range of environmental, economic, health and quality of life benefits for local communities. The green infrastructure network may comprise of spaces in public or private ownership, with or without public access.

11.0.2. The types of green and blue infrastructure assets to be found in Central Lincolnshire are wide ranging and include, but are not limited to:

- Allotments, community gardens and orchards;
- Amenity greenspaces - including play areas, urban commons, communal spaces within housing areas, and village greens;
- Cemeteries, churchyards and disused burial grounds;
- Green corridors – including rivers and canals, main drains, rail corridors, hedgerows, ditches, cycle routes, pedestrian paths and rights of way;
- Golf courses;
- Natural and semi-natural greenspaces – including woodland, scrub, grassland, wetlands, open water, bare rock habitats, existing sites of national and local biodiversity importance;
- Parks and gardens – including urban parks and gardens and country parks;
- Domestic gardens and street trees;
- Green roofs and walls;
- Functional green space, such as SuDS and flood storage areas;
- Historic environmental assets – including listed buildings, conservation areas, scheduled monuments and historic parks and gardens;
- Predominantly undeveloped natural floodplains and fens; and
- Previously developed land that is wildlife rich, such as restored mineral sites and open mosaic habitats.

11.0.3. Well planned, designed and managed green infrastructure has the potential to deliver a wide range of direct and indirect benefits for people and the environment, including:

- opportunities to mitigate and adapt the natural and built environment to climate change;
- improving air and water quality;
- reducing and managing flood risk and drought;
- improving quality of place;
- supporting people's physical and mental health and social wellbeing;
- encouraging active and more sustainable travel;
- sustaining economic growth, attracting investment, promoting employment and skills improvement;
- protecting and enhancing existing habitats and providing opportunities to create a more joined-up and resilient ecological network;
- providing opportunities for local, sustainable food production; and
- conserving and enhancing landscape character, local distinctiveness and the setting of heritage assets.

11.0.4. Benefits to people provided by nature have been termed 'ecosystem services'. The extent to which green infrastructure provides these benefits depends on how it is designed and maintained. Individual elements of the green infrastructure network can serve a useful purpose without being connected. However, connectivity between different green infrastructure assets can help maximise the benefits that they generate and reduces fragmentation and severance. For example, well-connected green infrastructure assets create a network that allows and encourages movement by people and wildlife, helping to maximise the benefits and support adaptation and resilience to a changing climate, such as potentially dramatic increases in rainfall.

11.0.5. The overarching aim is to establish a comprehensive, high quality network of green infrastructure throughout Central Lincolnshire. In 2011, a partnership of local organisations produced the Central Lincolnshire Green Infrastructure Study, which sets out a green infrastructure network and strategy for Central Lincolnshire. The strategy defines specific priority areas where targeting investment in green infrastructure is most likely to deliver multiple benefits. Detailed descriptions of each of the priority areas are contained within the Study and are summarised below.

Central Lincolnshire Green and Blue Infrastructure Network Priority Areas

Priority Area	Explanation
Strategic Green Corridors	7 priority landscape-scale areas for strategic GI enhancement, linkage and creation
Strategic Green Access Links	16 priority routes within and connecting the Strategic Green Corridors intended to provide for multi-user, predominantly off road access routes for pedestrians and cyclists. Also offer opportunities as wildlife corridors.
Urban Green Grids	3 priority areas with key opportunities for greening the built environment for Lincoln, Gainsborough and Sleaford.
Green Infrastructure Zones	30 areas with opportunities for targeted green infrastructure improvements in the wider countryside.

11.0.6. The Gainsborough Open Space and Green Infrastructure Strategy (LUC, 2019) describes the current green infrastructure provision across Gainsborough, sets out a vision and core principles that all green infrastructure should follow, and identifies potential projects to deliver improved existing and provide new high quality, multi-functional green spaces and environmental features for Gainsborough. In June 2021, green infrastructure profiles were published for Lincoln and Sleaford, identifying green infrastructure assets within and adjacent to each urban area and opportunities to enhance, link and extend the green infrastructure network.

11.0.7. In 2019, the Greater Lincolnshire Nature Partnership (GLNP) produced a baseline GI Map for Central Lincolnshire. This highlights areas of existing priority habitats, designated sites and other areas of green or blue space and updates the baseline GI maps in the 2011 GI Study.

11.0.8. The Central Lincolnshire green infrastructure network can be viewed on the Central Lincolnshire Interactive Map and within Green Infrastructure Strategies and Green Infrastructure Profile and Opportunity Plans for Lincoln, Gainsborough and Sleaford, available on the Central Lincolnshire website.

11.0.9. Green infrastructure is integral to place-making, significantly contributing towards places where people want to live, work and invest. As Central Lincolnshire continues to grow and develop, the green infrastructure network is likely to come under increasing pressure from new development, particularly within and around the main urban settlements. However, development brings opportunities to enhance the network and deliver new green infrastructure of all types and sizes.

11.0.10. New development should contribute to the extension of the green infrastructure network, helping to address deficiencies in provision and providing good quality connections to the network and throughout the development. Developer contributions will be sought proportionate to the scale of the proposed development to provide, or contribute towards, the cost of providing new or improved existing green infrastructure, where this is required as a consequence of the development, on its own, or as a result of the cumulative impact of a development in the area.

11.0.11. Green infrastructure principles should be considered and incorporated into a scheme from the earliest stages of the design process, at every scale (from a single building to a new settlement), and be capable of delivering a wide range of environmental, health and quality of life benefits for local communities. Developers should appraise the site context for green infrastructure functions and take opportunities to achieve multi-functionality by bringing green infrastructure functions together. Natural England's Green Infrastructure Framework provides a useful guide for considering green infrastructure.

11.0.12. In developing proposals, the green infrastructure network for Central Lincolnshire should be viewed and considered alongside other relevant policies in this Local Plan to identify opportunities for protecting, enhancing and connecting green infrastructure assets as part of new development.

Policy S59: Green and Blue Infrastructure Network

The Central Lincolnshire Authorities will safeguard green and blue infrastructure in Central Lincolnshire from inappropriate development and work actively with partners to maintain and improve the quantity, quality, accessibility and management of the green infrastructure network.

Proposals that cause loss or harm to the green and blue infrastructure network will not be supported unless the need for and benefits of the development demonstrably outweigh any adverse impacts. Where adverse impacts on green infrastructure are unavoidable, development will only be supported if suitable mitigation measures for the network are provided.

Development proposals should ensure that existing and new green and blue infrastructure is considered and integrated into the scheme design from the outset. Where new green infrastructure is proposed, the design and layout should take opportunities to:

- a) incorporate a range of types and sizes of green and blue spaces, green routes and environmental features that are appropriate to the development and the wider green and blue infrastructure network to maximise the delivery of multi-functionality;
- b) deliver biodiversity net gain and support ecosystem services;
- c) respond to landscape/townscape and historic character;
- d) support climate change adaptation and resilience including through use of appropriate habitats and species; and
- e) encourage healthy and active lifestyles.

Development proposals must protect the linear features of the green and blue infrastructure network that provide connectivity between green infrastructure assets, including public rights of way, bridleways, cycleways and waterways, and take opportunities to improve and expand such features.

Development will be expected to make a contribution proportionate to their scale towards the establishment, enhancement and on-going management of green and/or blue infrastructure by contributing to the development of the strategic green infrastructure network within Central Lincolnshire, in accordance with the Developer Contributions SPD.

11.1. Biodiversity and Geodiversity

- 11.1.1. The abundance and distribution of the UK's species has declined rapidly since the 1970's²³. There is now an urgent need to reverse the net loss of biodiversity, as this trend is not just a significant problem for wildlife. It has serious implications for the physical environment (air, soil, water) the ability of the natural environment to provide natural resources (such as food and construction materials), our ability to respond to the climate emergency and for our physical and mental health and well-being. Indeed, Lincolnshire Environmental Records Centre data highlights that over 900 species of wildlife previously recorded in Lincolnshire have not been recorded since 1960. This potentially indicates significant losses.
- 11.1.2. The Environment Act received royal assent on 9 November 2021 and includes a new target to reverse the decline of species abundance in England by 2030.
- 11.1.3. The Central Lincolnshire authorities have a duty to protect and enhance biodiversity. They will work collaboratively and across administrative boundaries with other Local Planning Authorities, public bodies and local stakeholders, in order to support the delivery of strategic ambitions and priorities for nature, such as those set out in the Local Nature Recovery Strategy.
- 11.1.4. Central Lincolnshire has many areas which are noted for their natural beauty and biodiversity value. These areas also support a wide variety of species and habitats, and form an important part of the network of biodiversity sites within the wider environment. Wildlife sites and habitats that are, as at 2020, recognised as being of national, regional and local importance within or partly within Central Lincolnshire include: Bardney Limewoods National Nature Reserve (NNR), over 20 Sites of Special Scientific Interest (SSSI), 383 Local Wildlife Sites (LWS), 17 Local Geological Sites (LGS), and 7 Local Nature Reserves (LNR). These sites support important natural assets, such as ancient woodland, heathland, acid grassland and wetland.

Designated Sites

- 11.1.5. Designated sites for nature conservation importance are classified into a hierarchy according to their status and the level of protection they should be afforded. International sites form the top tier of the hierarchy with the highest level of protection, followed by national and then locally designated sites. This policy seeks to ensure that appropriate weight is given to their importance and the contribution that they make to the wider ecological network. The table below sets out the hierarchy of designated sites that can be

²³ NBN (2019) State of Nature 2019

found in Central Lincolnshire, and National and Local sites are shown on the Interactive Policies Map.

Hierarchy of Protected Designated Sites in Central Lincolnshire

International Sites	None within Central Lincolnshire
National Sites	Sites of Special Scientific Interest (SSSI) National Nature Reserves (NNR)
Local Sites	Local Nature Reserves (LNR) Local Wildlife Sites (LWS) Local Geological Sites (LGS)

- 11.1.6. Although there are no international sites within Central Lincolnshire, there are 5 European sites within 15km of its boundary: Humber Estuary SAC, Humber Estuary SPA/Ramsar, Thorne Moor SAC, Hatfield Moor SAC and Thorne and Hatfield Moors SPA. These internationally important sites are protected by the Habitats Regulations.
- 11.1.7. Nationally designated sites are of national importance for biodiversity or geodiversity and are designated under UK legislation. Development that is likely to have an adverse effect on such sites, alone or in combination with other developments, will only be supported in exceptional circumstances, in accordance with the NPPF.
- 11.1.8. Locally designated sites are non-statutory, but none the less are valuable components of the local ecological network, make an important contribution to nature's recovery, and provide benefits for both people and wildlife. On-going surveys can reveal new areas that warrant such protection. Policy S60 will be applied to any new sites or extensions to existing sites following the adoption of this Local Plan.
- 11.1.9. Irreplaceable habitats are defined in the NPPF glossary. Examples present in Central Lincolnshire include ancient woodland, ancient and veteran trees, ancient grassland and heathland. Their significance is derived from age, uniqueness, species diversity or rarity. Development resulting in the loss or deterioration of irreplaceable habitats will be refused, unless there are wholly exceptional reasons²⁴ and a suitable compensation strategy exists.

Biodiversity Outside of Designated Sites

- 11.1.10. Landscape and habitat features that lie outside of designated sites can also provide valuable spaces and corridors for habitats and species, including protected species. Waterways, for example, can be valuable for biodiversity, providing green and blue corridors that link habitats and wildlife sites. Maintaining and enhancing a network of habitats, species and wildlife sites, and linkages between them, is important to achieving the vision and aims of the Greater Lincolnshire Local Nature Recovery Strategy.
- 11.1.11. The Nature Recovery Network is a major commitment in the UK Government's 25-Year Environment Plan and intends to improve, expand and connect habitats to address wildlife decline and provide wider environmental benefits for people. This approach will build on the work of previous national initiatives, such as Nature Improvement Areas (NIAs). NIAs are landscape-scale initiatives that aim to ensure land is used sustainably to achieve

²⁴ For example, infrastructure projects (including nationally significant infrastructure projects, orders under the Transport and Works Act and hybrid bills), only where the public benefit would clearly outweigh the loss or deterioration of habitat.

multiple benefits for people, wildlife and the local economy. The Humberhead Levels is a nationally selected NIA that spans the administrative boundaries of North Lincolnshire and West Lindsey District Councils.

Mitigation Hierarchy

11.1.12. The mitigation hierarchy is an approach to limiting the negative impacts of development on biodiversity and is set out in the NPPF. It requires that if significant harm to biodiversity resulting from development cannot be avoided, adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused. Avoidance of adverse impacts to biodiversity as a direct or indirect result of development must be the first consideration. Avoidance measures may include either locating development on an alternative site with less harmful impact, or locating development within the site to avoid damaging a particular habitat feature. Compensation will only be considered after all other options have been explored and strictly as a last resort.

Species and Habitats of Principal Importance

11.1.13. Some species benefit from statutory protection under a range of legislative provisions (such as the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017). There are also a range of Priority Habitats and Priority Species in England that are listed as habitats or species of principal importance under Section 41 of the Natural Environment and Rural Community Act (2006). The current national list (August 2010) contains 56 habitats of principal importance and 943 species of principal importance.

11.1.14. Developers will be expected to submit sufficient, suitable and robust information with their application to demonstrate a comprehensive understanding of habitats and species associated with their site, and to enable the likely effects on biodiversity to be assessed. This may include a desk study, a completed biodiversity checklist or toolkit, Phase 1 habitat survey, or other appropriate ecological survey, where there is a reasonable likelihood of the presence of important habitats or species. This will help to avoid potentially costly delays at a later date and allow a planning decision to be made in a timely manner.

11.1.15. The Lincolnshire Environmental Records Centre holds data on statutory and non-statutory designated sites, habitats and species and is therefore a useful source of biodiversity information.

11.1.16. The Partnership for Biodiversity in Planning has created a free online tool, the Wildlife Assessment Check²⁵, to help applicants identify whether there is a need to conduct ecological appraisals before submitting a planning application.

Policy S60: Protecting Biodiversity and Geodiversity

All development should:

- a) protect, manage, enhance and extend the ecological network of habitats, species and sites of international, national and local importance (statutory and non-statutory), including sites that meet the criteria for selection as a Local Site;
- b) minimise impacts on biodiversity and features of geodiversity value;

²⁵ <https://www.biodiversityinplanning.org/wildlife-assessment-check/>

- c) deliver measurable and proportionate net gains in biodiversity in accordance with Policy S61; and
- d) protect and enhance the aquatic environment within or adjoining the site, including water quality and habitat.

Part One: Designated Sites

The following hierarchy of sites will apply in the consideration of development proposals:

1. International Sites

The highest level of protection will be afforded to internationally protected sites. Development proposals that will have an adverse impact on the integrity of such areas, will not be supported other than in exceptional circumstances, in accordance with the NPPF.

Development proposals that are likely to result in a significant adverse effect, either alone or in combination with other proposals, on any internationally designated site, must satisfy the requirements of the Habitats Regulations (or any superseding similar UK legislation). Development requiring Appropriate Assessment will only be allowed where it can be determined, taking into account mitigation, that the proposal would not result in significant adverse effects on the site's integrity.

2. National Sites (NNRs and SSSIs)

Development proposals should avoid impact on these nationally protected sites. Development proposals within or outside a national site, likely to have an adverse effect, either individually or in combination with other developments, will not normally be supported unless the benefits of the development, at this site, clearly outweigh both the adverse impacts on the features of the site and any adverse impacts on the wider network of nationally protected sites.

3. Irreplaceable Habitats

Planning permission will be refused for development resulting in the loss, deterioration or fragmentation of irreplaceable habitats, including ancient woodland and aged or veteran trees, unless there are wholly exceptional reasons and a suitable compensation strategy will be delivered.

4. Local Sites (LNR, LWS and LGS)

Development likely to have an adverse effect on locally designated sites, their features or their function as part of the ecological network, will only be supported where the benefits of the development clearly outweigh the loss, and the coherence of the local ecological network is maintained. Where significant harm cannot be avoided, the mitigation hierarchy should be followed.

Part Two: Species and Habitats of Principal Importance

All development proposals will be considered in the context of the relevant Local Authority's duty to promote the protection and recovery of priority species and habitats.

Development should seek to preserve, restore and re-create priority habitats, ecological networks and the protection and recovery of priority species set out in the Natural Environment and Rural Communities Act 2006, Lincolnshire Biodiversity Action Plan, Lincolnshire Geodiversity Strategy and Local Nature Recovery Strategy.

Where adverse impacts are likely, development will only be supported where the need for and benefits of the development clearly outweigh these impacts. In such cases, appropriate mitigation or compensatory measures will be required.

Part Three: Mitigation of Potential Adverse Impacts

Development should avoid adverse impact on existing biodiversity and geodiversity features as a first principle, in line with the mitigation hierarchy. Where adverse impacts are unavoidable they must be adequately and proportionately mitigated. If full mitigation cannot be provided, compensation will be required as a last resort where there is no alternative.

Development will only be supported where the proposed measures for mitigation and/or compensation along with details of net gain are acceptable to the Local Planning Authority in terms of design and location, and are secured for the lifetime of the development with appropriate funding mechanisms that are capable of being secured by condition and/or legal agreement.

If significant harm to biodiversity resulting from development cannot be avoided, adequately mitigated, or, as a last resort, compensated for, then planning permission will be refused.

11.2. Biodiversity Opportunity and Net Gain

- 11.2.1. National planning policy states that development should deliver a net gain in biodiversity. The Environment Act sets out a mandatory requirement for development to deliver at least a 10% biodiversity net gain and approval of a biodiversity net gain plan. The Act includes provision for secondary legislation to set a date for the requirement to come into force.
- 11.2.2. Biodiversity net gain means leaving the natural environment in a measurably better state than before, and is central to delivering nature's recovery and increasing stocks of natural capital. Net gain should deliver genuine additional improvements for biodiversity by creating or enhancing habitats in association with development. Such improvements should go beyond any required mitigation and/or compensation measures following the application of the mitigation hierarchy. As part of delivering net gains for nature, development proposals will be expected to protect, provide and extend green infrastructure in accordance with Policy S59 Green and Blue Infrastructure Network.
- 11.2.3. Biodiversity net gain can be achieved on-site, off-site or through a combination of on-site and off-site measures, or, as a last resort, through the purchase of statutory biodiversity credits. Development proposals can, for example, provide a net gain in biodiversity on-site through the enhancement of the existing features of the site, the creation of additional habitats or the linking of existing habitats to reduce fragmentation in the local ecological network. The Central Lincolnshire Authorities' preference is for biodiversity net gain to be delivered on, or adjacent to, the development site, in accordance with the mitigation hierarchy. Off-site biodiversity net gain, either on the applicant's own land or by purchasing units on the market, may be considered acceptable, if sufficient biodiversity net gain cannot be achieved within the development site and where there is opportunity to create, restore or enhance habitats off site that form part of the Nature Recovery Network and where this is considered the best outcome for biodiversity.

11.2.4. Net gains in biodiversity can be delivered by almost all development, by following the principles of the mitigation hierarchy and understanding the ecological constraints and opportunities from the early stages of design.

11.2.5. Biodiversity enhancements can include both the creation of new habitat as well as improving existing habitats and can include, but are not limited to:

- Bird and bat boxes/bricks integrated into the structure of existing and/or new buildings
- Wildlife friendly sustainable urban drainage (SuDs)
- Wildlife tunnels under paths and roads
- Wildlife friendly ponds
- Living roofs and walls
- Bug hotels
- Using native plants in landscaping
- Setting aside space within a development to create new habitat, such as woodland, wetland or wildflower meadows
- Improve and re-naturalise waterways

11.2.6. The proposals for enhancement of biodiversity will depend on the nature and scale of the development, however a development with limited or no impacts on biodiversity should still seek to demonstrate a net gain. Small-scale development proposals form a significant proportion of the planning applications received by the Central Lincolnshire Authorities and therefore collectively, could make a notable contribution to biodiversity net gain and the wider Nature Recovery Network. The Local Planning Authority will use planning conditions to require that a planning permission provides for works that will measurably increase biodiversity.

11.2.7. A suitable biodiversity metric should be used to demonstrate that a ‘measurable biodiversity net gain’ has been achieved. The preferred metric for calculating biodiversity net losses and gains is the Natural England Biodiversity Metric, which supports and reinforces the application of the mitigation hierarchy.²⁶ The metric calculates the change in biodiversity resulting from a project or development by subtracting the number of pre-intervention or ‘baseline’ biodiversity units (i.e. those originally existing on-site and off-site where applicable) from the number of post-intervention units (i.e. those projected to be provided after the development or change in land management). All applications should be supported by the submission of the full metric assessment.

11.2.8. Local Ecological Network²⁷, Biodiversity Opportunity and Green Infrastructure Mapping has been prepared for Central Lincolnshire by the GLNP. These maps identify the known existing areas of high biodiversity value and areas of local biodiversity priority where it is considered most important and feasible to target habitat creation, extension and restoration. To complement these maps, a set of principles has been prepared (see Appendix 4 of this Local Plan), to guide development proposals that fall within or overlap the biodiversity opportunity areas. Development proposals should have regard to the above evidence and to the biodiversity opportunity area principles.

²⁶Biodiversity Metric 4.0 or its successor. User guidance can be found on Natural England’s website: [The Biodiversity Metric 4.0 \(JP039\)](#).

²⁷ The components of the ecological network within Central Lincolnshire have been mapped and are available to view on the Central Lincolnshire website on the Interactive Map. This will be updated annually incorporating data supplied by the GLNP.

11.2.9. Recognising the need for a consistent approach to delivering Biodiversity Net Gain across Greater Lincolnshire, the Lincolnshire Wildlife Trust established a multi-agency Task and Finish Group in September 2020. The purpose of this Group is to work in partnership to produce a framework document of shared principles for Biodiversity Net Gain and to ensure Biodiversity Net Gain is delivered in an exemplary and consistent way across Greater Lincolnshire. The framework document will be available on the Central Lincolnshire website once completed.

11.2.10. Major and large scale development schemes²⁸ should deliver wider environmental net gain wherever possible, reflecting the opportunities identified in the Central Lincolnshire Biodiversity Opportunity and GI Mapping, Central Lincolnshire Green Infrastructure Strategy and Local Nature Recovery Strategy (or any subsequent replacements). Seeking to achieve wider environmental net gain should reduce pressure on, and achieve overall improvements in, natural capital and ecosystem services and the benefits that they deliver.²⁹

11.2.11. The baseline data on habitats and species that underpin local biodiversity strategy, the local ecological network, biodiversity, and green infrastructure opportunities, will be kept up to date by the GLNP through the management of the Lincolnshire Environmental Record Centre.

Policy S61: Biodiversity Opportunity and Delivering Measurable Net Gains

Following application of the mitigation hierarchy, all development proposals should ensure opportunities are taken to retain, protect and enhance biodiversity and geodiversity features proportionate to their scale, through site layout, design of new buildings and proposals for existing buildings with consideration to the construction phase and ongoing site management.

Development proposals should create new habitats, and links between habitats, in line with Central Lincolnshire Biodiversity Opportunity and Green Infrastructure Mapping evidence, the biodiversity opportunity area principles set out in Appendix 4 to this Plan and the Local Nature Recovery Strategy (once completed), to maintain and enhance a network of wildlife sites and corridors, to minimise habitat fragmentation and provide opportunities for species to respond and adapt to climate change.

Proposals for major and large scale development should seek to deliver wider environmental net gains where feasible.

Biodiversity Net Gain

The following part of the policy applies unless, and until, subsequently superseded, in whole or part, by national regulations or Government policy associated with the delivery of mandatory biodiversity net gain arising from the Environment Act 2021. Where conflict between the policy below and the provisions of Government regulations or national policy arises, then the latter should prevail.

All qualifying³⁰ development proposals must deliver at least a 10% measurable biodiversity net gain attributable to the development. The net gain for biodiversity should be calculated using Natural England's Biodiversity Metric.

²⁸ As defined in the Glossary

²⁹ Guidance on the application of a natural capital approach can be found on the Government website at: [Enabling a Natural Capital Approach guidance - GOV.UK \(www.gov.uk\)](https://www.gov.uk/guidance/enabling-a-natural-capital-approach)

³⁰ As defined in The Environment Act 2021, Schedule 14, Part 2, Paragraph 17.

Biodiversity net gain should be provided on-site wherever possible. Off-site measures will only be considered where it can be demonstrated that, after following the mitigation hierarchy, all reasonable opportunities to achieve measurable net gains on-site have been exhausted or where greater gains can be delivered off-site where the improvements can be demonstrated to be deliverable and are consistent with the Local Nature Recovery Strategy.

All development proposals, unless specifically exempted by Government, must provide clear and robust evidence for biodiversity net gains and losses in the form of a biodiversity gain plan, which should ideally be submitted with the planning application (or, if not, the submission and approval of a biodiversity gain plan before development commences will form a condition of any planning application approval), setting out:

- a) information about the steps to be taken to minimise the adverse effect of the development on the biodiversity of the onsite habitat and any other habitat;
- b) the pre-development biodiversity value of the onsite habitat;
- c) the post-development biodiversity value of the onsite habitat following implementation of the proposed ecological enhancements/interventions;
- d) the ongoing management strategy for any proposals;
- e) any registered off-site gain allocated to the development and the biodiversity value of that gain in relation to the development; and
- f) exceptionally any biodiversity credits purchased for the development through a recognised and deliverable offsetting scheme.

Demonstrating the value of the habitat (pre and post-development) with appropriate and robust evidence will be the responsibility of the applicant. Proposals which do not demonstrate that the post-development biodiversity value will exceed the pre-development value of the onsite habitat by a 10% net gain will be refused.

Ongoing management of any new or improved onsite and offsite habitats, together with monitoring and reporting, will need to be planned and funded for 30 years after completion of a development.

11.3. Responding to Landscape Character

- 11.3.1. Central Lincolnshire is a predominantly rural landscape interspersed by the City of Lincoln, market towns and smaller settlements and characterised by its contrasting chalk and limestone uplands, low lying vales and fenland landscapes. The Lincolnshire Wolds Area of Outstanding Natural Beauty (AONB) is a nationally designated area with the highest status of landscape protection, and the Lincoln Hillside is recognised as one of the most historic townscapes in the East Midlands.
- 11.3.2. In addition, landscape character assessments developed for previous Local Plans have identified locally designated Areas of Great Landscape Value (AGLV) which are considered to be of high landscape value to the local areas with strong distinctive characteristics which make them particularly sensitive to development. The primary objective is the conservation and enhancement of their landscape quality and individual character.
- 11.3.3. Key views within the landscape, as well as in to and out of settlements, are valued by the local community, contribute to the distinctive local identity of a place and assist in way finding.

11.7. Trees, Woodland and Hedgerows

- 11.7.1. The Central Lincolnshire Authorities have a statutory duty (s197 of the Town and Country Planning Act 1990) to consider the protection and planting of trees when granting planning permission for proposed development. The potential effect of development on trees is a material consideration that must be taken into account in dealing with planning applications.
- 11.7.2. Trees, and hedgerows, contribute enormously to the character of many parts of the Central Lincolnshire area – they are very important visual elements in the landscape, since they are attractive in themselves, soften and give a context to development, provide focal points and screen unsightly areas from view. However, the amenity value of trees is not confined only to their contribution to visual character, trees, woodland and hedgerows are important components of Central Lincolnshire's green infrastructure network. They can also help to reduce noise and prove beneficial in terms of atmospheric pollution, modifying microclimates and flood mitigation through storm water attenuation. Furthermore, they provide habitats for biodiversity, help to stabilise soil against erosion, and play a role in reducing climate change by locking up carbon dioxide. As a result, they are highly valued, and the relative scarcity of tree cover particularly in the southern half of the Central Lincolnshire area (North Kesteven District) gives them an added importance.
- 11.7.3. Trees and woodlands take many years to mature, ancient woodlands and aged or veteran trees in particular are irreplaceable. Aged and veteran trees are those which, because of their great age, size or condition are of exceptional wildlife, landscape or cultural value.
- 11.7.4. Mature trees, woodlands and hedgerows are sensitive to the impacts of development, either directly through their removal or indirectly through the impacts of construction or the future use of the site. Due to the length of time and the cost taken to replace mature features, and the contribution they can make to the quality of development, they should be retained and protected wherever possible.
- 11.7.5. The Central Lincolnshire Authorities will look to prevent the loss or damage of good quality trees, woodlands or hedgerows, especially those which are protected such as ancient woodlands, or have a high public amenity value. Policy S66 ensures that trees are not considered in isolation and that they are integral to the overall design of a scheme and contribute to the wider objectives of securing biodiversity and green infrastructure on new developments.
- 11.7.6. Where trees are present on a development site, a British Standard 5837 Tree Survey 'Trees in relation to Construction survey', a Tree Constraints Plan, an Arboricultural Impact Assessment and any other related survey information, should be submitted along with an application for planning permission. This will ensure it is clear that a proper consideration of all trees and woodlands has taken place and been taken into account in the preparation of proposals for a site. To ensure that tree cover and habitat is retained, it is important that both the short term and long term impacts that a development may have on trees is evaluated at the earliest opportunity. In addition, an Arboricultural Method Statement and associated Tree/Hedgerow Protection Plan will also be required where there is a likely adverse impact on the health and wellbeing of the trees, either through the pressure to prune or fell or through excavation works which could harm the root systems. The Statement should set out the measures that will need to be taken to protect the health of the trees during the construction period and afterwards.

11.7.7. Consideration also needs to be given to the growth potential and management requirements of trees and hedgerows. Where the loss of trees and hedges is unavoidable, they should be replaced with suitable new planting either within the site or in the locality if this is more appropriate. In the case of hedges, the renovation of existing hedges in the wider area can be an appropriate form of mitigation. Development can make a positive contribution to the tree resource in the area through on or off site planting.

11.7.8. The preference will be to incorporate existing natural features into the development. However, there may be instances where the loss of important natural features is unavoidable, for example to enable a scheme to fulfil important objectives such as economic development or the provision of housing. Where the loss of such features is demonstrably unavoidable, adequate replacement provision, preferably by native British species, of the same or greater value will be sought. The proposal will also be required to demonstrate:

- That the development could not equally well go ahead elsewhere, where no harm to trees would be involved;
- That the proposed development scheme could not be modified to retain the tree; and
- That the amenity value of the tree is outweighed by the benefits to the community of the development proposal.

11.7.9. Proposals that either directly or indirectly result in the loss or deterioration of ancient woodland will not be supported unless there are exceptional reasons and the need for and benefits of the development at that location clearly outweigh the loss. When considering the planning balance in these cases compensation proposals must not be considered as part of the benefits resulting from a development.

11.7.10. In terms of mitigation where loss of trees and woodland is proposed (and where it is deemed acceptable for such tree(s) to be lost, taking account of the status of the tree), then suitable proposals for mitigation, via compensation, should be provided. The tree compensation standard set out in this policy provides a suitable mechanism to determine the appropriate level of mitigation. The Council's first preference is for on-site replacement at suitable locations within the curtilage of the development. In exceptional circumstances, where planting cannot be achieved on-site without compromising the achievement of good design, new tree planting proposals may be considered off site (including on public land) to mitigate. Where trees are to be provided off-site, planning obligations will be sought to cover replacement trees, their planting and their future maintenance.

11.7.11. Where new tree planting is proposed (irrespective of whether this is to compensate for losses on site), then the quantity, location and species selection of new trees will be expected to take practicable opportunities to meet the following six Tree Planting Principles:

1. Create habitat and, if possible, connect the development site to the Strategic Green Infrastructure Network; and
2. Assist in reducing or mitigating run-off and flood risk on the development site; and
3. Assist in providing shade and shelter to address urban cooling, and in turn assist in mitigating against the effects of climate change; and
4. Create a strong landscaping framework to either (a) enclose or mitigate the visual impact of a development or (b) create new and enhanced landscape;
5. Be of an appropriate species for the site; and

6. Avoid tree planting where it has potential to cause harm, such as to important habitats, peat soils, property or infrastructure.

Policy S66: Trees, Woodland and Hedgerows

Development proposals should be prepared based on the overriding principle that:

- the existing tree and woodland cover is maintained, improved and expanded; and
- opportunities for expanding woodland are actively considered, and implemented where practical and appropriate to do so.

Existing Trees and Woodland

Planning permission will only be granted if the proposal provides evidence that it has been subject to adequate consideration of the impact of the development on any existing trees and woodland found on-site (and off-site, if there are any trees near the site, with 'near' defined as the distance comprising 12 times the stem diameter of the off-site tree). If any trees exist on or near the development site, 'adequate consideration' is likely to mean the completion of a British Standard 5837 Tree Survey and, if applicable, an Arboricultural Method Statement.

Where the proposal will result in the loss or deterioration of:

- a) ancient woodland; and/or
- b) the loss of aged or veteran trees found outside ancient woodland,

permission will be refused, unless and on an exceptional basis the need for, and benefits of, the development in that location clearly outweigh the loss.

Where the proposal will result in the loss or deterioration of a tree protected by a Tree Preservation Order or a tree within a Conservation Area, then permission will be refused unless:

- c) there is no net loss of amenity value which arises as a result of the development; or
- d) the need for, and benefits of, the development in that location clearly outweigh the loss.

Where the proposal will result in the loss of any other tree or woodland not covered by the above, then the Council will expect the proposal to retain those trees that make a significant contribution to the landscape or biodiversity value of the area, provided this can be done without compromising the achievement of good design for the site.

Mitigating for loss of Trees and Woodland

Where it is appropriate for higher value tree(s) (category A or B trees (BS5837)) and/or woodland to be lost as part of a development proposal, then appropriate mitigation, via compensatory tree planting, will be required. Such tree planting should be on-site wherever possible and should:

- e) take all opportunities to meet the six Tree Planting Principles (see supporting text); and
- f) unless demonstrably impractical or inappropriate, provide the following specific quantity of compensatory trees:

Trunk diameter(mm) at 1.5m above ground of tree lost to development	Number of replacement trees required, per tree lost*
75 - 200	1
210 - 400	4
410 - 600	6
610 - 800	9

810 - 1000	10
1000+	11

* replacement based on selected standards 10/12 cm girth at 1m

New Trees and Woodland

Where appropriate and practical, opportunities for new tree planting should be explored as part of all development proposals (in addition to, if applicable, any necessary compensatory tree provision). Where new trees are proposed, they should be done so on the basis of the five Tree Planting Principles. Proposals which fail to provide practical opportunities for new tree planting will be refused.

Planting schemes should include provision to replace any plant failures within five years after the date of planting. Planting of trees must be considered in the context of wider plans for nature recovery which seeks to increase biodiversity and green infrastructure generally, not simply planting of trees, and protecting / enhancing soils, particularly peat soils. Tree planting should only be carried out in appropriate locations that will not impact on existing ecology or opportunities to create alternative habitats that could deliver better enhancements for people and wildlife, including carbon storage. Where woodland habitat creation is appropriate, consideration should be given to the economic and ecological benefits that can be achieved through natural regeneration. Any tree planting should use native and local provenance tree species suitable for the location.

Management and Maintenance

In instances where new trees and/or woodlands are proposed, it may be necessary for the council to require appropriate developer contributions to be provided, to ensure provision is made for appropriate management and maintenance of the new trees and/or woodland.

Hedgerows

Proposals for new development will be expected to retain existing hedgerows where appropriate and integrate them fully into the design having regard to their management requirements.

Proposals for new development will not be supported that would result in the loss of hedges of high landscape, heritage, amenity or biodiversity value unless the need for, and benefits of, the development clearly outweigh the loss and this loss can be clearly demonstrated to be unavoidable.

Development requiring the loss of a hedgerow protected under The Hedgerow Regulations will only be supported where it would allow for a substantially improved overall approach to the design and landscaping of the development that would outweigh the loss of the hedgerow. Where any hedges are lost, suitable replacement planting or restoration of existing hedges, will be required within the site or the locality, including appropriate provision for maintenance and management.

11.8. Best and Most Versatile Agricultural Land

11.8.1. Agriculture is a significant land use across Central Lincolnshire, and the wider Lincolnshire area and generates a significant proportion of the national food production. Therefore the protection of the best and most versatile land is key to ensure that food production is not negatively impacted by development. The Agricultural Land Classification (ALC) mapping shows that with the exception of a few relatively small areas of Grade 1 land, the majority of agricultural land within Central Lincolnshire is either Grade 2 or Grade 3, with approximately 50% of the area classified as Grade 3.

11.8.2. Development of the best and most versatile agricultural land will only be supported where it can be demonstrated that the need for the development, its benefits and/or sustainability considerations outweigh the need to protect such land taking into account the economic and other benefits of the best and most versatile agricultural land.

11.8.3. Proposals for development on unallocated sites which would individually or cumulatively result in a significant loss (1 hectare or more) of best and most versatile agricultural land will also need to demonstrate that there are no other suitable alternative sites which could accommodate either all or part of the development on either previously developed land, or land within the built up area of existing adjacent or nearby settlements, or on poorer quality agricultural land. All proposals over one hectare which would have the potential to involve the loss of best and most versatile agricultural land will be expected to be accompanied by an agricultural land classification statement.

Policy S67: Best and Most Versatile Agricultural Land

Proposals should protect the best and most versatile agricultural land so as to protect opportunities for food production and the continuance of the agricultural economy.

With the exception of allocated sites, significant development resulting in the loss of the best and most versatile agricultural land will only be supported if:

- a) The need for the proposed development has been clearly established and there is insufficient lower grade land available at that settlement (unless development of such lower grade land would be inconsistent with other sustainability considerations); and
- b) The benefits and/or sustainability considerations outweigh the need to protect such land, when taking into account the economic and other benefits of the best and most versatile agricultural land; and
- c) The impacts of the proposal upon ongoing agricultural operations have been minimised through the use of appropriate design solutions; and
- d) Where feasible, once any development which is supported has ceased its useful life the land will be restored to its former use (this condition will be secured by planning condition where appropriate).

Where proposals are for sites of 1 hectare or larger, which would result in the loss of best and most versatile agricultural land, an agricultural land classification report should be submitted, setting out the justification for such a loss and how criterion b has been met.

15. Ministry of Defence Establishments

15.1.1. The Ministry of Defence (MOD) is one of the largest land owners in the UK, with an estate consisting of a wide range of facilities such as barracks, depots and airfields. Large areas of Central Lincolnshire have been used for MOD purposes throughout the last century and the military presence has brought, and continues to bring, many benefits, particularly to the economy. Many of these sites are also essential for maintaining the defence and security of the country and so are of national importance.

15.1.2. The areas currently in MOD use are:

- Beckingham Training Area;
- RAF Cranwell;
- RAF Digby;
- RAF Scampton; and
- RAF Waddington.

15.1.3. It is important that the role and the ongoing use of these establishments is protected and able to adapt in accordance with MOD operational plans.

15.1.4. The MOD is committed to making the most efficient use of its existing estate by maximising the utilisation of sites, identifying sites which can be released and consolidating on fewer, larger sites where resources can be better deployed. One site identified to be released within the plan period is RAF Scampton with its functions being relocated elsewhere, including RAF Waddington.

15.1.5. The re-use of suitably located MOD sites which are surplus to MOD operational purposes presents a significant opportunity for new housing, economic development and/or regeneration and also to deliver biodiversity net gain and enhanced green infrastructure when such opportunities arise.

15.1.6. The following policy will assist in determining such proposals. Policy S84 will only apply to the MOD establishments listed above and development at any former military establishments or installations not listed will be subject to other policies in the plan (including but not limited to Policy S5: Development in the Countryside) and in line with the policy for the relevant tier of the Settlement Hierarchy in Policy S1.

Policy S84: Ministry of Defence Establishments

Part One: Development related to operational purposes

Defence related non-residential development within or adjoining an operational MOD site that is required for operational purposes will be supported in principle.

Development for housing or communal accommodation for MOD personnel connected to an operational MOD site will be supported provided that it satisfies relevant policy requirements in the Local Plan including but not limited to *Policy S53 Design and Amenity*, *Policy S21 Flood Risk and Water Resources*, and *Policy S47 Accessibility and Transport*.

Part Two: Development affecting MOD establishments

Development will not be supported where it would adversely affect military operations or capability unless those impacts can be appropriately mitigated in agreement with the MOD.

Part Three: Development of MOD land and assets surplus to Defence requirements

The redevelopment of RAF Scampton is addressed in Policy S75.

The redevelopment or change of use of any other operational MOD land and facilities which are surplus to MOD requirements, whether for the whole or part of the MOD landholding in that area, will be supported provided that:

- a. where feasible the majority of the proposal is on brownfield land;
- b. any increase in traffic likely to arise as a result of the development can be safely accommodated on the local road infrastructure;
- c. the proposal would not conflict with the existing land uses on neighbouring land; and
- d. in cases where large scale redevelopment of a site is planned, a comprehensive masterplan is prepared which demonstrates how the site will be redeveloped to ensure the holistic planning of the site and avoid piecemeal development.

Where the proposal is to create a civilian community, proposals must also:

- e. include appropriate infrastructure and community facilities for the new community and any existing community remaining; and
- f. demonstrate that the new community is sustainably located with reasonable access to essential services such as jobs, education, health, leisure, retail and culture either within the development or at other nearby settlement(s) by sustainable modes of travel; and
- g. through satisfying the above criteria a-f clearly demonstrate how the proposal supports the spatial strategy of the Local Plan.

Further to Policy S56, an Unexploded Ordnance Certificate and Land Quality Assessment (LQA) may be required (where relevant) as part of a proposal, or required through condition to a grant of permission, in order to assess and identify the necessary remedial action for defence specific contaminants.



Application by Fosse Green Energy Ltd for an order granting development consent for the Fosse Green Energy solar farm

Local Impact Report:

APPENDIX G2

Thorpe on the Hill Neighbourhood Plan policies

North Kesteven District Council
([REDACTED])

NKDC reference: 23/0325/NSIP

Planning Inspectorate reference: EN010154

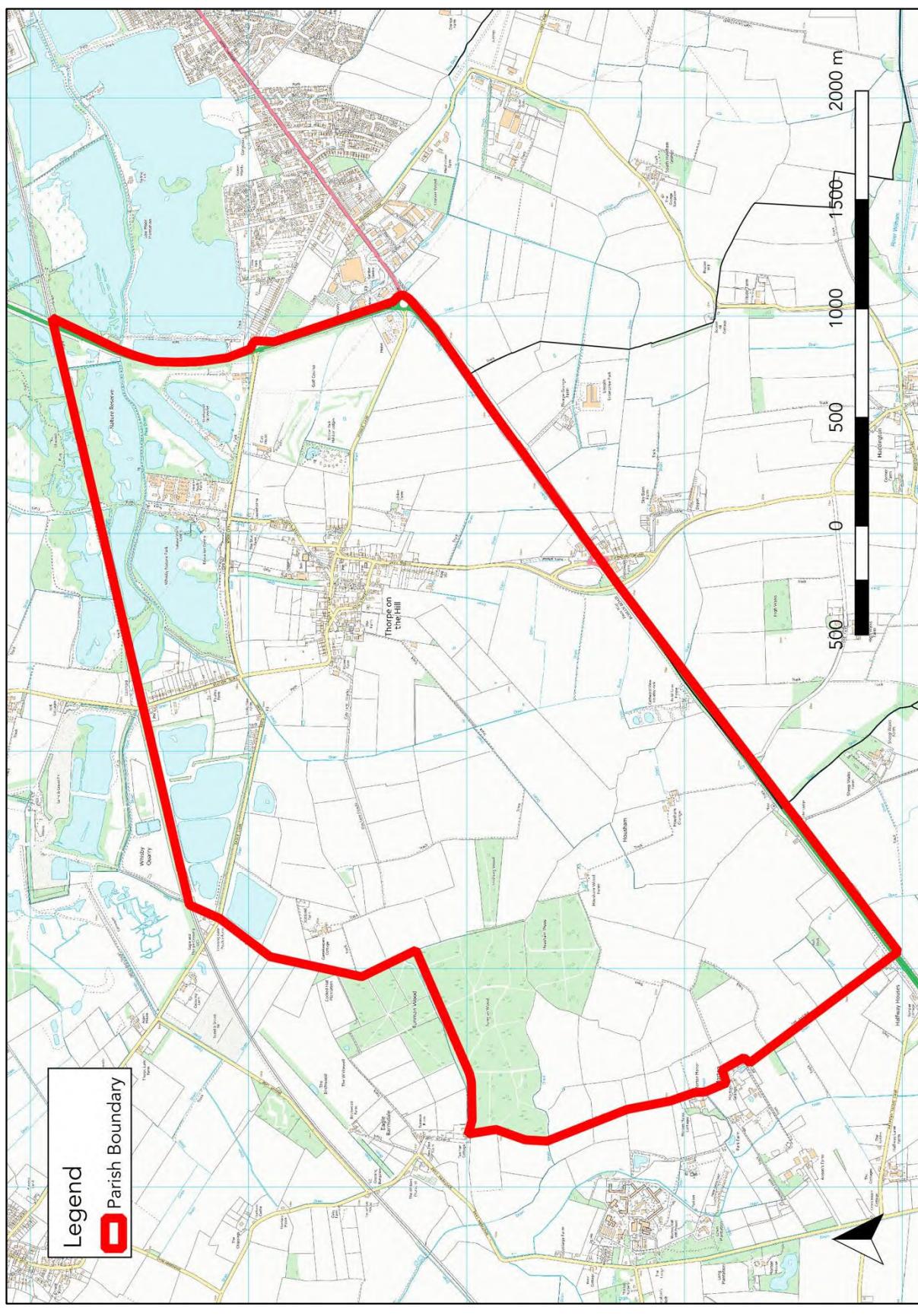
January 2026

Thorpe on the Hill



Neighbourhood Plan
2016 - 2036

Map 1: Thorpe on the Hill Parish Boundary and Neighbourhood Area boundary



3. Our Vision and Objectives

Key Issues

Broadly, the main issues that have emerged as being of concern to many people within the local community are:

Housing: How to ensure that the scale, location and type of new housing enables reasonable additional choice without detracting from Thorpe's character as a small, rural village and a rural Parish.

Built Environment: How to protect the character of the Village and Parish, and their heritage assets, whilst allowing for an appropriate level of new development and change.

Transport and Traffic: How to minimise adverse effects of traffic using roads in to, out of and through the village, whilst maintaining and improving accessibility to facilities and services for local people.

Community Facilities: How to preserve and enhance Thorpe's community spirit and protect the local facilities that people value.

Natural environment: How best to protect the landscape, support agricultural change, improve access to the countryside and protect and enhance habitats and biodiversity.

Employment: How to support increased provision of local employment opportunities, whilst protecting the amenities that people living in Thorpe value.

Vision

The purpose of a neighbourhood plan is to influence change, steering it in directions that are in the best interests of the community as a whole. This Neighbourhood Plan is based on the following vision for change in Thorpe on the Hill over the next 20 years.

Over the period of this Neighbourhood Plan, Thorpe on the Hill will continue to be a thriving and vibrant community. Treasured natural assets, the distinctive characteristics of the village and the rural landscape that surrounds it will be protected and enhanced where opportunities arise. Modest growth will contribute to the Parish becoming an even better place in which to live, work and to visit.

Objectives

The following objectives are based on the Vision and they provide the context for the Neighbourhood Plan's Policies (in the next section) and Parish Priorities (section 3).

Objective 1

To ensure that any new development harmonises with the landscape character of our Parish and the “townscape” character of our village.

Objective 2

To allow for development of a type and scale sufficient to meet local needs and support our local facilities, without detracting from Thorpe's essential character as a small, rural village and community.

Objective 3

To protect and enhance our open spaces that are valued for their contribution to recreation, visual amenity, ecology and biodiversity, and landscape character and quality.

Objective 4

To cherish and respect our heritage by ensuring that new buildings complement their built and natural surroundings.

Objective 5

To support and protect our community facilities.

Objective 6

To ensure our Parishioners and businesses have convenient and safe access to the facilities and places they need to travel to, whilst seeking to minimise harmful emissions and avoid high levels of traffic through the village.

5.4. From the consultation responses, it appears that there is support for the principle of increasing local employment – including self-employment and working from home, as well as the possibility of allowing development to accommodate some slightly larger businesses where this will not detract from the residential and environmental amenities that people value in the Parish. Policy 2 is intended to enable and allow for that sort of change, without seeking either to predict or to prescribe the forms that change might take.

6. Natural Environment

Biodiversity

Policy 3: Biodiversity

Development should minimise its impact on biodiversity and provide net gains in biodiversity where possible. The following measures to protect and enhance local biodiversity will be supported:

- a) the preservation of ecological networks, especially those between built-up areas;
- b) the protection of ancient trees or trees of arboricultural value;
- c) the preservation, restoration and re-creation of wildlife habitats, and the protection and recovery of priority species; and,
- d) the provision of a net gain in flora and fauna.

6.1. The residents of Thorpe on the Hill care very much about the significant green (agricultural and semi-natural) and blue (fresh water) surroundings that make up a large part of the Parish. The ecological role of these areas and the need to protect and enhance their local biodiversity and wildlife value is recognised by the Greater Lincolnshire Nature Partnership and is reflected in the Central Lincolnshire Local Plan.

6.2. The Parish hosts a significant portion of Whisby Nature Park which is a Local Wildlife Site (LWS) and Local Nature Reserve (LNR) and is particularly important for its wetland environment. Tunman Woodland is also a LWS as well as being an area of Ancient Woodland. These two areas are shown on Map 3 below and are given considerable protection through the Central Lincolnshire Local Plan.

6.3. However, these two areas of the Parish form only part of its rich biodiversity: fresh water lakes, historic grassland, a number of TPOs, deciduous woodland and historic hedgerows all contribute to its overall quality. These assets are not identified in the Lincolnshire Biodiversity Opportunity Mapping Study, but they are identified as Natural and Semi-Natural Greenspaces in the Central Lincolnshire Open Space Audit and Provision Standard Assessment (shown on Map 3 as “green space”) and their biodiversity importance is highlighted in the Lincolnshire Biodiversity Plan (2011).

Green Spaces and Green Infrastructure

Policy 4: Green Spaces and Green Infrastructure

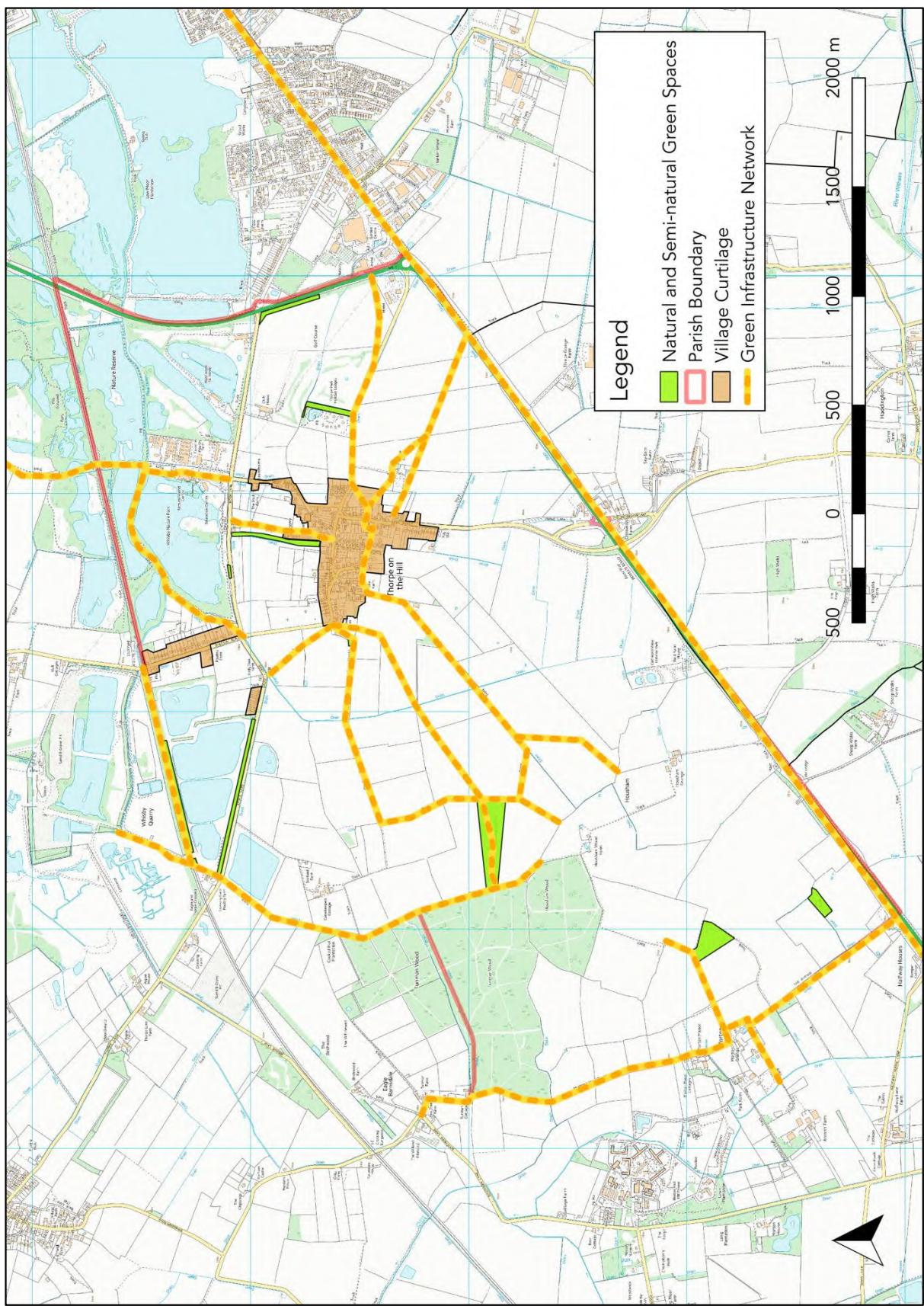
1. Development should protect public rights of way and the enhancement of public rights of way will be supported.
2. Where necessary to mitigate the impact of a development proposal, proportionate contributions will be sought to improve existing or deliver new green spaces or other green infrastructure. The delivery of new, or improvements to, green spaces or green infrastructure will be supported.

6.4. Whisby Nature Park and Tunman Woods, along with the network of bridleways, footpaths and cycle routes connecting different green spaces across the Parish are valued for the range of benefits they bring, including: physical and mental health, connectivity, leisure, sense of place, mitigation of climate change effects, visitor attractions and landscape character.

6.5. Within the village curtilage, the triangle of land on which there are mature trees between Main Street and Lincoln Lane is designated as an Important Open Space in the Local Plan and is afforded protection from development under policy LP23. The other areas of Green Spaces and Green Infrastructure shown on Map 4 are identified as Natural and Semi-Natural Green Spaces in the Central Lincolnshire Open Space Audit and Provision Standard Assessment (both publicly and non-publicly accessible). Within this Neighbourhood Plan, they are collectively termed Green Spaces.

6.6. Almost all the Parish falls within the Strategic Green Corridor, as identified in the Central Lincolnshire Green Infrastructure Study, and it is crossed by Strategic Green Access Links. The network of footpaths, bridleways, cycle paths and quiet lanes is of pivotal importance for both residents and visitors, as it is widely used to access open spaces, and the countryside from the village and to reach other settlements. The network of Green Infrastructure shown on Map 4 is also identified on the Public Rights of Way Improvements Plan and the Green Infrastructure Study for Central Lincolnshire. It is protected through Policy LP20 of the Local Plan.

Map 4: Green Spaces and Green Infrastructure



Landscape and Views

Policy 5: Landscape and Views

Development outside the village curtilage should not reduce the separate identity of Thorpe on the Hill by reducing the existing gap between the village curtilage and the A46; and must respect the unique layout and pattern of the enclosure landscape of Thorpe on the Hill, as well as field boundaries such as hedges and trees. Development must also take account of the important views identified on Map 5. The preservation and enhancement of these views will be supported.

6.7. The entire Parish of Thorpe on the Hill lies squarely within the area defined in the Lincolnshire Historic Landscape Characterisation (2011) defined as Lincolnshire: Character Zone TVL2. This zone is a small sub-set of the much larger Natural England Character Area defined as No.48: Trent and Belvoir Vales.

6.8. Thorpe on the Hill is a typical Parish in this Character Zone. The built environment is almost exactly as described in the adopted description of the Character Zone. It contains a large block of ancient woodland in the eastern part of the Parish (much of it formerly in the Parish of Aubourn-cum-Haddington). There are also strips of woodland along the minor roads in the northern part of the Parish.

6.9. Characteristically, Thorpe's rural landscape is mostly made up of arable fields, which are arranged in a generally rectilinear pattern, with straight field boundaries, often at right-angles to each other. Field boundaries here are also very often formed by hedges rather than drainage ditches and the hedges are usually multi-species, though with hawthorn predominating and occasional standards.

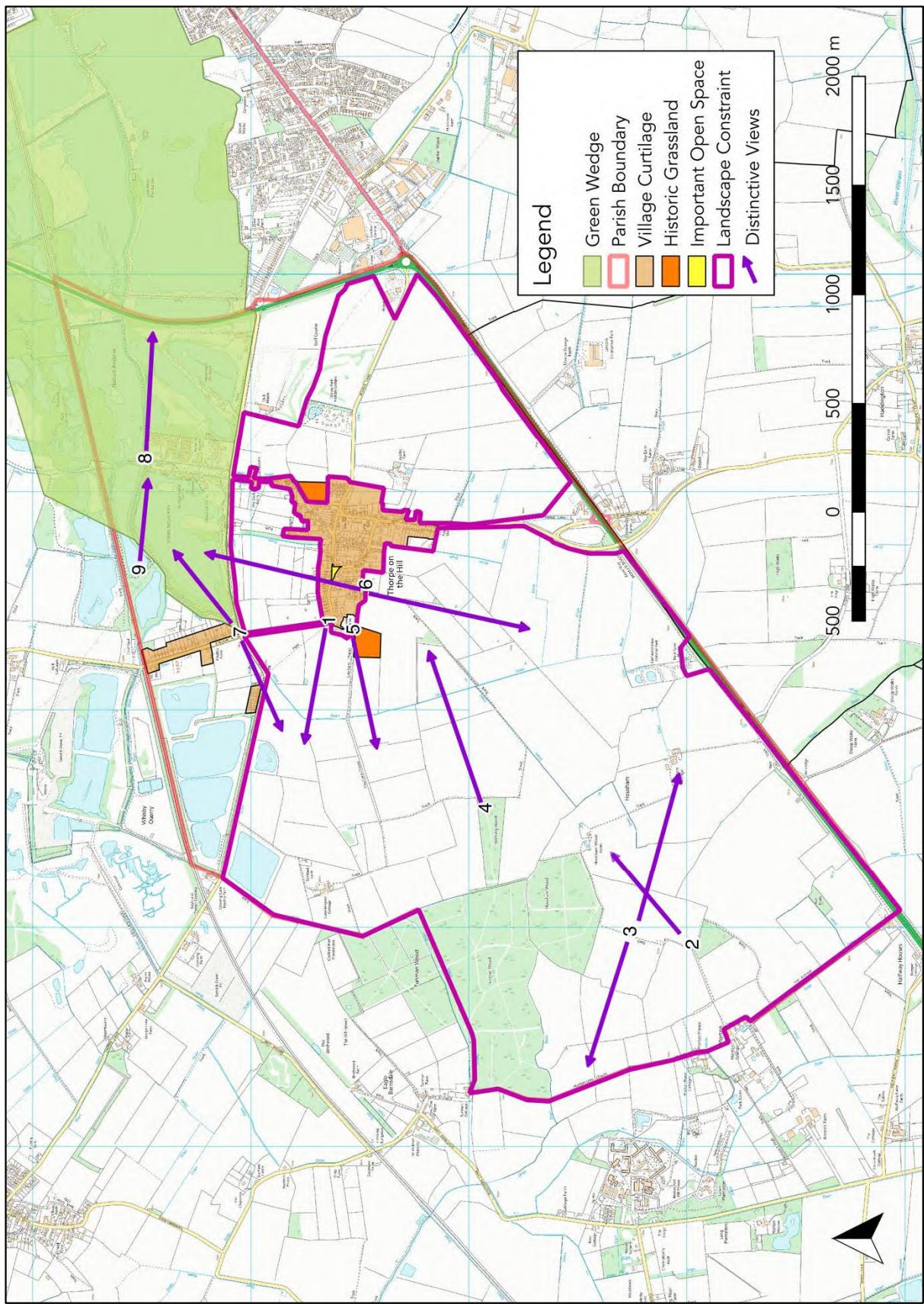
6.10. The modern Parish lies north of the Fosse Way and was enclosed in 1774. Several versions of the map recording the subdivision of the landscape and the newly-created field boundaries have survived. Using these maps it has been calculated that there has been something like a thirty percent loss of hedged field boundaries (by length) since the late eighteenth century. This relatively small loss-rate means that the structure of the post-enclosure landscape and much of its detail, both physically, and in terms of natural environment, has survived into the present day. The hawthorns and the standards are both likely to have been first planted in 1774.

6.11. Map 5 shows those areas where this enclosure landscape, created in 1774, survives well (Historic Enclosure Landscape). As is also characteristic, these areas of historic landscape survival in Thorpe lie predominantly within the former medieval open fields (East Field, Middle Field and West Field). The area of former village common, along the northern edge of the Parish, which was also enclosed in 1774, has now lost almost all of its enclosure boundaries, and an entirely new landscape has been created by gravel extraction.

6.12. Within the predominantly arable enclosure landscape, Thorpe also retains a number of small enclosures of permanent pasture adjacent to the nucleated settlement, where the remains of the medieval open-field agriculture can still be seen in the form of rare ridge-and-furrow earthworks. These particular areas are shown as Historic Grassland on Map 5.

6.13. The Parish Council has identified a number of distinctive views that need to be considered in development proposals within the Parish. These are shown by direction on Map 5 and also described in further detail at Appendix 2.

Map 5: Landscape character and features



Appendix 2: Assessment of Distinctive Landscape Views

The Parish Council considers the views identified in the publication *Views from the Hill* (100th Edition) to be the most distinctive within the Parish and worthy of protection from inappropriate development that would significantly alter these. A description of the views is provided below and is supported with photographs. The location and direction of the views are shown on Map 5 of this Neighbourhood Plan.

View 1

At sunset, on a clear evening, between April and September, stand on the corner where Lincoln Lane meets Station Road. The sun setting over the western quadrant of the Parish must be one of the best views around.



View 2

At any time, particularly at dusk when the cathedral is lit up, follow the footpath through Stocking Wood. At the junction, turn south along the side of Tunman and Housham Woods and continue along the path towards Morton to grid reference SK889640. Turn and look to the north east and you will see Lincoln Cathedral sitting on top of Thorpe on the Hill.



View 3 Retrace your steps from View 2 towards Housham Wood. This path is the highest point in the Parish. About half way along, stand and turn 360 degrees. These are the most extensive views in the village. The horizons to the left and right are several miles away.



View 4 When the trees are in leaf, go through Stocking Wood and then turn to return to the village. Stop just before leaving the wood. Look towards the village, which will be



framed by trees.

View 5

At any time of year and any time of day in daylight, stand at the first bend at the top of Clay Lane. Look south west over the ancient woodland of Tunman Wood.



View 6

Follow the footpath from Main Street to the wide track below what was the Scott Farmhouse. Look slightly upwards in a wide sweep from north west to south east and enjoy a classic, Lincolnshire big sky view. This is best on a clear day with the sun in the east.



View 7

When the trees are in leaf, stand at the crossroads on Station Road. Look in all directions and be amazed at the density of trees that we have in the Parish.





**Application by Fosse Green Energy Ltd for
an order granting development consent for the
Fosse Green Energy solar farm**

**Local Impact Report:
APPENDIX G3
Bassingham
Neighbourhood Plan
policies**

North Kesteven District Council



NKDC reference: 23/0325/NSIP

Planning Inspectorate reference: EN010154

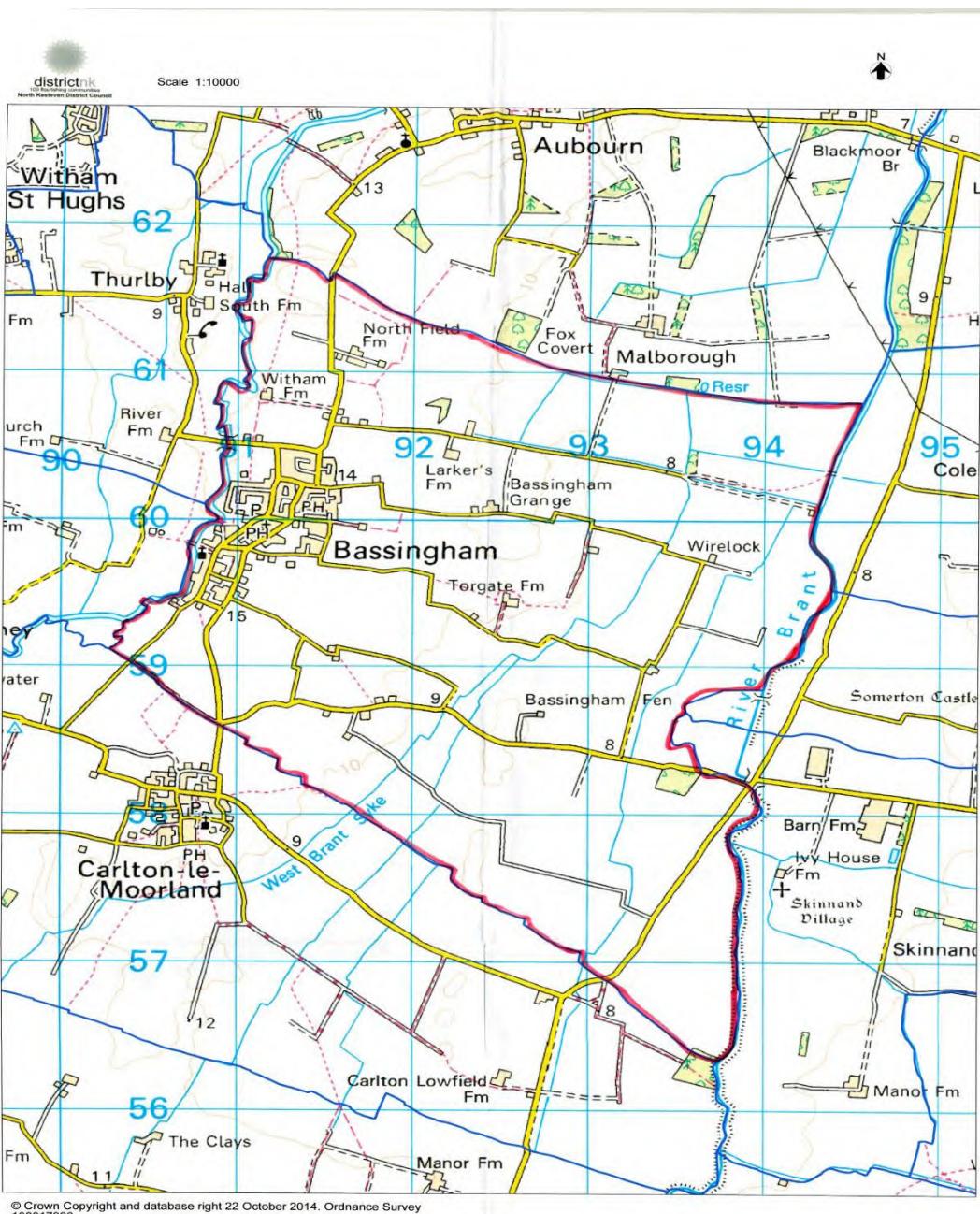
January 2026



BASSINGHAM NEIGHBOURHOOD PLAN

2016 – 2036

Bassingham Neighbourhood Plan Area



for upgraded facilities for Scouts/Guides and the youth of Bassingham and if possible the provision of their own venue.

- 2.16 Two public houses, The Bugle Horn, a hostelry in the village since 1692, and The Five Bells provide a warm welcome to both residents and visitors
- 2.17 Consultation has shown that there are genuine deep felt concerns regarding the level of primary school places and the undue strain that may be placed on the village Health Centre in the future if excessive housing development is allowed over and above that required by the Local Plan.

Environment, Design and Sustainability

- 2.18 Bassingham generally has a high quality environment; an historic village core forming the heart of a Conservation Area; attractive landscape surrounding the village; some good open spaces and a pretty riverside.
- 2.19 **Flooding:** The River Witham flows to the west of the village and has a contained flood plain to the west of the river. However, some surface water flooding has occurred in the centre of the village on a number of occasions.
- 2.20 **Open Space:** In the centre of Bassingham there is a memorial playing field left in perpetuity to the village for the use of all residents. In addition, there is a high quality network of green spaces, often associated with walking routes and footpaths.
- 2.21 **Landscape:** Bassingham falls within 'The Brant and Witham Vales' landscape character sub-area ("North Kesteven Landscape Character Assessment", David Tyldesley and Associates, 2007) defined primarily by its low, flat landscape of intensively farmed character in the north west of the NKDC district. The sub-area is largely defined by its distinct and extensive low lying and generally flat topography, enclosed by the Lincoln Cliff and the low ridge and sand and gravel ridged undulations aligned generally with the A46. The influence of settlement is important within the central band of the sub-area, where five villages or hamlets (including Bassingham) lying between the two rivers. These are villages of notable character but generally are unremarkable in a wider landscape sense because of the very low variation in elevation and relief. Conversely, the low flat elevation provides wide and attractive vistas and views looking out from settlements such as Bassingham. The surrounding landscape, as well as being dominated by farming and agriculture, offers leisure and visitor opportunities for walking and cycling and offers future potential for limited rural diversification.
- 2.22 **Character and Heritage:** Bassingham is a medium size, compact village set in open farmland. The historic core dates from Saxon times, and is today

characterised by attractive red brick houses and cottages, and has retained a natural, complex and organic street layout.

2.23 **Design Quality:** There is a local perception that Bassingham has lost some of its character due to recent housing development. While most of the major new peripheral housing developments are somewhat generic, infilling within the village core has generally been sympathetic, retaining building heights and styles, and maintaining an organic and vernacular feel.

2.24 **Bassingham Conservation Area:** The conservation area covers the historic village and is located between the River Witham to the west and Carlton Road and Lincoln Road to the east. It stretches from Old Brickkiln Lane in the south to just north of Water Lane in the north. Most of the properties included in the conservation area front onto either High Street or Newark Road. The conservation area is predominantly residential in nature and was revised, amended and approved by NKDC on 15th December 2016. Full details can be found within the relevant section of the Evidence Base.

The conservation area contains a number of listed buildings and other buildings of local importance. All of the listed buildings are Grade II except for the Grade II* listed Church and closed churchyard of St Michael and All Angels.

The Key Diagram shows the location of the Conservation area.

2.25 **Sustainability:** Bassingham is peripheral from the main highway network, and while it has some services and infrastructure, does not have the highway and infrastructure capacity that would make it a suitable future location to accommodate significant growth above that assumed in the Local Plan.

The surrounding landscape has already seen some renewable energy development by way of solar farms, and there may be future potential for more of such low impact and un-intrusive energy development. The open flat nature of the surrounding landscape already makes pylons highly visible and somewhat intrusive, and hence the surroundings of the village are not considered a suitable location for significant future wind farm development.

4. The Plan's Central Aim

4.1 The Group decided that the Central Aim of the NDP should be-

Bassingham will continue to develop as a compact and sustainable village with the village centre being at the heart of a thriving and strong community. The village's built heritage will be maintained, and its existing setting and close relationship with the surrounding countryside and the landscape within which it sits will be respected.

4.2 The overwhelming view from local people is Bassingham's strengths are its thriving community, its heritage, and the fact that its character and landscape setting have so far been maintained while still having accommodated an appropriate level of new development. The Bassingham Neighbourhood Plan's overall aim must therefore be to maintain this village character.

4.3 Looking at these principles in more detail, achieving the Aim means.

4.4 **Bassingham must continue to feel 'compact':**

Walkability is important - at present, people living in Bassingham are within walking distance of shops and services. Although the village will grow, it should remain reasonably compact. To date, opportunities for infill development have maintained this compact character, whilst respecting the historic character and vernacular layout of the village, and this should continue over the plan period. The village should not grow beyond its existing compact form, nor accommodate any new development that is only accessible by car and potentially socially isolated from the existing community.

4.5 **Bassingham must continue to have a close relationship with the open countryside around it:**

Just as it doesn't take long to walk to the village centre, most residents live within walking distance of the surrounding open farmland. Compactness is important to a close relationship with open countryside, as is maintaining and enhancing walking and cycling routes in to and out of the village. Similarly, the character of the village within the wider landscape is likely to deteriorate if the village is allowed to extend beyond its existing form and layout.

4.6 Bassingham must continue to act as a village centre at the heart of a thriving and strong community for its residents:

Bassingham needs to provide a range of different facilities as well as housing - that is; employment, shopping, and community facilities, including education. It is important that good car, public transport, walking and cycling access are provided so that residents, visitors, and people from the surrounding villages can get to them easily.

Achieving the Aim

4.7 In order to achieve the Aim, a range of topic specific Core Objectives have been derived, which are grouped under five themes.

- Housing and Growth
- Transport
- Employment and Businesses
- Community Life
- Environment, Design and Sustainability.

4.8 For each heading, there are some comments about the key issues and concerns raised at the public consultation events, followed by the Objectives that were developed from these comments.

Housing and Growth

Comments raised by local people during the consultation can be summarised as:

- The architectural style and characteristics of the village should be maintained through sympathetic and managed growth so the overall character is preserved
- Infill is seen as the reasonable approach to growth to prevent the village being encircled within an “urbanised” ring of development
- Strong support has been given to the construction of retirement/disabled accessible living accommodation with an increase number of bungalows being incorporated into new developments
- There was support for quality starter homes and a range of housing type/sizes to encourage a broad social and demographic mix. Affordable housing was generally supported where there was a demonstrated need.

OBJECTIVE: Provide new housing as required by the Local Plan.

OBJECTIVE: Integrate new housing into the existing built form and character of Bassingham.

Transport

Comments raised by local people during the consultation can be summarised as:

- Developments should not cause adverse parking effects/traffic density and there had to be supporting road maintenance
- The need to reduce vehicle speeds.
- Upgrading of pathways (pedestrian and cycle) to be followed through to encourage more walking and cycling
- Improve access to the countryside and the river for walkers.
- The need for more frequent and extended bus routes.

OBJECTIVE: Connect new housing into Bassingham with good pedestrian, cycle and bus connections.

OBJECTIVE: Plan public transport to better meet users' needs.

OBJECTIVE: Ensure new development does not result in a decrease in road safety.

Employment and Businesses

Comments raised by local people during the consultation can be summarised as:

- The need to attract more small businesses.
- Future business growth should be based around the current industrial area
- Improvements to public services are essential if they are to support employment prospects in the surrounding towns and cities.

OBJECTIVE: Provide opportunities for new start and micro businesses to locate in the village.

Community Life

Comments raised by local people during the consultation can be summarised as:

- Local services including shops, pubs, the school, the health centre with dispensary, and day nurseries are highly valued.
- A need for improved facilities for young people.

OBJECTIVE: Protect existing key facilities.**Environment, Design and Sustainability**

Comments raised by local people during the consultation can be summarised as:

- Traditional brick designs which enhance the visual settings and show sensitivity in the scale, choice of materials and architectural design
- Energy efficient use of resources for any new site
- Biodiversity in relation to local wildlife (habitat and protected species) together with the retention of “Lincolnshire” hedges
- Improvement to drainage system and negation of flood risk
- Development to 2036 should be made up of small developments which have a gradual impact on the sustainability of the village
- Protection of open space, maintaining the playing field and retention of Grade 1 – 3 agricultural and wherever possible

OBJECTIVE: New development should reinforce the character and quality of Bassingham and result in energy efficient and sustainable development.

OBJECTIVE: Maintain and enhance the existing open space and green infrastructure network within the village, and ensure new development includes a level of open space and green infrastructure to match the existing standards of provision in the village.

OBJECTIVE: Facilitate sustainable energy, without compromising the inherent landscape and countryside quality surrounding the village.

8. Transport

Objective	Policy Index
Connect new housing into Bassingham with good pedestrian, cycle and bus connections.	T1: Transport considerations in new development.
Plan public transport to better meet users' needs.	T1: Transport considerations in new development.
Ensure new development does not result in a decrease in road safety.	T1: Transport considerations in new development.

This section of the Plan explains how the Neighbourhood Plan will ensure that proposals are robustly assessed to ensure that opportunities for more sustainable choices in transport and movement are realised, and that no unacceptable reduction in road safety results from new development.

OBJECTIVE - CONNECT NEW HOUSING INTO BASSINGHAM WITH GOOD PEDESTRIAN, CYCLE AND BUS CONNECTIONS.

8.1 Cars are essential for many people in rural villages such as Bassingham but to address the challenges presented by the additional numbers of vehicle journeys generated by new and recent development, movement must be managed by optimising access to public transport, and encouraging walking and cycling, so as to reduce car journeys. Bassingham has remained "walkable" in terms of access to services and facilities, and the overall aim is to ensure that any significant residential or other major development is located within walking distance from the village core.

OBJECTIVE - PLAN PUBLIC TRANSPORT TO BETTER MEET USERS' NEEDS.

8.2 The provision of public transport services cannot be directly delivered by the Neighbourhood Plan, so policy T1 promotes the Parish Council's long-term aspirations for extending and improving both the extent and frequency of public transport provision in and around the village to improve public transport users' needs.

8.3 The Local Transport Plan is prepared by the Highway Authority in consultation with all those who have influence on the transport system. This includes neighbouring authorities, district and parish councils as well as transport operators. The Parish Council will continue to engage in the Local Transport Plan process, continuing to work with Lincolnshire County Council (as Highway Authority) to identify and secure opportunities for extending and improving public transport provision that arise across the Neighbourhood Plan period.

OBJECTIVE - ENSURE NEW DEVELOPMENT DOES NOT RESULT IN A DECREASE IN ROAD SAFETY.

8.4 Community consultation raised issues relating to the cumulative impact of recent developments on existing highways and levels of on street parking. It is considered important that new development coming forward over the Neighbourhood Plan period robustly addresses such issues and certainly does not make matters worse.

POLICY T1: Transport considerations in new development.

Where it is appropriate and proportionate, planning applications should be accompanied by information which demonstrates how the following considerations have been addressed:

- Provision of safe walking and cycling routes in the immediate area of the site with consideration given to the need to maintain and enhance walkable access to services and facilities in the village, and to the surrounding open countryside;
- Opportunities to extend existing routes for walkers and cyclists, including routes linking into the surrounding countryside, as well as into the village, and to accommodate people of all ages and abilities, including those with pushchairs and wheelchairs;
- How use of materials, provision of off road parking and shared services and traffic calming measures can encourage low vehicle speeds throughout the development;
- How the proposals link with public transport;
- Impacts of the traffic arising from the development; and
- Identified impacts that will result in an unacceptable reduction in highway safety

11. Environment, Design and Sustainability.

Objective	Policy Index
New development should reinforce the character and quality of Bassingham and result in energy efficient and sustainable development.	ES1: Achieving Design Quality ES2: Achieving Green Design ES3: Listed Buildings, Conservation Area and Built Heritage
Maintain and enhance the existing open space and green infrastructure network within the village, and ensure new development includes a level of open space and green infrastructure to match the existing standards of provision in the village.	ES4: Landscape and Countryside Surrounding the Village
Facilitate sustainable energy, without compromising the inherent landscape and countryside quality surrounding the village.	ES5: Renewable Energy Schemes

OBJECTIVE - NEW DEVELOPMENT SHOULD REINFORCE THE CHARACTER AND QUALITY OF BASSINGHAM AND RESULT IN ENERGY EFFICIENT AND SUSTAINABLE DEVELOPMENT.

This section of the Plan includes policies to ensure design of new development continues to be of a high standard, secures energy efficient "Green Design" and sets out the special considerations and approaches to development affecting the villages Built Heritage assets.

11.1 The Parish Council wants to work in co-operation with developers to achieve the highest possible standards of design and construction. This means creating developments that are more cost effective to run, more secure, minimise their environmental impact and provide healthy living conditions, at the same time as respecting the area's rich heritage and distinctiveness.

Further information on what contributes to the local distinctiveness, character and aesthetic qualities of Bassingham is provided in the Bassingham Conservation Appraisal (2016) and Natural England's National Character Area profile for Area 48 Trent and Belvoir Vales (2013).

- 11.2 Where a Design and Access Statement is required this is an appropriate vehicle to demonstrate consideration of how the provisions of the Neighbourhood Plan Design Policies have been taken into account.
- 11.3 The Neighbourhood Plan will seek to ensure that all new development built in the Bassingham Neighbourhood Plan area reflects building styles and materials used over many years.

OBJECTIVE - MAINTAIN AND ENHANCE THE EXISTING OPEN SPACE AND GREEN INFRASTRUCTURE NETWORK WITHIN THE VILLAGE, AND ENSURE NEW DEVELOPMENT INCLUDES A LEVEL OF OPEN SPACE AND GREEN INFRASTRUCTURE TO MATCH THE EXISTING STANDARDS OF PROVISION IN THE VILLAGE.

11.11 Assessment of landscape and visual impacts requires a systematic and robust approach, as outlined in best-practice guidance from the Landscape Institute and Institute of Environmental Management and Assessment (Third Edition May 2013). This is normally undertaken by landscape professionals.

11.12 Information on green infrastructure in the Neighbourhood Area is included in the Central Lincolnshire Green Infrastructure Study (2011).

ES4: Landscape and Countryside Surrounding the Village

Planning applications for new development outside the Settlement Boundary will be supported which are consistent with the Local Plan Policy LP2 and Policy LP55 and which demonstrates how the following considerations have been addressed;

- Contribution to a green infrastructure network;
- Utilising soft boundaries, such as tree lined native hedges;
- Including characteristic landscape features, including scattered trees, farmsteads and copses, in new landscape design;
- Conserving hedges and the field pattern they create or provide replacement planting where their loss cannot be avoided;
- Exploring opportunities for landscaping and planting to connect to existing routes and green infrastructure within the village; and/or
- Avoidance of the best and most versatile agricultural land (Grades 1,2 and 3a) in preference for use of poorer quality land.

OBJECTIVE - FACILITATE SUSTAINABLE ENERGY, WITHOUT COMPROMISING THE INHERENT LANDSCAPE AND COUNTRYSIDE QUALITY SURROUNDING THE VILLAGE.

This section of the Plan includes policies to secure appropriate domestic and commercial renewable energy schemes, while making sure that these can be accommodated without affecting existing amenity and important local assets, especially landscape quality.

11.13 Existing climate change poses a global challenge. We are responsible at a local level for ensuring the protection of our environment and landscape by mitigation of such change where possible.

11.14 Any significant adverse impact on the character of the village, and its landscape settings will offset sustainability gains. It is therefore important that all

schemes, from a domestic scale up to commercial schemes in the countryside surrounding the village are rigorously assessed and regulated.

11.15 It is expected that all energy generating infrastructure and its installation will comply with the Microgeneration Certification Scheme where appropriate.*

ES5: Renewable Energy Schemes

Any proposal requiring a planning application for energy generating schemes and infrastructure using renewable energy sources, and new Renewal Energy Scheme development will be supported in the Neighbourhood Plan Area provided that:

- On householder/domestic schemes, and any other schemes located within the Settlement Boundary, the energy generating infrastructure is located as close as practicable and is proportionate to the scale of the existing buildings and proposed development it is intended to serve.
- The siting, scale and design of any energy generating infrastructure does not compromise public safety, allows continued safe use of public rights of way, and does not adversely affect existing amenities.
- Any technologies and infrastructure used to generate energy should not detract from the rural, visual and historic character of the village and the surrounding landscape setting and environment.
- Adjoining land uses are not adversely impacted in terms of noise, vibration, or electromagnetic interference.
- Where appropriate the energy generating infrastructure and its installation complies with the Microgeneration Certification Scheme (*).

* The Microgeneration Certification Scheme (MCS) is an internationally recognised quality assurance scheme, supported by the DECC.



**North Kesteven
DISTRICT COUNCIL**

**Application by Fosse Green Energy Ltd for
an order granting development consent for the
Fosse Green Energy solar farm**

**Local Impact Report:
APPENDIX G4
Coley
Neighbourhood Plan
policies**

**North Kesteven District Council
([REDACTED])**

**NKDC reference: 23/0325/NSIP
Planning Inspectorate reference: EN010154
January 2026**

Coleby Parish Council



Coleby Parish Neighbourhood Plan 2018-2036

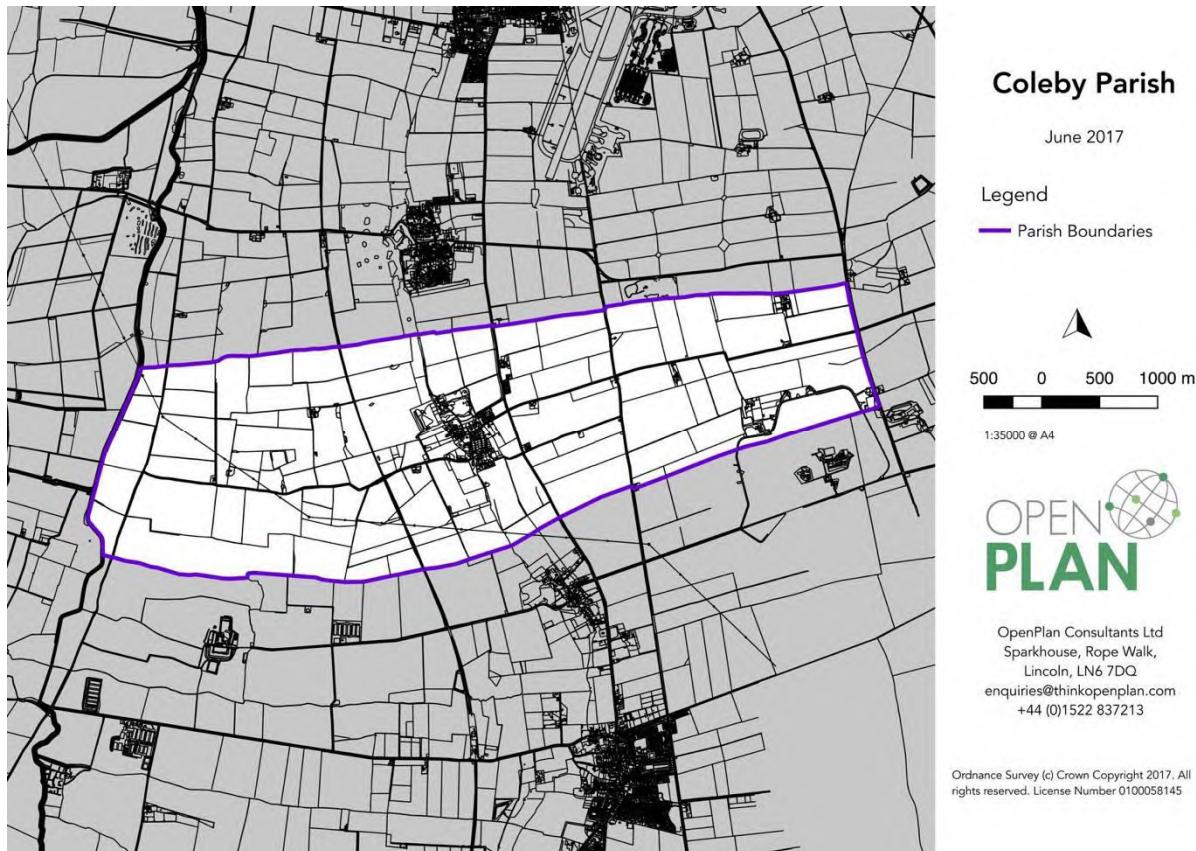
Figure 1 - Development Plan



“Neighbourhood planning provides a powerful set of tools for local people to ensure that they get the right types of development for their community”¹

6. NKDC formally designated the whole of Coleby Parish as our Neighbourhood Planning Area on 1 April 2016.² The designated area is shown in Figure 2 below.

Figure 2 - Designated Area for the Neighbourhood Plan



7. We have consulted widely with residents, businesses, landowners, developers and others to understand issues relevant to a Neighbourhood Plan and what we can do to address them.

¹ National Planning Policy Framework Guidance Paragraph 184

² NKDC formal records of our Neighbourhood Plan are available at <http://www.n-kesteven.gov.uk/ColebyPlan>

Table 1 - Vision, Objectives and Planning Policy Approaches

Coleby Parish is a wonderful place to live that has adapted to change whilst retaining its own unique look and feel.			
Vision	Community	Natural environment	Housing
Objectives	<p>Preserve and enhance the distinct community spirit of Coleby and protect the local facilities that people value.</p>	<p>Protect the village's green spaces and its landscape, improve access to the countryside and protect and enhance habitats and biodiversity?</p>	<p>Protect and enhance the character of the Village and Parish, and their heritage assets, whilst allowing for an appropriate level of new development.</p> <p>Ensure that there is adequate parking for new development whilst maintaining the character of the village.</p>
Planning Policy Approaches	<p>Encourage and support proposals to develop, improve or expand facilities that would support the social, cultural, economic and physical well-being of the local community</p> <p>Discourage and prevent development that would result in the loss of any community asset or facility</p>	<p>Designate local green spaces within the village (which would protect them from inappropriate development)</p> <p>Discourage development that would detract from the open character or visual separation between the village and the A607</p> <p>Limit development in the open countryside</p> <p>Protect and enhance the network of public footpaths and bridleways</p> <p>Ensure development does not cause harm to local ecology and wildlife and, where practicable, measures are taken to enhance local biodiversity and strengthen local ecology</p> <p>Encourage and support appropriate renewable energy technologies (provided that the type and scale proposed does not negatively impact on the character and setting of the village)</p>	<p>Ensure that the scale, location and type of new housing enable reasonable additional choice without detracting from Coleby's character as a small, rural village and a rural Parish.</p> <p>Encourage new developments to be consistent with the character assessment of the village (which would provide an overall description of key aspects that contribute to the village character, such as: views, street layout, important buildings, landmarks, streetscape, important open space and greens spaces)</p> <p>Encourage new developments to be consistent with Design Guidance prepared for the village (which would identify design elements that require consideration such as building heights, density, palette of materials etc.)</p> <p>Ensure that new development provides sufficient amount of off-street parking</p>

5. Planning Policies⁸

Location of Development

50. From responses to consultations carried out during the preparation of this Neighbourhood Plan, a clear desire emerged for growth to be respectful of the village character and its setting, and for development not to alter the compact and small-village feel of Coleby by expanding into and spoiling the surrounding countryside. For these reasons, parishioners demonstrated a clear desire to maintain development within the existing village curtilage and support for appropriate redevelopment of brownfield sites within relatively close proximity to the village.
51. There is also a desire to keep traffic growth to a minimum, but this is with an understanding that Coleby has relatively high levels of car ownership and cars per property. Restricting most new buildings and developments to locations within and immediately adjacent to the village will help to achieve this, by maximizing opportunities for people to walk and cycle between their homes and local facilities, and to use public transport when possible for some of their longer trips.
52. It is widely acknowledged that vehicles parked on-street at various locations on the village's narrow streets hinder the movement of passing traffic and pedestrians. Whilst the Neighbourhood Plan is limited in the role it can play to retrospectively resolve this issue, it can require future developments to provide appropriate levels of on-site car parking to ensure existing problems are not perpetuated. This is particularly important in new residential development schemes, where sufficient provision should be made for both residents and visitors.
53. This neighbourhood plan does not set specific parking standards and instead expects proposals to be considered on a case-by-case basis, taking into account the type, mix and use of development and parking required for their visitors.
54. In Policy 1 'amenity' refers to: compatibility with neighbouring land uses; overlooking; overshadowing; loss of light; increase in artificial light or glare; adverse noise and vibration; adverse impact upon air quality from odour, fumes, smoke, dust and other sources; adequate storage, sorting and collection of household and commercial waste, including provision for increasing recyclable waste; creation of safe environments etc. (CLLP Policy LP26 Design and Amenity).
55. Policy 1 allows for some new development in appropriate locations, setting out a preference for the location of any new development within the developed footprint of the village, following the sequential test in Policy LP4 of the Local Plan. The policy conforms to the policy principles established in the Local Plan, which classifies the village

⁸ A Composite Policies map is in Figure 20 at page 42.

of Coleby as a Small Village with the rest of the Parish falling under the definitions of Hamlet and Countryside.

56. To support the application of Policy 1, the developed footprint of the village has been defined and is shown in Figure 10. This is important in setting a distinction between the main built up area of Coleby and the outlying properties and surrounding countryside. It is not simply a means of showing the limits of existing development, as some developed areas lie outside it and some undeveloped areas lie within it.
57. In defining the developed footprint, the village curtilage identified in the 2007 NKDC Local Plan was used as a starting point and tested against the criteria set out in Policy LP4 of the Local Plan.⁹ The only changes to the 2007 boundary relate to the site of the recently approved development of 4 dwellings on Dovecote Lane (16/0772/OUT) that is included in the developed footprint.
58. Notwithstanding the fact that boundaries provide a useful guide for decision making, it is not intended that planning permission within the village envelope will automatically be granted, as all proposals must have regard to all other planning policies in the development plan.
59. Policy 1 specifically requires proposed residential development outside of the village to be consistent with the findings of the Capacity Study completed as part of this Neighbourhood Plan. The Capacity Study was undertaken to establish the capacity of different areas in and around the village, and in other parts of the Parish, to accommodate new dwellings. The assessment considered the sequential preference criteria as set in Policy 1 and also a number of additional considerations reflecting the rationale of the NPPF and Local Plan policies as well as other policies and aspirations of this Neighbourhood Plan. The Study concluded that there is potential scope for the Local Plan's growth target for Coleby to be developed within the developed footprint of the village in combination with those sites already permitted/completed since 2012 (the date from which the Local Plan is effective).
60. However, as this Neighbourhood Plan does not allocate specific sites for housing development, it is likely that some of the sites identified within the village will not come forward for development during the lifetime of the Plan. For this reason, the conclusions of the Capacity Study relating to appropriate areas at the edge of the village should be applied to proposals when there is evidence that there are no infill sites available or suitable within the period 2012-2036.
61. The recommendations presented in the Capacity Study are subordinate to the sequential preference criteria. Therefore, proposed development that is consistent with the Capacity Study but that is lower in the sequential order (i.e. previously developed sites before greenfield sites) will still need to demonstrate that there are no available or suitable sites that are supported in the Capacity Study and higher in the order.

⁹ Policy LP4 of the Central Lincolnshire Local Plan 2012-2036 sets permitted growth levels for villages and a sequential test for prioritising development sites.

62. Information submitted with applications should clearly demonstrate how proposals conform to all relevant aspects of Policy 1.

Policy 1: Appropriate Location for Development

- 1. Development proposals within the developed footprint of the village, as presented in Figure 10 of this Plan, will be supported where they comply with the criteria set out below and all relevant development plan policies.**
 - a) Development will need to demonstrate that it can be carried out without resulting in an unacceptable impact on:**
 - I. the setting of the village within the wider landscape;
 - II. the character and appearance of the Conservation Area;
 - III. the character, extent, setting and use of any heritage asset;
 - IV. the landscape character within the Parish; and
 - V. the levels of amenity that occupiers of adjacent premises may reasonably expect to enjoy.
 - b) Development should provide safe road access and sufficient off-street parking in a form that is consistent with the established character of the village.**
- 2. Where there is insufficient land within the developed footprint of the village to meet the growth level of the parish as set out in the Central Lincolnshire Local Plan 2012-2036, priority should be given to development on sites within the areas considered appropriate for development in the Coleby Capacity Study and which meet the requirements of the Development Plan.**

77. The importance of the land separating the village from the A607 was recently recognised in NKDC's decision to refuse planning permission for residential development on Rectory Road (Ref: 16/1043/OUT). Retaining this area of separation is an important principle that the Parish Council will continue to support. Furthermore, important natural features and assets such as mature trees and areas of Local Green Space will be protected and enhanced.

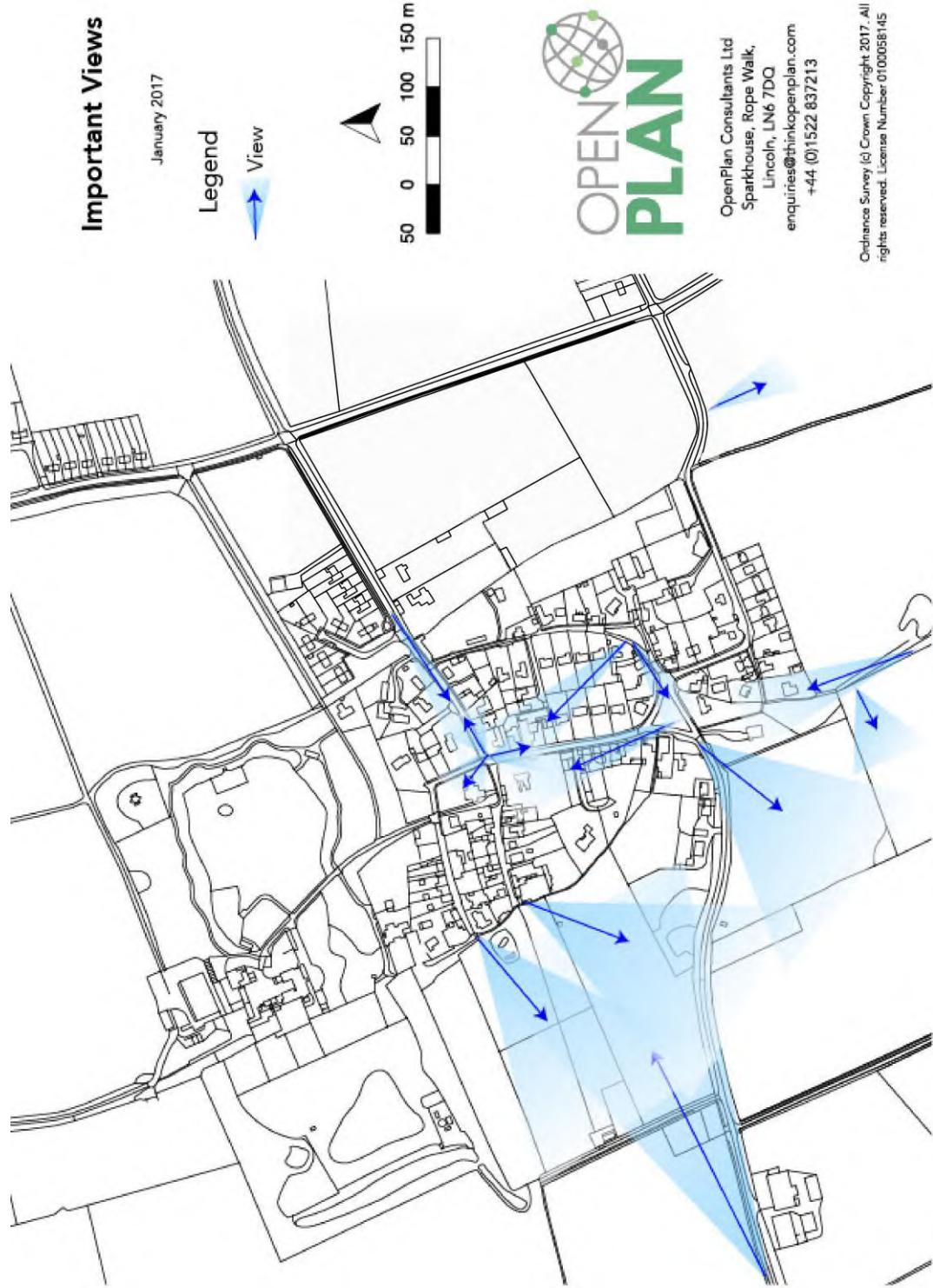
Policy 3: Design and Character of Development

1. **Development proposals will be supported where they have regard to the Coleby Character Assessment, and particularly where they:**
 - a) **Respect the archaeological, historic and natural assets of the surrounding area, and take every opportunity, through design and materials, to reinforce local character and a strong sense of place;**
 - b) **Recognise and reinforce local character in relation to height, scale and space between buildings;**
 - c) **Would not result, either in isolation or cumulatively with any other development proposals, in the area of separation between the village and the A607 being unacceptably reduced either physically or visually;**
 - d) **Respect local landscape quality ensuring that the views and vistas shown on Figure 12 are maintained wherever possible;**
 - e) **Retain mature or important trees of good arboricultural and / or amenity value; and**
 - f) **Respond to and enhance the setting of Local Green Spaces and other valued green spaces, such as green verges.**



Figure 11 - Stone walls and grass verges are a feature of Coleby village

Figure 12 - Important Views



Local Green Space (LGS)

78. The NPPF enables local communities, through Neighbourhood Plans, to identify for special protection, green areas of particular importance to them. By designating land as LGS local communities are able to rule out development other than in very special circumstances.

79. The NPPF notes that LGS designation will not be appropriate for most green areas or open space and the designation should only be used where the green space is in reasonably close proximity to the community it serves; is demonstrably special to a local community and holds a particular local significance; and is local in character and not an extensive tract of land.

80. Having regard to these criteria, it is considered that there are a number of green spaces both within and around the built up area of the Parish that meet this test and merit special designation and protection. These LGS are defined on Figure 13. Within such areas the Plan seeks to protect their special qualities and new development is generally prohibited.

81. Further information and justification for these designations is presented in the Local Green Space Assessment that forms part of the Neighbourhood Plan's evidence base (see Appendix 6).

Policy 4: Local Green Space and Green Infrastructure

- 1. The Neighbourhood Plan designates the following locations as Local Green Spaces as shown on Figure 13 of this Plan:**
 - a) Blind Lane Green**
 - b) Coronation Crescent Green**
 - c) Tempest Green**
 - d) Far Lane Cemetery**
 - e) All Saints Church garden**
 - f) Lowfield cemetery**
- 2. Applications for development that would adversely affect the function of a Local Green Space will not be permitted other than in very special circumstances.**

Figure 13 - Local Green Spaces



Access to the Countryside

82. The Coleby area is well served by footpaths and other public rights of way, which enable recreational access to the local countryside for residents and visitors to the area. These features are highly valued by residents and are an important feature of the Coleby lifestyle. In particular, the Viking Way that runs from Rutland Water and passes through Lincoln en route to the Humber intersects with the village. At its point along the western edge of the village, the vista over the Trent Valley is particularly enjoyed and treasured by the community. The Viking Way and other local routes are shown on Figure 15.
83. New development may offer an opportunity to improve existing footpaths and other routes, and may in some circumstances, be able to contribute to the creation of new ones.
84. Unacceptable adverse impacts on footpaths and rights of way are changes that will reduce public enjoyment and amenity value such as the closure of footpaths or re-routeing of paths that reduce accessibility or the loss of adjacent landscape and wildlife features.

Policy 5: Access to the Countryside

1. **In order to maintain and enhance access to the countryside, links to existing footpaths and rights of way shown in Figure 15 as well as improvements to footpath surfaces and signage will be sought in connection with new development for appropriate uses, where feasible.**
2. **Development resulting in an unacceptable adverse impact on existing footpaths and rights of way will not be supported.**



Figure 14 - Residents prize the countryside and views

Figure 15 - Footpaths and Public Rights of Way



Community Facilities

85. Coleby's community facilities are highly valued by the majority of residents. They include the primary school, meeting places like the Village Hall and church, the two pubs, the playing field and children's playground. It is recognised that other Community Facilities may arise during the lifetime of this Plan.

86. These facilities are an important part of parish life; creating social cohesion and providing the residents with a sense of belonging and identity thus increasing well-being and quality of life. The policy below concentrates on the impact of development on the use and range of facilities within the parish and complements Policy LP 15 of the Local Plan, which this Neighbourhood Plan fully supports.

87. There is a strong desire to retain the village's community facilities and to enhance them as opportunities arise. Proposals that would result in the loss of existing facilities will generally not be supported unless accompanied by suitable alternative provision. Where there is sufficient justification to demonstrate that this cannot be provided, applicants will normally be expected to demonstrate that a business or facility is no longer economically viable (and cannot be expected to return to viability in the foreseeable future) and that all reasonable efforts have been made to find a purchaser, tenant or operator willing to continue the business/facility (or one with a similar value to the local community) without success.

Policy 6: Community Facilities

- 1. Proposals to develop, improve or expand facilities to support the social, cultural, economic and physical well-being of the local community, will be encouraged and supported provided they are consistent with other policies in this Neighbourhood Plan and the Local Plan.**
- 2. Proposals that involve the loss of any existing community facility will not be supported unless their loss can be adequately justified.**
- 3. Community Facilities in existence at the time this Plan was made are identified on Figure 17.**

88. As a rural village with an older population, availability and access to facilities is of increased importance. These facilities help the community to come together, lessen the need to travel by car and help to also attract younger residents into the area.

89. In order to establish whether certain facilities are at risk of closure during the next 10 years, work was undertaken to understand current usage levels and long-term plans for