Springwell Solar Farm

Response to Deadline 1 Submissions

APFP Regulation 5(2)(a)

Planning Act 2008

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

EN010149/APP/8.20
June 2025
Springwell Energyfarm Ltd

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1. Introduction

1.1. Purpose of the Report

1.1.1. This Report provides the Applicant's responses to the Local Impact Reports (LIRs) and Written Representations (WRs) received at Deadline 1 in respect of the proposed Springwell Solar Farm (the Proposed Development).

1.1.2. The Applicant has combined the responses to the LIRs and WRs into one document to collectively address points raised by North Kesteven District Council (NKDC) and Lincolnshire County Council (LCC) together.

1.2. Structure

1.2.1. This document is structured as follows:

- Section 2 provides the Applicant's response to the points raised in NKDC's LIR, WR and Responses to ExQ1, including signposting to other responses and application documents where appropriate;
- Section 3 provides the Applicant's response to the points raised in LCC's LIR, WR and Responses to ExQ1, including signposting to other responses and application documents where appropriate;
- Section 4 provides the Applicant's responses to the WRs and Responses to ExQ1 submitted by Category 1 stakeholders;
- Section 5 provides the Applicant's responses to the WRs, Responses to ExQ1 and Post-Hearing Submissions submitted by Category 2: Other Individual and Technical Stakeholders; and
- Section 6 provides the Applicant's responses to the other WRs or Deadline 1 submissions received, on a thematic basis.

1.2.2. The Applicant's response to Appendix 1 of North Kesteven District Council's Local Impact Report is set out at Appendix 1 of this document.

1.3. Approach

Local Impact Reports

1.3.1. At Deadline 1, LIRs were submitted by NKDC and LCC as requested by the Examining Authority (ExA).

1.3.2. This report should be read alongside the following:

- Statement of Common Ground with North Kesteven District Council;
- Statement of Common Ground with Lincolnshire County Council.

Written Representations

1.3.3. A total of 53no. Written Representations were received at Deadline 1. Of these:

- 2 were submitted by local authorities;
- 7 were submitted by other statutory consultees;
- 44 were submitted by members of the public, businesses and non-statutory organisations.

1.3.4. This Report follows the categorisation of responses used in the Responses to Relevant Representations, as follows:

- Category 1: Statement of Common Ground parties;
- Category 2: Other Individual and Technical Stakeholders;
- Category 3: Themed Responses where similar issues have been raised by more than one Interested Party (IP).

1.3.5. This Report does not look to duplicate the Applicant's Responses to Relevant Representations which was submitted at Deadline 1. Where appropriate to avoid repetition, the Applicant has sought to cross-refer back to responses provided in that document, supplemented by additional information that has been entered into the Examination since that document was prepared.

1.3.6. The Applicant has initiated engagement via Statements of Common Ground (SoCGs) with a number of parties that have submitted a WR. The table below sets out the parties which have submitted WRs with whom the Applicant is negotiating SoCGs. However as the Applicant is not submitting updated SoCGs at Deadline 2, the Applicant's responses to Written Representations are included within this document.

Table 1-1 - Statement of Common Ground Parties

SoCG Party	SoCG Ref.	Location of response to WR
Anglian Water Services Ltd	7.21	In the SoCG to be submitted at Deadline 3
Cadent Gas Ltd	7.22	In the SoCG to be submitted at Deadline 3
National Grid Electricity Transmission	7.23	No WR submitted
Lincolnshire Fire and Rescue Service	7.24	No WR submitted

SoCG Party	SoCG Ref.	Location of response to WR
Exolum Pipeline System Ltd	7.25	In the SoCG to be submitted at Deadline 3
Lincolnshire County Council	8.1	Section 3 of this document
North Kesteven District Council	8.2	Section 2 of this document
Historic England	8.3	In the SoCG to be submitted at Deadline 3
Natural England	8.4	In the SoCG to be submitted at Deadline 3
Environment Agency	8.5	In the SoCG to be submitted at Deadline 3
UK Health Security Agency	8.6	No WR submitted
Ministry of Defence	8.7	In the SoCG to be submitted at Deadline 3
Network Rail Infrastructure Ltd	8.8	In the SoCG to be submitted at Deadline 3
National Highways	8.9	No WR submitted

2. Response to NKDC's Submissions

2.1. Overview

2.1.1. Section 2.2 of this document responds to NKDC's LIR and WR. Section 2.3 provides the Applicant's comments on NKDC's Response to ExQ1 [REP1-103].

2.1.2. The following topics were raised by NKDC in their LIR [REP1-102] and their WR [REP1-105]:

- EIA methodology;
- Grid connection to the Navenby Substation;
- Air quality;
- Biodiversity;
- Climate change;
- Cultural heritage;
- Landscape and visual impacts and residential visual amenity;
- Land, soil and groundwater;
- Noise and vibration;
- Population;
- Traffic and transport;
- Water;
- Cumulative effects;
- Other matters.

2.1.3. The tables overleaf provide the Applicant's response to these topics arranged under the headings listed above, supported by identification of sub-themes for clarity and ease of reference.

2.2 Response to NKDC's LIR and WR

Table 2-1 - EIA Methodology

LIR/WR Para Ref.	Summary Position	Applicant's Response
Methodology		
LIR 10.1	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 matters in relation to assessment methodology in relation to the temporary / permanent loss of BMV agricultural land.	This has been noted by the Applicant and responses related to the assessment methodology for BMV agricultural land are addressed in Table 2-8 of this document.
Approach to Cumulatives		
LIR 10.4	Finally, the Council has also discussed and agreed the 'Cumulative Sites Long List and Shortlist' (Chapter 16, Appendix 16.1 and Table 16.3 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 Applicant notes this comment and thanks North Kesteven District Council for its ongoing engagement related to cumulative developments. **ES Volume 1, Chapter 16: Cumulative Effects [EN010149/APP/6.1.2]** [REP1-018] has been updated at Deadline 1 to include Leoda Solar Farm. A full update of the inter-project long and short lists has been undertaken and this has been updated at Deadline 2, with an assessment cut-off of 30 May 2025. The same process will be repeated at Deadline 4, with an assessment cut-off of 29 August 2025.

Table 2-2 – Grid Connection to Navenby Substation

LIR/WR Para Ref.	Summary Position	Applicant's Response
Grid Connection Date		
LIR 11.6 – 11.7	The documents accompanying the DCO application, however, are less clear on whether the NGNS will be	The Applicant has addressed these concerns within Table 1-1 of the Response to Action Points, Appendix 1 to the **Written Summary of Applicant's Oral Submissions at Issue**

LIR/WR Para Ref.	Summary Position	Applicant's Response
	completed in time to meet the phased connection dates and in line with the construction timetable for the solar farm. Chapter 3 of the ES indicates that the construction of the solar farm would take place in phases from Q1 2027 to Q4 2030. By the end of 2028, Springwell West and the Springwell Substation Phase 1 would be complete, with Phase 2 and Springwell East and Central completed by Q4 2030. The Grid Connection Statement at paragraph 4.1.5, provides that the completion of the Springwell Substation would take place in Q3 2029 which requires reconciliation with the information in Chapter 3 of the ES. It thus appears that Springwell West and the Springwell Substation Phase 1 could be completed at the end of 2028, in advance of the NGNS which would not be completed until the end of 2029. If these timescales are correct, this has significant implications for the deliverability and potential benefits of the solar farm and the validity of the ES. It is not unreasonable to assume that the benefits of energy generation under these proposals cannot be realised without the provision of a point of connection to the electricity transmission network. Further clarification is required on the dates provided within the ES documents and on how the timing of two projects would align.	**Specific Hearing 1 (ISH1) [EN010149/APP/8.16]** [REP1-073] and as discussed in ISH1, as set out in agenda no. 4 of **Written Summary of Applicant's Oral Submissions at Issue Specific Hearing 1 (ISH1) [EN010149/APP/8.16]** [REP1-073]. The Applicant has worked closely with National Grid to determine where a new substation may be located and to understand the programme for its delivery. The Applicant's understands that a planning application for Navenby substation will be made in October 2025. National Grid confirmed that , they still expect to be able to connect the project to the National Grid in late 2029, as set out in the grid connection offer. As supported by National Grid Electricity Transmission PLC response to addressing Q1.1.1 within the **Response to First Written Questions (ExQ1) [EN010149/APP/8.14]** [REP1-071]. The Applicant has also updated the **Grid Connection Statement** at Deadline 1 **[EN010149/APP/7.6.2]** [REP1-058], to reflect the revised connection dates which are now aligned to the Navenby substation schedule. The ES has been based on worst case assumptions at the time of undertaking of the environmental assessments. There is also a mechanism in place via paragraph 2(4) of Schedule 16 of the **Draft DCO [EN010149/APP/3.1.2]** [REP1-006] for when the Applicant is discharging requirements, it will need to confirm that the subject matter being approved would not be likely to give rise to any materially new or different environmental effects compared to those in the ES and that the requirements have been discharged in line with the ES. The Applicant is therefore bounded by the effects contained in the ES.
Commencement		
LIR 11.11 – 11.12	The Council suggests that the delivery of the NGNS and alignment with the construction of the solar farm is a crucial matter upon which the Examining Authority	There is no policy support or justification for NKDC's proposed requirement that the commencement of the Proposed Development be restricted based on Navenby Substation's milestones. The Applicant's view is that such a requirement is unnecessary

LIR/WR Para Ref.	Summary Position	Applicant's Response
	should satisfy itself given that this is an unprecedented situation and that the Springwell solar farm is reliant on somewhat scarce public information available from the National Grid at the point of preparing their DCO application. If the solar farm proposals were to commence without the benefit of a grid connection, there is the potential risk that negative environmental impacts would occur. As a result, during the Examination (and on a 'without prejudice' basis) the Council will seek to ensure that an additional Requirement is provided to restrict the commencement of the Springwell solar farm until the NGNS has reached a meaningful point of construction, beyond simply the commencement of development, that ensures more certainty that the provision of the substation will be achieved prior to commencement of the solar farm and to ensure alignment between the projects.	and would result in an overly unreasonable burden on the Applicant, especially in circumstances where the Applicant engages frequently with National Grid and is not aware of any obvious reason for the proposed Navenby Substation to be refused planning permission. As discussed at ISH1 and set out at agenda item number 4 of the **Written Summary of Oral Submissions at Issue Specific Hearing 1 [EN010149/APP/8.16]** [REP1-073], NKDC's suggestion is counter to NPS EN-1 which anticipates and allows for the circumstance in which "it may not be possible to coordinate applications". Paragraphs 4.11.8 and 4.11.9 set out what the Applicant needs to satisfy the decision maker of in that situation, and the Applicant is confident it has addressed these requirements. The Applicant's response to Action Point 2 at **Appendix 1 - Response to Action Points** of the **Written Summary of Oral Submissions at Issue Specific Hearing 1 [EN010149/APP/8.16]** [REP1-073] details the relevant national and local policy position which is generally supportive of the application for the Navenby Substation, on the basis that NGET take a responsible approach to siting, design and mitigation, following the Horlock Rules and in accordance with the Central Lincolnshire Development Plan. In addition, the Applicant does not consider that there are material considerations that would result in the future scheme being refused. If more details become available during the course of the examination, the Applicant is willing to provide further information and update the ExA on this position accordingly. Please also refer to National Grid Electricity Transmission PLC response to Q1.1.1 within the **Response to First Written Questions (ExQ1) [EN010149/APP/8.14]** [REP1-071]. The Applicant's decision to commence construction of the Proposed Development would also be driven by commercial considerations, and it is highly unlikely that the Applicant would construct the Proposed Development without sufficient confidence that a grid connection would be in place for the export of the energy generated.

Table 2-3 – Air Quality

LIR/WR Para Ref.	Summary Position	Applicant's Response
General		
LIR 13.11 – 13.12	Any effects on air quality experienced during construction, operation and decommissioning will be controlled through the implementation of mitigation measures, which are detailed in and secured by the Outline Construction Traffic Management Plan, Outline Decommissioning Environmental Management Plan and Outline Operational Environmental Management Plan. The Council's position is that there are no positive construction, operation and decommissioning impacts in relation to air quality and that overall, the construction and operational impacts are neutral.	Mitigation measures to control dust and particulate matter and road traffic exhaust emissions during the construction, operation (including maintenance) and decommissioning phases are secured within the **oCEMP [EN010149/APP/7.7.2]** [REP1-060]**, oCTMP [EN010149/APP/7.8.2]** [REP1-062]**, oOEMP [EN010149/APP/7.10.2]** [REP1-040] and **oDEMP [EN010149/APP/7.13.2]** [REP1-046].

Table 2-4 – Biodiversity

LIR/WR Para Ref.	Summary Position	Applicant's Response
General		
LIR 14.13	The Council's consultants recommend that further detail is provided in some cases for purposes of transparency at decision-making, and to ensure clarity on what is proposed and that it is robust and securable. In some cases, comparable queries were raised at PEI stage and have not been addressed. More information is required on certain methods to allow verification of the baseline habitat and to permit that the BNG assessment is	A full response to all of the comments raised by North Kesteven District Council that was included as Appendix A and Appendix B with the North Kesteven LIR has been provided in **Appendix 1** of this document. Responses to questions raised by NKDC are given below in subsequent paragraphs.

LIR/WR Para Ref.	Summary Position	Applicant's Response
	correct. This is set out in AECOM's full comments (attached at Appendix A) and additional BNG comments (attached at Appendix B) attached and should be read in full as they have implications for the conclusions reached by the Council in this LIR.	
Designated Sites		
LIR 14.15 – 14.18	During all phases, no statutory designated sites for nature conservation are anticipated to be affected. The ES states that non-statutory designated Local Wildlife Sites within or adjacent to the Site would be protected by a 20 metres buffer from Springwell Solar Farm, as detailed in and secured by the Design Commitments, except for four Local Wildlife Sites which would require sections to be removed to enable highways access into the Site. These are: • A15, Green Man Road to Cuckoo Lane Local Wildlife Site; • A15, Slate House Farm to Dunsby Pit Plantation Local Wildlife Site; • Temple Road Verges, Welbourn to Brauncewell Local Wildlife Site; and • Navenby Heath Road Verges Local Wildlife Site. These are all roadside grassland verges designated for calcareous grassland. The sections to be removed from each Local Wildlife Site are relatively small and total less than 5% of the total length of the Local Wildlife Sites. New calcareous grassland would be created to compensate for the	This is the assessment as stated in **ES Volume 1, Chapter 7: Biodiversity [EN10149/APP/6.1.2]** [REP1-024]. The location of the Local Wildlife Site (LWS) verges was identified at an early stage and various options were considered. An option appraisal assessment, was carried out on various site options for the substation and compounds including various highways access options. The 'mitigation hierarchy' was used in the assessment to aim to avoid impact to the LWS and other ecological receptors where possible (i.e. prioritising avoiding impacts, mitigation if avoidance is not possible, and lastly restoring or compensating). However, it was determined that there was no feasible alternative to the chosen sites, and removal of sections of LWS were found to be required to provide safe highways access. The mitigation hierarchy has been applied as far as is considered reasonably practicable and has influenced the scheme design from the outset. The extent of the LWS to be affected has been kept to a minimum and other important features, such as woodland and ponds, have been avoided altogether. Given the extent of the LWS road verges along the A15 and other considerations such as traffic and road safety, the removal of a few sections has been found to be unavoidable. Full surveys of the sections of LWS affected have been carried out to fully quantify and assess the potential impact, as detailed in **ES Volume 3, Appendix 7.9: Local Wildlife Site Verges Survey [EN010149/APP/6.3]** [APP-090] and appropriate mitigation has been outlined and detailed within the **oLEMP [EN10149/APP/7.9.2]** [REP1-064].

LIR/WR Para Ref.	Summary Position	Applicant's Response
	sections of Local Wildlife Sites lost and to enhance the overall amount of calcareous grassland within the Site once established during the operational (including maintenance) phase. AECOM have queried whether the mitigation hierarchy has been applied for this important habitat and why habitat losses cannot be avoided (irrespective of the ability to compensate for losses). For example, AECOM query what has been done at the design stage to avoid or proactively minimise impacts on LWSs and hedgerows. The provision of habitat compensation and BNG should not be relied on to make the case for hedgerow loss being acceptable.	
Habitats		
LIR 14.22 – 14.24	As per paragraph 14.16 above, AECOM have raised questions about the application of the mitigation strategy in seeking avoidance of impacting hedgerows to achieve electrical connections. The ES indicates that 1,249m of hedgerow would be removed during construction for internal access and cables. They have also requested clarification of the method used for surveying existing hedgerows as this has implications for the identification of species-rich hedgerows, the accounting of hedgerows within the BNG Metric, and the practical achievement of like-for-like compensation of hedgerows. See AECOM's full comments in relation to Appendix 7.11 Important Hedgerow Survey.	As outlined in **ES Volume 3, Appendix 7.1: Preliminary Ecological Appraisal [EN010149/APP/6.3.2]** [REP1-032] all hedgerows were surveyed using the UK habitat survey criteria and hedgerow type would have been applied based on the UK habitat description relevant – so species rich hedgerows in UK habitat parlance would have been identified as species rich hedgerows and subject to a habitat condition assessment to inform the BNG metric calculation. In addition, all hedgerows identified as being directly affected were subject to a Hedgerow Regulations assessment to provide further clarity on the ecological importance of each hedge being affected, as outlined in **ES Volume 3, Appendix 7.11: Important Hedgerow Survey [EN010149/APP/6.3]** [APP-092]. Full like for like compensation for those hedgerow sections is proposed with over 15km of new hedgerow planting. Hedgerow planting and the management required to ensure successful implementation is fully outlined in the **oLEMP [EN10149/APP/7.9.2]** [REP1-064].

LIR/WR Para Ref.	Summary Position	Applicant's Response
	AECOM point out that in Table 7.6 of the ES, it is stated that embedded mitigation is provided to protect the important scarce arable plant assemblages identified. This is not supported by the BNG figures which show that fields (BC105 and 115 and Target Notes 9 and 10) where the most diverse assemblage of notable plants was found will be converted to grassland. Pending this point, it is not agreed that there would be no significant effect. There is a potential conflict with CLLP Policy S60. As noted in Appendix 7.8, the development coincides with a landscape and soil types of known value for scarce arable flora, and therefore is located where action is best targeted to conserve scarce arable flora need to be focussed to achieve the aims of the Lincolnshire Biodiversity Action Plan. Paragraph 4.2.28 of the PEA report, however, identifies a very notable scarce arable plant species that is endemic to (globally restricted to) England, Nationally Rare, has not been seen recently, and has only been found in Cornwall previously. A full impact assessment of this important feature is required and identification of whether the data is adequate to understand its full distribution across the site.	The Applicant proposed to create legume rich modified grassland under the panels in fields BC105 and BC115. However, as outlined in the **oLEMP [EN10149/APP/7.9.2]** [REP1-064] the margins (being the 6m buffer between the security fence and existing field boundary) in this location would be cultivated and sown with a bird seed mix. In addition, a proportion of these margins would be cultivated in spring or autumn (a mixture of both across the margins), but no seed sown, both of these actions are likely to enable arable plants to continue to survive within the margins. It is considered that the embedded design and mitigation proposed is in-line with Policy S60 "Biodiversity Opportunity and Delivering Measurable Net Gains." As indicated by the BNG assessment and Applicant commitment to deliver BNG in-line with **ES Volume 3, Appendix 7.14: Biodiversity Net Gain Assessment [EN010149/APP/6.3.2]** [REP1-032], which will deliver over 10% BNG (for area habitats and hedgerows). The plant referred to is common ramping fumitory (*Fumaria muralis ssp. Neglecta*), the sub species Neglecta is indeed only known from Cornwall. This is therefore an error, and the plant identified was the common species not the subspecies. It should be noted that the paragraph refers to a sown margin so all the plants would have been introduced, and *Fumaria muralis ssp. Neglecta* was not recorded during the subsequent detailed arable surveys. This change will be made to **ES Volume 3, Appendix 7.1: Preliminary Ecological Appraisal [EN010149/APP/6.3.2]** [REP1-032] to be re-issued at Deadline 3; therefore, no further assessment work is required..
Protected and/or notable species		
LIR 14.27	**Ground nesting and wintering birds:** In respect of ES paragraph 7.7.14, AECOM request that more clarity is provided on the impacts of ground nesting birds and how the calculation has been made to determine that the	Paragraph 7.7.14 in **ES Volume 1, Chapter 7: Biodiversity [EN10149/APP/6.1.2]** [REP1-024] discusses mitigation for nesting birds during the operational period.

LIR/WR Para Ref.	Summary Position	Applicant's Response
	post-development habitats are adequate to maintain the conservation status of these species (and ideally to enhance their status). A similar exercise was carried out for the Heckington Fen DCO. It is not clear how much reliance is placed on land within the solar array contributing to this, and whether this is realistic and certain. It should be confirmed whether all ground nesting birds are suitably addressed (e.g. quail).	The approach to ground nesting birds has been to use skylark as a proxy; these being the most abundant species identified and there being little available information to predict the quantum of mitigation required for each individual species. Skylark were the most abundant species recorded with an average of 185 singing males recorded across five survey visits in 2023. The numbers on the first visit (early March 2023) are likely inflated due to wintering birds from the continent still being present, whilst the last visit (July 2023) included a number of family parties including newly fledged birds. Therefore, we have used the average value of 185 singing male birds. The area of habitat surveyed for skylarks was approximately 1,681 hectares (considerably larger than the area allocated to solar PV modules within the Order Limits), equating to an average estimated density of territories or breeding pairs of 0.11/ha. Density of nesting birds varied considerably from field to field (depending on the cropping regime) which is why an estimated average density has been used. Only areas underneath solar panels required mitigation, as areas such as the cable route would be subject to temporary impacts only, reinstated back to arable on completion and ground nesting birds could continue to use these areas. This average density was applied to the area allocated to solar panels to estimate the number of skylark territories that require compensation, 0.11 territories per hectare x 712.69ha = 78 territories. Available literature suggested that typical skylark territory densities range from 0.02 per ha in intensive grazed pasture through to 0.56 in organic set aside or 0.76 in coastal marshes. It is considered that grassland creation could with careful management achieve a density similar to coastal marshes 78/0.76 = 102 ha of mitigation required, just short of 1ha of grassland per pair. Mitigation has been allocated in blocks larger than 3ha recognising that skylark like large open fields. The upper limit of skylark density is believed to be achievable given the additional measures proposed to boost foraging habitat as outlined below: Requirements for ground nesting birds are threefold: 1) continued availability of open ground for nesting for species such as skylark as well as hedgerows and margin habitat for species such as grey partridge and corn bunting, 2) adequate foraging during the breeding

LIR/WR Para Ref.	Summary Position	Applicant's Response
		season in the form of insects 3) a source of winter bird food in the form of seeds. It is considered that the quantum of mitigation (approx. 100ha) will be sufficient to maintain the conservation status of the species identified. The Applicant has reviewed the Heckington Fen application documents and cannot find the detail inferred. However, the mitigation proposed for the Proposed Development includes 100ha of new grassland creation (considerably more than the 68ha proposed by Heckington Fen) as well as provision of rough grass and flower rich grassland along margins to boost insect abundance as well as a source of winter seed. In addition to this grassland, enhancements underneath panels will likely also increase the abundance of invertebrates during the breeding season increasing the availability of foraging – although this is considered enhancement not direct mitigation. Quail are a highly irruptive summer visitor so numbers of quail arriving in Britain each summer are highly variable. Affected by complex rotational cropping regimes, precise future breeding locations on agricultural land are also impossible to predict. However, as outlined in the **oLEMP [EN10149/APP/7.9.2]** [REP1-064] preconstruction surveys will be carried out and if breeding quail, or any other nesting bird species, are identified, then works will cease in the fields concerned until young have fledged. Therefore impacts on ground nesting birds including quail are not anticipated.
Monitoring		
LIR 14.42	The monitoring approach set out in the oLEMP is not agreed. All habitats should be monitored and reported on in accordance with the Central Lincolnshire guidance. Mitigation for scarce arable flora should be provided for at least 30 years (consistent with the wider habitat requirements) and monitoring should be undertaken to verify that this management is being applied as approved. The detailed comments by AECOM include reference to the provisions within the oCEMP and	For the avoidance of doubt, the **oLEMP [EN10149/APP/7.9.2]** [REP1-064] states that monitoring of all habitats will be undertaken for 30 years in line with BNG requirements and will then be reviewed to ensure prescriptions are still appropriate for the remaining 10 years of the operational life of Springwell. A specific commitment to monitoring scarce arable flora for at least 30 years will be made within the **oLEMP [EN10149/APP/7.9.2]** [REP1-064] and subsequent detailed LEMPs. All habitats would be monitored and reported as per consent conditions. This would be detailed in and secured by the **oLEMP [EN10149/APP/7.9.2]** [REP1-064] which will be updated at Deadline 3.

LIR/WR Para Ref.	Summary Position	Applicant's Response
	oLEMP to which additional information would be welcomed.	Responses to detailed comments are provided in **Appendix 1** of this document.
LIR 14.43 – 14.44	The Council and Lincolnshire County Council have agreed in principle that the establishment of an Ecological Steering Group (ESG) would be beneficial for the proposed development. The group is envisaged to 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 the delivery of required mitigation and enhancement measures. A key role would also be to carry out validation checks of the applicant's Biodiversity Net Gain monitoring over the required minimum 30-year period. It is anticipated that meetings would be held at an appropriate frequency to ensure good communication between both the developer and stakeholders and that funding would be required (anticipated via a s106 Agreement) to reflect Officer time in participating in the ESG and associated monitoring obligations. The Council is in the process of estimating monitoring commitments on the basis of the published Central Lincolnshire BNG monitoring formula. At present there is no draft s106 Agreement or Heads of Terms and as such the Council will raise this matter through its Written Representation.	A response to this question has been addressed in Q1.4.3 within the Applicant's **Responses to First Written Questions (ExQ1) [EN010149/APP/8.14]** [REP1-071]. The Applicant is supportive of the establishment of an Ecological Steering Group, and engagement with NKDC, LCC and the Applicant is ongoing to agree the securing mechanism. The **oLEMP [EN10149/APP/7.9.2]** [REP1-064] will be updated at Deadline 3 to include the details of the Ecological Steering Group once this has been agreed.
LIR 14.45	A further beneficial purpose of the group would be to yield benefits by assisting with the identification of opportunities for strategic working with other solar NSIP	The Applicant is supportive of the establishment of an Ecological Steering Group, and engagement with NKDC, LCC and the Applicant is ongoing to agree the securing

LIR/WR Para Ref.	Summary Position	Applicant's Response
	developers in the vicinity. This would assist in relation to the delivery of BNG where strategic delivery could result in significant benefits for species groups such as ground nesting birds.	mechanism. The **oLEMP [EN10149/APP/7.9.2]** [REP1-064] will be updated at Deadline 3 to include the details of the Ecological Steering Group once this has been agreed. The Applicant has been working with other developers and stakeholders, including Lincolnshire Wildlife Trust to identify opportunities for delivering strategic BNG improvements, particularly related to the ground nesting birds within the region.
Biodiversity Net Gain		
LIR 14.46	The ES indicated that +10% BNG would be provided on the site. AECOM have reviewed the BNG Metric provided by the applicant and confirm that it is the current version of the Statutory Metric. There do not appear to be any plans provided that allow the relevant habitat parcels to be identified. This is a limitation on the ability of stakeholders to verify the details entered into the Metric. In the attached notes, AECOM have raised a number of additional matters that require clarification and/or provision of additional information. Consequently, the Council is not currently in a position to agree the BNG calculation.	The comment is noted and a response to the clarifications raised by North Kesteven District Council in Appendix 1 of their Local Impact Report are provided in Appendix 1 of this document. Due to limitations in the number of rows within the Statutory Defra Metric, habitat of the same type has often been amalgamated into a single line, but the BNG metric clearly indicates in the comments column which amalgamated field numbers and polygon IDs each habitat line in the metric refers to for the baseline data, and for the post development scenario, which field numbers each habitat line refers to. Field numbers are clearly indicated on the landscape plans included within the **oLEMP [EN10149/APP/7.9.2]** [REP1-064] it is possible to cross reference. It is recognised that it is not currently possible to identify polygons on a plan. Therefore, the Applicant proposes to prepare a plan enabling habitat entries in the BNG spreadsheet to be cross referenced to field numbers and polygon IDs in order to enable the verification of details into the BNG Metric. This will be provided for Deadline 3.
Trees		
LIR 14.51	The following mature trees require further clarification as to their veteran status as some have not been fully inspected due to understorey, others are smaller/multi-stemmed that may still have veteran qualities. Examples include T008, T009, T021, T028, T040, T045, T052, T055, T078, T089, T091, T092, T109, T111, T113, T114, T118 (noted as having veteran potential), T121,T124 (noted as having veteran potential), T127,	In general, the more veteran features present (*list below*), the stronger the indication that it can be classified as a veteran. However, there is no specific number of features required to qualify as a veteran, meaning it is subjective to a degree. From a practical surveying standpoint for the purposes of the EIA, a tree has been identified as a veteran to require three of the features below, unless one of them was significant in extent (severe stem hollowing for example), then this could be considered sufficient to warrant veteran classification alone. This was the interpretation of the guidance available.

LIR/WR Para Ref.	Summary Position	Applicant's Response
	T144, T154, T156, T158, T162, T163, T170, T173, T175, T180, T188, T196, T199, T200, T202, T203, T211, T215, T227, T239, T240, T244, T245, T246, T247, T267, T275, T284, T286, T287, T310, T326. Root Protection Areas (RPAs) for veteran trees should be 15m radius regardless of stem diameter so assessments should provide for no loss of veteran trees and no incursion into RPAs.	Characteristic features of veteran trees sourced from https://publications.naturalengland.org.uk/file/113006, which states '*The more features a tree has the stronger the indication that it is a veteran*': • *Girth large for the tree species concerned* • *Major trunk cavities or progressive hollowing* • *Naturally forming water pools* • *Decay holes* • *Physical damage to trunk* • *Bark loss* • *Large quantity of dead wood in the canopy* • *Sap runs* • *Crevices in the bark, under branches or on the root plate sheltered from direct rainfall* • *Fungal fruiting bodies (e.g. from heart rotting species)* • *High number of interdependent wildlife species* • *Epiphytic plants* • *An 'old' look* • *High aesthetic interest* Five trees are considered to be veteran trees (T118, T119, T124, T175, T180) in the arboricultural assessment detailed in **ES Volume 3, Appendix 7.12: Arboricultural Impact Assessment [EN010149/APP/6.3]** [APP-093] and of these only one veteran tree is now included within the Order Limits and it is approximately 250m from the proposed Solar PV development. Therefore there is no loss of veteran trees. Photos and field notes of the trees listed have been re-assessed and the following have been evaluated as ' not considered the quantity or quality of features expected for a veteran tree. However, good habitat feature.' T052, T055, T078, T121, T127, T144, T158, T163, T170, T173, T199, T200, T202, T203, T211, T215, T227, T239, T240, T244, T245, T246, T247, T267, T275, T284, T286, T284, T286, T287, T310 and T326. The remaining listed by NKDC are not considered veteran nor likely to be in near future. Where trees require veteran Root Protection Area (RPA) buffer (15m radius) to be added, **ES Volume 3, Appendix 7.12: Arboricultural Impact Assessment [EN010149/APP/6.3]** [APP-093] will be amended and drawings updated accordingly and re-issued at Deadline 3. A link to the photos of all of the trees can be provided if required and on request.

Table 2-5 - Climate

LIR/WR Para Ref.	Summary Position	Applicant's Response
Local employment		
LIR 15.20	The ES has used conservative calculations in most cases, however, there was a reference to the panels being maintained by persons travelling from outside the country in some instances (paragraph 8.4.22). It is recommended that the applicant should consider apprentices and local employment opportunities for this solar farm.	**ES Volume 1, Chapter 8: Climate [EN010149/APP/6.1]** [APP-048] Paragraph 8.4.22 notes that two annual technician visits with a one-way commuting distance of 100km has been assumed to estimate emissions associated with workers and maintenance visits during operation. This does not state that panels will be maintained by persons travelling from outside of the country. This assumption has been used as a conservative estimate to ensure a worst case assessment has been undertaken. The Applicant will engage with local businesses and will seek to use local staff where available. The Applicant is committed to promoting access to employment, upskilling and reskilling opportunities for local people. These could include work experience placement, access to job and joint apprenticeships across industry partners. These are detailed and secured in the **Outline Employment, and Supply Chain Plan [EN010149/APP/7.20]** [APP-0153].
Reinstatement		
LIR 15.21	The proposal indicates that the proposed development will be compensated by a planting scheme that equals or exceeds the current levels of vegetation. It is recommended that the development should consider exceeding current levels of vegetation and increasing soil sequestration / soil enrichment above the beyond to ensure that the development returns the land in a better state and therefore maintaining sustainable future considerations for valuable arable farmland (Table 8.9)	The extent of new planting will exceed by many multiples the amount of vegetation being removed as a result of the Proposed Development. This is secured by **Appendix 1: Green Infrastructure Parameters** and **Appendix 2: Vegetation Removal Parameters** of the **oLEMP [EN10149/APP/7.9.2]** [REP1-064]. Appendix 1 shows the proposals for strategic planting which includes approximately 15,563m of new hedgerows and 16ha of tree belt planting. By comparison, Appendix 2 shows the removal of approximately 1,253m of existing hedgerows. Should the DCO be granted consent, detailed LEMP(s) will be produced for the Proposed Development in accordance with the DCO Requirement in Schedule 2 of the **Draft DCO [EN010149/APP/3.1.2]** [REP1-006]. The LEMP(s) would require approval prior to commencement of construction and would be required to be substantially in accordance with the oLEMP, including the Green Infrastructure Parameters presented in Appendix 1 and Vegetation Removal Parameters presented in Appendix 2.

LIR/WR Para Ref.	Summary Position	Applicant's Response
		The habitat creation proposals have considered the soil type across the Site, for example, habitat creation proposals in Springwell East are for neutral grassland, appropriate to the neutral soil type in this area, as opposed to calcareous reflecting both changes in soil type and landscape character. It is anticipated that the habitat creation proposals, which include hedgerow and tree planting, will improve the soil health and quality, including soil sequestration / soil enrichment following continuous grassland, when compared to land remaining in intensive arable rotation.
Monitoring		
LIR 15.22	Within the ES, it is stated that monitoring requirements are not compulsory (paragraph 8.11) in relation to climate change matters. However, the Council strongly recommends ongoing monitoring as best practice to ensure transparency in regard to how this proposal helps the national net zero agenda and how this would be contributing over the 40 year period. Specifically the Council's view is that monitoring and reporting requirements should be imposed in relation to emissions data and renewable energy generation figures. This is especially relevant where it is recognised that the GHG assessments within the ES are dependent on the quality of data and in some cases have been estimated (paragraph 8.12.1)	**ES Volume 1, Chapter 8: Climate [EN010149/APP/6.1]** [APP-048] demonstrates that the net impact of the Proposed Development on the climate is positive, allowing for savings of 9.6 million tCO_2e across its lifetime when compared against fossil fuel energy. It is not standard industry practice to monitor emissions from schemes such as this. For example, the most commonly adopted international standards from the IFC and Equator Principles state that monitoring and reporting is only required if scope 1 and 2 GHG emissions (direct emissions such as fuel combustion and indirect emissions from purchased energy such as electricity) exceed 25,000 tCO_2e per year. Annual scope 1 and 2 emissions from the Proposed Development are estimated at 8,885, 100 and 7,646 tCO_2e for the construction, operation and decommissioning phases respectively, and therefore do not come close to this threshold. The emissions that will arise from the lifecycle have been quantified and compared against the UK carbon budgets, and therefore the national Net Zero agenda, in Table 8.15 of **ES Volume 1, Chapter 8: Climate [EN010149/APP/6.1]** [APP-048].

Table 2-6 – Cultural Heritage

LIR/WR Para Ref.	Summary Position	Applicant's Response
Above Ground Heritage Assets		
LIR 16.8 – 16.10	Table 9.3 only proposes to retain the listed milepost on the A15 as an above ground sensitive receptor. The Council has expressed ongoing concerns about the assessment of built heritage assets during Scoping and PEIR stages. Despite this, these concerns remain unaddressed and there has been no follow-up engagement from the developer. There is a lack of detailed analysis of individual assets, rather a broad-brush approach and de-scoping en-masse within groups. There is very limited information within the groups as to why individual heritage assets have been scoped out the analysis and why a 'grouped assessment' of the significance of effects has instead been applied. In addition, the proposals also have cumulative impacts, particularly the connectivity of the open rural landscape and broader visual and experiential effects on heritage assets. This is notable given the proximity to the Leoda Solar Farm and other proposed developments, alongside potential sequential visual impacts on historic landmarks. A detailed evaluation of these cumulative effects should be undertaken to ensure a robust understanding of the scheme's wider historic environment implications. 16.11 A number of receptors located within close proximity to the development have been scoped out and no evidence base has been provided. These are Thompsons Bottom	The listed milepost on the A15 is the only above ground sensitive receptor for which a likely significant effect is predicted (due to the potential for physical damage without additional mitigation). Following the implementation of additional mitigation measures as set out and secured in the **oCEMP [EN010149/APP/7.7.2]** [REP1-060] there are no significant effects anticipated on the milepost. Since the drafting of the LIR, there has been further engagement and the majority of the Council's concerns have now been addressed as detailed in the **Draft Statement of Common Ground – Lincolnshire County Council [EN010149/APP/8.1]** [REP1-066]**.** This has included a meeting on 30th April 2025 where further discussion was held regarding of the de-scoping of heritage assets including Temple Farmhouse (LBEN 1254328 and 1261359), Home Farmhouse (LBEN 1061825) and Farmyard to the north of The Firs (LBEN 1280661) for which the effects are agreed as not significant, and Thompsons Bottom Farmhouse and outbuildings (LBEN 1254329/1254407) and Scopwick Mill (LBEN 1280676) which are still under discussion. Table 9.2 and Table 9.3 in **ES Volume 1, Chapter 9: Cultural Heritage [EN010149/APP/6.1.2]** [AS-012] are based on the results of the **ES Volume 3, Appendix 9.1: Archaeological Desk- Based Assessment and Stage 1 Setting Assessment [EN010149/APP/6.3.3]** [REP1-038] which contain further detail. Non-significant effects to designated heritage assets that are scoped out of the ES are further detailed in **Appendix 5** of the **Planning Statement [EN010149/APP/7.2.2]** [AS-018]. An updated **ES Volume 1, Chapter 16: Cumulative Effects [EN010149/APP/6.1.2]** [REP1-018] to account for Leoda Solar Farm was submitted at Deadline 1. No inter-project cumulative effects are predicted as a result of Leoda Solar Farm (EN0110016) during operation due to the lack of visibility of the Proposed Development from the heritage assets. During the construction, operation (including maintenance), and decommissioning phases,

LIR/WR Para Ref.	Summary Position	Applicant's Response
	Farmhouse and outbuildings (LBEN 1254329/1254407), Temple Farmhouse (LBEN 1254328 and 1261359), Home Farmhouse (LBEN 1061825) and Farmyard to the north of The Firs (LBEN 1280661). All are farmhouses which have been grouped together and descoped despite having clear impacts on both setting and special interest. This generalised approach fails to consider the impact on individual assets and appears to rely heavily on embedded mitigation. In the case of Scopwick Mill (Grade II Listed), it is only 200m from the nearest solar array, yet despite the proximity and scale there is no detail on the specific mitigation. Table 9.2 in Chapter 9 appears to solely list receptors and descope them without any detailed analysis of the individual impacts on setting. There are probably a number of instances where this group approach is acceptable in the context of a 5km study area (particularly with regards village centres where there are enclosed views) but an understanding of individual significance is Above Ground Heritage Assets: Table 9.3 only proposes to retain the listed milepost on the A15 as an above ground sensitive receptor.	physical impacts to below-ground heritage assets may occur. If assets affected by the Proposed Development extend beyond the footprint of the Proposed Development and were also impacted by Leoda Solar Farm, a cumulative effect could arise. However, given the physical separation between the two schemes, such impacts would only be possible in the vicinity of the National Grid substation. Evaluations undertaken for the Proposed Development do not indicate that any heritage assets extend beyond the Order Limits in this area, and therefore no inter-project cumulative effects are anticipated. It is assumed that appropriate mitigation will be in place for any heritage assets affected by Leoda Solar Farm.
LIR 16.11 – 16.16	A number of receptors located within close proximity to the development have been scoped out and no evidence base has been provided. These are Thompsons Bottom Farmhouse and outbuildings (LBEN 1254329/1254407), Temple Farmhouse (LBEN 1254328 and 1261359), Home Farmhouse (LBEN 1061825) and Farmyard to the	Since the drafting of the LIR a meeting was held on 30th April 2025 to discuss the de-scoping of these assets, NKDC agreed that based on design amendments since the previous consultation they now agree with the assessment of Temple Farmhouse (LBEN 1254328 and 1261359), Home Farmhouse (LBEN 1061825) and Farmyard to the north of The Firs (LBEN 1280661). As noted above, the distance from Scopwick Mill (NHLE 1280676) to the nearest array is 400m.

LIR/WR Para Ref.	Summary Position	Applicant's Response
	north of The Firs (LBEN 1280661). All are farmhouses which have been grouped together and descoped despite having clear impacts on both setting and special interest. This generalised approach fails to consider the impact on individual assets and appears to rely heavily on embedded mitigation. In the case of Scopwick Mill (Grade II Listed), it is only 200m from the nearest solar array, yet despite the proximity and scale there is no detail on the specific mitigation. Table 9.2 in Chapter 9 appears to solely list receptors and descope them without any detailed analysis of the individual impacts on setting. There are probably a number of instances where this group approach is acceptable in the context of a 5km study area (particularly with regards village centres where there are enclosed views) but an understanding of individual significance is required of those buildings with greatest impact and the heritage assets need to be considered in greater detail. The assessment considers the Council's Local List of non-designated heritage assets but whilst this is analysed in Appendix 9.1, it does not feature in Chapter 9. This required to demonstrate a full understanding of the built environment of the area around the site. In summary, there continues to be a lack of consideration of individual assets and analysis of	The locally listed buildings within close proximity to the Order Limits are all 19th century partially extant farmsteads, they derive significance from their surviving historic fabric, associated modern farm buildings where present provide a conceptual link to the current agricultural use of the land the character of which also provides appropriate context to understand the function of the historic farmsteads. They are of low importance as examples of local farmsteads and together have group value. There will be no physical impacts to any of these buildings, effects would occur through changes to their setting which would be: • Ashby Lodge (MLI120940). Arrays will be visible within 200 m to the west (beyond the A15), 380 m to the south and 350 m to the east. The alteration to the character and appearance of the surrounding landscape would reduce the contribution that this makes to the significance of the building, a block of woodland northeast of the farmstead would serve to restrict views of arrays in this direction. The farmstead would still be experienced within an immediate setting of agricultural land, the changes to the wider surroundings would slightly reduce the contribution that setting makes to its significance. The effect would be not significant. • Slate House (MLI120942) faces east across formal gardens obscured from the road by hedges. Plantations of trees to the west of the farm complex further screen views to and from the farm, historic mapping shows a footpath leading west from the house through these trees. The Order Limits surround the asset on three sides (south, west and north) but the arrays have been pulled back on the northern side to increase separation from the farmstead and the existing tall vegetation would limit visibility of the arrays. The change to the wider surroundings is considered to result in a minor reduction in the contribution that the agricultural surroundings make to Slate House which would be less than substantial harm. As the asset is of low importance the impact would not result in a significant effect. assessment risks underrepresenting the asset's contribution to local rural character. • Glebe Farm (MLI120941) derives further significance from its historic relationship with Ashby Hall. The surrounding agricultural land provides appropriate context to appreciate the farmstead. The closest arrays would be 600m to the northeast with the area of Order Limits adjacent to the farmstead used for below ground cabling and either returned to agricultural use or used as grassland habitat. There would be no impact on the relationship with Ashby

LIR/WR Para Ref.	Summary Position	Applicant's Response
	impacts on designated heritage assets within close appreciation of the site. The descoping is broad brush and provides no rationale or evidence base for the decisions. Stating that the assets will not be impacted is insufficient as it fails to consider the individual circumstances of the individual assets and how any mitigation can be best applied. There remains limited and insufficient information on mitigation and inconsistent application of what is being considered for additional mitigation. There are clear demonstrable impacts on the heritage and built environment, and these have either been largely dismissed, or are reliant on a standard approach for mitigation, with no information provided regarding bespoke analysis and understanding of the heritage assets which may be impacted. Much of the proposal will lead to 'less than substantial harm' to the designated heritage asset and those impacts should be tested and understood to ensure the correct approach and mitigation has been applied.	Hall and the change to the wider landscape would result in a negligible reduction in the contribution that it makes to the significance of Glebe Farm, the effect would be not substantial. • Rowston Top / The Maltings (MLI120856), arrays would be within 230 m to the north, and Order Limits within 200 m to the west would be used for cabling and then retained as agricultural land or used for grassland habitat. The farmstead would therefore continue to be experienced in a largely agricultural setting and there would be no interruption to its association with Ashby Hall estate, and the change to the surroundings would result in a very slight reduction in the contribution that the setting makes to its significance and the effect would be not significant. • Scopwick Lowfield Farm (MLI120841), arrays would be present within 90 m to the southwest of the farmstead, 260 m to the north and over 500 m to the east. Land within the Order Limits between the farmstead and the arrays to the north would be potentially used for cabling then retained as agricultural land. The change to the character of the agricultural surroundings would result in a slight reduction in the contribution that they make to the significance of the farmstead and the effect would be not significant. • Sheffield House (MLI120857), the closest arrays would be 70 m to the northwest of the farmstead, on the opposite side of a watercourse that marks the parish boundary. The relationship between the farmstead and its own agricultural land holding that would have lain south of the watercourse will be unaltered and trees along the watercourse will serve to filter views of the arrays. The change to the surrounding agricultural land would result in a negligible reduction in the contribution it makes to the significance of the farmstead and the effect would be not significant. Mitigation for the effects resulting from changes to the setting of heritage assets has been embedded in the design of the Proposed Development, this has been further discussed and explained to the Council during the examination. As detailed in the **Draft Statement of Common Ground – Lincolnshire County Council [EN010149/APP/8.1]** [REP1-066] agreement has been reached regarding the effects on Temple Farmhouse (LBEN 1254328 and 1261359), Home Farmhouse (LBEN 1061825) and Farmyard to the north of The Firs

LIR/WR Para Ref.	Summary Position	Applicant's Response
		(LBEN 1280661) whilst the effects on Thompsons Bottom Farmhouse and outbuildings (LBEN 1254329/1254407) and Scopwick Mill (LBEN 1280676) are still under discussion. Further clarification regarding the mitigation for Thompson's Bottom Farmhouse (hedgerow screening along Warren Lane as shown on **Viewpoint 29 ES Volume 4: Landscape Visualisations EN010149/APP/6.4** [APP-132]) and Scopwick Mill (400m from the nearest arrays, not 200m as stated in the LIR, and reference to **Viewpoint 19 ES Volume 4: Landscape Visualisations EN010149/APP/6.4** [APP-131]) has been shared via email on 12 June 2025.
Archaeology		
LIR 16.18 and 16.22	The Historic Environment (Infrastructure) Officer has serious concerns over the adequacy of works undertaken for Springwell. The assessment undertaken falls considerably short of acceptable standards and fails to meet the requirements set out by the NPPF, EIA Regulations and National Policy Statement EN-1. EN1 outlines requirements for understanding the significance of heritage assets that will be affected, including Section 5.9.12: 'The applicant should ensure that the extent of the impact of the proposed development on the significance of any heritage assets affected can be adequately understood from the application and supporting documents.'(Section 5.9.9 – 5.9.15) and that 'The results of predetermination archaeological evaluation inform the design of the scheme and related archaeological planning conditions.' (footnote 94). The Applicant has indicated that further archaeological works will be undertaken post-consent. Whilst the Council welcome's this approach in principle, best practice, as stated above within Historic England Advice	This point was raised in the Lincolnshire County Council Relevant Representation [RR-233] and during subsequent correspondence. During ISH1 officers on behalf of LCC and Historic England provided comments on the assessment, with LCC confirming that the trial trenching undertaken had been proportionate and that the County was content with the trial trenching undertaken for the assessment, and that their focus was on asking for more information as to what is planned as part of the Proposed Development and working on an appropriate mitigation strategy. This is detailed in the **Written Summary of Applicant's Oral Submissions at Issue Specific Hearing 1 (ISH1) [EN010149/APP/8.16]** [REP1-073]. Historic England's comments were focussed on the desk-based assessment, and similarly its focus in terms of additional information from trial trenching was on that being undertaken pre-commencement. This point has been addressed within Table 2, Item 5-7 in the **Draft Statement of Common Ground – Lincolnshire County Council [EN010149/APP/8.1]** [REP1-066]. As noted in the **Written Summary of Applicant's Oral Submissions at Issue Specific Hearing 1 (ISH1) [EN010149/APP/8.16]** [REP1-073] the scope of work set out within the **Outline Written Scheme of Investigation [EN010149/APP/7.15]** [APP-0148] is under discussion and the Applicant is aiming to issue a revised Outline Written Scheme of Investigation at Deadline 3 once further engagement has taken place. A meeting with the Council and Historic England is scheduled for 19 June 2025 to progress these discussions further.

LIR/WR Para Ref.	Summary Position	Applicant's Response
	Note 17 'Planning and Archaeology', is that this should have been undertaken prior to submission of the DCO and should have been representative of the full DCO Order Limit red line boundary, in accordance with NPPF, EIA Regulations and National Policy Statement EN-1.	
LIR 16.19 – 16.21	The significance of any heritage assets cannot be assessed until there has been sufficient evaluation to identify the currently unknown archaeology across the proposed development area. Trial trenching is essential in finding and characterising the archaeology. The Applicant has not undertaken sufficient trenching evaluation to identify the presence of archaeology across the impact zone and therefore 'the significance of any heritage assets' cannot be adequately understood. Significant concerns are raised over the amount of trial trenching undertaken within the 1280-hectare site. The Applicant has completed 196 trenches, each 50m by 1.8m. The trenching thus represents slightly over 0.1% of the full red line boundary. Approximately 99.9% of the site has not been evaluated. The direct and indirect significant effects of the development on cultural heritage cannot be understood until sufficient trial trenching has been undertaken across the full impact zone and the scheme as presented currently lacks a proportionate level of detail on the significance of any heritage assets affected on 99.9% of the site and there is insufficient information to understand the impact.	This point was raised in the Lincolnshire County Council Relevant Representation [RR-233] and during subsequent correspondence and has been addressed within 5-11 in the **Draft Statement of Common Ground – Lincolnshire County Council [EN010149/APP/8.1]** [REP1-066]. During ISH1 officers on behalf of LCC and Historic England provided comments on the assessment, with LCC confirming that the trial trenching undertaken had been proportionate and that the County was content with the trial trenching undertaken for the assessment, and that their focus was on asking for more information as to what is planned as part of the Proposed Development and working on an appropriate mitigation strategy. This is detailed in the **Written Summary of Applicant's Oral Submissions at Issue Specific Hearing 1 (ISH1) [EN010149/APP/8.16]** [REP1-073]. As noted in the **Written Summary of Applicant's Oral Submissions at Issue Specific Hearing 1 (ISH1) [EN010149/APP/8.16]** [REP1-073] the scope of work set out within the **Outline Written Scheme of Investigation [EN010149/APP/7.15]** [APP-0148] to inform the detailed design is under discussion and the Applicant is aiming to issue a revised Outline Written Scheme of Investigation at Deadline 3 once further engagement has taken place.

LIR/WR Para Ref.	Summary Position	Applicant's Response
LIR 16.23 – 16.25	There are also considerable amounts of the site where no archaeological trenching is proposed at all. The outline Written Scheme of Investigation (oWSI) states that areas of ecological enhancement will not be subject to archaeological trenching eg tree planting, wildflower planting and other forms of enhancement. These areas will need to be included within the programme of trenching to establish if archaeological remains are present and whether mitigation is required depending on the type of enhancement proposed. Concern remains whether all areas of landscaping and drainage will also be included within the trenching programme or have been proposed for omission. It is essential that sufficient trenching is undertaken to identify the presence, extent, depth and significance of previously unknown archaeology across the redline boundary, including areas of ecological mitigation. The current 0.1% sample is not standard practice and has proven to be ineffective at establishing the presence of archaeological remains. LCC's Historic Environment (Infrastructure) Officer advises that between 3% and 5% of the site should be sampled by trenching to get an understanding of the archaeological potential, with a contingency of 2% should it be needed to aid understanding the extent, depth and significance of any remains found, as required. The Council's position is that the proposed Requirement 11 covering archaeological works post-consent is not appropriate or fit for purpose. The wording currently	This point was raised in the Lincolnshire County Council Relevant Representation [RR-233] and during subsequent correspondence and has been addressed within 5-11 in the **Draft Statement of Common Ground – Lincolnshire County Council [EN010149/APP/8.1]** [REP1-066]. The scope of work set out within the **Outline Written Scheme of Investigation [EN010149/APP/7.15]** [APP-0148] to inform the detailed design is under discussion and the Applicant is aiming to issue a revised Outline Written Scheme of Investigation at Deadline 3 once further engagement has taken place. Further engagement is also ongoing regarding the wording of Requirement 11 which was updated by the Applicant in the **Draft DCO** [REP1-006] as set out in the **Draft Statement of Common Ground – Lincolnshire County Council [EN010149/APP/8.1]** [REP1-066]. The remaining point under discussion is the Works numbers the requirement should relate to. LCC have requested that the requirement relate to all Works numbers. Further discussion as to the scope of work necessary for each Work number is ongoing and will be reflected within the updated oWSI and further revisions of the draft DCO as appropriate.

LIR/WR Para Ref.	Summary Position	Applicant's Response
	suggested is vague and unenforceable. We would advise that the wording accepted at the Mallard Pass, Cottam and West Burton Solar Farms, all recently consented NSIPs within Lincolnshire, is included for Springwell, should the scheme be consented. The wording utilised within the Mallard Pass Requirement has been deemed to be appropriate and allows for an enforceable and robust level of archaeological works to be undertaken and appropriate mitigation, informed by sufficient evaluation, to be deployed.	

Table 2-7 – Landscape and Visual Impacts, and Residential Visual Amenity

LIR/WR Para Ref.	Summary Position	Applicant's Response
Landscape Impacts		
LIR 17.21	The development has the potential to transform the local landscape by altering its character on a large scale. 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.	The Applicant has acknowledged in **ES Volume 1, Chapter 10: Landscape and Visual [EN010149/APP/6.1]** [APP-050] that there would likely be a significant effect on landscape character locally (within a defined tract of the landscape), but does not consider that the landscape change identified has the potential to result in a significant effect on landscape character at a wider regional scale. Three plans comprising **Appendix 2** to the **Applicant's Response to First Written Questions (ExQ1) [EN010149/APP/8.14]** [REP1-071] illustrate the geographical extent of the Order Limits relative to the boundaries of the relevant National Character Area (NCA), District Landscape Character Type (LCT) and Landscape Character Areas (LCAs). The NCA (Southern Lincolnshire Edge) and LCT (Central Plateau) are broadly similar in extent and provide a good proxy for considering effects on landscape character at a regional scale.

LIR/WR Para Ref.	Summary Position	Applicant's Response
		Beyond 1-1.5km of the Order Limits the Proposed Development would have no effect on landscape character. By contrast, the LCT extends over 15km to the north and 19km to the south and there would be no effect on landscape character across the greater majority of the LCT. The NCA is even greater in extent and therefore again there would be no effect on landscape character across the greater majority of the NCA. When considered at the NCA or LCT (regional) scale, the effects on landscape character would not be significant. The openness, tranquillity and agrarian character experienced at a regional scale across the majority of the NCA and LCT would remain unaltered by the Proposed Development.
LIR 17.22 – 17.23	The ES concludes that there will be the significant major/moderate adverse landscape effects across the whole site during construction and Operation Year 1. This will reduce to moderate adverse (not significant) at Springwell East at Operation Year 10 when mitigation will have been established but will remain significant major/moderate adverse at Springwell West and Central. AAH note that professional judgement has been applied in reaching this assessment and a rationale provided (paragraph 10.9.193), however, they recommend that the conclusion that the impact on Springwell East is not significant (at operational year 10) is considered during the Examination.	The Applicant confirms that LIR paragraph 17.22 accurately summarises the Applicant's assessment of effects on landscape character in **ES Volume 1, Chapter 10: Landscape and Visual [EN010149/APP/6.1]** [APP-050]. The Applicant also notes that further justification regarding its judgements concerning the significance of landscape effects in Springwell East at Year 10 are set out in paragraphs 10.9.189 to 10.9.192 of the above document. A considerable amount of new hedgerow planting is proposed throughout Springwell East, particularly alongside PRoWs, and once established (year 10) these would further restrict the extent of effects on landscape character within LCA 11: Central Clays and Gravels resulting in a reduced magnitude of change in landscape character. The Applicant would be happy to assist if the ExA has any specific questions in relation to the findings of significance at Year 10 in relation to landscape character in Springwell East.
LIR 17.24	In addition, AAH recommend that vegetation removal is limited along site boundaries or sight lines, or along construction access routes, due to its potential to change the character of the local landscape beyond the limits of the development. Tree and vegetation removal must be clarified through the examination process, and subsequently any works or removal of trees and	The Applicant notes that plans showing the proposed areas of vegetation for removal are illustrated in the Vegetation Removal Parameters presented in Appendix 2 of the **oLEMP [EN10149/APP/7.9.2]** [REP1-064]. These plans take account as necessary the construction access routes and sight lines and form the basis on which the assessments in **ES Volume 1, Chapter 10: Landscape and Visual [EN010149/APP/6.1]** [APP-050] were undertaken.

LIR/WR Para Ref.	Summary Position	Applicant's Response
	hedgerows must be agreed prior to any works commencing.	Should the DCO be granted consent, detailed LEMP(s) will be produced for the Proposed Development in accordance with the DCO Requirement in Schedule 2 of the **Draft DCO [EN010149/APP/3.1.2]** [REP1-006]. The LEMP(s) would require approval prior to commencement of construction and would be required to be substantially in accordance with the framework set out in the **oLEMP [EN10149/APP/7.9.2]** [REP1-064], including the Vegetation Removal Parameters presented in Appendix 2 (Section 1.3.3). The LEMP(s) would confirm the extent of vegetation removal during construction and would require approval prior to commencement of construction. In accordance with Requirement 8 of the **Draft DCO [EN010149/APP/3.1.2]** [REP1-006], the LEMP(s) would need to be submitted to and approved by the relevant planning authority, in consultation with Lincolnshire County Council, the Environment Agency and Natural England. The Applicant considers that the provisions above will ensure that vegetation removal is minimised along site boundaries and along construction access routes. This would minimise the potential to change the character of the local landscape beyond the limits of the development.
Visual Impact		
LIR 17.26	Access, and the wider highways elements of the scheme, do not appear to be fully considered in the LVIA despite the potential for adverse effects on the views of the rural landscape including potential vegetation loss, urbanisation and reduction of visual amenity. Consequently, the visual effects during construction may be underestimated within the LVIA due to unconsidered impact of loss of vegetation. Clarification on this matter by the applicant should be provided.	The Applicant does not agree with this observation and considers that the effects of vegetation loss have been taken into account as necessary in the assessment of effects during construction and operation. The Applicant notes that plans showing the proposed areas of vegetation for removal are illustrated in **ES Volume 2, Figure 7.4: Important Hedgerows and Areas Proposed for Vegetation Removal [EN010149/APP/6.2]** [APP-064]. These plans take account as necessary of construction access routes and sight lines and form the basis on which the assessments in **ES Volume 1, Chapter 10: Landscape and Visual [EN010149/APP/6.1]** [APP-050] were undertaken. The Applicant does not agree therefore that the visual effects during construction have been underestimated within the LVIA.

LIR/WR Para Ref.	Summary Position	Applicant's Response
LIR 17.28	There are potential opportunities for the applicants of each scheme to coordinate mitigation planting in the area around the National Grid Substation, which we would recommend are investigated further if possible. For example, this may include the extending of carriageway hedgerow planting further north along the western edge of the A15 (such as along field parcels Bcd024, Bcd027, Bcd031), which are in the Springwell Order Limits and would bring mitigation planting closer to potential visual receptors, likely further screening the proposed National Grid Substation.	Please refer to the Applicants response to the **Response to First Written Questions (ExQ1) [EN010149/APP/8.14]** [REP1-071] Q1.10.15: Coordination of Visual Mitigation with the National Grid Substation Proposals.
LVIA Mitigation		
LIR 17.34 – 17.36	The proposals include embedded mitigation measures which are reliant on additional planting to integrate and screen proposals, promote conservation and protection of the environment and encourage ecological and habitat diversity. The success of the landscape mitigation is highly dependent on the successful management and maintenance of the new planting, as well as the protection of existing trees and hedgerows (to BS:5837 Trees in Relation to Construction standard and any subsequent arboricultural method statements, as approved by the appropriate authority). This would include areas within the Order Limits but away from construction activity, such as storage areas for materials which may suffer from tracking by plant that would damage tree root protection areas. The Council would expect the management plan to be developed further beyond the initial 5-year period, particularly if landscape and visual effects are being assessed at 10 years. Any	The **oLEMP [EN10149/APP/7.9.2]** [REP1-064] provides a framework for delivering the Green Infrastructure elements of the Proposed Development for the construction and operational phases of the development including the successful establishment and future maintenance of the proposed landscape and ecological works for the duration of its operation. Should the DCO be granted consent, detailed LEMP(s) will be produced for the Proposed Development in accordance with the DCO Requirement in Schedule 2 of the **Draft DCO [EN010149/APP/3.1.2]** [REP1-006]. The LEMP(s) would require approval prior to commencement of construction and would be required to be substantially in accordance with the framework set out in the **oLEMP [EN10149/APP/7.9.2]** [REP1-064], including the Green Infrastructure Parameters presented in Appendix 1 and Vegetation Removal Parameters presented in Appendix 2. This includes measures to protect existing trees and hedgerows in accordance with BS:5837 as set out within Section 5.3.16. An indicative management programme schedule is presented in Appendix 3 of the **oLEMP [EN10149/APP/7.9.2]** [REP1-064] which would be developed further within the LEMP(s) at the detailed design stage. The initial management prescriptions set out within the **oLEMP**

LIR/WR Para Ref.	Summary Position	Applicant's Response
	early planting 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. The landscape proposals are at a high level and it would be expected that if the project proceeds, much more detailed plans would need to be submitted and subsequently agreed by the appropriate authority prior to the commencement of any works. This should include detail of the areas of landscape mitigation, location and types of planting as well as number, density and specification. Detailed landscape proposals should be based on the mitigation illustrated in the oLEMP. Monitoring of the proposals also requires further development to ensure that 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 establishment will assist.	**[EN10149/APP/7.9.2]** [REP1-064] cover the first 30 years of the Proposed Development with a greater emphasis on the establishment period for new planting and habitats (0-5 years). After 5 years, and every 5 years thereafter, there would be a full review and update of the detailed LEMP(s) by a suitably qualified ecologist and landscape architect to ensure that the delivery of the detailed LEMP(s) is being met. In addition, monitoring of specific habitat types would be undertaken at years 1, 2, 3 and 5, 10, 15, 20, 25 and 30 as set out in Section 7 of the **oLEMP [EN10149/APP/7.9.2]** [REP1-064]**.** After 30 years (which is the mandatory timeline for biodiversity net gain), the management of habitats will fall under the general management prescriptions set out within the detailed LEMP(s) for the remainder of its operation. The Applicant has updated Section 1 and 8 of the **oLEMP [EN10149/APP/7.9.2]** [REP1-064] to provide additional controls on the detailed landscape design. It states that 'each LEMP will include details of the location, number, species, size and planting density of any proposed planting including the details of any proposed tree, hedgerow and shrub panting and the proposed times of such planting'. This is set out in the Applicant's response to **Response to First Written Questions (ExQ1) [EN010149/APP/8.14]** [REP1-071] Q1.10.20: Control Documents. The LEMP(s) would need to be in substantial accordance with the Green Infrastructure Parameters presented in Appendix 1 and must be approved by the appropriate local planning authority prior to the commencement of works. On this basis no further controls on the detailed landscape design are required. All of the advanced planting already undertaken by the Applicant (in advance of DCO consent) is included on the Green Infrastructure Parameters presented in Appendix 1 of the **oLEMP [EN10149/APP/7.9.2]** [REP1-064] and would be included within the detailed LEMP(s) to be approved by the local planning authority should the DCO be granted consent. Early planting refers to planting that can take place following DCO consent (if it is granted) and before construction is complete. Early planting would be identified in accordance with Section 5.3.12 of the **oLEMP [EN10149/APP/7.9.2]** [REP1-064] and submitted at part of the detailed LEMP(s). On this basis, both advanced and early planting would be included within the LEMP(s).

LIR/WR Para Ref.	Summary Position	Applicant's Response
		The Applicant recognises the importance of establishing new planting and has committed to the monitoring of new tree and hedgerow heights and densities at years 1, 2, 3, 5 and 10 to help ensure they reach the target heights set out in the Environmental Statement. This is set out in the response to the **Response to First Written Questions (ExQ1) [EN010149/APP/8.14]** [REP1-071] Q1.10.21: Planting Performance Criteria.

Table 2-8 – Land, Soil and Groundwater

LIR/WR Para Ref.	Summary Position	Applicant's Response
Loss of BMV Land		
LIR 18.18 – 18.21	In assessing the environmental impact on agricultural land, Table 11.7 of the ES describes 'permanent, irreversible loss of one or more soil functions or soil volumes (including permanent sealing or land quality downgrading), over an area of more than 20ha of soil related features (including effects from 'temporary developments') as a major impact. Temporary developments can result in a permanent impact if resulting disturbance or land use change causes permanent damage to the soil. The Council notes that Examining Authorities on other solar projects have taken the view that such a loss of land is a permanent impact as it is virtually impossible to mitigate. It is anticipated that BMV land used for satellite collector compounds, Springwell substation and main collector compound and BESS would be hard surfaced. This would result in up to 21ha of BMV land being	Please refer to the Applicant's **Response to First Written Questions (ExQ1) [EN010149/APP/8.14]** [REP1-071] Questions Q1.9.4 which provides a response related to the approach to the assessment for BMV land, particularly related to the fixed equipment (Satellite Collector Compounds, Springwell Substation, Main Collector Compound and BESS). Furthermore, the response to this question has also been addressed in Q1.9.1 within the Applicant's **Response to First Written Questions (ExQ1) [EN010149/APP/8.14]** [REP1-071]. As set out in the **Planning Statement [EN010149/APP/7.2.2]** [AS-018] the Applicant has sought to avoid and reduce the amount of BMV used for Solar PV (and other hard infrastructure) development. Out of the 1280ha of land within the Order Limits, 231.7ha is BMV which is proposed to be utilised for hard infrastructure i.e. collector compounds, Springwell Substation, Solar PV development, and BESS. This represents use of 42.8% of the total BMV within the Order Limits. The bund that will be located in Field Tb2 is considered temporary and this will be removed during the decommissioning phase and returned back to the original agricultural grade of the land for agricultural use, as detailed and secured within the **oSMP**

LIR/WR Para Ref.	Summary Position	Applicant's Response
	permanently sealed. In addition, the land uses listed in Table 11.12 do not include construction compounds or access tracks which may be hard surfaced and thus may result in the further loss of BMV and non-BMV agricultural land. The BMV land to be used for temporary green infrastructure in field T2b (through the formation of a bund to screen the substation and BESS) and community growing area appears to be a further permanent loss of BMV agricultural land. While the land to be used as temporary green infrastructure will not be permanently sealed, it would be covered by a 3-5m bund for the duration of the solar farm. The community growing area may or may not result in a loss of BMV agricultural land. Together they would account for the further loss of up to 20ha of BMV land. The Council considers that permanent sealing or potential land quality downgrading of BMV land from 'temporary' uses should be assessed as a major adverse impact in the ES and weighed in the planning balance. In this context the Council highlights the Institute of Environmental Management & Assessment (IEMA) Guide 'A New Perspective on Land and Soil in Environmental Impact Assessment' (February 2022) which notes that that soils in grades 1, 2 and Subgrade 3a are considered to be a receptor of 'Very High Sensitivity' and where the permanent loss, or reduction in quality, of more than 20ha of agricultural land due to development is of very high magnitude of impact.	**[EN010149/APP/7.11.2]** [REP1-042]. The community growing area is located on BMV agricultural land. Land that will be returned back to agricultural use following decommissioning will be returned to the prior ALC grade following measures and mitigation outlined in the **oSMP [EN010149/APP/7.11.2]** [REP1-042]. Therefore, as the land is being returned back to the pre-construction condition in line with EN-1 paragraphs 2.10.66 and 2.10.77 the development will be classed as temporary for all areas except green infrastructure. During the operation phase soil quality is able to be improved from nutrient inputs as a result of grazing and reduced agricultural pressure through heavy machinery, ploughing, fertilisers, herbicides and pesticides. During decommissioning the impact on soils has been mitigated through industry standard practice such as using track matting, avoiding wet weather conditions and using pile screws, these measures can be found in detail in the **oSMP [EN010149/APP/7.11.2]** [REP1-042]. Additionally, while a 40-year solar farm may seem like a long-term land use from a human perspective, it represents only a brief moment in the lifespan of soils, which develop and change over geological timescales spanning hundreds of thousands to millions of years. Therefore, its impact on soil processes is relatively short-term in the context of soil evolution. Solar farming being classed as temporary land was agreed by the Examining Authority on the **Heckington Fen Solar Farm Decision Letter [EN010123-001129]**; "ExA considers the Proposed Development would result in long term but not irreversible or permanent loss of agricultural land". As set out in the **oSMP [EN010149/APP/7.11.2]** [REP1-042] and secured by Requirement 18 of the **Draft DCO [EN010149/APP/3.1.2]** [REP1-006] during construction, operation and decommissioning measures will be put in place to ensure the soil is being handled correctly and is able to be returned back to agricultural use and the original agricultural grade following the decommissioning phase of the Proposed Development, therefore limited permanent impacts are anticipated and the Applicant disagrees that this should be assessed as a major adverse impact.

LIR/WR Para Ref.	Summary Position	Applicant's Response
		The Proposed Development includes proposed green infrastructure on 77 ha of BMV land. This has been assessed in the ES as presenting a permanent significant adverse effect on the basis that more than 20 hectares of land is impacted The impacts on soil quality and agricultural land will also be minimised during the operational phase through implementation of measures in the **oSMP [EN010149/APP/7.11.2]** [REP1-042].
Impacts on Soil		
LIR 18.22	There is some conflict between maintaining the land in agricultural production and improving biodiversity. Table 11.12 indicates that 77.1ha of BMV land will be permanently lost to green infrastructure which is considered to be a significant adverse impact. Whilst not incompatible, site-based issues, such as soil type(s) and local agricultural practices may create future problems. The green infrastructure areas particularly target the highest grades on agricultural land and any future restriction that might prevent its return to cultivation should be a consideration in the planning process. At least some of these areas are likely to be bound by BNG monitoring and habitat management obligations for the duration of operation and therefore will likely be incompatible with ongoing agricultural use. Soil structure can be significantly damaged during the construction phase of the process. Much of this damage can be remedied post construction but not all and it is possible that long term drainage issues may occur on the site due to the construction.	Proposed habitats have been selected that will not restrict the ability of the land to return to cultivation i.e., the focus on grassland creation. These habitats will largely be managed through agricultural use such as cutting or grazing, as defined in the **oLEMP [EN10149/APP/7.9.2]** [REP1-064]. There are some habitats that will be created, such as the calcareous grassland, adjacent to the A15, which may be bounded by habitat management obligations, however, these are located outside of the area of agricultural fields and therefore, would not restrict the ability of the land to return to agricultural use. As set out in the **oSMP [EN010149/APP/7.11.2]** [REP1-042] and secured by Requirement 18 of the **Draft DCO [EN010149/APP/3.1.2]** [REP1-006] during construction, operation and decommissioning measures will be put in place to ensure the soil is being handled correctly and is able to be returned back to agricultural use and to its original ALC grade following the decommissioning. During the construction phase soil structure may be temporarily damaged however soil will be stripped and stored correctly to minimise damage following instruction by the **oSMP [EN010149/APP/7.11.2]** [REP1-042] and following industry best practice. This damage can be repaired following construction and any field drains which have been damaged will also be restored. The ALC grade and drainage of the site will be restored back to the pre-construction condition.
LIR 18.23 – 18.24	Suitable soil management and restoration clauses would be needed in order to secure the land's quality at the end of the term. Whilst many of the damaging operations can be remedied using agricultural equipment, the layout	Please refer to the **Response to First Written Questions (ExQ1) [EN010149/APP/8.14]** [REP1-071] Q1.15.2 related to Below Ground Cables at Decommissioning and Q1.9.6 related to Soil Management and Mitigation.

LIR/WR Para Ref.	Summary Position	Applicant's Response
	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 the term when all infrastructure has been removed. If the soil is in 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. The ES states that upon decommissioning, the land beneath hard surfaced areas will be removed to a depth of 1m and restored using soils retained onsite or replaced with imported topsoil. This needs to be reconciled with the approach in the outline Soils Management Plan.	The **oSMP [EN010149/APP/7.11.2]** [REP1-042] includes measures to ensure that soil is managed throughout the operational phase. Vegetation establishment underneath the panels will also help to prevent soil erosion and damage to the soil and will help to improve the soil quality during the operational phase**.** The **oSMP [EN010149/APP/7.11.2]** [REP1-042] was updated at Deadline 1 to clarify that the land will be returned to the original ALC grade, informed by the pre development ALC survey outputs, following the construction phase (construction compounds and access tracks that will not be used for the purposes of the operational phase) and at the decommissioning phase. Soil quality is not expected to decrease during the operation of the solar farm, as the land will not be subjected to conventional agricultural practices such as heavy farm machinery use, pesticide or herbicide application, or tillage. In the absence of these disturbances, the soil structure remains intact and undisturbed, allowing natural processes to continue. Nutrients can be returned to the soil through controlled grazing. Moreover, because the soil is not being regularly turned, organic matter can accumulate at the surface and within the soil profile, promoting increased carbon sequestration and water infiltration**.**
Cumulative Impacts		
LIR 18.25	The amount of BMV land lost on a permanent basis to green infrastructure is significant while the loss of BMV land on a temporary basis through 'sealing' the land under hardstanding is also considered to be significant in terms of its environmental impact especially given the 40-year lifespan of the solar farm. The site is currently productive farmland which will be removed from mainly arable farming for 40+ years at best and a lower intensity grass-based system will replace it. The loss of arable production is locally significant and in view of other projects in the wider District and County,	Please refer to the Applicant's **Response to First Written Questions (ExQ1) [EN010149/APP/8.14]** [REP1-071] Q1.9.4 which provides a response related to the approach to the assessment for BMV land. Furthermore, the response to this question has also been addressed in Q1.9.1 of the above document**.** In accordance with IEMA land and soils guidance, a permanent land loss of over 20ha is considered a high magnitude of change from the baseline. As the total area of loss to Green Infrastructure is 77.1ha of BMV there will be a high magnitude resulting in a significant effect, however although there is an adverse effect due to loss of agricultural production the soil quality is able to be improved due to the improvements under BNG. The majority of land used within solar projects is for the PV areas, and these are considered temporary works

LIR/WR Para Ref.	Summary Position	Applicant's Response
	potentially cumulative significant. The loss of BMV agricultural land is considered to be a negative impact.	without permanent loss which can be returned to agricultural use at the end of the operational period for the Proposed Development. Therefore, the Applicant considers that inter-project cumulative effects are considered minimal in the context of the remaining BMV available at a county level as detailed in **ES Volume 1, Chapter 16: Cumulative Effects [EN010149/APP/6.1.2]** [REP1-018].

Table 2-9 – Noise and Vibration

LIR/WR Para Ref.	Summary Position	Applicant's Response
Construction Noise		
LIR 19.8	Construction noise is temporary and variable, and due to the nature of the construction works, highest levels of noise may only exist for a matter of hours or days as the works move across the Site. The majority of heavy machinery works would be within Field Tb2 to the north of Springwell West along the A15 where the BESS and substation are to be located. Mitigation measures, including temporary barriers to screen the works, the use of screw piling when installing solar panels near residential properties, and equipment being switched off when not in use will help minimise construction noise. These measures will be implemented along with controlled working hours between 8am and 6pm on weekdays, and 8am and 12 noon on Saturdays near residential properties. Further assessment of the horizontal directional drilling works around the B1188, which is part of the electrical cabling works, is expected to be agreed with North Kesteven District Council, as	The comment is noted. Should works be required outside of the controlled workings hours, these would be undertaken in accordance with the measures set out in paragraph 2.8.2 – 2.8.5 and Table 9 of the **oCEMP [EN010149/APP/7.7.2]** [REP1-060]. These works would be discussed and agreed with North Kesteven District Council prior to the construction phase, as detailed and secured in Section 2 of the **oCEMP [EN010149/APP/7.7.2]** [REP1-060].

LIR/WR Para Ref.	Summary Position	Applicant's Response
	this would likely require 24 hour works over a period of days depending on the ground conditions.	

Table 2-10 – Population

LIR/WR Para Ref.	Summary Position	Applicant's Response
Cumulative Impacts		
LIR 20.11 – 20.12	In seeking to create a balanced growth economy it is important that as complete a picture as possible of the economic impacts of NSIP developments are considered. However, given the minimal and temporary nature of the direct economic benefits of individual applications (largely limited to the construction phases) it is the Council's view that the indirect impacts, and particularly the cumulative economic and socio-economic impacts of a potentially significant number developments of a similar scale, both in the District and neighbouring parts of Greater Lincolnshire, must be taken into account. Given the number and scale of NSIP developments currently 'live' or in the preplanning phases there is a significant risk created by considering proposals either individually or on a piecemeal basis that an underestimation of the cumulative impacts may cause unforeseen and unmitigated harms to the agricultural economy or, that real opportunities will be missed.	Section 16.9 of **ES Volume 1, Chapter 16 – Cumulative Effects [EN010149/APP/6.1.2]** [REP1-018] considers the likelihood for significant cumulative socio-economic effects on 'population' or socio-economic receptors – namely people and the economy (in terms of potential positive effects relating to construction economic activity, and adverse effects relating to agricultural employment capacity). This recognises that there are several solar projects likely to be constructed and operated within Lincolnshire and surrounding areas that are either currently in planning or under development, which are likely to lead to a reduction in the indicative employment capacity of agricultural land, and are likely to bring economic benefits in the form of employment, local spending, GVA and wages in the construction and energy sectors. In objective terms, the cumulative schemes would hypothetically reduce employment capacity in agriculture by around 16,800ha, with an indicative employment capacity of 267 FTE jobs (approximately 3% of the agricultural economy in Lincolnshire). There are mitigating factors to this cumulative effect which relate to health pathways, and mean that this estimated reduction is a 'worst case' assessment: • Any cumulative assessment of the potential impact on the agricultural economy is hypothetical and does not consider individual landowner agreements could safeguard the employment supported by landholdings by moving the employment and or productivity to a nearby site;

LIR/WR Para Ref.	Summary Position	Applicant's Response
		• Agricultural activity could be on-going during construction or operational phases (for example in the form of agrivoltaics); • Any project developing on agricultural land would be subject to a consideration of voluntary land arrangements, or statutory compensation, relating to the operation of resident agricultural operations. • Uplift in other sectors (construction and energy – see below) will occur, which is a normal activity within any economy. Employment in these sectors will be supported by individual project commitments for promoting local skills and employment as required by NPS EN-1. The cumulative developments are likely to bring economic benefits in the form of employment, local spending, GVA and wages in the construction and energy sectors. Employment is estimated at: • Construction employment - If delivered over 10 years, supporting an average of 1,572 FTE jobs per year across the construction labour market area. This represents nearly £100m in GVA per year and £4.4m in spending in the area per year; and • Around 236 operational FTEs (permanent) in roles related to operation and maintenance of the solar projects; representing a contribution to GVA of around £36m per year and spending of £600,000 per year during the operational phases. The Applicant has committed to an **Outline Employment, Skills and Supply Chain Plan [EN010149/APP/7.20]** [APP-0153] which is secured as a Requirement of the **Draft DCO [EN010149/APP/3.1.2]** [REP1-006], and includes cumulative co-ordination as a key tenet. It includes a commitment to contribute to an evidence base to support the planning and delivery of education and skills curricula and training capable of delivering the workforce and skills needed across NSIP projects in the wider area, at the right time, to support the business competitiveness of all energy and construction projects. It is further anticipated that each individual NSIP would (or has) also produce(d) similar strategies to enhance and promote local employment, skills and supply chain opportunities and as set out above the Applicant is keen to collaborate with developers, sectors and public and voluntary and community stakeholders in this regard.

LIR/WR Para Ref.	Summary Position	Applicant's Response
LIR 20.17	The Council agrees with this assessment and would further argue that this approach to managing the challenges and opportunities created by the cumulative impacts of major NSIP and other projects should be extended to include 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. What impacts will this land take have on the agrifood sector and its supply chains? If solar farms produce a de facto 'energy crop' the economic value of this output 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 new 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 will be only one of several 'green' options open to landowners considering investments to drive profitability, productivity, or resilience both alongside and instead of primary production.	**Food Security and Land Use** The Applicant has addressed the issue of food security in the **Response to Relevant Representations [EN010149/APP/8.13]** [REP1-070] (RR-313; RR-227; RR121; RR-062; RR-178; RR-350; RR-435; RR366; RR-322; RR-042; RR-351) which broadly sets out that following amendments to the NPPF in December 2024, there is no longer a need to consider food production in land use planning terms, or the cumulative impact of the loss of land available for food production as a consequence of multiple NSIPs. The Applicant's assessment recognises that the change in land use from agricultural to energy generation would result in changes to employment and GVA supported by the Proposed Development (**ES Volume 1 Chapter 13: Population [EN010149/APP/6.1.2]** [REP1-016]), and that this is within the context of the wider employment and GVA supported by the existing and future sectors from cumulative schemes (**ES Volume 1, Chapter 16 – Cumulative Effects [EN010149/APP/6.1.2]** [REP1-018]). Measures are in place to promote and retain the economic value (jobs, skills, supply chain, GVA) of the Proposed Development – and for solar development in general – through an **outline Employment, Skills and Supply Chain Plan [EN010149/APP/7.20]** [APP-0153] which is secured as a Requirement of the **Draft DCO [EN010149/APP/3.1.2]** [REP1-006], and includes cumulative co-ordination as a key tenet. It includes a commitment to contribute to a Regional evidence base to support the planning and delivery of education and skills curricula and training capable of delivering the workforce and skills needed across the Region, at the right time, to support the business competitiveness of all energy and construction projects. Sectoral change is considered to be a normal part of the economy, and is supported by the overarching need to transition to low carbon renewable energy supported by the National Policy Statements EN-1 and EN3 in particular. **Aggregating Direct Economic Benefits / Importance of Modelling** The Applicant's assessment quantifies the employment and GVA supported by the Proposed Development in both the operational (including maintenance) and construction phases (**ES Volume 1 Chapter 13: Population [EN010149/APP/6.1.2]** [REP1-016]), and

LIR/WR Para Ref.	Summary Position	Applicant's Response

- **Aggregating direct economic benefits:** North Kesteven has a nationally significant role in feeding and defending the nation. In the future it may have a similarly significant role in powering the nation. The value of the electricity produced will be of considerable direct economic benefit over time to impacted businesses and communities, the wider District and Greater Lincolnshire. Given that we are 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 maximise value and assess the potential to contribute to strategic economic and socio economic goals, particularly in respect of green infrastructure growth, Net Zero and the building of green capital in the rural economy.
- **Importance of modelling:** The individual and cumulative impacts of NSIP developments may be far-reaching. They may also be largely positive. There are established economic models available to measure the wider impacts of major investments on local economies and communities. We would urge applicants to use 3BL or LM3 modelling to set help achieve a balanced view across the lifetime of developments.
- **Future Energy needs.** Solar Farms have a lifespan of 25-40 years. This raises questions about how decommissioning be staggered across the Grid and how will the energy they produce be replaced, how soon will new solar farms need to be planned if

that this is within the context of the wider employment and GVA supported by other planned solar projects, and as such sets out the cumulative modelled headline economic effects in these relevant sectors (renewable energy construction and energy operation) from cumulative schemes (**ES Volume 1, Chapter 16 – Cumulative Effects [EN010149/APP/6.1.2]** [REP1-018]).

Measures are in place to promote and retain the economic value (jobs, skills, supply chain, GVA) of the Proposed Development – and for solar development in general – through an **outline Employment, Skills and Supply Chain Plan [EN010149/APP/7.20]** [APP-0153] which is secured as a Requirement of the **Draft DCO [EN010149/APP/3.1.2]** [REP1-006].

The Applicant recognises that 3BL and LM3 are examples of generic models that enable organisations to measures their economic impact by analysing any expenditure on any geographic area using current data. Principally, the models estimate where direct expenditure results in additionality within a local area, resulting in direct economic effects, and then applies estimates for multipliers for indirect and induced effects within the supply chain. Such models are not usually sector-specific, and may not capture bespoke supply chains for sector-specific interventions such as the Proposed Development. While the Applicant has not used 3BL or LM, it has (in **ES Volume 1 Chapter 13: Population [EN010149/APP/6.1.2]** [REP1-016] considered the direct employment supported, and estimated using Green Book compliant approaches to additionality, the local retention of direct impacts in order to consider the significance of the impact on the local and regional economy. This is an established approach for consented applications and allows us to achieve a balanced view across the lifetime of developments. Further measures will be developed to identify, map and interact with the supply chain for the indirect benefit of the region, and these measures are set out in principle through the **Outline Employment, Skills and Supply Chain Plan [EN010149/APP/7.20]** [APP-0153].

Future Energy Needs
It is not considered to be within the scope of the assessment within this application, for the Proposed Development (under EIA Regulations or through the requirements of National

LIR/WR Para Ref.	Summary Position	Applicant's Response
	output is to be maintained and what will the land take be in 40-100 years' time given that energy demands are likely to increase.	Policy Statements EN-1 or EN-3) to consider the implications for energy need more generally after the decommissioning phase of the Proposed Development, or the hypothetical implications for future energy demand, and that demand's translation into wider land use.
Planning Obligations		
LIR 20.19	The Council considers that the outline Employment, Skills and Supply Chain Plan (ESSCP) requires a financial contribution to enable its delivery. The relatively recently consented Longfield and Heckington Fen DCOs were subject to s106 Agreements which provide for a £50,000 index-linked per annum to (in the case of the latter) the Council 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 Applicant and NKDC have had ongoing engagement on the potential for an agreement, subject to the Applicant being satisfied that such a package would meet the tests of s106. The Applicant has arranged a meeting with both LCC and NKDC on the 19th of June 2025, to discuss s106, side agreements and Heads of Terms. These ongoing discussions are documented in the **Draft Statement of Common Ground - North Kesteven District Council [EN010149/APP/8.2]** [REP1-077] submitted at Deadline 1.

Table 2-11 – Traffic and Transport

LIR/WR Para Ref.	Summary Position	Applicant's Response
Planning Obligations		
LIR 21.9	Since the Council is not the Local Highway Authority, it defers comment on traffic and transport matters to LCC. From their draft Local Impact Report (paragraph 11.12), LCC are likely to require that a contribution of £500,000 is secured through a s106 Agreement to fund the	The Applicant has agreed with Lincolnshire County Council (LCC) as local highways authority the following with respect to the A15 / B1202 junction: • That the Staff Travel Plan will include enhanced measures to supress single car occupancy levels, including a greater reliance on car sharing and staff mini-buses;

LIR/WR Para Ref.	Summary Position	Applicant's Response
	improvement of the A15/B1202 junction which is currently over-capacity and would be adversely affected by the solar farm development.	• That staff movements through the junction will be subject to an embargo between 0700-0900hrs and 1600-1800hrs; • That HGV use through the junction will be supressed between 0700-0900hrs and 1600-1800hrs to no more than 5 HGV movements per direction per hour. These replace the need for a financial contribution (which the Applicant did not consider met the tests for a section 106 obligation) and address LCC's concerns about the traffic impact through the junction. The **Outline Construction Traffic Management Plan (oCTMP) [EN010149/APP/7.8.2]** [REP1-062] has been updated to include the above commitments. The **Draft Statement of Common Ground – Lincolnshire County Council [EN010149/APP/8.1]** [REP1-066] will be re-submitted at Deadline 3, and will contain these commitments.

Table 2-12 – Water

LIR/WR Para Ref.	Summary Position	Applicant's Response
Foul and Surface Water Drainage Measures		
LIR 22.15	A Flood Risk Assessment has evaluated multiple sources of flooding and has determined an overall low flood risk to the development, given the limited extents of Flood Zone 3 and surface water flooding identified within the site. The risk to development is not considered to be significant since the BESS and Springwell substation would be located outside the higher flood risk areas. Further surface and foul water drainage details would be agreed as part of the draft DCO requirements.	The drainage requirements are secured through Requirement 10 of the **Draft DCO [EN010149/APP/3.1.2]** [REP1-006] with the final details of the drainage strategy being subject to approval by the Lead Local Flood Authority and the Environment Agency following detailed design.

Table 2-13 – Cumulative Effects

LIR/WR Para Ref.	Summary Position	Applicant's Response
Cumulative Impacts		
LIR 23.6	The short list of cumulative sites included 17 other existing or proposed developments such as residential developments, solar parks, quarry extensions, industrial and employment parks and infrastructure. The ES considered the cumulative effects on air quality, biodiversity, cultural heritage, traffic and landscape. Minor effects are anticipated in respect of construction traffic and landscape and visual impacts. While the short list includes other NSIP solar farms in the District (Heckington Fen, Beacon Fen and Fosse Green), it does not include the Leoda Solar Farm at Leadenham which was subject to public consultation and EIA Scoping from January to March 2025 but it is noted that the applicant intends to keep the short list under review. The Council considers that the cumulative effects of the development alongside the Leoda solar farm should be considered.	At Deadline 1, **ES Volume 1, Chapter 16: Cumulative Effects [EN010149/APP/6.1.2]** [REP1-018] was updated to take account of the Leoda Solar Farm (EN0110116) for which the EIA Scoping Report was submitted in January 2025. A full update of the inter-project long and short lists has been undertaken and this has been provided at Deadline 2.
LIR 23.9	The Council considers that negative cumulative impacts will be experienced as a result of the Springwell solar farm in conjunction with the NGNS and Fosse Green and Leoda NSIP solar farms; and with Beacon Fen solar farm in relation to cumulative agricultural land impacts. These impacts could be significant in terms of landscape and visual impact, construction related traffic and transport movements and loss of BMV agricultural land over a long period. This is likely to have a negative impact on the amenity of the local community.	**ES Volume 1, Chapter 16: Cumulative Effects [EN010149/APP/6.1.2]** [REP1-018] acknowledges that there would be some significant adverse landscape and visual effects during construction and in years 1 and 10 of operation in combination with the National Grid Navenby Substation. However, this chapter also records (and it remains the Applicant's professional opinion) that there would be no significant cumulative landscape and visual effects with the proposed Fosse Green, Leoda or Beacon Fen Solar Farm DCO projects irrespective of whatever combination of these projects was to be consented and constructed. If both the Proposed Development and the proposed National Grid Navenby Substation were developed in combination, the major/moderate adverse effects on landscape character identified in relation to the Proposed Development alone would extend further north, approximately up to the B1202. Likewise, the significant effects on users of the A15

LIR/WR Para Ref.	Summary Position	Applicant's Response
		identified in relation to the Proposed Development alone would extend further north in this cumulative scenario up to the B1202. The solar and energy storage elements of both the Fosse Green Energy NSIP and the Leoda Solar Farm NSIP are located in the vale west of the Lincoln Cliff, in a different character area (the Witham and Brant Vales) and would have no visual connection with the Proposed Development. There would therefore be no shared landscape or visual receptors. Although indicative grid connection corridor options extend to the A15 north of the Proposed Development, it is understood that this would be via an underground cable and therefore no significant landscape or visual effects are anticipated in combination with either of these two projects. Similarly. the Beacon Fen Energy Park NSIP proposal is located approximately 7.45km away from the Proposed Development in a different landscape character area (the Fens) and there would be no visual connection with the Proposed Development. There would therefore be no shared landscape or visual receptors. No significant cumulative landscape or visual effects are anticipated with this project. The Applicant does not agree that there would be significant cumulative impacts to construction related traffic and transport movements or loss of BMV agricultural land, as detailed in **ES Volume 1, Chapter 16: Cumulative Effects [EN010149/APP/6.1.2]** [REP1-018]. In relation to agricultural land, in accordance with IEMA land and soils guidance, a permanent land loss of over 20ha is considered a high magnitude of change from the baseline. However, the majority of land used within solar projects is for the Solar PV areas, and these are considered temporary works without permanent loss which can be returned to agricultural use at the end of the operational period for the Proposed Development (that approach is also consistent with the Secretary of State's decisions on made solar DCOs to date, for example the decision in Heckington Fen paragraph 4.52 in which loss of BMV during operation is referenced as temporary, and West Burton paragraph 4.273 where loss of BMV during operation is referred to as being reversible). Therefore, the Applicant considers that inter-project cumulative effects are considered minimal in the context of the

LIR/WR Para Ref.	Summary Position	Applicant's Response
		remaining BMV available at a county level as detailed in **ES Volume 1, Chapter 16: Cumulative Effects [EN010149/APP/6.1.2]** [REP1-018] and the mitigation measures to protect the soil as detailed and secured in the **oSMP [EN010149/APP/7.11.2]** [REP1-042].
LIR 23.12	The Council considers that there is potential for significant inter-project effects to arise and that this would lead to a negative impact.	The Applicant agrees that there are potential significant inter-project cumulative effects on landscape and visual amenity as detailed in **ES Volume 1, Chapter 16: Cumulative Effects [EN010149/APP/6.1.2]** [REP1-018]. However, the Applicant does not agree with the Council in respect of other cumulative effects, as set out above at ref. 23.9. The Applicant has worked hard to avoid and minimise significant adverse effects from the Proposed Development, including cumulative with other developments.

Table 2-14 – Glint and Glare

LIR/WR Para Ref.	Summary Position	Applicant's Response
LIR 24.5	Whilst the Planning Inspectorate has agreed that glint and glare can be scoped out of the assessment as part of the EIA of likely significant effects, a glint and glare assessment has been undertaken, as presented in **ES Volume 3, Appendix 5.4: Glint and Glare Study [EN010149/APP/6.3.2]** [REP1-028]. The assessment pertains to the possible impact upon road safety, residential amenity, railway infrastructure and operations, and aviation activity. Mitigation to reduce the glint and glare impacts, in the form of planting is embedded within the design and is presented within **ES Volume 2, Figure 3.3: Green Infrastructure Parameter Plans [EN010149/APP/6.2.2]** [REP1-027].	This has been noted. Mitigation to reduce the glint and glare impacts, in the form of planting is embedded within the design and is secured within the **oLEMP [EN10149/APP/7.9.2]** [REP1-064]. In some instances there are no impacts and therefore no mitigation is required.

Table 2-15 – Other Matters

LIR/WR Para Ref.	Summary Position	Applicant's Response
BESS		
LIR 25.13 – 25.14	As set out in their draft LIR, LCC have consulted with LFRS. LFRS have developed their own standing advice for BESS based on national guidance and require a programme of monitoring and risk assessment once the BESS has been established to ensure that it complies with the oBMSP and ERP. During the first year of operation, this will involve 21 days of work for LFRS and then two days in each subsequent year for the lifetime of the development. LFRS have identified that the need for monitoring and assessment will enable: • early engagement to ensure that the required standards are being complied with; • to ensure the BESS is constructed to the correct standards with support from LFRS; • early development of the ERP; • familiarisation of the BESS for local fire crews and overview by LFRS; • development of on-going maintenance and updating risk information; and • assurance for local residents and communities that the BESS is being independently inspected and monitored to reduce the risk of a fire.	The issue of and agreements made in relation to ongoing involvement of the LFRS with development and implementation of the **oBSMP [EN010149/APP/7.14.2]** [REP1-046] and ERP was discussed at the ISH1. Please see the statements set out for Agenda item 6 on page 20 of **Written Summary of Oral Submissions at Issue Specific Hearing 1 [EN010149/APP/8.16]** [REP1-073] and Protective Provisions in Schedule 15 of the **Draft DCO [EN010149/APP/3.1.2]** [REP1-006]. Discussions and agreements made directly with the LFRS can also be found in **Draft Statement of Common Ground - Lincolnshire Fire and Rescue Service [EN010149/APP/7.24]** [APP-0157]. These documents include the engagement with LFRS throughout the design, construction and operational phases of the project and compliance of the project with NFCC Guidance. The ERP would be developed at the earliest opportunity, taking into account the availability of information that is required to ensure it is robust and fit for purpose; this includes the ongoing update of risk analysis and mitigation measures throughout the project life in collaboration with the LFRS. The Protective Provisions secure the familiarisation of the LFRS with the site at various times. The ongoing maintenance will be developed with the Original Equipment Manufacturer (OEM) as part of a site maintenance regime, taking into account industry best practice.
LIR 25.15 – 25.17	To enable LFRS to undertake the necessary monitoring to ensure that BESS is in accordance with the draft Requirement 7, they have requested a financial	Protective Provisions for the LFRS have been included within Schedule 15 of the **Draft DCO [EN010149/APP/3.1.2]** [REP1-006] submitted at Deadline 1. The Applicant has now been informed of the amount of the funding required, and can confirm it is agreeable to the

LIR/WR Para Ref.	Summary Position	Applicant's Response
	contribution to be provided via a Protective Provision within the DCO so the LFRS has sufficient resources in place to undertake monitoring of the BESS. The sum total requested over the operational period of the solar farm is £76,335. This approach has been agreed as part of the recently approved Gate Burton, West Burton, Cottam and Heckington Fen solar farm DCOs. Therefore, there is a precedent for this approach to be followed at the Springwell solar farm. Notwithstanding the isolated location of the BESS relative to centres of population, and noting a separation distance of over 400m to the closest residential property, the Council has strong concerns about the potential risk to human health arising from fire related accidents at BESS developments. For this reason, it supports the measures sought by LFRS (as summarised in the LCC Local Impact Report) including the payment of a financial contribution towards the independent monitoring of the BESS by LFRS. However, at present, without any provision in the draft DCO of a payment mechanism to address LFR's site monitoring requirement there is a gap in the overall mitigation package; notwithstanding that LFR do not object to the proposals. Battery safety guidance published by the National Fire Chiefs Council sets out that applicants should specify their choice of NMC or LFP battery chemistry in developing emergency response/Battery Safety Management Plans.	proposed sum and will update the protective provisions in this respect in the next revision of the draft DCO, in line with the approach taken at Heckington Fen.

LIR/WR Para Ref.	Summary Position	Applicant's Response
LIR 25.18 – 25.20	The degree to which the Planning Act (2008) can compel what is essentially and ultimately a matter of customer choice is unclear. However, as above, with the suggestion that LFP cells have an advantage over other lithium-ion chemistries in relation to thermal and chemical stability, which improves battery safety, the Council's view is that the ExA should consider this matter through the examination. 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. 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 and we note that Defra plans to open a consultation on integrating grid-scale battery energy storage systems into the Environmental Permitting Regulations by June this year, in order to determine whether more robust regulatory and operational oversight is required. As such the Council consider that there is a need to agree the battery type proposed within the BESS as part of the requirement to agree the BSMP in view of the changing market trends	It is the Applicant's view that the battery type is not a material planning matter and should not be set as part of any planning decision. To do so would prematurely lock in a battery technology which is likely to be enhanced by one if not two generations before any procurement would take place. No battery type is perfect and each has their positives and negatives to consider; the Applicant would need to choose the best system available at the time based on a range of factors, with safety to site personnel, first responders and the general public being central to that consideration. Full detailed analysis of the BESS system would be completed at detailed design stage as per agreements made with the LFRS (**Draft Statement of Common Ground - Lincolnshire Fire and Rescue Service [EN010149/APP/7.24]** [APP-0157]) and UKHSA (**Draft Statement of Common Ground – UK Health Security Agency [EN010149/APP/8.6]** [REP1-081]). The ExA, SoS and the public can have confidence that there are adequate controls in place with respect to the BESS, such that any perception of harm is prevented or reduced. Those measures include: • That the BSMP must be approved by the relevant planning authority and this must be in consultation with both the LFRS and the Environment Agency (pursuant to Requirement 7). The BSMP must be substantially in accordance with the outline BSMP, which includes extensive controls aimed at ensuring safety, including that a plume assessment confirm effects no worse than those currently assessed, thereby providing an additional level of control; • The detailed design of the BESS must accord with design commitments and project parameters and must also be in accordance with the BSMP. As above, the **oBSMP [EN010149/APP/7.14.2]** [REP1-048] includes measures specific to the detailed design of the BESS aimed at safety, and the design commitments provide additional controls in relation to offsets from residential properties; and • Protective provisions included in the draft DCO for the LFRS so that they can undertake an annual site familiarisation exercise (funded by the Applicant) and to provide the necessary assurance to Lincolnshire Fire and Rescue Service that all the required systems and measures are in place in accordance with the battery safety management plan.

LIR/WR Para Ref.	Summary Position	Applicant's Response
	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.	
Force Majeure Event		
LIR 25.22 – 25.24	The Council has concerns that the application does not make provision for the eventuality of a force majeure event which may lead to the cessation of the production of electricity for a lengthy period. It might include a major incident/disaster at the National Grid substation, a major accident at the Springwell solar farm or commercial collapse of the solar farm owner or operator. Such an unforeseen eventuality could take place during any of the phases of the construction, operation or decommissioning of the solar farm. The Council notes that an **outline Decommissioning Environmental Management Plan (oDEMP) [EN010149/APP/7.13.2]** [REP1-046] has been produced. Requirement 19 would require a full DEMP to be produced within 10 weeks prior to the intended date of decommissioning together with a timetable for its implementation. The Council considers that a provision should be made within the oDEMP for the provision of a force majeure event. There is precedent for such a provision within the DCO for the Heckington Fen solar farm in North Kesteven. The purpose of the provision would be to ensure that extensive redundant solar PV arrays and equipment are not left in situ within the countryside and to ensure that	The Applicant is agreeable to adopting text based on that included in the Heckington Fen outline operational environmental management plan and this is included in the revised **oOEMP [EN010149/APP/7.10.2]** [REP1-040] submitted at Deadline 2.

LIR/WR Para Ref.	Summary Position	Applicant's Response
	early decommissioning of the development is triggered in the event of the early cessation of energy generation from the site. The Council considers that there would be a negative impact on the landscape until the provisions are made for unexpected cessation of energy generation are included in the outline DEMP	

2.2. Response to NKDC's Response to ExQ1

Table 2-16 – Response to NKDC's Response to ExQ1

ExQ1 Ref	NKDC Response	Applicant's Response
1.5.2	NKDC noted that the current singular comparison does not fully represent the energy contribution to the grid in the current state and it is recommended that a comparison against other technologies is taken into account.	A technical note which provides an assessment of the GHG emissions against several alternative baselines has been undertaken and is presented in **Appendix 2** of this document. The findings of these different methodologies showcase that the Proposed Development is comparable with other renewable energy technologies and contributes to the decarbonisation of the UK's electricity grid. These findings further support the conclusion in **ES Volume 1, Chapter 8: Climate [EN010149/APP/6.1]** [APP-048] that the Proposed Development contributes to the UK's transition to net zero and aids in reducing GHG emissions within the energy sector.
1.7.2	NKDC responded to the ExQ1 that they consider that the following assets should be scoped into assessment: Thompsons Bottom Farmhouse and outbuildings (LBEN 1254329/1254407) Scopwick Mill Slate House (MLI120942)	Thompsons Bottom Farmhouse and outbuilding and Scopwick Mill are addressed within **Draft Statement of Common Ground – North Kesteven District Council [EN010149/APP/8.2]** [REP1-077]. It should be noted that although NKDC's response to the ExQ1 states that no mitigation has been considered, the Proposed Development includes hedgerow planting along Warren Lane which will serve to screen the solar arrays from view

ExQ1 Ref	NKDC Response	Applicant's Response
	Ashby Lodge (MLI88323) Rowston Top (The Maltings) (MLI120856) Glebe Farm (MLI120941) Scopwick Lowfield Farm (MLI120841)	when approaching and leaving Thompson's Bottom Farm to/from the east. This is secured within the **oLEMP [EN10149/APP/7.9.2]** [REP1-064]. The Applicant agrees with the Council that the harm to the significance of Scopwick Mill would be less than substantial. Whilst the scale of this less than substantial harm is not yet agreed, it is the Applicant's position that the harm is at the lower end of less than substantial, equates to an impact of minor magnitude and the effect (being not significant) is correctly scoped out of the ES. Likewise the Applicant does not agree that the locally listed buildings should be scoped into the ES for the reasons detailed in the Response to NKDC's LIR as detailed in WR 16.11-16 above in this document.
1.8.8	NKDC note that the government's guidance on drafting DCOs recommends, in respect of provisions in relation to hedgerows and protected trees, that a schedule of each are provided within the DCO. NKDC considers that a similar approach should be taken in respect of non-protected trees and shrubs, and that the Applicant should set out a schedule and provide a map of the location of the trees and shrubs to which Article 40 of the draft DCO relates. NKDC consider that Article 40 should include provisions to inform the relevant planning authority before any felling or lopping is undertaken and to replace any trees or shrubs that are felled under its provisions. Article 41 is concerned with works to trees subject to a tree preservation order (TPO) that is within the Order limits and was made after November 2024. No TPOs have been made to date. The Council requests a	The Applicant does not agree that a schedule of all trees or shrubs which may be removed is necessary or proportionate, and that there are adequate controls in place with respect to the operation of the power in Article 40, as follows: • The power in the Article is subject to the DCO requirements in Schedule 2 of the draft DCO, including requirements for compliance with the approved CEMP. Should the DCO be granted consent, detailed LEMP(s) will be produced for the Proposed Development in accordance with Requirement 8, Schedule 2 of the **Draft DCO [EN010149/APP/3.1.2]** [REP1-006]. The LEMP(s) would confirm the extent of vegetation removal during construction and would require approval prior to commencement of construction and would be required to be substantially in accordance with the framework set out in the **oLEMP [EN10149/APP/7.9.2]** [REP1-064]. This provides oversight for the Councils in terms of approving this plan; and • The **oLEMP [EN10149/APP/7.9.2]** [REP1-064] attaches Vegetation Removal Parameters at Appendix 2. Those parameters identify the maximum extent of vegetation removal during construction and the detailed LEMP would need to be substantially in accordance with those parameters. The precise location of vegetation removal may differ from those parameters, however, the parameters show the maximum extent of vegetation that would need to be removed during construction. The outline LEMP also makes clear at 4.1.2 that with respect to vegetation removal, this

ExQ1 Ref	NKDC Response	Applicant's Response
	provision is made to ensure that where possible, the undertaker seeks to replace any trees that are removed.	would be reinstated where practicable and retained during the operational phase of the Proposed Development. The outline LEMP also includes details of vegetation clearance and new planting in sections 1.3.5, 5.3.20, 5.3.25 and 8.1.1. The Applicant's response to Q1.6.6 in the **Response to First Written Questions (ExQ1) [EN010149/APP/8.14]** [REP1-071] explains why there is some uncertainty, and therefore whilst some flexibility is needed, with respect to identifying the vegetation that would be removed at this stage. That is because vegetation removal during construction will be related to cable crossings, highway works / accesses and access tracks, the precise location of which cannot be finalised now, and final decisions will depend on future surveys and detailed design considerations. The vegetation removal has assumed the maximum extent that may be required for the construction of highway works, internal access tracks and cable routes. Wherever practicable, these works are aligned to existing tracks, crossing and / or gaps in hedgerows to reduce the extent of vegetation removal which is secured in the detailed design by the **Design Commitments [EN010149/APP/7.4]** [APP-0138]. In terms of removal of vegetation during operation of the Proposed Development, for trees and shrubs that are not protected by a TPO, the Applicant does not consider additional controls are necessary. Article 40 is clear in terms of the limited scope in which the undertaker may fell or lop a tree or shrub, as listed in paragraph (1)(a) – (c) of the article, and then further caveated by paragraph (2). This means removal is limited to where trees are creating an obstruction or interference, constituting a danger, or obstructing construction vehicles. In addition, the LEMP approved pursuant to Requirement 8 will include positive provisions relating to management and monitoring of vegetation / planting to ensure mitigation is maintained; see measures relating to vegetation management at 6.1.20 – 6.1.24, and in terms of management and monitoring at 6.1.49 and following, as well as monitoring provisions in section 7.

ExQ1 Ref	NKDC Response	Applicant's Response
		With respect specifically to lopping or pruning of vegetation, this type of work would be covered by general management measures in the LEMP and it is not reasonable or appropriate for the Applicant to need to consult the Council ahead of undertaking this type of work. With respect to construction, the oLEMP states that details of pruning would form part the detailed CEMP(s) as follows: *Section 5.3.21 of the oLEMP states that 'minor works to vegetation such as lateral pruning or crown lifting will be undertaken where required as part of the permitted preliminary works to avoid damage to trees by construction activities. Some vegetation and tree clearance/pruning may also be required. These works will be undertaken by a qualified arborist and in accordance with an agreed specification set out within an Arboricultural Method Statement (AMS) that will form part of the detailed CEMP(s).'* In relation to operation, the oLEMP covers this as part of the management / maintenance regime in Table A3.1: *Pruning if required by qualified arborist to be undertaken in late winter (February), inspections to monitor health of trees and to remove dead, dying or diseased wood where necessary in accordance with BS3998:2010*. With respect to Article 41, the Applicant proposes adding wording to the outline LEMP to provide that where an individual tree subject to a TPO must be removed (for example, due to it being dead or in a dangerous condition) and the local authority requires a replacement, a new tree will be planted in the same place or as near as practicable. This update will be made at Deadline 3.
1.12.1	Section 5.18 of EN1 recognises that solar farms will have socio-economic impacts which should be assessed and mitigated, where appropriate. At paragraph 5.13.11 it advises the SoS to consider any relevant positive provision the applicant has made or is proposing to make to mitigate impacts (for example through planning obligations) and any legacy benefit that may arise.	The Applicant has responded to points raised by NKDC and issues documented within the NKDC Local Impact Report on Population within Table 2-10 of this document. Also within Table 20 – Population as documented in the **Draft Statement of Common Ground - North Kesteven District Council [EN010149/APP/8.2]** [REP1-077] submitted at Deadline 1. The Applicant and NKDC have had ongoing engagement on the potential for an agreement, subject to the Applicant being satisfied that such a package would meet the tests of s106.

ExQ1 Ref	NKDC Response	Applicant's Response
	NKDC considers that the s106 agreement would be in addition to the measures set out in the outline Employment, Skills and Supply Chain Plan and R16 of the dDCO for the reasons given above. It would assist in providing a beneficial effect after development. NKDC and LCC have requested a s106 agreement to fund some of the proposals contained within the outline Employment, Skills and Supply Chain Plan. NKDC has been party to a new SOCG with the applicant (to be submitted at Deadline 1) which includes the provision for a skills and employment financial package. This is acknowledged and welcomed. The Council will work constructively with the applicant to progress a s106 agreement for submission to the Examination.	The Applicant has arranged a meeting with both LCC and NKDC on the 19th of June 2025, to discuss s106, side agreements and Heads of Terms.

3. Response to LCC's Submissions

3.1. Overview

3.1.1. The following topics were raised by LCC in their LIR [REP1-088] and WR:

- Principle of the Development – climate change;
- Grid connection;
- Landscape and visual;
- Ecology
- Traffic and transport;
- Public Rights of Way;
- Flood risk, drainage and surface water;
- Cultural heritage (built heritage and archaeology);
- Land, soil and groundwater;
- Socio-economics (population);
- Public health;
- Minerals and waste;
- Cumulative effects;
- Fire safety;
- Draft Development Consent Order.

3.1.2. The tables overleaf provide the Applicant's response to these topics arranged under the headings listed above, supported by identification of sub-themes for clarity.

3.1.3. Matters have been summarised in the LCC WR with cross-references to the relevant sections of the LIR; however where further commentary is required additional paragraphs from the LIR and its technical appendices have been included in the tables overleaf.

3.2. Response to LCC's LIR and WIR

Table 3-1 – Principle of Development – Climate Change

LIR/WR Para Ref.	Summary Position	Applicant's Response
Principle of Development		
LIR 7.14	The Springwell Solar Project would make a significant contribution towards renewable energy generation, generating 800MW of energy. This contribution aligns with the NPS's and to key commitments of government at the national level to reach net zero by 2050. The Council recognises, in principle, that solar energy development can help meet targets for reducing carbon emissions, reduce reliance on fossil fuels and provide local and national energy security. They can also provide economic diversification for farmers and landowners and support local employment opportunities during the construction phase and which may offset any impact on farming enterprises. Therefore whilst the Springwell Solar Project, by its nature offers significant positive impacts in terms of the production of clean renewable energy and the transition and movements towards Net Zero, in order to be supported it must be demonstrated that there are no significant adverse environmental impacts that cannot be appropriately managed and/or mitigated through the DCO process. The Council's position is therefore that overall, adopting a 'whole life' approach to GHG emissions, that significant positive impacts would accrue. The Council does however raise some points of detail in respect of the applicant's assessment of GHG emission in relation to waste generation in Section 18 of this report.	**ES Volume 1, Chapter 8: Climate [EN010149/APP/6.1]** [APP-048] presents a 'whole life' greenhouse gas (GHG) assessment at all stages of the Proposed Development, i.e. construction, operation, and decommissioning. The GHG impact during construction, operation, and decommissioning is assessed as having a significant beneficial effect as it will contribute to achieving the rate of transition required by nationally set policy commitments and support the trajectory towards net zero. A response related to the GHG emissions related to waste generation is detailed in Table 3-12 of this document.

Table 3-2 – Grid Connection

LIR/WR Para Ref.	Summary Position	Applicant's Response
LIR 8.7	The application documents indicate that the Springwell solar project would commence construction during the first quarter of 2027 and would be seeking to connect to the grid in two stages in 2028 and 2030. However, the anticipated completion date for the Navenby substation would not be until late 2029. Additional clarity on the connection dates is needed. While it is understood that the applicant has submitted a change request to National Grid to align these dates, we will expect the application documents to be updated accordingly to reflect this change.	The Applicant has also updated the **Grid Connection Statement** at Deadline 1 **[EN010149/APP/7.6.2]** [REP1-058]**,** to reflect the revised connection dates which are now aligned to the National Grid Navenby substation schedule. As discussed at ISH1 and set out at agenda item number 4 of **Written Summary of Oral Submissions at Issue Specific Hearing 1 [EN010149/APP/8.16]** [REP1-073], NKDC's suggestion is counter to NPS EN-1 which anticipates and allows for the circumstance in which "it may not be possible to coordinate applications". Paragraphs 4.11.8 and 4.11.9 set out what the Applicant needs to satisfy the decision maker of in that situation, and the Applicant is confident it has addressed these requirements. The Applicant's response to Action Point 2 at **Appendix 1 - Response to Action Points** of the **Written Summary of Oral Submissions at Issue Specific Hearing 1 [EN010149/APP/8.16]** [REP1-073] details the relevant national and local policy position which is generally supportive of the application for the Navenby Substation, on the basis that NGET take a responsible approach to siting, design and mitigation, following the Horlock Rules and in accordance with the Central Lincolnshire Development Plan. We also do not consider that there are other material considerations that would result in the future scheme being refused. If more details become available during the course of the examination, the Applicant is willing to provide further information and update the ExA on this position accordingly. Please also refer to National Grid Electricity Transmission PLC response to addressing Q1.1.1 within the **Response to First Written Questions (ExQ1) [EN010149/APP/8.14]** [REP1-071].
LIR 8.8 (and in WR)	Certainty of a grid connection and therefore the deliverability of this project is a concern to the Council. There is a potential risk for negative environmental impacts to occur from the Springwell development commencing without the benefits of generation which would be relied upon for the grant of any consent being	The Council raises concerns regarding the certainty of a grid connection and the potential for negative environmental impacts should the Springwell development commence without one. The Applicant respectfully considers that such concerns do not justify the imposition of a requirement restricting commencement of the Proposed Development based on progress at the Navenby Substation.

LIR/WR Para Ref.	Summary Position	Applicant's Response
	secured. Should the SoS be minded to grant the DCO, the Council are of the view that the DCO should make provision through a requirement to restrict the commencement of the Springwell development until a particular point has been reached with the Navenby Substation, which we consider should be more than a material start, so that it can be said with certainty that this necessary infrastructure will be delivered in line with the assumptions made in the ES. The Council would draw the SoS attention to requirement 33 of the Keadby 3 (Carbon Capture Equipped Gas Fired Generating Station) Order 2022 which imposes a restriction on commencement until an environmental permit is in place. Whilst this requirement relates to an environmental permit need it has similarities in that it was the case that negative environmental effects could occur if the control was not in place	As addressed in Issue Specific Hearing 1 and recorded under agenda item 4 of the **Written Summary of Oral Submissions at Issue Specific Hearing 1 [EN010149/APP/8.16] [REP1-073],** and further in Appendix 1 – Responses to Action Points, Action Point 2, there is no evidence to suggest that the Navenby Substation will not come forward. The Applicant is not aware of any planning or technical barrier that would prevent it from receiving consent. It is the Applicant's understanding that the future proposal is considered to be in accordance with the Central Lincolnshire Development Plan. We also do not consider that there are other material considerations that would result in the scheme being refused. If more details become available during the course of the examination, the Applicant is willing to appraise further and update the ExA on this position accordingly. NPS EN-1 anticipates that this situation could occur with regard to renewable energy projects, where a separate consent from the grid infrastructure is required. As outlined in paragraph 3.3.12 of the **Site Selection Report, Appendix 1** of the **Planning Statement [EN010149/APP/7.2.2]** [AS-018], the National Grid TEC Register shows connection offers totalling up to 4.2GW at Navenby Substation. This highlights the strategic importance of the substation and its strong policy support in helping to deliver the Government's target of tripling solar generation by 2030 and achieving Net Zero by 2050. This is further supported by National Grid Electricity Transmission PLC's response to Q1.1.1 within the **Response to First Written Questions (ExQ1) [EN010149/APP/8.14]** [REP1-071]. In practice, it is highly unlikely that the Applicant would commence construction without a high degree of confidence in the availability of a grid connection, given the commercial implications. The market itself provides a strong disincentive to proceed without the necessary infrastructure. The Council refers to Requirement 33 of the Keadby 3 (Carbon Capture Equipped Gas Fired Generating Station) Order 2022. However, the Applicant does not consider this example to be comparable. In that case, the concern was that, absent such a requirement, a fossil fuel plant could operate without carbon capture and storage, resulting in direct environmental harm. That context does not apply to the Proposed Development. The

LIR/WR Para Ref.	Summary Position	Applicant's Response
		Applicant responded to this point in the ISH1, and this is recorded in the Applicant's **Written Summary of Applicant's Oral Submissions at Issue Specific Hearing 1 (ISH1)** agenda item 4 **[EN010149/APP/8.16]** [REP1-073]. Accordingly, the Applicant does not consider it necessary or appropriate to include a requirement restricting commencement based on milestones related to the Navenby Substation.
LIR 8.9	A further consideration is the effect on the validity of the ES should there be a slippage in timescales for the Springwell development due to not being able to connect to the grid by the connection dates indicated, for example, ecology surveys becoming out of date or overlaps with the construction phases of future projects which were not envisaged to be constructed at the same time as Springwell, due to optimistic assumptions within the ES not coming to fruition.	The Applicant has set out their position on the environmental impact of the National Grid Navenby Substation in Table 4 of the **Draft Statement of Common Ground – Lincolnshire County Council [EN010149/APP/8.1]** [REP1-066] submitted at Deadline 1. National Grid has confirmed that despite the later submission date planned for the planning application, they still expect to be able to connect the project to the National Grid in late 2029, as set out in the grid connection offer. As supported by National Grid Electricity Transmission PLC response to addressing Q1.1.1 within the **Response to First Written Questions (ExQ1) [EN010149/APP/8.14]** [REP1-071]. The Applicant responded to this point in the ISH1 and this is recorded in the **Written Summary of Applicant's Oral Submissions at the Open Floor Hearing 1 (OFH1)** [REP1-072] as follows - The ES can only be based on worst-case assumptions, which is a reasonable worst case, and this is the approach taken here. There is a check in place via paragraph 2(4), Schedule 16 of the **Draft DCO [EN010149/APP/3.1.2]** [REP1-006]. Pursuant to Schedule 16, when the Applicant is discharging requirements, it will need to confirm that the subject matter being approved would not be likely to give rise to any materially new or different environmental effects compared to those in the ES. In this way, the Applicant is bound by the effects contained in the ES.

Table 3-3 – Landscape and Visual

LIR/WR Para Ref.	Summary Position	Applicant's Response
Landscape Effects		
LIR 9.16 (and in WR)	The development has the potential to transform the local landscape by altering its character on a large scale. 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.	Please refer to the response in Table 2.7 of this document which responds to the same comment in NKDC LIR paragraph 17.21.
Cumulative Effects		
LIR 9.19 – 9.20 (and in WR)	National Grid Navenby Substation is identified as the primary project to potentially generate cumulative landscape or visual effects with Springwell Solar Farm. Subsequently significant cumulative effects are identified through extending the overall area of development, increasing the land use area changed from agricultural to energy infrastructure, and also visually through increasing the extent the two schemes may likely be visible by receptor. The cumulative landscape and visual effects of the development have the potential to bring about significant negative landscape and visual effects; however, adjacent schemes are relatively small in comparison with the wider Springwell order limits schemes. However, there are significant concerns that the combined mass and scale of these projects could significantly impact the landscape character at national,	The Applicant notes that the assessment of cumulative landscape and visual effects is presented in **ES Volume 1, Chapter 16: Cumulative Effects [EN010149/APP/6.1.2]** [REP1-018] paragraphs 16.6.19 – 16.6.45. If both the Proposed Development and the proposed National Grid Navenby Substation were developed in combination, the major/moderate adverse effects on landscape character identified in relation to the Proposed Development alone would extend further north, approximately up to the B1202. The Applicant acknowledges therefore that in combination the two projects would affect a greater proportion of the host National Character Area (NCA) and Landscape Character Type (LCT) than the solus effects of the Proposed Development. However, in the Applicant's opinion significant adverse effects on landscape character would still be relatively localised to the close vicinity of the two projects and there would be a negligible effect on the greater majority of both the NCA and LCT. With reference to the three plans presented in Appendix 2 to the **Response to First Written Questions (ExQ1) [EN010149/APP/8.14]** [REP1-071] the extent of the NCA and LCT in relation to the Proposed Development and the location of the National Grid Navenby Substation and other known solar farm projects (operational or in planning) can be seen.

LIR/WR Para Ref.	Summary Position	Applicant's Response
	county, and regional levels. The introduction of energy infrastructure in predominantly agricultural areas may alter the landscape over the operational period. This change would be noticeable to visual receptors traveling through the landscape, experiencing these schemes across several kilometres, even with gaps between them. This represents a clear and marked change to the landscape character.	The existing key characteristics of the NCA/LCT would prevail across the majority of these geographical areas. The openness, tranquillity and agrarian character experienced across the majority of the NCA and LCT would remain unaltered by the Proposed Development. The Applicant therefore disagrees that the Proposed Development in combination with the National Grid Navenby Substation and other known solar farm projects (operational or in planning) would significantly impact the landscape character at national, county, and regional levels.

Table 3-4 - Ecology

LIR/WR Para Ref.	Summary Position	Applicant's Response
Trees		
LIR 9.21	Tree and vegetation removal associated with the development, including wider highways improvements and access for construction, must be clarified through the examination process, and subsequently any works (such as lopping or pruning), or removal of trees and hedgerows must be agreed prior to any works commencing. Prior to any construction activities, all tree and hedgerow protection methods associated with that phase of construction should also be clarified and subsequently agreed with the appropriate authority (in this case the local planning authority). This would be to BS:5837 Trees in Relation to Construction and any subsequent arboriculture method statements, again this should be approved by the appropriate authority. In particular this should ensure existing trees, and	The design of the Proposed Development has sought to minimise the amount of hedgerow and tree loss in accordance with Project Principle 2.1 and 4.2 set out in the **Design Approach Document [EN010149/APP/7.3.2]** [REP1-056]. This includes a minimum 10m offset to existing hedgerows from the perimeter fencing surrounding the Solar PV development and the use of existing access tracks, crossing and / or gaps in the hedgerows for all internal access tracks and cable routes wherever practicable. The electrical cables will avoid root protection areas of trees and hedgerows, except where a hedgerow crossing is required. This is set out in the **Design Commitments [EN010149/APP/7.4]** [APP-0138] for the detailed design of the Proposed Development and is secured by a requirement in the **Draft DCO [EN010149/APP/3.1.2]** [REP1-006]. The **oLEMP [EN10149/APP/7.9.2]** [REP1-064] presents the Vegetation Removal Parameters in Appendix 2, which identifies likely vegetation for removal for construction purposes. It includes details on vegetation which would be reinstated where practicable and retained during the operational phase of the Proposed Development. In addition, measures

LIR/WR Para Ref.	Summary Position	Applicant's Response
	associated root protection areas, are suitably protected throughout the entire construction period. This would also likely include areas within the order limits, but away from construction activity, such as storage areas for materials which may suffer from tracking by plant that would damage tree root protection zones.	to protect retained trees and hedgerows are outlined in both the **oLEMP [EN10149/APP/7.9.2]** [REP1-064] and the **oCEMP [EN010149/APP/7.7.2]** [REP1-060] which will be finalised at detailed design stage pre commencement. Prior to works commencing all tree and hedgerow protection methods associated with that phase of construction will also be clarified and subsequently agreed with the appropriate authority. This is secured within the **oLEMP [EN10149/APP/7.9.2]** [REP1-064].
Existing Biodiversity Value		
LIR 10.16 - 10.17	To this end, the Applicant has prepared an outline Construction Environmental Management Plan (oCEMP), an outline Landscape and Ecological Management Plan (oLEMP), an outline Operational Environmental Management Plan (oOEMP) and an outline Decommissioning Environmental Management Plan (oDEMP). A Mitigation Schedule [APP-057] has been prepared which provides a helpful summary of the mitigation identified for the Project including embedded mitigation measures, which have been designed into the project. 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 **oCEMP [EN010149/APP/7.7.2]** [REP1-060]**, oLEMP [EN10149/APP/7.9.2]** [REP1-064], **oOEMP [EN010149/APP/7.10.2]** [REP1-040] and **oDEMP [EN010149/APP/7.13.2]** [REP1-046] are secured by Requirements in the **Draft DCO [EN010149/APP/3.1.2]** [REP1-006], and the detailed versions will be prepared substantially in accordance with the outlines and subject to approval by the planning authority prior to the relevant phase of work.
Biodiversity Net Gain		
LIR 10.21 – 10.23	The delivery of at least 10% BNG is not currently mandatory for NSIPs however it is considered best practice and the achievement of well in excess of 10%	Based on **ES Volume 3, Appendix 7.14: Biodiversity Net Gain Assessment [EN010149/APP/6.3.2]** [REP1-032], the Proposed Development is predicted to result in a net gain of 31.66% for area-based habitat units 20.68% for hedgerow units and 13% for

LIR/WR Para Ref.	Summary Position	Applicant's Response
	has been secured on a number of other solar DCOs granted within Lincolnshire recently including 76.8% gain in habitat units as part of requirement 9 of the Cottam Solar DCO and 69.4% within requirement 9 of the West Burton DCO. Given the scale and nature of the proposed development and what has been achievable on other, similar schemes, the Council will expect the project to deliver significantly more than 10% BNG and for this to be secured via a specific requirement within the DCO. Suggested wording for a BNG requirement is provided in the table below with relevant percentages to be added when the Applicant has updated its BNG calculations as part of the design process. The Applicant has set out their approach to BNG in the ES volume 3 Appendix 7.14 (Biodiversity Net Gain) [APP-095]. At paragraph 1.1.4 the Applicant states that the BNG assessment document and calculations will "… be updated as part of the detailed design stage of the Proposed Development to reflect the final design and be included in the Landscape and Ecology Management Plan (LEMP)(s) submitted for approval under the requirement in Schedule 2 of the draft DCO, to demonstrate a minimum 10% BNG is achieved and the trading rules are met." In APP-047, at paragraph 7.4.24 the applicant also refers to its commitment to achieving a minimum of 10% BNG. The Council welcomes the Applicant's commitment to delivering BNG. These commitments will need to be secured via a specific requirement in the DCO and the applicant will need to demonstrate that the commitments made to delivering	watercourse units. The habitat condition criteria that must be reached to deliver the gain in biodiversity is set out within the BNG Assessment and this will form the basis of post construction monitoring ensuring that the predicted uplift is delivered. **ES Volume 3, Appendix 7.14: Biodiversity Net Gain Assessment [EN010149/APP/6.3.2]** [REP1-032] calculations will be updated as part of the detailed design stage of the Proposed Development to reflect the final design and will be included in the Landscape and Ecology Management Plan (LEMP)(s) submitted for approval under the requirement in the **Draft DCO [EN010149/APP/3.1.2]** [REP1-006] to demonstrate how the predicted target BNG will be achieved, and the trading rules met. The Draft DCO is to be updated at Deadline 3 to include a commitment to meet the predicted BNG results, which are above 10% for area-based habitats and hedgerows units. See **Response to First Written Questions (ExQ1) [EN010149/APP/8.14]** [REP1-071] Q1 1.4.2 which explains how the trading rules for hedgerows are now met and watercourse units are being delivered through updates to the oLEMP and the final BNG calculations.

LIR/WR Para Ref.	Summary Position	Applicant's Response
	BNG are achievable if BNG is to be given positive weight in the planning balance. Based on the current assessment, the Scheme is predicted to result in a net gain of 31.66% for area-based habitat units and 20.68% for hedgerow units. The Council notes however that the trading rules set out in the Statutory BNG metric user guide are not currently being met. This is specifically in relation to the loss of native hedgerow with trees – associated with bank or ditch' habitat. The Council notes the Applicant's intention to ensure that the trading rules are met and encourages the Applicant to continue to make progress with this work to provide confirmation of what the project will deliver for biodiversity at the earliest possible stage.	
LIR 10.24	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 ongoing engagement with the Applicant in relation to BNG.	The Applicant thanks Lincolnshire County Council for their ongoing engagement related to BNG and has been working with other developers and stakeholders, including Lincolnshire Wildlife Trust to identify opportunities for delivering strategic BNG improvements, particularly related to the ground nesting birds within the region.
Cumulative Effects		
LIR 10.26	Cumulative effects on sensitive ecological receptors are considered for Navenby Heath Road Verges LWS, ground nesting birds and bats. The assessment concludes that given mitigation proposed for this development and likely standard / good practice mitigation proposed for other nearby 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	The **oCEMP [EN010149/APP/7.7.2]** [REP1-060]**, oLEMP [EN10149/APP/7.9.2]** [REP1-064], **, oOEMP [EN010149/APP/7.10.2]** [REP1-040] **oDEMP [EN010149/APP/7.13.2]** [REP1-046] are secured by Requirements in the **Draft DCO [EN010149/APP/3.1.2]** [REP1-006] , and the detailed versions will be prepared in accordance with the outlines and subject to approval by the planning authority prior to the relevant phase of work.

LIR/WR Para Ref.	Summary Position	Applicant's Response
	DCO, the Council agrees with the applicant's conclusions in relation to cumulative effects on ecology.	
Ecological Steering Group		
LIR 10.27 – 10.28	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.	The Applicant and LCC have had ongoing engagement on the suggested establishment of an Ecological Steering Group for the Proposed Development. The Applicant will be submitting an updated oLEMP at Deadline 3 to include a commitment to establish an Ecological Steering Group through the duration of the Proposed Development. The engagement on the scope of the Ecological Steering Group is ongoing with Lincolnshire County Council and will be set out in the updated oLEMP.

Table 3-5 – Traffic and Transport

LIR/WR Para Ref.	Summary Position	Applicant's Response
A15/B1202 Junction		

LIR/WR Para Ref.	Summary Position	Applicant's Response
LIR 11.11	A further consideration is the impact of the development on the A15/B1202 junction which is over-capacity now and has an existing accident problem. County Council Highways has (independently of the development) undertaken a feasibility study looking at this junction and possible future improvements, referred to in table 11.1 of APP-123]. The Transport Assessment [APP-123] (paragraph 10.1.11 onwards) shows that the Springwell Solar development would have an adverse impact on this junction but does not offer any solutions to the impact of the development. The Council has continued discussions with the applicant, who is now proposing mitigation measures. These include an enhanced travel plan to reduce staff vehicle movements, a staff movement embargo at the junction between 0700-0900 and 1600-1800, and a restriction of HGV movements through the junction to five per hour in each direction. These measures are considered acceptable in principle. The Council anticipate that the application documents will be updated to reflect these discussions and we will provide further comments in due course and as above this will be progressed through the SoCG. The Council is no longer seeking a financial contribution towards an improvement scheme as initially expressed in its Relevant Representation [RR-233].	The Applicant has agreed with Lincolnshire County Council (LCC) as local highways authority the following with respect to the A15 / B1202 junction: • That the Staff Travel Plan will include enhanced measures to supress single car occupancy levels, including a greater reliance on car sharing and staff mini-buses; • That staff movements through the junction will be subject to an embargo between 0700-0900hrs and 1600-1800hrs; • That HGV use through the junction will be supressed between 0700-0900hrs and 1600-1800hrs to no more than 5 HGV movements per direction per hour. These replace the need for a financial contribution and address LCC's concerns about the traffic impact through the junction. The **Outline Construction Traffic Management Plan (oCTMP) [EN010149/APP/7.8.2]** [REP1-062] submitted at Deadline 1 has been updated to include the above commitments. The **Draft Statement of Common Ground - Lincolnshire County Council [EN010149/APP/8.1]** [REP1-066] submitted at Deadline 1 includes these commitments for agreement with LCC. The **Draft Statement of Common Ground - Lincolnshire County Council [EN010149/APP/8.1]** [REP1-066] will be re-submitted at Deadline 3.
LIR 11.10	The development proposes 2 junction improvements on the A15 (A15/B1191/Temple Road and A15/Gorse Hill Lane junctions) that would need the equivalent of full S278 Agreements under the Highways Act 1980. In principle, the proposals are acceptable (they involve widening and provision of right turn lanes), however, the	The **Outline Construction Traffic Management Plan (oCTMP) [EN010149/APP/7.8.2]** [REP1-062] was updated at Deadline 1 in response to the comments from LCC. The **Draft Statement of Common Ground - Lincolnshire County Council [EN010149/APP/8.1]** [REP1-066] includes these commitments for agreement with LCC.

LIR/WR Para Ref.	Summary Position	Applicant's Response
	wording of the draft DCO [APP-012] in Articles 8 and 10 would give the developer the right to do these works with no further approvals by the Council. At this stage, the technical details have not been submitted or approved and the Council would require a bond for these major works to be undertaken (so if the developer stops mid-way we are able to complete the works and make the highway safe) – all of these requirements are included in the Section 278 process and it is essential that these major works on the A15 are undertaken following the principles of this process. The Council has been engaged in discussion with the applicant regarding the provision of detail and the mechanism for securing these junction improvements, which the applicant has indicated would be via the CTMP and it is expected that this will be reflected in the Statement of Common Ground (SoCG) between the applicant and the Council in due course.	

Table 3-6 – Public Rights of Way

LIR/WR Para Ref.	Summary Position	Applicant's Response
Outline Public Rights of Way and Permissive Paths Management Plan		
LIR 12.11	The Council's PRoW Officers have been consulted on the PRoW enhancement proposals, which are welcomed. Despite potential negative impacts on users during construction, such as temporary route closures and impacts on visual amenity; walking through open	The Applicant thanks Lincolnshire County Council for their engagement on Public Rights of Way. Following further engagement, the **oPROWPPMP [EN010149/APP/7.12.2]** [REP1-044] was updated at Deadline 1 to reflect the more detailed comments and recommended amendments contained in Appendix B of the Lincolnshire County Council Local Impact Report. .

LIR/WR Para Ref.	Summary Position	Applicant's Response
	fields vs walking through a solar farm is a significant difference for the path user, the permanent enhancements would offer long-term benefits. However, the Council seeks resolution on some details in the outline PROWPPMP.	

Table 3-7 – Flood Risk, Drainage and Surface Water

LIR/WR Para Ref.	Summary Position	Applicant's Response
LIR 13.15	The Council in its capacity as Lead Local Flood Authority (LLFA) has reviewed the application documents for this proposal. In terms of flood risk and drainage, the LLFA considers the assessment in ES Volume 1, Chapter 15 (Water)[APP-055] and in the FRA APP-0149 to be reasonable. Subject to the development being carried out as proposed within the DCO application documents, the outlined mitigation measures being implemented and further surface and foul water drainage details being agreed as part of subsequent DCO requirements, as proposed in the draft DCO [APP-012] requirement 10, the Council as LLFA for Lincolnshire, is of the view that impacts of this proposal would be neutral.	The surface water drainage requirements are secured through **Flood Risk Assessment: Appendix A - Outline Drainage Strategy [EN010149/APP/7.16.3]** [REP1-050] and Requirement 10 of the **Draft DCO** [REP1-006] with the final detail of the surface water drainage scheme being subject to approval by the Lead Local Flood Authority.

Table 3-8 – Cultural Heritage (Built Heritage and Archaeology)

LIR/WR Para Ref.	Summary Position	Applicant's Response
Built Heritage		
LIR 14.12, 14.15 and 14.16 (and in WR)	There are concerns about the assessment of built heritage assets and the extent of follow-up engagement since the Statutory Consultation stage. While some progress has been made, issues remain regarding receptors within or near the scheme that need further assessment and bespoke mitigation. The exclusion of non-designated assets, particularly farmsteads, is not supported as several warrant further scrutiny. The historic farmsteads within the order limits and wider study area are an integral part of Lincolnshire's agricultural heritage, reflecting traditional rural practices and contributing to the region's distinct historic character. The Historic Farmsteads in Greater Lincolnshire Report highlights their significance, yet the current DBA assessment fails to consider their collective value, treating them in isolation rather than as part of a cohesive historic landscape. The current assessment overlooks how these farmsteads are experienced as a group, with shared historic associations that define the rural distinctiveness of the area. The introduction of large-scale infrastructure risks severing these connections, eroding both the physical setting and the intangible heritage that links these assets to Lincolnshire's agricultural past. A list of non-designated farmsteads considered particularly sensitive to change is provided at Appendix D with a brief justification for their inclusion. A comprehensive evaluation of these impacts	As noted above, the non-designated heritage assets (historic farmsteads) detailed in Annex D are all 19th century partially extant farmsteads, there will be no physical impacts to any of these buildings, effects would occur through changes to their setting and as noted in the Applicants **Response to First Written Questions (ExQ1) [EN010149/APP/8.14]** [REP1-071] Q1.7.2 these effects would be not significant.

LIR/WR Para Ref.	Summary Position	Applicant's Response
	is essential to ensure they are properly considered in decision-making. The ES's assessment of built heritage and setting currently lacks key details and evidence to support scoping decisions and fails to address the concerns raised by the Council during the Statutory Consultation stage. The applicant should expand the scope of the assessment to include a more comprehensive analysis of designated and non-designated heritage assets and their settings. Without this information or further discussions around the issues raised in respect of the PEIR, it is impossible to fully understand the potential impact and harm this scheme may cause to the historic environment. At this stage the Council cannot agree with the applicant's conclusion that the assessment of harm would be less than substantial in respect of built heritage assets.	
LIR 14.13	Key concerns include the scoping out of conservation areas of Scopwick and Blankney from the Environmental Statement (ES). It is considered to be premature to exclude these areas, as their settings are influenced by their wider landscape context and the experience of traveling between them. The scheme has the potential to harm the character and appearance of these conservation areas, which derive significance from their historic buildings and rural surroundings. The introduction of large-scale infrastructure could disrupt key historic views and the sensory continuity of the open countryside.	This matter was raised in the Lincolnshire County Council Relevant Representation [RR-233] and during subsequent correspondence. A meeting was held on 30th April 2025 with the built heritage officers from LCC and NKDC to discuss the assessment of effects to built heritage including the Scopwick and Blankney Conservation Areas. The previous concerns were alleviated by the offsets along the footpath between the two conservation areas. This is captured within 5-4 in the **Draft Statement of Common Ground – Lincolnshire County Council [EN010149/APP/8.1]** [REP1-066].

LIR/WR Para Ref.	Summary Position	Applicant's Response
Archaeology		
WR	The level of archaeological investigations conducted so far is considered to be inadequate to assess the potential impact on buried heritage assets. There is a real risk of encountering significant, previously unknown remains. It is concluded that the proposed development would likely have a negative construction impact on heritage assets unless further evaluation and mitigation measures are implemented and at this stage is therefore considered to be contrary to CLLP policy S57 (The Historic Environment).	The Applicant agrees that further archaeological investigation is needed to inform the detailed design and this will be set out in the updated **Outline Written Scheme of Investigation (WSI) [EN010149/APP/7.15]** [APP-0148] which will be issued at Deadline 3. The ES has assessed a likely worst case scenario for impacts to below ground archaeology based on the design parameters and embedded mitigation. These design parameters have retained flexibility in order to respond to any sensitive archaeological remains which may be discovered during post-consent trial trenching. A variety of additional mitigation measures are set out in the **outline WSI [EN010149/APP/7.15]** [APP-0148] and further engagement with the Council is ongoing to update the **outline WSI [EN010149/APP/7.15]** [APP-0148] and draft mitigation plan. The updated **outline WSI [EN010149/APP/7.15]** [APP-0148] will be issued at Deadline 3 of the examination.
LIR 14.24 – 14.26	The applicant has not worked with the Council, as the local archaeological advisor, to establish an effective methodology; engagement has been limited and unsatisfactory. There has been inadequate aerial photographic analysis (only 13 photos reviewed for a 1280ha site) and an over-reliance on generic mitigation strategies without site-specific evaluation. Proper desk-based assessments, aerial/LiDAR analysis, and geophysical surveys are essential to inform trenching strategies. The language used is dismissive and implies a landscape of low archaeological potential and value, yet the limited level of assessment means these sweeping statements are not evidence-based and are misleading and unreliable. This conflicts directly with NPPF, EIA Regulations and NPS EN-1, which requires that the baseline evidence is accurate and that 'The EIA must	This matter was raised in the Lincolnshire County Council Relevant Representation [RR-233] and during subsequent correspondence and has been addressed within 5-8, 5-9 and 5-10 in the **Draft Statement of Common Ground – Lincolnshire County Council [EN010149/APP/8.1]** [REP1-066], agreement has not yet been reached regarding the assessment of significance of the below ground archaeology and appropriate mitigation measures. Further engagement is ongoing regarding the scope of evaluation work required for the detailed design and a meeting is scheduled for 19th June 2025 with the Council and Historic England to review the updates to the **outline WSI [EN010149/APP/7.15]** [APP-0148]. This further evaluation work will include a synthesis of the desk-based assessments, aerial/LiDAR analysis, and geophysical survey results to be presented within the updated oWSI. It should be noted that the aerial investigation analysis examined over 500 aerial photos for a 1 km study area around the Order Limits, the 13 referenced within **ES Volume 3, Appendix 9.3: Aerial Investigation Report [EN010149/APP/6.3]** [APP-099] are those where features were identified.

LIR/WR Para Ref.	Summary Position	Applicant's Response
	identify, describe and assess in an appropriate manner, in light of each individual case, the direct and indirect significant effects of the proposed development on the following factors…(d)material assets, cultural heritage and the landscape.' (Regulation 5 (2d)). Where the significance of heritage assets has been misunderstood or downplayed, there is a likelihood that any mitigation measures will be ineffective, leading to longer than anticipated archaeological excavation times and increased costs and delays before or during the construction phase. The limitations are particularly evident within the aerial assessment, with only 13 aerial photographs listed as being assessed within their Appendix 9.3: Aerial Investigation Report Annex 2: Aerial photographs consulted [APP-099], for a site covering 1280 hectares. For comparison, a nearby solar farm NSIP, covering 1100 hectares, reviewed 166 Historic England vertical aerial photos and 575 Historic England specialist aerial photographs, which provided a comprehensive assessment, and discovered a number of potential archaeological sites that had not shown on the geophysical survey.	
LIR 14.30	As previously covered within our PEIR response, Historic England Advice Note 17: Planning and Archaeology3 states that 'Appropriate evaluation can support the smooth and speedy progression of the development and help to manage the developer's risk early in the planning process' (section 131). It also states that 'Data gathered can also help to inform a	This matter was raised in the Lincolnshire County Council Relevant Representation [RR-233] and during subsequent correspondence and has been addressed within 5-13 in the **Draft Statement of Common Ground – Lincolnshire County Council [EN010149/APP/8.1]** [REP1-066]. The scope of work set out within the **Outline Written Scheme of Investigation [EN010149/APP/7.15]** [APP-0148] to inform the detailed design is under discussion and the Applicant is will be issuing a revised Outline Written Scheme of Investigation at Deadline 3 once further engagement has taken place.

LIR/WR Para Ref.	Summary Position	Applicant's Response
	costed mitigation strategy, the benefits of which include a reduction in the chances of unexpected risks and associated costs, and potentially the scope to allocate the cost of archaeology appropriately into financial forecasts' (section 132). It is therefore important that once design details are available, these are used to update the oWSI and produce a reasonable and proportionate trenching programme targeting impact areas.	
LIR 14.32	There needs to be an appropriate mechanism, preferably secured by requirement through the DCO process, for updating the outline Written Scheme of Investigation (oWSI) [APP-148] and the location and extent of trenching once detailed design has been progressed sufficiently to understand areas of impact. The oWSI will need to be approved by the Council prior to commencing evaluation trenching. The trenching would need to be completed prior to the commencement of any ground works, including site preparation or other works.	Further investigation to inform the detailed design is proposed and secured in the **Outline Written Scheme of Investigation [EN010149/APP/7.15]** [APP-0148] and is in line with the approach taken for other DCO solar farms. The scope of work set out within the **Outline Written Scheme of Investigation [EN010149/APP/7.15]** [APP-0148] to inform the detailed design is under discussion and the Applicant will be issuing a revised Outline Written Scheme of Investigation at Deadline 3 once further engagement has taken place. The wording of the draft requirements to secure updates to the oWSI is under discussion with Lincolnshire County Council as noted in the **Draft Statement of Common Ground – Lincolnshire County Council [EN010149/APP/8.1]** [REP1-066] that was issued at Deadline 1. However, the requirement was updated at Deadline 1 and does align with comments from LCC.
LIR 14.34 – 14.35	Section 7.1.2 of the oWSI states that the WSIs will conform to the requirements of the Lincolnshire Archaeology Handbook5. We would like to point out that all phases of works already undertaken should have been completed in accordance with the Handbook. Requirements for archaeological investigation have been set out within the handbook and have been designed by the local authority archaeological advisors' over decades in consultation with archaeological	The scope of work set out within the **Outline Written Scheme of Investigation [EN010149/APP/7.15]** [APP-0148] to inform the detailed design is under discussion and the Applicant will be issuing a revised Outline Written Scheme of Investigation at Deadline 3 once further engagement has taken place.

LIR/WR Para Ref.	Summary Position	Applicant's Response
	fieldwork companies and are based on what has proven to be effective and works. Regarding the oWSI specifically, it indicates a programme will be agreed for the proposed additional archaeological works. This will only be possible for the next phase of archaeological trenching, which, once complete, would inform further phases of archaeological works and ultimately the final mitigation strategy and archaeological management plan. The scope of subsequent works and mitigation will depend on the results of the next phase. If this is the case, the Applicant needs to ensure all measures outlined in the oWSI conform to those requirements set out within the Lincolnshire Archaeology Handbook, as suggested in their oWSI. This includes excavation, recording, photography, sampling, post-excavation and archiving and public engagement.	
LIR 14.36 - 14.37	Furthermore, the embedded mitigation measures within the oWSI are generic and their implementation or viability is dependent on further archaeological evaluation. Proposed use of non-intrusive concrete feet for solar arrays would still result in harm to fragile and shallow archaeological remains such as human burials and we have seen elsewhere that use of concrete shoes actually involves the excavation of a footing 500mm deep. Excavation is suggested by the Applicant at 13 locations within the cable corridor and a further 11 locations where avoidance is not possible. Directional drilling should be considered as a mitigation option to avoid or minimise	The scope of work set out within the **Outline Written Scheme of Investigation [EN010149/APP/7.15]** [APP-0148] to inform the detailed design is under discussion and the Applicant will be issuing a revised Outline Written Scheme of Investigation (oWSI) at Deadline 3 once further engagement has taken place. The updated oWSI will include a draft mitigation strategy which would be updated following further trial trenching to inform detailed design.

LIR/WR Para Ref.	Summary Position	Applicant's Response
	the impact depending on the significance of the archaeological resource as well as any other areas identified through archaeological trenching.	
LIR 14.38 – 14.40	Areas indicated as descoped within the oWSI are shown to be part of the development on scheme drawings and these will need to be revised once areas of impact have been identified. Areas of ecological enhancement/green, areas of solar arrays and cabling, and primary and secondary construction compounds need to be included in the trenching programme. Areas without ground disturbance can be omitted from the targeted trenching with the understanding that if they are to be included at a later date, they may need to be archaeologically assessed. Once the programme of trenching has been completed, the scope and nature of mitigation will need to be revised accordingly based on the results and significance of archaeology revealed. Where the extent of any archaeological remains is unclear, mitigation areas will need to extend and cover any areas of unknown, unevaluated land. Sufficient flexibility will need to be built into the works programme to account for archaeological remains of high significance which require additional resources and capacity to preserve them in a manner appropriate to their significance.	The scope of work set out within the **Outline Written Scheme of Investigation [EN010149/APP/7.15]** [APP-0148] to inform the detailed design is under discussion and the Applicant will be issuing a revised Outline Written Scheme of Investigation (oWSI) at Deadline 3 once further engagement has taken place. Directional drilling to avoid areas of high archaeological sensitivity can be considered if no other alternative mitigation is suitable.
LIR 14.42	The work undertaken to date is limited, in part due to a lack of details available to understand the location of	The location of potential impacts is understood in relation to the **ES Volume 2, Figure 3.1: Zonal Masterplan [EN010149/APP/6.2.2]** [REP1-027] and **ES Volume 2, Figure 3.3:**

LIR/WR Para Ref.	Summary Position	Applicant's Response
	impacts arising from the scheme. Improvements can be made within the documentation submitted, particularly the Aerial Investigation Report [APP-099], and this will contribute to and inform design prior to the programme of trenching.	**Green Infrastructure Parameter Plans [EN010149/APP/6.2.2]** [REP1-027] with further detail on the **Works Plans [EN010149/APP/2.3]** [APP-007]. This matter was raised in the Lincolnshire County Council Relevant Representation and during subsequent correspondence and has been addressed within 5-10 in the **Draft Statement of Common Ground – Lincolnshire County Council [EN010149/APP/8.1]** [REP1-066]. The **ES Volume 3, Appendix 9.3: Aerial Investigation Report [EN010149/APP/6.3]** [APP-099] reviewed a large number of aerial photographs but only references those where features were identified. The results of the non-intrusive evaluations will be synthesised within the updated oWSI to allow targeting of intrusive evaluation to inform the detailed design.
LIR 14.43	The proposed Requirement 11 in the draft DCO covering archaeological works post consent is not appropriate or fit for purpose given that much of the archaeological trial trench evaluation is proposed to be completed post-DCO. The wording suggested is vague and not sufficiently enforceable. As part of other solar NSIPs such as Mallard Pass, Cottam, and West Burton, the SoS ultimately required stronger wording in the DCO to ensure adequate archaeological evaluation and mitigation. It is therefore recommended that similar wording for Springwell is adopted to ensure enforceability and protection of heritage assets.	The Applicant has revised the drafting of this requirement at Deadline 1 in its **Draft DCO [EN010149/APP/3.1.2]** [REP1-006] to reflect the comments from LCC and others. The remaining point under discussion is the works packages the requirement should relate to. LCC have requested that the requirement relate to all works packages, further discussion as to the scope of work necessary for each work package is ongoing and will be reflected within the updated oWSI and further revisions of the draft DCO as appropriate.
LIR 14.47	We remain positive and keen to work with the applicant going forwards in establishing an effective approach to understanding, managing and mitigating the archaeological risk that will occur and maximising the public benefit that will be gained from the archaeological work.	The **oLEMP [EN10149/APP/7.9.2]** [REP1-064] includes heritage interpretation boards as enhancement measures. The Applicant will liaise with the Community Liaison Group regarding engagement strategies for heritage.

Table 3-9 – Land, Soil and Groundwater

LIR/WR Para Ref.	Summary Position	Applicant's Response
Agricultural Land and Soils		
WR	A significant permanent and negative impact as a consequence of the loss of 77 ha of BMV agricultural land is identified. The National Policy Statements direct that previously developed land, brownfield land, contaminated land, industrial land and non-BMV land should be developed as a preference, and where policies S14 and S67 of the CLLP seek to protect the best and most versatile agricultural land so as to preserve opportunities for food production and the continuance of the agricultural economy. The proposal also involves the temporary loss of 591 ha of BMV land under solar PV panels for 40 years, which is a substantial period. This loss is not only at a local level but significant when considered in-combination with the loss of land from other NSIP scale solar developments that are also being promoted and considered across Lincolnshire contrary to Central Lincolnshire Local Plan policy S67 (Best and Most Versatile Agricultural Land).	Please refer to the Applicant's response to the **Response to First Written Questions (ExQ1) [EN010149/APP/8.14]** [REP1-071] Q1.9.4 which provides a response related to the approach to the assessment for BMV land. The response to this question has also been addressed in Q1.9.1 within the **Response to First Written Questions (ExQ1) [EN010149/APP/8.14]** [REP1-071]. In accordance with IEMA land and soils guidance, a permanent land loss of over 20ha is considered a high magnitude of change from the baseline. However, the majority of land used within solar projects is for the PV areas, and these are considered temporary works without permanent loss as the land can be returned to agricultural use at the end of the operational period for the Proposed Development. Therefore, the Applicant considers that inter-project cumulative effects are considered minimal in the context of the remaining BMV available at a county level as detailed in **ES Volume 1, Chapter 16: Cumulative Effects [EN010149/APP/6.1.2]** [REP1-018]**.** Land that will be returned back to agricultural use following decommissioning will be returned to the prior ALC grade following measures and mitigation outlined in the **oSMP [EN010149/APP/7.11.2]** [REP1-042]. Therefore, as the land is being returned back to the pre-construction condition in line with EN-1 paragraphs 2.10.66 and 2.10.77 the development will be classed as temporary for all areas except green infrastructure. During the operation phase soil quality is able to be improved from nutrient inputs as a result of grazing and reduced agricultural pressure through heavy machinery, ploughing, fertilisers, herbicides and pesticides. During decommissioning the impact on soils has been mitigated through industry standard practice such as using track matting, avoiding wet weather conditions and using pile screws, these measures can be found in detail in the **oSMP [EN010149/APP/7.11.2]** [REP1-042]. Additionally, while a 40-year solar farm may seem like a long-term land use from a human perspective, it represents only a brief moment in the lifespan of soils, which develop and change over geological timescales spanning hundreds

LIR/WR Para Ref.	Summary Position	Applicant's Response
		of thousands to millions of years. Therefore, its impact on soil processes is relatively short-term in the context of soil evolution.
LIR 15.21	ES Chapter 16 'Cumulative Effects' [APP-072] provides a methodology to compare BMV of solar farms against the total BMV in Lincolnshire of 410,000 ha, (paragraph 16.8.9), a figure with which the Council agrees. The Zone of Influence (ZoI) identified comprises solar farms the county of Lincolnshire, in addition to any solar developments within 1km of the border with Nottinghamshire. The BMV identified has then been calculated as a percentage of Lincolnshire's BMV resulting in a figure of approximately 2% (paragraph 16.8.10). Table 16.12 'BMV agricultural land: temporary loss per cumulative development' has a number of issues: • the ZoI within includes solar farms outside Lincolnshire, which are then included in the cumulative BMV figure which is then used to calculate the BMV impact against the Lincolnshire BMV figure. Numerically the 2% figure is correct however the methodology results in a skewed result. • some NSIPs have progressed further through the NSIP stages and updated BMV figures are now available • Leoda Solar NSIP has been omitted from the assessment • only 2 Town and County Planning Act (TCPA) Solar Farms are included in the calculation when there are significantly more.	At Deadline 1, **ES Volume 1, Chapter 16: Cumulative Effects [EN010149/APP/6.1.2]** [REP1-018] was updated to take account of the Leoda Solar Farm (EN0110116) for which the EIA Scoping Report was submitted in January 2025. For Deadline 2, a full update of the inter-project long and short lists has been provided, with a refresh of latest information based on the status of applications, including updated BMV figures. This update has included a review of the Renewable Energy Planning database to capture the additional TCPA solar farms within Lincolnshire, where the criteria for making the short list are met. The Applicant notes the comment related to the skewed results, however, this approach of including DCO solar farms within Nottinghamshire (within 1km of the Lincolnshire border) in the calculations was done on a precautionary, and worst case basis. For example, One Earth Solar Farm straddles the border, and therefore rather than an arbitrary exclusion based on county borders, the entire site was included. However, the calculation without these schemes was included within paragraph 16.8.10 of **ES Volume 1, Chapter 16: Cumulative Effects [EN010149/APP/6.1.2]** [REP1-018]. In considering LCCs' comments regarding the total hectares to be occupied by all the TCPAs of ground mounted solar farms of 1MW and above, the addition of 1,584ha, whilst changing the percentage of BMV to be used (noting this also changes as the ALC survey results become available for projects), does not change the Applicant's conclusion. The majority of the land used within solar projects is for the Solar PV areas, and these are considered temporary works without permanent loss which can be returned to agricultural use at the end of the operational period for the Proposed Development (that approach is also consistent with the Secretary of State's decisions on made solar DCOs to date, for example the decision in Heckington Fen paragraph 4.52 in which loss of BMV during operation is referenced as temporary, and West Burton paragraph 4.273 where loss of BMV during operation is referred to as being reversible). Therefore, the Applicant considers that inter-project cumulative effects are considered minimal in the context of the remaining BMV available at a county level as detailed in **ES Volume 1, Chapter 16: Cumulative Effects**

LIR/WR Para Ref.	Summary Position	Applicant's Response
		[EN010149/APP/6.1.2] [REP1-018] and the mitigation measures to protect the soil as detailed and secured in the **oSMP [EN010149/APP/7.11.2]** [REP1-042]. The Applicant is committed to continued engagement and keeping the long and short list under review and updating the cumulative assessment throughout the examination. A further full update of the inter-project long and short lists will be submitted for Deadline 4, with an assessment cut-off date of 29 August 2025. This has been confirmed within the Deadline 1 cover letter [REP1-001].
LIR 15.24	It is noted that mitigation has been embedded into the scheme with fields that were identified as comprising solely of Grade 1 or 2 land were discounted from the area of Solar PV development to reduce the impact on Best and Most Versatile (BMV) agricultural land. It is noted however in ES Volume 2: Figures Chapter 11: Land, Soil and Groundwater, Chapter 11, Table 11.12 [APP-067] that 77.1ha is considered a permanent loss of BMV to Green Infrastructure. According to the Institute of Environmental Management & Assessment (IEMA) Guide 'A New Perspective on Land and Soil in Environmental Impact Assessment' (February 2022) 'the permanent loss, or reduction in quality, of more than 20ha of agricultural land due to development is of very high magnitude' which is acknowledged as 'major' in Table 11.7. It is noted however that ES Volume 1 Chapter 4: Reasonable Alternative Considered [APP – 044] Table 4.3 states in the final row that '*The fields discounted from Solar PV development, as detailed above, were retained within the Order Limits as Mitigation and Enhancement Areas to potentially provide ecological mitigation, green infrastructure opportunities, access and cable routing*.' The permanent land take for	Please refer to the Applicant's **Response to First Written Questions (ExQ1) [EN010149/APP/8.14]** [REP1-071] Q1.9.4 which provides a response related to the approach to the assessment for BMV land. The Applicant has minimised its use of BMV land where practicable and provides clear justification for the necessity to site certain infrastructure on BMV land in **ES Volume 1, Chapter 4: Reasonable Alternatives Considered [EN010149/APP/6.1]** [APP-044], **ES Volume 1, Chapter 11: Land, Soil and Groundwater [EN010149/APP/6.1.2]** [REP1-014], and the **Design Approach Document [EN010149/APP/7.3.2]** [REP1-056]. For the purposes of the land, soil and groundwater assessment which is presented in **ES Volume 1, Chapter 11: Land, Soil and Groundwater [EN010149/APP/6.1.2]** [REP1-014] a worst case has been assessed that assumes all green infrastructure would be permanent. This approach has been undertaken in this assessment to consider the worst case impacts to BMV land. The assessment concludes that as there are over 20 ha of land that will be permanently affected by the proposed green infrastructure that this would lead to a significant (adverse) effect on agricultural land. As set out in **ES Volume 1, Chapter 5: Approach to the EIA [EN010149/APP/6.1]** [APP-045] a worst case scenario is used to calculate the impacts for each of the environmental assessments to ensure a robust assessment is undertaken. However, noting that it is likely that some of this land may be temporary and will be returned to agricultural use following the decommissioning of the Proposed Development, for example, the areas of grassland

LIR/WR Para Ref.	Summary Position	Applicant's Response
	Green Infrastructure affects a total area of 166.2ha, of which 77ha are classified as BMV land which is adverse in terms of availability of agricultural land. Paragraph 11.9.21 considers this would be beneficial for soil quality, however the Council considered this argument is irrelevant given that 166.2ha (including 77.1ha BMV) of land is considered as a permanent loss.	creation. At the end of the decommissioning of the Proposed Development, the Applicant no longer has any rights over the land and the land will be handed back to the landowner. Whilst it is assumed that the land would return to agricultural use the Applicant does not have the rights to enforce this and the landowner at this point will decide on how they wish to manage their land. For example, the landowner may choose, to retain the areas of calcareous and neutral grassland to support their agricultural business through grazing, green hay / fodder production or they may revert the land to arable, or further diversify their agricultural business and manage it for carbon sequestration or other environmental management schemes. Related to the soil quality, based on the proposed and anticipated changes to soil use, overall soil health is expected to improve due to the reduction in intensive agricultural use, providing an opportunity for soil nutrient levels to improve, and less stress on soil physical properties. Soil will be managed throughout the construction, operation and decommissioning phase in accordance with the measures detailed in the **oSMP [EN010149/APP/7.11.2]** [REP1-042]. Therefore, based on the methodology set out in ES Volume 1, Chapter 11: Land, Soil and Groundwater **[EN010149/APP/6.1.2]** [REP1-014], the Applicant considers that over the operational phase, there would be beneficial effects to the soil quality. Land that will be returned back to agricultural use following decommissioning will be returned to the prior ALC grade following measures and mitigation outlined in the **oSMP [EN010149/APP/7.11.2]** [REP1-042]**.** Therefore, as the land is being returned back to the pre-construction condition in line with EN-1 paragraphs 2.10.66 and 2.10.77 the development will be classed as temporary for all areas except green infrastructure. During the operation phase soil quality is able to be improved from nutrient inputs as a result of grazing and reduced agricultural pressure through heavy machinery, ploughing, fertilisers, herbicides and pesticides. During decommissioning the impact on soils has been mitigated through industry standard practice such as using track matting, avoiding wet weather conditions and using pile screws, these measures can be found in detail in the **oSMP [EN010149/APP/7.11.2]** [REP1-042]**.** Additionally, while a 40-year solar farm may seem like

LIR/WR Para Ref.	Summary Position	Applicant's Response
		a long-term land use from a human perspective, it represents only a brief moment in the lifespan of soils, which develop and change over geological timescales spanning hundreds of thousands to millions of years. Therefore, its impact on soil processes is relatively short-term in the context of soil evolution.

Table 3-10 – Socio-economics

LIR/WR Para Ref.	Summary Position	Applicant's Response
ES Volume 1, Chapter 13: Population		
LIR 16.5	However, the reality of net additional employment average of approx. 20 FTEs in Lincolnshire during the operation phase, with the bulk of FTE coming in a 4 year span during construction, when placed against other strategic opportunities such as STEP fusion and industrial decarbonisation, is small. Some scope on the nature of the long term operational requirements in terms of skills would therefore be welcomed.	The Applicant acknowledges that the operational employment supported by the Proposed Development is relatively small in terms of FTE, when compared to other more labour intensive energy sector developments such as nuclear (fusion) and industrial decarbonisation. As such, **ES Volume 1, Chapter 13: Population [EN010149/APP/6.1.2]** [REP1-016] characterises the effects as 'minor' magnitude impacts, which are neutral to slight beneficial, but not significant in the context of the wider labour market and economy. It is anticipated that the operational (including maintenance) phase would support some periods requiring short-term, temporary iterative increases in on-site personnel for example for non-routine maintenance of the panels and connectors, site management and environmental management. The more fixed operational employment supported would include electrical engineering roles likely to require higher level skills and qualifications, as well as site management, administrative and process/elementary occupations including security and maintenance. The **Outline Employment, Skills and Supply Chain Plan [EN010149/APP/7.20]** [APP-0153] states that the Plan (para 1.1.5) "*focuses, in the main, on promoting the potential benefits that would arise during construction. However, the final Plan would incorporate*

LIR/WR Para Ref.	Summary Position	Applicant's Response
		activities relating to both the construction and operational phases", noting further at paragraph 2.2.1 that "*The Working Group would be an important conduit for regularly sharing contemporary data on workforce and skills needs of the Proposed Development during both the construction and operational phases*". As such, it is anticipated that from the inception of the Employment, Skills and Supply Chain Working group (Section 1.15 of the **Outline Employment, Skills and Supply Chain Plan [EN010149/APP/7.20]** [APP-0153]), there will be a strong governance process to plan for future operational skillsets and share data and assumptions around the detailed approach to contracting operational vacancies with all relevant partners involved.
LIR 16.6	In terms of construction employment the ES Volume 1 Chapter 13: Population [APP-053], paragraph 13.7.1 estimates that an average of 400 jobs to 650 peak jobs for four years would be supported by the development. While it is appreciated that efforts are to be made to resource a local workforce and at paragraph 13.7.30 anticipates that only 6% of the workforce would stay in the area, this number of jobs would result in a significant temporary workforce either commuting or staying in Lincolnshire, particularly when accumulated with other schemes. However, the 6% figure is likely underestimated, as applying data from all construction jobs to a specialised role like this may be inaccurate. There could be significant resultant demographic changes, changes to housing demand, changes to other local public and private services, and socio-cultural impacts. An example would be a concentration of workers in any one place creating needs on NHS services. Better understanding on the size and social make-up of likely temporary workforce would allow better understanding of these impacts.	Paragraph 13.5.15 of **ES Volume 1, Chapter 13: Population [EN010149/APP/6.1.2]** [REP1-016] notes that there were around 7,670 jobs within the construction sector within Construction Labour Market (CLMA) Focus Area, and 236,300 in the CLMA, representing a substantial pool of potential labour, which survey information suggest is highly mobile and transient. Within the overall construction workforce **ES Volume 1, Chapter 13: Population [EN010149/APP/6.1.2]** [REP1-016] Table 13.8 sets out the 3-digit Standard Industrial Classification (SIC) make-up to identify the types of skillsets available, and can be broadly compared to Paragraph 13.4.24 which suggests that the occupational distribution of jobs to install and connect solar PV. The take-up of employment by local workers will be enhanced through the **Outline Employment, Skills and Supply Chain Plan [EN010149/APP/7.20]** [APP-0153]. The employment supported will be in a range of different positions and skillsets across civil construction sectors, electrical and mechanical skills including specialised solar installation professionals and some non-construction and supporting roles such as security, process and administrative and transportation roles. As such, the Applicant considers that the estimate of non-local workforce assumed by the assessment is reasonable and evidence-based (drawing on average construction industry

LIR/WR Para Ref.	Summary Position	Applicant's Response
		characteristics), but recognises the Council's concern should a larger non-local workforce be present. Paragraph 13.5.39 of **ES Volume 1, Chapter 13: Population [EN010149/APP/6.1.2]** [REP1-016] sets out that: "*Due to the peripatetic nature of construction work, the likelihood that nonlocal workforce staff would return home between shift patterns, the short tenures and minimum length of time requires for a legal Assured Shorthold Tenancy and the specialist nature of the work required by non-local workforce staff, it is not anticipated that workers would use private rented accommodation. Therefore, impacts on private rented accommodation has not been assessed*". The Applicant notes in this regard that the non-local element of workforce is not likely to result in a substantial net additional demand for housing or services as a result of: • The number of non-local workers accounting for a very small proportion of the County and District's existing residential population (see Paragraph 13.5.5 of **ES Volume 1, Chapter 13: Population [EN010149/APP/6.1.2]** [REP1-016]; • Tenures of employment generally being very short for the construction sector; and • The fact that most non-local workers would be expected to reside in short-term, tourist sector accommodation (of which there is a substantial supply), returning to their permanent homes between working periods (e.g. at weekends) and therefore being unlikely to contribute to demand for services (due to them having access to on-site welfare and occupational health provision, and being unlikely to change their GP registration, prescribing or ongoing health service activity to their temporary location).
LIR 16.7	Paragraphs 13.7.17 to 13.7.26 of the ES Volume 1 Chapter 13: Population [APP-053] considers the temporary impacts on tourism. The Applicant acknowledges at 13.7.26 of APP-053 that significant visual effects from PRoW and the Stepping Out Network may adversely impact the number of visitors to the area. The Council are concerned that the proposal would have	The Applicant recognises the tourist draw associated with the Stepping Out network, identifying the scale of users of the network's activities and events (via the North Kesteven District Council Annual Report 2022/23) at paragraph 13.5.45 of **ES Volume 1, Chapter 13: Population [EN010149/APP/6.1.2]** [REP1-016]. This is within the context of the scale of the wider tourist market – for example as explained at **paragraph 13.5.45**, the area also welcomed approximately 860,433 visitors (4x the number of visitors to the Stepping Out Network) to indoor leisure facilities and sports outreach services, and received a total of

LIR/WR Para Ref.	Summary Position	Applicant's Response
	an negative impact on tourism through the loss of tourists who use the network and do not agree with the applicant's conclusion that as other routes of the network may continue to be used the residual impacts associated with the loss of tourism, such as potential loss of business are not likely to be impacted.	estimated 1.5 million tourist visits in 2020. More recent data produced by North Kesteven District Council suggests that this number is now much greater – 2.9 million visitors in 2023[1] The Applicant also notes that (at paragraph 13.5.43, drawing on Leisure Guide 2023 - Heart of Lincolnshire) the Stepping Out network of footpaths extends far beyond the area affected by the Proposed Development, as it comprises 28 walks, covering a 130-mile network across North Kesteven. Of these, only five trails/loops/circuits are within or adjacent to the Order Limits of the Proposed Development – see paragraphs 13.5.52-53 of **ES Volume 1, Chapter 13: Population [EN010149/APP/6.1.2]** [REP1-016], and **ES Volume 1, Chapter 10: Landscape and Visual [EN010149/APP/6.1]** [APP-050] concludes that beyond 3km there would be a low level of theoretical visibility of the Proposed Development and therefore there would be limited effects to tourist receptors beyond this area. North Kesteven District Council, in response to **ExQ1.12.3** has provided additional information regarding the use of the Stepping Out Network (and Spires and Steeples routes and Scopwick and Blankney routes) noting that in 2024/25, a total of 250,283 people used the wider Stepping Out network, of which 10,000 (approx. 4% of all visitors to the Stepping Out Network, or 0.34% of all tourist visitors to North Kesteven) used the section in and around the Order Limits of the Proposed Development. The Applicant concludes that, in terms of effects on tourism: • A relatively small proportion of the Stepping Out Network would be affected, and that the effects would be limited to changes in visual amenity (which may be subjective and may not affect tourist draw), on some of these routes, for a short section of those routes. This may deter some visitors (and therefore reduce footfall for some local

[1] https://www.n-kesteven.gov.uk/council-news/2024/11/new-tourism-strategy-north-kesteven#:~:text=Tourism%20and%20visitor%20activity%20saw,2%2C000%20jobs%20across%20the%20year.

LIR/WR Para Ref.	Summary Position	Applicant's Response
		businesses) – though this is subjective and is unlikely to constitute evidence in-line with the tests required for socio-economic impacts at paragraph 5.13.10 of EN-1 ("*The Secretary of State may conclude that limited weight is to be given to assertions of socio-economic impacts that are not supported by evidence*"); • During the construction phase, mitigation will be in place to avoid or minimise where practicable the adverse effects through temporary diversions and measures within the oCEMP and oCTMP to address amenity effects of construction on users of PRoW; • During the operational phase, PRoW diversions would be in place, and new permissive paths will be open that have been designed to retain and enhance recreational connectivity across the Site. Details of these new routes can be found in **ES Volume 2, Figure 3.3: Green Infrastructure Parameters [EN010149/APP/6.2.2]** [REP1-027] and will be secured within the **oLEMP [EN10149/APP/7.9.2]** [REP1-064]; and, • The wider tourist economy is substantial, with other elements that contribute to tourist draw, and with the vast majority of the PRoW networks promoted by the Council unaffected by the Proposed development – even if all visitors to this section of the Stepping Out network were to be deterred, which is unlikely and subjective, this would amount to 0.34% of annual visitors to North Kesteven. The Applicant acknowledges that there may be visual effects experienced by users of the PRoW, and that the receptor (the tourist economy) is of medium sensitivity, but that the magnitude of effects are limited and localised, and unlikely to be significant in terms of the overall effect on tourism, albeit may reduce the attractiveness of a small section of an important PRoW network. The Applicant has undertaken measures – where practicable – to seek to mitigate the effect.
LIR 16.8	In terms of the agricultural economy, the temporary land take during the operational phase (ES Volume 1 Chapter 13: Population [APP-053] paragraph 13.7.53) in reference to agricultural land loss makes some broad assumptions in relation to the current land use. This appears to be indicative and could be clarified further.	The Applicant has set out an indicative estimate of the change in FTE employment supported by the agricultural land within the Order Limits by applying the average number of jobs supported in the agricultural sector in Lincolnshire per hectare of agricultural land in the County, assuming a proportional relationship between land and employment. This is intended to be indicative and illustrative, in order to deal with uncertainty related to the scale, intensity and sub-sector of agricultural activity that could hypothetically be

LIR/WR Para Ref.	Summary Position	Applicant's Response
		supported by the land. It also allows a comparison of employment capacity, with actual employment supported (and people supported to work) within agricultural land holdings in the Order Limits – the latter is described in terms of the effect on people employed. The Applicant notes that – as amended paragraph 13.7.16 in **ES Volume 1 Chapter 13: Population [EN010149/APP/6.1.2]** [REP1-016] submitted at Deadline 1 that: *"Engagement with the agricultural operators has confirmed that during the construction (and operational) period the reduction in employment supported would be met entirely through retirement and a pause on recruitment, and would not be expected to result in redundancies".*
Outline Employment, Skills and Supply Chain Plan		
LIR 16.10	There appears to be a gap in the Outline Employment, Skills and Supply Chain Plan [APP-0153] with regards to independent training providers/charitable organisations that deliver Adult Learning programmes. The Council's Adult Learning & Skills Team hosts two Regional Adult Skills Groups (one for Lincoln / West Lindsey / South and North Kesteven regions, and one for Boston / South Holland /East Lindsey regions) where providers meet on a bi-annual basis. The aims of these groups are to raise awareness of projects on the horizon, discuss opportunities for collaboration and identify and gaps in provision. It would be beneficial to include information on the Regional Adult Skills Groups in the Outline Employment, Skills and Supply Chain Plan. The Adult Learning & Skills Team would welcome further engagement.	As set out at Item 11-1 in the **Draft Statement of Common Ground – Lincolnshire County Council [EN010149/APP/8.1]** [REP1-066] submitted at Deadline 1, the Applicant has engaged with a learning and skills representative from LCC. The recruitment and training opportunities that could be available to communities through the Proposed Development will be conveyed to the next scheduled meetings. This would be followed by regular updates in the run up to, and during, construction; enabling close relationships to be built between the Applicant, contractors and skills providers. This will then be included within detailed Employment, Skills and Supply Chain Plans. LCC has identified providers represented on the Regional Groups that deliver skills that best match the requirements of the Proposed Development and introductory conversations between the Applicant and those providers have commenced.

Table 3-11 – Public Health

LIR/WR Para Ref.	Summary Position	Applicant's Response
Assessment within the DCO Application		
LIR 17.8 – 17.9	The County Council Director of Public Health has reviewed the application and a number of concerns are raised in relation to public health which are set out in full in chapter 17 of the LIR. The exclusion of a human health chapter in the ES and lack of a health impact assessment is disappointing. The chapters relevant to population health do not sufficiently address mental health impacts of the largescale solar farm development. Nor does it relate potential impacts to local health profiles or identify vulnerable groups, for example: Heath Farm Autism Care near the development site.	A **Health and Wellbeing Summary Statement [EN010149/APP/8.10]** [REP1-067] submitted by the Applicant at Deadline 1) provides a summary of the approach to the consideration and assessment of effects of the Proposed Development on human health and wellbeing (both physical and mental health), including a background to the Applicant's approach to consideration of health pathways, determinants and populations / subpopulations through the scoping, pre-application, consultation phases of this application, in the context of guidance around the consideration of health in Environmental Impact Assessment (EIA). Paragraphs 1.6.1 to 1.6.5 describe how the approach to consideration of health and wellbeing was compliant with the Scoping Opinion. The **Health and Wellbeing Summary Statement [EN010149/APP/8.10]** [REP1-067] includes specific information relating to mental health (embedded throughout Section 2 and with specific commentary at Section 5). The **Health and Wellbeing Summary Statement [EN010149/APP/8.10]** [REP1-067] provides assurance that throughout the ES and non-ES assessments, sub-populations with a higher sensitivity to health effects related to environmental change resulting from the Proposed Development and this includes fixed-location community facilities and social infrastructure with a greater sensitivity to change as a result of their operations and characteristics of users (for example, with higher concentrations of people with different neurodiversity, such as autism). Effects on Heath Farm (Autism UK have been summarised at: • Section 3.5 (in terms of noise and vibration effect); and • Section 3.7 (in terms of effects on community access and PRoW).
Public Health Impacts		

LIR/WR Para Ref.	Summary Position	Applicant's Response
LIR 17.11	Landscape and visual impacts are shown to be relevant to the construction and decommissioning phases but are also prevalent during operation. The impact on households where their current view is significantly altered, is not felt to have been adequately addressed or mitigated. Obscuring open countryside with 3.5m high hedging to screen the solar arrays or bunding could create a feeling of enclosure. It is accepted that new hedgerows and woodland in general can be beneficial, however there is no indication that new woodland would be accessible to the public.	Section 3.6 of the **Health and Wellbeing Summary Statement [EN010149/APP/8.10]** [REP1-067] (submitted by the Applicant at Deadline 1) provides an overview of the potential health pathway effects related to landscape and visual change assessed within **ES Volume 1, Chapter 10: Landscape and Visual [EN010149/APP/6.1]** [APP-050]. It notes that **ES Volume 3, Appendix 10.5: Residential Visual Amenity Assessment [EN010149/APP/6.3]** [APP-111] assesses potential effects on residential properties specifically, which are summarised in **ES Volume 1, Chapter 10: Landscape and Visual [EN010149/APP/6.1]** [APP-050]. In total, it has been assessed that the residents of 25 dwellings would experience significant visual effects during year 1 but in most cases by year 10 these effects would reduce in magnitude due to the establishment of mitigation and by year 10 would be not significant. The assessment concludes that no residential property would experience a visual effect which was so overbearing that it would render the dwelling an unpleasant or unattractive place to live. The Applicant has developed the design of the Proposed Development to provide a sensitive response to the local environment and reduce potential impacts in accordance with the Project Principles set out in the **Design Approach Document [EN010149/APP/7.3.2]** [REP1-056]. The **outline Landscape and Ecology Management Plan [EN10149/APP/7.9.2]** [REP1-064] provides a framework for delivering the Green Infrastructure elements of the Proposed Development for the construction and operational phases of the development including the successful establishment and future management of the proposed landscape and ecological works for the duration of its operation. The green infrastructure parameters include approximately 16ha of new tree belt planting at strategic locations within the Order Limits to help soften and screen built development and integrate it to the existing landscape, whilst also providing habitat for biodiversity. The location of tree belt planting is shown on the Green Infrastructure Parameters presented in Appendix 1 of the **oLEMP [EN10149/APP/7.9.2]** [REP1-064] and has been developed in

LIR/WR Para Ref.	Summary Position	Applicant's Response
		accordance with the Project Principles set out in the **Design Approach Document [EN010149/APP/7.3.2]** [REP1-056]. Some of the proposed tree belts are aligned to the creation of new Public Rights of Way and permissive footpaths in location where it aligns with broader opportunities to enhance the footpath network. For example, tree planting along the western edge of the Springwell West is aligned to the creation of a new permissive path along the boundary of the Order Limits. In these instances, footpath users will derive some benefit from walking next to or though areas of proposed woodland planting via the proposed footpath route. The Applicant considers that adverse visual effects have been mitigated as far as practicable and the design response is proportionate and appropriate to the landscape context of the Proposed Development.

LIR 17.12	Opportunities to enhance mental and physical health and wellbeing are limited to a community growing space and enhancements to the PRoW network for walkers, cyclists, and horse riders. It is felt there could be significantly more community gain.
	
	Public Health would like to influence the allocation of the ongoing Springwell Community Fund to maximise the potential gain(s) for population health improvement.
		As summarised in the **Planning Statement [EN010149/APP/7.2.2]** [AS-018] and the **Health and Wellbeing Summary Statement [EN010149/APP/8.10]** [REP1-067] (submitted by the Applicant at Deadline 1), as well as significantly contributing to meeting policy commitments and legal decarbonisation targets for securing renewable energy, the Proposed Development will deliver enhancements relevant to positive health pathways. These benefits occur during different stages of the Proposed Development's lifetime.
		
		The Proposed Development includes the following other benefits:
		• Proposed enhancements and improvements to the local footpath and cycle network including the provision of new PRoWs:
		  • Linking RAF Digby to Scopwick.
		  • Providing a connection between the existing PRoW west of the A15 to New England Lane.
		  • Providing a connection across the A15 by linking Temple Road to Bloxham Woods Car Park.
		• The creation of four new permissive paths:
		  • A new permissive path along the western edge of the Proposed Development linking New England Lane to Temple Road, north of Brauncewell;

LIR/WR Para Ref.	Summary Position	Applicant's Response

- A new permissive path connecting the B1191 (Heath Road) with the existing PRoW between RAF Digby and Rowston (Rows/5/1);
- A new permissive path linking Bloxholm Wood to Brauncewell Village; and
- New permissive paths to provide a series of circular walking loops from Bloxholm Woods.

- In addition to this, proposals include the **enhancement of 2km of existing PRoW**, which will attract new users to the area and make this green infrastructure more accessible to local residents and tourists. The overall impact of the Proposed Development on users of PRoW and permissive paths during the operational phase will be slightly beneficial through the creation of new routes, increasing connectivity and access to green spaces within the study area.
- A new **community growing area to** the north of Scopwick. The community growing area would be located adjacent to existing community facilities along Vicarage Lane (including Scopwick Cemetery, park and play area) and is adjacent to the Spires and Steeples Trail and Stepping Out Scopwick Loop. The community growing area would be secured via the **oLEMP [EN10149/APP/7.9.2]** [REP1-064].
- and allows for permissive access 364 days a year to an area of up to 2ha for community use during the operation of the Proposed Development. The detailed design of the space would be developed post-DCO consent in conjunction with the **Community Liaison Group**.
- Providing a variety of biodiversity benefits including: new habitat for invertebrates, reptiles, amphibians, small mammals and birds; vegetated cover for foraging and dispersal, to maintain bat flight lines across the landscape, and provide a winter seed source for birds set out within the **oLEMP [EN10149/APP/7.9.2]** [REP1-064].
- The Proposed Development commits to delivering a minimum Biodiversity Net Gain of 10% as secured within the **oLEMP [EN10149/APP/7.9.2]** [REP1-064].This has been assessed through the **ES Volume 3, Appendix 7.14: Biodiversity Net Gain Assessment [EN010149/APP/6.3.2]** [REP1-032].
- Provision of an **Outline Employment, Skills and Supply Chain Plan [EN010149/APP/7.20]** [APP-0153], which will:
  - Increase direct and indirect employment and opportunities;

LIR/WR Para Ref.	Summary Position	Applicant's Response

- Lever potential of the Proposed Development and other similar schemes in the local area, to encourage the next generation to take up careers in the renewable energy sector and invest their futures in Lincolnshire;
- Engage effectively with local businesses and wider supply chain, and
- Assist in development and dissemination of local knowledge and skills relating to renewable energy infrastructure.

- The Applicant has an established record of adding legacy value through supply chains and has committed to promoting the delivery of economic benefits generated by the Proposed Development to residents and business. on the Proposed Development and catalysing increased capabilities and specialisms in green construction and manufacturing across Lincolnshire. **Outline Employment, Skills and Supply Chain Plan [EN010149/APP/7.20]** [APP-0153].

While not a consideration for the SoS, The Applicant is proposing a **Community Fund** of £400 per megawatt of installed capacity per year from the start of operation and lasting throughout the lifetime of the Proposed Development. It is envisaged that it would be managed by an independent third party and delivered in partnership with the local community. Local people would be able to advise on the fund strategy and spend, to prioritise issues that are important to the local area.

The approach to the set-up and administration of our Community Funds for the proposed development would follow an approach to previously consented projects, which closely aligns (and will continue to align with) with the UK Governments suggested approach outlined in the current consultation: *Community benefits and shared ownership for low carbon energy infrastructure: working paper.* The key principles of which include:

- **Set Values and Duration for Community Funds:** Establishing clear values for community funds associated with each technology across the operational lifetime of the projects;
- **Third-Party Administration and Nuanced Fund Distribution:** Utilising a professional third-party organisation to manage funds across multiple impacted

LIR/WR Para Ref.	Summary Position	Applicant's Response
		communities ensures effective oversight and accountability, ensuring that funds are represent the broader community's interests; • **Use of Community Liaison Officers:** Engaging with local residents and communities, providing consistency and building relationships throughout the lifetime of the proposed development; • **Guidelines for Co-Located Sites**: Implementing clearly defined guidelines for community benefits at co-located sites allowing for equitable distribution of funds based on specific project characteristics. • **Indexation of Funds:** Linking community fund amounts to the Consumer Price Index (CPI) provides a clear and consistent method for adjusting contributions over time.
LIR 17.13	Continuing to facilitate walking, cycling and horse riding (bridleways) is welcomed, but could potentially be outweighed by people worried about and not wishing to walk between fields of solar arrays or close to underground cabling and associated infrastructure. The technical summary [APP-134] acknowledges that "the routes next to Springwell Solar Farm may be used less" and so could impact on opportunities for physical activities for locals as well as tourism. It is not evident that the developer has undertaken a survey of current PROW usage, and therefore the statement in the Tourism section in the Technical Summary [APP-134] that 'Public rights of way and the Stepping Out Network Trails are heavily used by tourists and therefore significant visual effects may deter tourists from visiting the area. However, the network has been designed to link routes together and although the routes next to Springwell Solar Farm may be used less, the wider network is not likely to be impacted.' cannot be verified as there is no baseline information or monitoring proposed.	The in-combination and intra-project effects relating to users of PRoW are considered within the **Health and Wellbeing Summary Statement [EN010149/APP/8.10]** [REP1-067] (submitted by the Applicant at Deadline 1) at **Section 4.2**. This summarises that in terms of the health determinant / pathways relevant to the effects on amenity and recreational use of PRoW, the Applicant considers that: • Effects during the construction phase are temporary, short-term and managed where practicable through embedded mitigation and management plans – the Proposed Development has been carefully designed through consultation to provide physical mitigation for potential changes to amenity; • While there would be some short-term closures and disruption, this is limited and well managed and communicated, and is within the context of wider accessibility of routes in the local area and diversions that would be provided by the Applicant; • Following construction, there would be permanent, long-term improvements in accessibility within the local area and across the Site – this is recognised by LCC in their Local Impact Report (Section 12) which states that *the enhancements to the network, which would be permanent, would provide a longer term positive benefit*.

LIR/WR Para Ref.	Summary Position	Applicant's Response
LIR 17.15	The Council acknowledge that the potential health impacts associated with electromagnetic fields around solar arrays, substation, powerlines, and cables have been considered. It needs to be demonstrated that potential actual exposure to radiation (which includes electromagnetic fields) would comply with exposure limits developed by the International Commission on Non–Ionizing Radiation Protection. The ExA must consider consultation comments submitted by Radiation Protection Services of the UKHSA on this aspect of the development.	Paragraphs 3.9.9 to 3.9.15 of the **Health and Wellbeing Summary Statement [EN010149/APP/8.10]** [REP1-067] (submitted by the Applicant at Deadline 1) provide an overview of the potential health pathway effects related to electro-magnetic field effects. The impacts of electromagnetic fields upon human health have been assessed within **ES Volume 3, Appendix 5.5: High-Level Electromagnetic Field Assessment [EN010149/APP/6.3]** [APP-079] which considers the proposed electrical infrastructure including underground cables, transformers and substations. The assessment concludes no significant impact is predicted due to levels of electromagnetic radiation from the underground cables predicted to be below ICNIRP (International Commission on the Non-Ionizing Radiation Protection) reference levels for magnetic and electric fields, and radiation from the transformers that form part of the Springwell Substation While there have not been any representations specifically submitted by the UKHSA / OHID on the subject of radiation, the Applicant is engaging with the UKHSA on the subject of thermal runaway and other material issues / risks, and details can be found in the **Draft Statement of Common Ground – UK Health Security Agency [EN010149/APP/8.6]** [REP1-081] which – in-line with UKHSA's response to **ExQ1.3.1** – shows that all matters are agreed.
LIR 17.16	There is potential for accidents and fires associated with the development which would impact on the health of the public. It is noted that the settlements local to Springwell Solar Farm have sensitive receptors along them and it is noted there are a number of additional mitigation measures have been proposed. The potential for an increase in road traffic accidents, mostly because of large vehicle movements through the construction and decommissioning phases, should be mitigated to the satisfaction of Highways and the Lincolnshire Road Safety Partnership.	**Road Traffic Accidents** **Section 3.7** of the **Health and Wellbeing Summary Statement [EN010149/APP/8.10]** [REP1-067] (submitted by the Applicant at Deadline 1) provides an overview of the potential health pathway effects related to traffic and transport, drawing on assessments within the ES and mitigation strategies. The Applicant has assessed the likely significant effects arising from the construction, operation (including maintenance) and decommissioning of the Proposed Development on traffic and transport within **ES Volume 1, Chapter 14: Traffic and Transport** [AS-010]. The assessment concludes that there are no significant effects on the local road network or its users, including for road safety. Mitigation measures to ensure the safety of all road users are outlined in the **oCTMP [EN010149/APP/7.8.2]** [REP1-062]. This includes measures

LIR/WR Para Ref.	Summary Position	Applicant's Response
	Adequate provision to extinguish both an initial fire, and reignition once on-site suppressants have been exhausted, associated mainly with the substation infrastructure, should be ensured.	including setting approved access routes for HGV traffic, road signage strategy, a Staff Travel Plan, Community Liaison Group / Traffic Management Working Group, monitoring of the traffic management measures and effective enforcement measures. Lincolnshire Highways have been engaged throughout the design of the Proposed Development and will continue to be so. Details of the current position can be found in **Draft Statement of Common Ground - Lincolnshire County Council [EN010149/APP/8.1]** [REP1-066]. **Fire & Health** Consideration of the risks associated with major accidents and disasters have been included in **ES Volume 1, Chapter 5: Approach to the EIA** [APP-045], as it was agreed that this would be scoped out of the ES. Additionally, paragraphs 3.9.20 to 3.9.27 of the **Health and Wellbeing Summary Statement [EN010149/APP/8.10]** [REP1-067] (submitted by the Applicant at Deadline 1) provides an overview of the potential health pathway effects related to battery failure and fire. The Lincolnshire Fire and Rescue Service have been engaged throughout the design of the Proposed Development and will continue to be so through construction, operation and decommissioning. This includes details of the response in case of emergency and the methods by which to tackle an event. Details of agreements made can be found in **Draft Statement of Common Ground - Lincolnshire Fire and Rescue Service [EN010149/APP/7.24]** [APP-0157] and the arrangements for ongoing monitoring by the LFRS are secured through the Protective Provisions held within Schedule 15 of the **Draft DCO Draft DCO [EN010149/APP/3.1.2]** [REP1-006].

Table 3-12 – Minerals and Waste

LIR/WR Para Ref.	Summary Position	Applicant's Response
Minerals		
LIR 18.14 – 18.16 and	The proposed 40 year operational life of the proposed development would however extend significantly beyond the proposed plan period for the updated LMWLP and further limestone resources are therefore likely to be required during the life of the proposals, beyond any that may be identified in the new plan. Given the nature and scale of the proposals we acknowledge that it would not be possible to completely avoid sterilisation of some mineral resources. However, we have specific concerns in relation to proposals being located immediately adjacent to Brauncewell and Longwood Quarries as they could potentially sterilise mineral resources in land next to these sites that may otherwise have a reasonable prospect of being considered for extraction within the next 40 years. This should be given more meaningful consideration as part of the DCO application. In the absence of the applicant undertaking any detailed assessment of the mineral resources in these areas to demonstrate otherwise, it has to be assumed that there are viable mineral resources in proximity to these sites. It is acknowledged that the applicant has also put forward an argument regarding the overriding need for the project, in line with the criteria set out under Policy M11. However part of this test requires that the development could not reasonably be sited elsewhere,	The Applicant acknowledges that the Proposed Development is located within a Mineral Safeguarding Area (MSA) for limestone, as identified in Annex 1 of Appendix 2 of the **Planning Statement [EN010149/APP/7.2.2]** [AS-018]. This MSA forms part of a north–south corridor designated in the adopted Lincolnshire Minerals and Waste Local Plan (June 2016). While the Plan is expected to be updated during the lifetime of the Proposed Development, the Applicant notes that, according to Section 3 of the MSA, Lincolnshire has sufficient limestone reserves to extend beyond the Plan period. Additionally, a review of the planning history within the Order Limits confirms that no planning applications have been submitted or approved for limestone extraction on the Site, nor any extensions to nearby existing quarries. As set out in the Mineral Safeguarding Assessment (Appendix 2 of the **Planning Statement [EN010149/APP/7.2.2]** [AS-018]), the Proposed Development would not result in the permanent sterilisation of limestone resources within the Order Limits. The development comprises ground-mounted solar PV infrastructure, which is non-intrusive and reversible. Upon decommissioning after the 40-year operational period, the land will be restored, and the underlying mineral resource will remain accessible for future extraction if required. With regard to site selection, the Applicant undertook a comprehensive and methodical site selection process, guided by the specific technical and operational requirements of large-scale solar development. This process included a site search and a multi-stage assessment to identify and evaluate potential locations against a wide range of constraints, including proximity to grid connection infrastructure, land availability, solar irradiance, topography, flood risk, designated environmental and heritage assets, and land use conflicts. The Site Selection Report (Appendix 1 of the **Planning Statement [EN010149/APP/7.2.2]** [AS-018]) provides a detailed account of this process and explains why the Proposed Development site was ultimately selected as the most appropriate and viable option. The

LIR/WR Para Ref.	Summary Position	Applicant's Response
	and we consider that further information is required to demonstrate that the second part of this test has been met. Can justification be provided for example for why the footprint of the proposed development could not be amended and set further back from the identified quarries to avoid sterilising the land in their immediate proximity for at least the next 40 years?	search demonstrated that suitable alternative sites of comparable scale, capable of meeting the project's energy generation objectives and grid connection requirements, are extremely limited. Further detail is also provided in Table 1-2 of the Applicant's **Response to First Written Questions (ExQ1) [EN010149/APP/8.14]** [REP1-071], and in the **Written Summary of Oral Submissions at Issue Specific Hearing 1 [EN010149/APP/8.16]** [REP1-073], where the approach to alternatives, including scale and site boundary refinements, is clearly articulated. This confirms that reasonable alternatives and modifications have been considered, but no preferred or less constrained locations were identified. In response to the Council's concerns regarding the potential sterilisation of mineral resources adjacent to Brauncewell and Longwood Quarries, the Applicant confirms that the Proposed Development would not impede the continued operation or potential future expansion of these quarries outside the Order Limits, subject to the necessary planning permissions. The overlap between the designated Site-specific Mineral Safeguarding Area and the Springwell Order Limits is minimal, as demonstrated in the **Mineral Safeguarding Assessment** at **Appendix 2** of the **Planning Statement [EN010149/APP/7.2.2]** [AS-018]. While it is acknowledged that the land within the Order Limits will not be available for mineral extraction during the 40-year operational life of the Proposed Development, the solar PV infrastructure does not constitute a permanent obstruction. The development has been designed to ensure that underlying mineral resources remain undisturbed and can be accessed for future extraction following decommissioning. As such, any potential future quarry expansion would be limited to areas outside the Order Limits until the Proposed Development is decommissioned. In summary, the Proposed Development does not compromise the integrity of the MSA, does not result in permanent sterilisation of mineral resources, and remains compatible with the objectives of Policy M11 of the LMWLP. The Applicant remains committed to engaging

LIR/WR Para Ref.	Summary Position	Applicant's Response
		with the Council throughout the DCO process to ensure mineral safeguarding considerations are appropriately addressed.
LIR 18.17	Furthermore, whilst it is noted that the majority of the land around the two quarries is proposed for green infrastructure, has consideration been given to whether such landscape and biodiversity enhancements may present a constraint to any future mineral extraction in these areas?	As set out in the **Mineral Safeguarding Assessment** at **Appendix 2** of the **Planning Statement [EN010149/APP/7.2.2]** [AS-018], the majority of the Site-Specific Minerals Safeguarding Areas have been excluded from the Order Limits to reduce potential impacts on any future mineral extraction in these areas. In the vicinity of Brauncewell Quarry, the Order Limits include a small proportion of the total Mineral Safeguarding Area in part of Field W1. This area is proposed for Solar PV Development and green infrastructure, and would be temporary for the duration of the Proposed Development, which would not constrain any future extraction. In the vicinity of Longwood Quarry, the Order Limits include a small proportion of the total Mineral Safeguarding Area in fields Md03, Md04, Md05, C6 and C7. This land is proposed for green infrastructure, the majority of which would be temporary for the duration of the Proposed Development. A small section of hedgerow planting (approx. 50m) adjacent to the Spires and Steeples Way is considered to be permanent land take but is not considered to be a constraint to any future mineral extraction.
LIR 18.18 – 18.19	In light of the above, only if the applicant is able to address the points raised and therefore demonstrate full compliance with Policy M11, and subject to requirement 19 in the draft DCO [APP-012] specifying the date of decommissioning to be no later than 40 years following the final date of commissioning, the Council would not object to the proposal on mineral resource safeguarding grounds. With regard to Policy M12 and the safeguarded mineral sites, the Council are of the view that insufficient information has been provided in the assessment undertaken to demonstrate that the proposed development would not prejudice or detrimentally impact	NPS EN-1 paragraphs 5.11.28 and 5.11.29 state that *"Where a proposed development has an impact upon a Mineral Safeguarding Area (MSA), the Secretary of State should ensure that appropriate mitigation measures have been put in place to safeguard mineral resources"* and *"Where a project has a sterilising effect on land use (for example in some cases under transmission lines) there may be scope for this to be mitigated through, for example, using or incorporating the land for nature conservation or wildlife corridors or for parking and storage in employment areas."* As set out in the **Mineral Safeguarding Assessment** (**Appendix 2** of the **Planning Statement [EN010149/APP/7.2.2]** [AS-018]), the mineral resources within the Order Limits will not be permanently sterilised. On the basis that the Proposed Development has a lifespan of 40 years, and the Proposed Development would be decommissioned at

LIR/WR Para Ref.	Summary Position	Applicant's Response
	upon the operation of the safeguarded sites. Relevant issues to consider may include (but are not limited to): • access and highways; • health and safety (including fire safety); • screening/boundary treatments; • dust; • site buffers; and • the need to protect any associated utilities and infrastructure, etc. The Council suggest contacting the site operators and relevant experts such as the Health and Safety Executive, the Environment Agency and local Environmental Health Officers to accurately determine the detailed matters that should be considered and any necessary mitigation. At this stage, the Council has not seen any evidence that such engagement has been undertaken and would wish to see further evidence to confirm that such engagement has taken place, and a satisfactory outcome achieved.	the end of its operational life. Therefore, any minerals within the Order Limits would be available to exploit if required at a future date. The Proposed Development does not restrict the existing operations and is reserved by nature; therefore, it does not permanently sterilise the resource. The Applicant considers that the Proposed Development is not in conflict with mineral safeguarding policies. Two existing mineral sites—Brauncewell Quarry and Longwood Quarry (owned by Blankney Estate) —adjoin the proposed development boundary and are safeguarded under Policy M12: Safeguarding of Existing Mineral Sites and Associated Minerals Infrastructure. This includes a 250-metre safeguarding buffer around each site, as shown in Figures 1 and 2 of the Mineral Safeguarding Assessment. The majority of the Proposed Development located within these buffer zones is allocated for Green Infrastructure. These areas are non-intrusive and would not impact the ongoing operation or viability of either quarry. Specifically: • Along the eastern boundary of Longwood Quarry, the Proposed Development is separated by the B1188, which creates a clear physical boundary. It is understood that this boundary is likely to limit the quarry's westward eastward expansion regardless of the Proposed Development. • Along the northern boundary of Brauncewell Quarry, a mature tree line and fencing form part of both the existing mitigation strategy and the Proposed Development's design. While Solar PV infrastructure is proposed adjacent to this boundary, it is a passive and non-intrusive land use that would not sterilise limestone resources or interfere with the quarry's operations. Condition 35 of the Lincolnshire County Council consent PL\0060\07 provides a protection of the boundary trees and woodland in order to protect nesting birds and the biodiversity of the site and its surroundings. This condition limits any future expansion to the Brauncewell Quarry into the Proposed Development area to the north, regardless of the Proposed Development. In response to Policy M12, the Proposed Development has been assessed to ensure it does not prejudice the operation and safeguarded mineral sites at Brauncewell and Longwood Quarries.

LIR/WR Para Ref.	Summary Position	Applicant's Response
		Access and Highways: As shown on the **Streets, Rights of Way and Access Plans [EN010149/APP/2.4.3]** [REP1-004], there are no proposed access or highway works near Brauncewell Quarry. At Longwood Quarry, a small-scale passing bay is proposed. This is a minor, localised intervention and is not expected to impact quarry operations or access arrangements. **Health and Safety:** There is no direct interface with quarry operations. Standard health and safety protocols, including fire safety measures, will be in place during construction and operation, ensuring no risk to mineral site safety. As set out in the relevant Management Plans as part of the DCO Requirements. **Screening and Boundary Treatments**: Existing boundaries will be maintained. The Proposed Development will have a minimum 10m offset from Solar PV development to all existing hedgerows (Principle 2.1). Therefore, the existing boundary will be maintained, protecting the operational areas of the Proposed Development and the existing quarries. **Dust:** The Proposed Solar PV development will be cleaned throughout its lifetime, therefore not affecting the efficiency of the Solar Panels or impacting the operation of the quarries. **Site Buffers:** Appropriate separation is maintained from safeguarded sites, with no encroachment into operational or vegetation along the boundary. **Utilities and Infrastructure:** No utility works are proposed that would affect quarry infrastructure. The Proposed Development does not conflict with the operation or safeguarding of Brauncewell or Longwood Quarries and is considered compliant with Policy M12. Relevant

LIR/WR Para Ref.	Summary Position	Applicant's Response
		engagement with regulatory bodies and technical consultees has already been undertaken with the Health and Safety Executive (HSE), Environment Agency, and Local Environmental Health Officers; no objections or issues have been raised regarding the Proposed Development adjoining existing quarries. In light of the above, the Applicant considers that the Proposed Development would not prejudice or detrimentally affect the ongoing operation or potential future expansion of the safeguarded mineral sites. These stakeholders and relevant statutory consultees have not raised any objections regarding the safe operation of either of these sites. The Applicant engaged with and received feedback from Brauncewell Quarry at both phases of formal pre-application consultation (Phase One Consultation (2023) and Phase Two Consultation (2024)). As well as meeting representatives of Brauncewell Quarry at public events on 3 February 2023 and 25 January 2024, the Applicant received written feedback from the operator of Brauncewell Quarry to each phase of consultation. The feedback received raised no concerns about the impact of the Proposed Development on the operations of the quarry and welcomed opportunities to work with the Applicant during the construction phases. The Applicant notes that the owner of Longwood Quarry is Blankney Estates Limited, which, as the Main Landowner for the Proposed Development, has been extensively engaged with by the Applicant. No concerns have been raised by BEL with regard to the potential impact of the Proposed Development on the operations of the quarry. It is also noted that Longwood Quarry sits within the inner zone of consultation and therefore its operators have received direct communications about the Proposed Development and the opportunity to provide feedback on it. Engagement with quarry operators and relevant statutory consultees will continue where necessary to ensure any remaining issues are appropriately addressed and that compliance with Policy M11 and M12 is demonstrated.
Waste		

LIR/WR Para Ref.	Summary Position	Applicant's Response
LIR 18.23 (and in WR)	The Council has reviewed the application in respect of waste matters and whilst waste has been scoped out of the ES as a separate chapter, Chapter 3: Proposed Development Description of the ES [APP-043] sets out the arrangements that are proposed for managing any waste produced by the development, following the waste hierarchy. More specific measures are set out in the outline CEMP [APP - 0140], outline OEMP [APP - 0143], outline DEMP [APP - 0146] and outline LEMP [APP - 0142]. The inclusion of an outline Site Waste management Plan (oSWMP), appended to the outline CEMP, is welcomed. However, further details of expected waste arisings, and of their proposed fate, ***from all phases of the project*** will need to be included in the final SWMP.	The expected waste arisings and the proposed location of any waste arisings for the construction phase will be included in the final Site Waste Management Plan. Prior to the operation (including maintenance and decommissioning phases, further details on the types of waste and waste forecast, along with details on the amount of recycled / landfill waste that is anticipated will be included in the final OEMP and DEMP. These will be discussed and submitted for approval with the relevant local authority prior to the start of the operation (including maintenance) and decommissioning phases of the Proposed Development.
LIR 18.25 – 18.26	In respect of Policy W1 of the LMWLP this requires the Council to make provision for sites to meet predicted future capacity gaps for waste arisings. Currently there are no waste facilities locally to process discarded solar infrastructure as it is replaced during the lifetime of the development and at the decommissioning stage. When combined with the other solar projects in the county and region, cumulatively this will potentially present a significant issue and additional facilities to ensure these products are sustainably disposed of will be needed. The developer needs to be mindful that local facilities for recycling solar waste don't exist at present and this needs to be taken in account as part of any decommissioning plan. The ES Volume 1 Chapter 8: Climate, Table 8.5 'Service life of the Proposed Development components' assumes a 40 year lifespan	Within the GHG assessment presented in **ES Volume 1, Chapter 8: Climate [EN010149/APP/6.1]** [APP-048], emissions from the replacement of solar PV modules (0.5%) were not included. However, construction breakage was assumed to be 5%, adopting a conservative approach based upon research. The additional PV modules needed over the lifetime of the Proposed Development therefore have been conservatively assessed as 5%, and therefore this sufficiently covers the Solar PV modules that may be required for both replacement (0.5%) and construction breakage (0.2%) during the construction and operational phase of the Proposed Development. **ES Volume 1, Chapter 8: Climate [EN010149/APP/6.1]** [APP-048] will be updated at Deadline 3 to clarity that the above assumptions have been built into the current calculations which form part of this assessment. The **oCEMP [EN010149/APP/7.7.2] [**REP1-060**]** notes in paragraph 6.1.33 that a SWMP would be prepared and agreed with the relevant local authority prior to commencement of the operation (including maintenance) phase**.** The **oOEMP [EN010149/APP/7.10.2]** [REP1-040] in paragraph 2.10.4 and in the **oDEMP [EN010149/APP/7.13.2]** [REP1-046] in

LIR/WR Para Ref.	Summary Position	Applicant's Response
	for Solar PV which therefore does not take into account a potential failure rate (both individually and cumulatively alongside other solar farms) which would impact on recycling capacity and capability but also on its estimation of emissions (see 18.27 below). The Council notes the applicant's commitment at paragraph 6.1.35 of the outline CEMP [APP-0140] that a SWMP would be prepared and agreed prior to commencement of the decommissioning phase and the requirement (19) in the draft DCO [APP-012] to submit a DEMP. However, it will be necessary for a mechanism to be incorporated that requires a waste management strategy to be submitted which demonstrates the expected quantity of solar infrastructure that would be discarded during the operational and decommissioning phases and the arrangements to be put in to ensure adequate facilities are available to sustainably dispose/recycle these items in the future.	paragraph 2.10.5 states that a SWMP will be prepared by the Applicant which will provide waste estimates, specific key responsibilities, reporting and auditing requirements and waste recovery targets. This will include waste estimates for the expected quantity of solar infrastructure that would be discarded during the operational and decommissioning phases. The Applicant will engage with the relevant local authority prior to the operation (including maintenance) and decommissioning phases of the Proposed Development to determine the capacity of recycling facilities to discuss the facilities available to dispose/recycle the waste produced during these phases of the Proposed Development. This will be taken into account and agreed in the final OEMP and DEMP.
LIR 18.27	Furthermore the Council wishes to draw the SoS attention to the point relating to not just the predicted decommissioning GHG emissions associated with the recycling or disposal of components and panels at specialist disposal facilities, but also the need for replacement infrastructure during the lifetime of the development which is unrestricted and therefore could result in the infrastructure being replaced a number of times during the lifetime of the development. The ES Chapter 8 (Climate Change) [APP-048] table 8.28.12 in assessing the operational impact on GHG emissions states 'no replacement' for solar PV's and other	The **Draft DCO [EN010149/APP/3.1.2]** [REP1-006] authorises the "maintenance" of the authorised development. As per the definition in the draft DCO there is a restriction in terms of maintenance as it does not allow the removal, reconstruction or replacement of the whole of the authorised development. Article 5 further provides the restriction that maintenance cannot result in works likely to give rise to materially new or different effects to those in the ES. Advancements in current PV manufacturing have seen greater reliability with performance warranties in some cases extending to 40 years and degradation at 0.3%. The Applicant has collaborated with tier 1 solar PV manufacturers and with its team of solar engineers to model the generation and select PV module components that will provide the durability required to generate renewable energy for 40 years. The Applicant notes the potential need

LIR/WR Para Ref.	Summary Position	Applicant's Response
	components, and therefore attributes a 0% emissions, however other parts of the ES state Solar PV's would require replacement. The Council therefore currently disagrees with the conclusions at paragraph 8.8.5 of APP-048 that the overall impact on climate during the operation (including maintenance) is positive and no additional mitigation would be required as replacement has not been fully taken into account.	for some replacement over the 40 year lifetime in addition to construction breakages. This may be in the order of 0.5% for lifetime replacement, and 0.2% breakage during construction. Within the GHG assessment presented in **ES Volume 1, Chapter 8: Climate [EN010149/APP/6.1]** [APP-048], emissions from the replacement of solar PV modules (0.5%) were not included. However, construction breakage was assumed to be 5%, adopting a conservative approach based upon research. The additional PV modules needed over the lifetime of the Proposed Development therefore have been conservatively assessed as 5%, and therefore this sufficiently covers the Solar PV modules that may be required for both replacement (0.5%) and construction breakage (0.2%) during the construction and operational phase of the Proposed Development. This principle also applies to other components as part of the Proposed Development with construction wastage values as follows: solar PV frames, foundations and switchgear with 1% construction wastage, and inverters with 5% construction wastage. **ES Volume 1, Chapter 8: Climate [EN010149/APP/6.1]** [APP-048] will be updated at Deadline 3 to clarify that the above assumptions have been built into the current calculations which form part of this assessment.
LIR 18.28	The Council would also welcome clarification why the 'end of life' figures shown in Table 8.13: • Are shown as one item rather than itemised as 8.11 & 8.12 do for other phases. • Show a figure much lower than the embodied emissions from the manufacture of components (Table 8.11).	The emissions factors used for part of the decommissioning assessment are taken from Environmental Product Declarations, and these documents combine the emissions from C1 (deconstruction), C2 (transport), C3 (waste processing) and C4 (disposal). As such it is not possible to display the emissions from these sub categories. The emissions from decommissioning are typically much lower than for construction, as construction takes into account the embodied emissions of the product, inclusive of manufacturing (and the energy required for the manufacturing) and transportation, as well as construction activities. Decommissioning emissions do not include the emissions from the manufacture of the product, and fuel use during the decommissioning phase is typically half that of construction (as per the RICS Whole Life Carbon Assessment (WLCA) standard, 2023).

LIR/WR Para Ref.	Summary Position	Applicant's Response
LIR 18.29	The Council has concerns about some aspects of the Applicant's assessment and consider that further work is needed in order to adequately demonstrate that the impact of the development in terms of waste would not be significant. The Council wish to raise the following points: • The applicant should be aware that, whilst PV panel recycling facilities may be available in time to process the quantities of waste panels generated by this project, this is by no means certain. Thus, the applicant needs to indicate what they propose to do if such capacity is not forthcoming and assess the impacts accordingly. • Particular consideration needs to be given to the cumulative quantities of waste arising from this and other proposed large-scale solar infrastructure nearby. This includes the significant overall failure rate of PV panels during the operational phase. • The need for a commitment that the applicant will set out, and regularly review, their forecasts for, and proposed fate of, all wastes arising in each phase of the project – Commissioning, operational and decommissioning.	The current solar panel waste generation is low, so there is little demand for these facilities at present, hence the limited available capacity that is currently available. However, it is expected that facilities which reuse, recycle, or recover end of-life solar panels will be developed as the quantities of this waste stream increase in the future. The Waste Electrical and Electronic Equipment (WEEE) Regulations place obligations on those who place solar panels on the market to finance the costs of collection, treatment, recovery and environmentally sound disposal; and the landfill tax strongly incentivise reuse, recycling and recovery. Therefore, it is anticipated in the future that private sector waste companies will develop these facilities to respond to market demands. The Applicant is committed to providing further details on the types of waste and waste forecast, along with details on the amount of recycled / landfill waste that is anticipated. This will be included in the final OEMP and DEMP prior to the operation (including maintenance) and decommissioning phase. These alongside the resultant location of any waste and the capacity of these waste facilities will be discussed and submitted for approval with the relevant local authority prior to the start of the operation (including maintenance) and decommissioning phases of the Proposed Development. The Applicant has undertaken a further assessment of waste, particularly related to the cumulative impacts of waste generation in combination with other known solar developments within Lincolnshire and 1km into Nottinghamshire. This study uses an absolute worst case to take account of any large scale failures of PV panels and a realistic worst case scenario against the current baseline of facilities in the region. This study is presented in **Appendix 3** of this document. The commitment to regularly review waste forecasts and identify the resultant location of any waste will be set out and updated in the final CEMP, OEMP and DEMP. This is secured within the SWMP which forms an Appendix to the **oCEMP [EN010149/APP/7.7.2]** [REP1-060] which has been updated at Deadline 2. The SWMP used for the operational (including maintenance) and decommissioning phase will include the measures detailed in the SWMP which forms an Appendix to the **oCEMP [EN010149/APP/7.7.2]** [REP1-060] and this will be

LIR/WR Para Ref.	Summary Position	Applicant's Response
		updated to reflect the circumstances prevailing during the period in which operational and maintenance activities are to be carried out. This is secured within paragraph 2.10.4 of the **oOEMP [EN010149/APP/7.10.2]** [REP1-040] and paragraph 2.10.5 of the **oDEMP [EN010149/APP/7.13.2]** [REP1-046]. Mitigation measures to ensure that waste would be managed and disposed of according to the principles of the Waste Hierarchy and that the resultant location of waste would not impact the capacity of national and regional waste disposal facilities are secured in the **oCEMP [EN010149/APP/7.7.2]** [REP1-060] and the **Site Waste Management Plan** which forms an appendix to the **oCEMP [EN010149/APP/7.7.2]** [REP1-060].

Table 3-13 – Cumulative Effects

LIR/WR Para Ref.	Summary Position	Applicant's Response
LIR 19.6	Other NSIP scale solar proposals are coming forward in the NKDC area. Leoda Solar Farm has commenced non-statutory consultation and submitted a EIA scoping request since the Applicant completed their ES. The Council will therefore expect to see the applicant's cumulative assessment updated accordingly to include this proposal.	At Deadline 1 **ES Volume 1, Chapter 16: Cumulative Effects [EN010149/APP/6.1.2]** [REP1-018] was updated to take account of the Leoda Solar Farm (EN0110116) for which the EIA Scoping Report was submitted in January 2025. For Deadline 2, a full update of the inter-project long and short lists is being undertaken, with a refresh of latest information based on the DCO status of applications.
LIR 19.8	Similar to what has been seen in the western part of Lincolnshire around Gainsborough, there is also now a potential for a cluster of NSIP solar developments centred around the Navenby area in North Kesteven district. Springwell, Fosse Green and Leoda solar schemes are all seeking to connect to the proposed Navenby substation. The cumulative impacts of the	The Applicant is committed to keeping the long and short list under review and updating the cumulative assessment throughout the examination. A revised version of **ES Volume 1, Chapter 16: Cumulative Effects [EN010149/APP/6.1.2]** [REP1-018] has been submitted at Deadline 1 to take account of the Leoda Solar Farm (PINS project reference EN0110016) for which the EIA Scoping Report was submitted in January 2025. At Deadline 2, a full update of the inter-project long and short lists will be submitted, with an assessment cut-off date of 30 May 2025. The same process will be repeated for Deadline 4, with an

LIR/WR Para Ref.	Summary Position	Applicant's Response
	Springwell solar farm, combined with the other developments identified as part of the cumulative assessment could be significant. These impacts include landscape and visual effects, construction-related traffic and transport movements, and the long-term loss of BMV agricultural land. Such changes are likely to negatively affect the local community's amenity. The assessment of inter-project cumulative effects therefore should be kept under review as these other projects progress through the DCO process and more information becomes available.	assessment cut-off date of 29 August 2025. This has been confirmed within the Deadline 1 cover letter [REP1-001].
LIR 19.13	As has occurred elsewhere in Lincolnshire, we are now seeing proposals coming forward that would form a cluster of developments focused around the proposed Navenby substation, including the substation itself. The Council has requested that the ExA adopt a mechanism similar to that used for other solar projects in western Lincolnshire and the Outer Dousing offshore wind proposal. This mechanism requires each applicant to produce an inter-relationship report at the start of their examination and update it at each deadline. The report would aid understanding of the relationship between the schemes and likely impacts. The applicant has committed to producing an inter-relationship report, which is welcomed.	The Applicant has provided the **Interrelationships with other Nationally Significant Infrastructure Projects and Major Development Schemes [EN010149/APP/8.11]** [REP1-068] at Deadline 1. The Applicant welcomes feedback from the Council on their approach and further engagement, as well as updates through the examination process if required.

Table 3-14 – Fire Safety

LIR/WR Para Ref.	Summary Position	Applicant's Response
Financial Contributions		
LIR 20.8	To enable LFR to undertake the necessary monitoring to ensure the BESS is in accordance with the relevant requirement (currently 7 of the draft DCO) a financial contribution is required via a Protective Provision within the DCO for the Fire Service so that it has sufficient resources in place to undertake monitoring of the BESS connected to this project. This approach has been agreed as part of the recently approved Gate Burton, West Burton and Cottam DCO, therefore there is a precedent for this approach to be followed for this application. This has been discussed with the applicant, and the Council will therefore expect to see this included in the next version of the DCO.	Protective provisions for the LFRS have been included in the **Draft DCO [EN010149/APP/3.1.2]** [REP1-006] submitted at Deadline 1. The Applicant has now been informed of the amount of the funding required, can confirm it is agreeable to the proposed sum and will update the protective provisions in this respect in the next revision of the draft DCO, in line with the approach taken at Heckington Fen.
Outline Battery Safety Management Plan		
LIR 20.10	Lincolnshire Fire and Rescue (LFR) Service have reviewed the draft Outline Battery Safety Management Plan [APP - 0147] and are satisfied with the detail provided at this stage and with the explanations of how the developer aims to mitigate possible incidents occurring and defined measures applicable. The information in APP- 0147 accords with correspondence between the LFR and the developer to date and evidences that the advice of LFR has been taken into account, such as in regard to access to site for fire appliances, distance between units and additional water tanks. LFR are satisfied that the examples used would ensure compliance to guidance, and they would expect	The Lincolnshire Fire and Rescue Service will be engaged in the detailed design stage as agreed in the **Draft Statement of Common Ground - Lincolnshire Fire and Rescue Service [EN010149/APP/7.24]** [APP-0157] to demonstrate that the site complies with the NFCC guidance published at that time. Site visits are secured through the Protective Provisions held within Schedule 15 of the **Draft DCO Draft DCO [EN010149/APP/3.1.2]** [REP1-006] and these are for the purpose of *"providing the necessary assurance to Lincolnshire Fire and Rescue Service that all the required systems and measures are in place in accordance with the battery safety management plan".*

LIR/WR Para Ref.	Summary Position	Applicant's Response
	to see the final design to accord with these details. The LFR would welcome the opportunity to review the final design details and an opportunity to visit site during construction.	

Table 3-15 – Draft Development Consent Order

Note all comments on the Draft DCO have been provided in Section 22 of the Lincolnshire County Council LIR; the table below provides the Applicant's response to the revised wording proposed by LCC in their table in the LIR.

DCO Ref.	LCC Reason	LCC Suggested Amendment/Wording	Applicant's Response
Part 3 (Streets), Articles 8 and 10	As currently written these Articles would give the developer the right to undertake works with no further approvals from the Council. At this stage, the technical details have not been submitted or approved. The Council require major works to be delivered via a Section 278 process (or equivalent agreement) which would also for consideration of detailed design and allow for the provision of a bond which, if the developer was unable to complete the works, the Council would be able to make the Highway safe.	Replace Draft DCO Part 3 (Streets), Articles 10 (4) with West Burton DCO Part 3 Article 9 (4) 'Power to alter layout, etc., of streets' *(4)* *The powers conferred by paragraph (2) may not be exercised without the consent of the street authority, such consent to be in a form reasonably required by the street authority."*	The Applicant has addressed this comment in the amendments made to its **Outline Construction Traffic Management Plan [EN010149/APP/7.8.2]** [REP1-062] submitted at Deadline 1. The Applicant has added a new section 5.4 "Delivery of Road Modifications" which secures approval by LCC of the detailed design of highway works authorised by Articles 10 and 12 of the draft DCO including a highways agreement pursuant to Article 16 of the DCO for some works (note, the Applicant understands the correct references to be Articles 10 and 12, as these articles authorises changes to the highway, whereas Article 8 authorises street works for laying cables in the street, which would be subject to the LCC permitting scheme as confirmed by Article 9). The Applicant therefore does not propose any further amendment to the draft DCO.

DCO Ref.	LCC Reason	LCC Suggested Amendment/Wording	Applicant's Response
Part 6 (Miscellaneous and General), Article 40	As currently written Article 40 allows for the felling, lopping or cutting back of roots of any tree near any part of the development if believed to be necessary (excluding highways hedgerows and trees which require prior consent of the highway authority). This power is considered to be excessive. As the detailed design is not provided as yet under the Rochdale Envelope the impact on trees is unknown, therefore a blanket power could cause significant impact. It is noted that the Arboricultural Impact Assessment [APP-093] states at paragraph 6.1.1 'Once the construction details are provided, a detailed AMS should be compiled, detailing the exact location and nature of protective fencing, tree pruning, signage, timings and methods of works and other protection measures.' Some hedgerows and hedgerow trees are identified for removal in Table 2 of that report and at Schedule 12 of the draft DCO but no acknowledgement is made for trees. Given that there could be significant further losses to the environment on the basis of the current lack of detailed design, the Council would wish to see this power linked and an Arboricultural	It is suggested that a detailed Arboricultural Method Statement (AMS) which includes an updated schedule of trees to be removed should be included as part of the Construction Environment Management Plan (CEMP). The outline CEMP is currently included at Schedule 13 of the draft DCO, and should be updated to include a reference to the provision of an AMS.	Firstly, the Applicant has amended Article 40 at Deadline 1 in the **Draft DCO [EN010149/APP/3.1.2]** [REP1-006]**,** so that the power relates to trees or shrubs "within or overhanging land within the Order limits". (a) Secondly, it is not correct to state that there is the potential for "significant further losses". This is because the power in the Article is subject to the requirements, including requirements for compliance with the approved CEMP and LEMP. (b) The **oLEMP [EN10149/APP/7.9.2]** [REP1-064] attaches Vegetation Removal Parameters at Appendix 2. Those parameters identify the maximum extent of vegetation removal during construction and the detailed LEMP would need to be substantially in accordance with those parameters. So whilst the precise location of the removal may differ from those parameters, the parameters show the maximum extent of vegetation that would need to be removed during construction. The oLEMP also makes clear at 4.1.2 that with respect to vegetation removal, this would be reinstated where practicable and retained during the operational phase of the Proposed Development. (c) When the Applicant submits any documents for approval under the requirements, including the CEMP, detailed design, LEMP, it will need to

DCO Ref.	LCC Reason	LCC Suggested Amendment/Wording	Applicant's Response
	Method Statement which includes an updated schedule of trees to be removed and which will be included as part of the Construction Environment Management Plan. This would bring this element of the project into line with the approach to the ecological and archaeological elements of the project where post consent approvals are required. It is not appropriate for this power to be included on a precautionary basis The blanket power for the removal of trees would also not allow for BNG loss to be calculated appropriately using the Defra metric, as the trees to be removed are an unknown quantity and quality.		confirm, pursuant paragraph 2(3) of Schedule 16 of the draft DCO, whether it is likely the details for approval would give rise to any materially new or different environmental effects compared to those in the environmental statement. This is the control in place to ensure the Applicant cannot do works resulting in "significant further losses" than anticipated and assessed in the environmental statement. The Applicant considers there are adequate controls in place with respect to the power in Article 40.
Part 6 (Miscellaneous and General), Article 41	As currently written Article 41 provides deemed consent to fell, lop or cut back of roots of any tree subject to a TPO where the TPO was made after November 2024. Advice Note 15, section 5.8.22, para 22.2 states: '*Applicants may also wish to include powers allowing them to fell, lop or cut back roots of trees subject to a Tree Preservation Order (TPO). This power can extend to trees which are otherwise protected by virtue of being situated in a conservation area. To support the ExA, inclusion of this power should be accompanied by a*	According to the Arboricultural Impact Assessment report (APP-093) there are currently no TPOs within the boundary (1.6.4). The report does identify quite a few Grade A trees / groups either within or near the boundary that may over the course lifetime of the site come to be worthy of TPO consideration. The Council therefore consider it would be appropriate for the article to be amended to require consultation with the relevant planning authority prior to the removal of any trees that may become subject to a	With respect to Article 41, the Applicant proposes adding wording to the **oLEMP [EN10149/APP/7.9.2]** [REP1-064] to provide that where an individual tree subject to a TPO must be removed (for example, due to it being dead or in a dangerous condition) and the local authority requires a replacement, a new tree will be planted in the same place or as near as practicable. The Applicant would need to inform the Council of the removal in order to agree the details of any replacement. The Applicant will make this update at Deadline 3.

DCO Ref.	LCC Reason	LCC Suggested Amendment/Wording	Applicant's Response
	Schedule and plan to specifically identify the affected trees.'	TPO in the future. There should also be an expectation of replacement of any TPO tree removed, and an obligation that the relevant planning authority Tree Officer should be informed where any tree subject to a post November 2024 TPO is pruned/ felled, to allow records to be updated. The ExA is referred to the wording of article 40 for The A38 Derby Junctions DCO 2023 which provides for consultation with the relevant planning authority and seeks to ensure replacement of felled TPO trees. Suggested wording for article 41(2): (2) In carrying out any activity authorised by paragraph (1)— (a) the undertaker must do no unnecessary damage to any tree or shrub and must pay compensation to any person for any loss or damage arising from such activity; (b) the duty contained in section 206(1)(a) (replacement of trees) of the 1990 Act is not to apply although where possible the undertaker is to seek to replace any trees which are removed; and (c) the undertaker must consult the relevant planning authority prior to that activity taking place	

DCO Ref.	LCC Reason	LCC Suggested Amendment/Wording	Applicant's Response
Schedule 2 (Requirements), Article 1 (vi) Requirement 18 (Soil Management Plan)	The Council would defer to North Kesteven District Council for the discharge of this requirement.		The Applicant has made this change to the **Draft DCO [EN010149/APP/3.1.2]** [REP1-006] at Deadline 1.
Schedule 2 (Requirements), Requirement 11 (Archaeology) (1)	Requirement 11 (Archaeology) (1) currently states: 'No part of Work Nos. 1 to 6 may commence until a written scheme of investigation for that part has been submitted to and approved by the relevant planning authority.' This implies works 7 to 9 can commence without a WSI. It would be expected that a site wide WSI would be provided, as operations contained in Work No. 7 including 7A and 7B (temporary construction compounds), Work No.8 (works to facilitate access), and Work No. 9 (works to create, enhance and maintain green infrastructure and mitigation) could potentially impact on archaeology.	Proposed wording as taken from Mallard Pass, Cottam and West Burton approved DCOs: (1) The authorised development may not commence until: (a) a scheme for additional trial trenching has been submitted to and approved by both relevant planning authorities, in consultation with Lincolnshire County Council and Historic England; (b) additional trial trenching has been carried out in accordance with the scheme approved under sub-paragraph (a); and (c) updates are made to the outline written scheme of investigation to account for the results of the additional trial trenching carried out and the updated outline written scheme of investigation is submitted to and approved in writing by both relevant planning authorities in consultation with Lincolnshire County Council and Historic England. (2) The authorised development must be carried out in accordance with the updated	The Applicant has revised the drafting of this requirement at Deadline 1 in its **Draft DCO [EN010149/APP/3.1.2]** [REP1-006] to reflect the comments from LCC and others. The remaining point under discussion is the works packages the requirement should relate to.

DCO Ref.	LCC Reason	LCC Suggested Amendment/Wording	Applicant's Response
		outline written scheme of investigation approved under sub-paragraph 1(c).	
Schedule 2 (Requirements), Requirements 3, 4, 5 and 19	The Council would wish to be a consultee on these requirements.		The Applicant has included LCC as a consultee to requirements 3 (phasing), 4 (written approval), 5 (detailed design) and 19 (decommissioning) in the **Draft DCO [EN010149/APP/3.1.2]** [REP1-006] submitted at Deadline 1, with drafting as relevant to indicate the extent of the consultee role having regard to LCC's responsibilities.
Schedule 16 (Procedure for Discharge of Requirements Article 2 (1)	Further information and Consultation, (3) requires the relevant authority to notify the undertaker of any further information that is considered necessary or that is requested by the requirement consultee within 15 working days of receipt. (6)(a) requires that a requirement consultee should provide comments on an application to the relevant planning authority within 10 working days of receipt.	Due to the capacity and availability of consultees, it is requested that (3) is extended to 20 working days and (6)(a) to 15 working days.	The Applicant has made the change to paragraph 3(3) of Schedule 16 in the **Draft DCO [EN010149/APP/3.1.2]** [REP1-006] submitted at Deadline 1 (as well as an extension to the timeframe in paragraph 3(2)). The Applicant does not agree with the change proposed to paragraph 3(6)(a) and its reasoning is set out in response to Q1.8.14 in the **Response to First Written Questions (ExQ1) [EN010149/APP/8.14]** [REP1-071]**.**
Schedule 16 (Procedure for Discharge of Requirements Article 5 (Fees)	The Council consider that the fee schedule should be update to reflect the fees due to be introduced in April 2025 and requests that a proportionate increase is reflected in the fees set out in Schedule 16.	5. (1) Where an application is made to the relevant planning authority for a discharge, a fee is to apply and must be paid to the relevant planning authority for each application. (2) The fee payable for each application under sub-paragraph (1) is as follows— (a) a fee of £2,578 for the first application for the discharge of each of the	The Applicant has made these changes in the **Draft DCO[EN010149/APP/3.1.2]** [REP1-006] submitted at Deadline 1.

DCO Ref.	LCC Reason	LCC Suggested Amendment/Wording	Applicant's Response
		requirements 5, 7, 8, 10, 12, 13, 14, 18 and 19; (b) a fee of £588 for each subsequent application for the discharge of each of the requirements listed in paragraph (a) and any application under requirement 5 in respect of the requirements listed in paragraph (a); and (c) a fee of £298 for any application for the discharge of— (i) any other requirements not listed in paragraph (a); (ii) any application under requirement 4 in respect of requirements not listed in paragraph (a); and (iii) any approval required by a document referred to by any requirement or a document approved pursuant to any requirement.	
Schedule 15	There is currently no Protective Provision for The Protection of Lincolnshire Fire and Rescue included within the DCO.	Heckington Fen approved DCO Schedule 13 Part 9, para 104 to 107 includes appropriate wording. FOR THE PROTECTION OF LINCOLNSHIRE FIRE AND RESCUE **Interpretation** 104.— (1) For the protection of Lincolnshire Fire and Rescue as referred to in this Part of this Schedule the following provisions have effect, unless otherwise agreed in writing between the undertaker and Lincolnshire Fire and Rescue.	These have been included in the **Draft DCO[EN010149/APP/3.1.2]** [REP1-006] submitted at Deadline 1. The Applicant has now been provided with the amount of the funding required and will update the protective provisions in this respect in the next revision of the draft DCO.

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

DCO Ref.	LCC Reason	LCC Suggested Amendment/Wording	Applicant's Response
		reasonable request of Lincolnshire Fire and Rescue, up until the year in which the undertaker commences decommissioning of Work No. 2. **Costs** 106.— (1) Pursuant to the provisions set out at paragraph 105, the undertaker must pay to Lincolnshire Fire and Rescue— (a) £16,665 in the first year of operation of the authorised development for, or in connection with Lincolnshire Fire and Rescue's attendance at the site familiarisation exercise facilitated by the undertaker pursuant to paragraph 105(1), such sum to be paid within 30 days following the date of the site familiarisation exercise; and (b) £1,530 in each subsequent year of operation of the authorised development until the date of decommissioning of Work No. 2, such sums to be paid within 30 days of the date of the annual review for that year, if in that year an annual review has taken place pursuant to paragraph 105(2). (2) The costs payable under this sub-paragraph (1)(b) are to be Index Linked. **Arbitration** 107. Any difference or dispute arising between the undertaker and Lincolnshire Fire and Rescue under this Part of this	

DCO Ref.	LCC Reason	LCC Suggested Amendment/Wording	Applicant's Response
		Schedule must be determined by arbitration in accordance with article 38 (arbitration).	
Schedule 2 (Requirements), Requirement 20	The Council considers that a specific requirement relating to Biodiversity Net Gain should be included in the DCO. Relevant percentages should be added when the Applicant has updated its BNG calculations as part of the design process.	Proposed BNG Requirement 1. The authorised development may not commence until a biodiversity net gain strategy has been submitted to and approved by the relevant planning authority, in consultation with the relevant statutory nature conservation body. 2. The biodiversity net gain strategy must include details of how the strategy will secure a minimum of xx% biodiversity net gain in area habitat units and a minimum of yy% in hedgerow units and zz% in watercourse units for all of the authorised development during the operation of the authorised development, and the metric that has been used to calculate that those percentages will be reached. 3. The biodiversity net gain strategy must be substantially in accordance with the outline landscape and ecological management plan and must be implemented as approved and maintained throughout the operation of the authorised development to which the plan relates.	The Applicant disagrees that a separate biodiversity net gain strategy is required, as this can be achieved as part of the LEMP. That approach is consistent with made Orders, such as The Heckington Fen Solar Park Order 2025. The Applicant has taken on board the comments about including the percentages from its BNG calculations in the DCO requirement, and the Applicant will make that change in the next revision to the draft DCO.

3.3. Response to LCC's Responses to ExQ1

Table 3-16 – Response to LCC's Responses to ExQ1

ExQ1 Ref. & Respondent	Summary Position	Applicant's Response
LCC 1.5.2	**Baseline for Assessment Comparisons** LCC have noted that comparison to a counterfactual CCGT facility is an inappropriate baseline for assessment comparisons. Other potential options might include grid mix comparison, other types of renewable energy or existing land use as a baseline.	A technical note which provides an assessment of the GHG emissions against several alternative baselines has been undertaken and is presented in **Appendix 2** of this document. The findings of these different methodologies showcase that the Proposed Development is comparable with other renewable energy technologies and contributes to the decarbonisation of the UK's electricity grid. These findings further support the conclusion in **ES Volume 1, Chapter 8: Climate [EN010149/APP/6.1]** [APP-048] that the Proposed Development contributes to the UK's transition to net zero and aids in reducing GHG emissions within the energy sector.
LCC 1.9.5	**Cumulative Effects on Best and Most Versatile Agricultural Land**	This matter is addressed in Table 3-9 – Land, Soil and Groundwater in the **Response to Relevant Representations [EN101049/APP/8.13]** [REP1-070]
LCC 1.10.3	**Wider Landscape Character:** LCC have concerns regarding effects on the national, county and regional landscape character areas. The mass and scale of these 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	Please refer to the response in Table 3.3 of this document (response to LCC LIR Paragraphs 9.19-9.20) which addresses the cumulative effects on NCAs, LCTs and LCAs. With regards to the suggestion that published landscape character assessments would need to be updated, the Applicant notes that the North Kesteven Landscape Character Assessment (2007) is 18 years old whilst the profile description for NCA 47 – Southern Lincolnshire Edge is 11 years old. Both documents are somewhat dated and neither document acknowledges that there are now already operational solar farms within the relevant NCA, LCT or LCAs. The Applicant acknowledges that large scale solar development would become a frequent and locally characteristic feature of the NCA, LCT and LCAs in a similar manner to which 'utility infrastructure', 'RAF installations' and 'mineral workings' are recognised in the North Kesteven Landscape Character Assessment at present. However, the Applicant disagrees that solar development would become a 'defining' land use

ExQ1 Ref. & Respondent	Summary Position	Applicant's Response
	potentially several kilometres, albeit with gaps between the schemes. However repeated views and presence of large scale solar would combine over time to create a greater perception of change. 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.	characteristic at the NCA, LCT or even LCA level. The Applicant is of the opinion that agricultural land use would, by a considerable margin, remain the predominant and defining land use at all levels of character unit description. For context the land area of NCA 47 is approximately 57,000ha and the Springwell Order Limits (including green infrastructure which would not be developed) would be approximately 1,280ha. Therefore, as a percentage, the Springwell development (including large areas of the Order Limits which would not be developed for solar/BESS/substation) would occupy approximately 2.25% of the total land area within the NCA. The Applicant further notes that the Springwell areas zoned for Solar PV Development, the siting zone for Springwell Substation and Main Collector Compound, the siting zone for BESS, the Satellite Collector Compounds and the National Grid Navenby Substation site combined would total approximately 656ha. Therefore the land area actually occupied by above ground structures of the Proposed Development and the Navenby Substation together would be approximately 1.15% of the land area within the NCA. The Applicant would also note that land use/land cover is just one of several physical and perceptual landscape characteristics which combine to create a sense of place and define landscape character. Whilst land use is perhaps the most obvious characteristic that may be affected by the Proposed Development, other key characteristics such as landform, scale, underlying pattern and fabric, vegetation cover, intervisibility with adjacent character areas (prominent skylines and horizons etc) would remain largely unaffected. When all the characteristics of the landscape are considered in the round, it is the Applicants opinion that the character experienced across the majority of the NCA and LCT would remain unaltered by the Proposed Development.
LCC 1.10.4	**Character of Surrounding Villages:** Development has been offset from these villages, and therefore we would not expect there to be any direct landscape effects. Limited intervisibility has been identified between the development and these villages/settlements, and therefore the perception of solar development from within is likely to also be limited. However, we do have	The Applicant welcomes confirmation from LCC that there would be no direct effects on the landscape character of surrounding villages and that the perception of solar development from within the settlements is likely to also be limited. The Applicant acknowledges that residents of nearby villages may experience views of the Proposed Development when traveling through the wider landscape but does not

ExQ1 Ref. & Respondent	Summary Position	Applicant's Response
	concerns regarding indirect effects to these villages through a change to the context and setting through introducing large scale solar to the surrounding landscape. These are characterised as rural settlements, and therefore we would judge that some of the village character is defined through their context and setting in a rural landscape, and this would be eroded through being set within a landscape containing more urbanised elements such as solar and associated infrastructure. Perception of development from the surrounding landscape is likely to come from views along roads and footpaths in the surrounding area, as well as a change in land use.	consider this to be an effect on the character of the settlements. The Applicant considers this to be visual effect, not an effect on landscape character. The Applicant would also make the observation that people on the immediate approach to or leaving by road the settlements referred to in the ExA's written question (namely Blankney, Scopwick, Kirkby Green, Ashby de la Launde and RAF Digby) would have very little view if any view of the Proposed Development once operational. These settlements would perceptually remain within a rural setting. The Applicant does acknowledge that there would be views of the Proposed Development for residents who walk out of certain settlements in certain directions but again this would be a visual effect rather than an effect on the character of the settlement itself. Furthermore, for each of the settlements referenced in the ExA's question, the Proposed Development would only affect the experience walking in one direction – in each case alternative routes are available avoiding the solar farm and the majority of the land surrounding these settlements would remain free from solar development. To summarise the Applicant does not consider that an awareness by residents of there being a solar farm nearby constitutes an effect on the character of a settlement. In the Applicants opinion there would be no significant effects on the character of the named settlements and each of them would continue to be regarded as 'rural settlements'.
LCC 1.13.3	**A15/B1202 Junction improvement:** LCC does not consider the bus commuter services to be a realistic alternative. An alternative proposal has been agreed with the Applicant whereby LGV traffic associated with the development would be routed to avoid this junction during the am and pm 2 peak hour periods.	The Applicant has agreed with Lincolnshire County Council (LCC) as local highways authority the following measures with respect to the A15 / B1202 junction: • That the Staff Travel Plan will include enhanced measures to supress single car occupancy levels, including a greater reliance on car sharing and staff mini-buses; • That staff movements through the junction will be subject to an embargo between 0700-0900hrs and 1600-1800hrs; • That HGV use through the junction will be supressed between 0700-0900hrs and 1600-1800hrs to no more than 5 HGV movements per direction per hour. These replace the need for a financial contribution and address LCC's concerns about the traffic impact through the junction. The **outline Construction Traffic Management**

ExQ1 Ref. & Respondent	Summary Position	Applicant's Response
		Plan (oCTMP) [EN010149/APP/7.8.2] [REP1-062] has been updated to include the above commitments. The **Draft Statement of Common Ground – LCC [EN010149/APP/8.1]** [REP1-066] was submitted at Deadline 1, will be re-submitted at Deadline 3 and will contain these commitments.
1.13.7	**Construction traffic routes:** Construction traffic needs to be restricted to the proposed routes in the ES. This could be enforced through a mechanism in the CTMP.	The **outline Construction Traffic Management Plan (oCTMP) [EN010149/APP/7.8.2]** [REP1-062] already includes measures to restrict construction traffic to agreed routes. A monitoring mechanism is also included.
1.13.8	**Construction traffic movements:** As above, the assumptions which underpin the ES need to be enforceable through a mechanism in the CTMP.	The **outline Construction Traffic Management Plan (oCTMP) [EN010149/APP/7.8.2]** [REP1-062] already includes measures to monitor and enforce the assumptions (Chapter 8).

4. Responses to Category 1 Stakeholders

4.1. Responses to Written Representations

4.1.1. Section 4.3 of this document provides the Applicant's responses to Written Representations made by Category 1 Stakeholders.

4.1.2. The following Category 1 Stakeholders submitted Written Representations at Deadline 1:

- Cadent Gas Limited
- Environment Agency
- Exolum Pipeline System Limited
- Ministry of Defence
- National Grid Electricity Transmission PLC
- Natural England
- Network Rail Infrastructure Limited

4.1.3. The Applicant is progressing matters relating to protective provisions through discussions with those Stakeholders; an update will be provided in future SoCGs submitted during the Examination. The Applicant has therefore not provided responses to the above WRs.

4.2. Responses to ExQ1

4.2.1. Where Category 1 Stakeholders also submitted Responses to ExQ1 that the Applicant feels it necessary to respond to, these have been grouped in a subsequent table following the response to Written Representations for that stakeholder.

4.2.2. The Applicant has responded to the following Responses to ExQ1:

- Environment Agency
- Historic England

4.3. Response to Category 1 Stakeholder Responses to ExQ1

Table 4-1 – Response to Category 1 Stakeholder Responses to ExQ1

ExQ1 Ref. & Respondent	Summary Position	Applicant's Response
Q1.7.1 – Historic England [REP1-087]	We advise a staged requirement to ensure that necessary archaeological work is undertaken; reported, archived and brought to the public, and that there is independent curation and quality control of that work by LCC with the advice of HE and NKDC. The requirement should ensure the planning balance struck in the DCO determination is delivered; further to EN-01 5.9.6, 5.9.11 (bearing on assessment) and 5.9.16-5.9.21 (bearing on mitigation). The oWSI (a certified document at DCO) and the post-DCO mitigation strategy addendum to the oWSI would provide a yardstick against which the acceptability of the subsequent submissions are to be considered by LCC with the benefit of the advice of the NKDC archaeological curators and HE. The precise wording of the Requirement is a matter in the first instance for the Applicant and LCC as they will be parties to discharge, we advise following key stages should be addressed:- A) The oWSI needs to set out (prior to DCO) the necessity, scope and methods of further archaeological assessment that will be carried out post-DCO. B) The further archaeological assessment post-DCO shall set out in WSI submitted to and approved by LCC (in consultation with NKDC and HE) and shall be in accordance with the oWSI).	The Applicant is continuing engagement with LCC regarding the wording of Requirement 11. As noted above the draft wording shared at Deadline 1 is largely agreed with only one outstanding area of discussion (the Work Nos. to be included in the Requirement). Engagement is ongoing regarding updates to the oWSI which will include a draft mitigation strategy which would be updated following post-DCO trial trenching to inform the detailed design. An updated oWSI will be issued at Deadline 3 following further engagement with LCC.

ExQ1 Ref. & Respondent	Summary Position	Applicant's Response
	C) The results of that additional assessment shall be reflected in a mitigation strategy addendum to the oWSI submitted to and approved by LCC in consultation with NKDC and HE. D) WSI for mitigation shall be submitted to and approved by LCC (in consultation with NKDC and HE) and shall be the in accordance with the oWSI as updated by the mitigation strategy addendum to the oWSI. E) LCC shall only fully discharge the requirement when all archaeological work is completed, analysed, archived, and brought to the public through an appropriate publication strategy.	
Q1.9.9 - Environment Agency [REP1-085]	The Environment Agency would expect the Battery Energy Storage System (BESS) emergency response plan to include (but not be limited to): • Details of the maximum volume of firewater that could potentially be required • Details of how this volume of water would be contained, together with any potential volume of rainwater, should the containers/containment area be exposed during and following a fire • Details of any other mechanism(s) required to ensure there is no release of contaminated water/chemicals controlled waters • Details of any analysis that shall be undertaken to inform an appropriate mechanism for disposal of the water • Details of potential disposal mechanisms • Detailed drawings, as appropriate	The Applicant has provided further information as part of Deadline 1, please see Q1.9.9 in **Responses to First Written Questions (ExQ1) [EN010149/APP/8.14]** [REP1-071]. The NFCC guidance, any update of which will be followed during detailed design, states a minimum amount of water to have available, not a maximum. The amount of firefighting water to be held on site will be determined as part of detailed design.

5. Responses to Category 2 Stakeholder submissions

5.1. Responses to Written Representations

5.1.1. The following Category 2 stakeholders have provided WRs for which responses have been provided:

- Ashby de la Launde and Bloxholm with Temple Bruer and Temple High Grange Parish Council [REP1-116];
- Carlton Le Moorland Parish Council [REP1-120];
- Newark and Sherwood District Council [REP1-100];
- Scopwick & Kirkby Parish Council [REP1-162];
- Springwell Solar Action Group [REP1-167];
- Thorpe on the Hill Parish Council [REP1-170].

5.2. Responses to Post hearing submissions, including written submissions of oral cases

5.2.1. Where Category 2 Stakeholders also submitted Post hearing submissions, including written submissions of oral cases, that the Applicant feels it necessary to respond to, these have been grouped in Table 5-7 .

5.2.2. The Applicant has responded to the following Post hearing submissions, including written submissions of oral cases:

- Councillor Marianne Overton MBE [REP1-149];
- Councillor Amelia Bailey [REP1-110].

5.3. Responses to Category 2 Stakeholder Deadline 1 Submissions

Table 5-1 – Ashby de la Launde and Bloxholm with Temple Bruer and Temple High Grange Parish Council

Summary Position	Applicant's Response
The planning team must consider the cumulative effects of multiple developments, including biomass facilities, solar sites, battery energy storage systems (BESS), and National Grid substations. Together, these projects threaten to decimate 10,000 acres of prime farmland and transform our picturesque landscape into an industrial complex.	The assessment of cumulative effects detailed in **ES Volume 1, Chapter 16: Cumulative Effects [EN010149/APP/6.1.2]** [REP1-018] considers the effects of existing development and/or approved developments within a 10km 'search area' which is considered the Zone of Influence from the Proposed Development. The list of developments that have been assessed within the 10km radius, which includes other solar developments, BESS, biomass facilities etc. are detailed in **Table 16.3** of **ES Volume 1, Chapter 16: Cumulative Effects [EN010149/APP/6.1.2]** [REP1-018]. An assessment of the inter-project cumulative effects with the proposed National Grid Navenby Substation are detailed in Table 16.4 of **ES Volume 1, Chapter 16: Cumulative Effects [EN010149/APP/6.1.2]** [REP1-018]. Consideration has also been afforded to the adoption of a wider county level study for the cumulative assessment in relation to Best and Most Versatile Land which considers other Solar NSIPs within Lincolnshire and within 1km of the border with Nottinghamshire. This is detailed in Section 16.8 of **ES Volume 1, Chapter 16: Cumulative Effects [EN010149/APP/6.1.2]** [REP1-018]. The Applicant has developed the design of the Proposed Development to provide a sensitive response to the local environment and reduce potential impacts in accordance with the Project Principles set out in the **Design Approach Document [EN010149/APP/7.3.2]** [REP1-056]. This includes Project Principles 2.1-2.5 which were included to embed a landscape-led approach to the design of the Proposed Development. An assessment of landscape and visual inter-project cumulative effects is detailed in Table 16.11 and in Paragraph 16.7.50 – 16.7.58 of **ES Volume 1, Chapter 16: Cumulative Effects [EN010149/APP/6.1.2]** [REP1-018]. The long list will be kept under review by the Applicant to allow for a robust assessment of inter-project cumulative effects. The Applicant remains committed to updating the cumulative long list as new developments come into the public domain, ensuring that the assessment remains as accurate and comprehensive as possible throughout the examination process. The Applicant has submitted a revised assessment of cumulative effects at Deadline 2.

Summary Position	Applicant's Response
	Please refer to the **Response to Relevant Representations [EN101049/APP/8.13]** [REP1-070] Table 3-10 (land use) which provides further detail on the associated planning policy and design development in relation to the consideration towards Best and Most Versatile Land and need for the Proposed Development.
EDF's application lacks detailed safety measures, including spacing between containers and fire suppression capabilities. The National Fire Chiefs Council (NFCC) recommends a minimum of 6 meters between containers; EDF proposes only 3 meters. Additionally, the risk of thermal runaway and the release of toxic gases poses significant threats to public safety and the environment.	The Applicant has been in regular consultation with the LFRS as noted in 20.9 of the Lincolnshire County Council Local Impact Report [REP1-088]**,** who have reviewed the design information so far (including spacing and thermal runaway mitigation proposals) and have "no further comments to make at this stage". The extract from the NFCC guidance on page 7 states "A standard minimum spacing between units of 6 metres is suggested unless suitable design features can be introduced to reduce that spacing. If reducing distances a clear, evidence based, case for the reduction should be shown". The Applicant considers that this has been discharged through the discussions with the LFRS; full details of agreements made can be found in the **Draft Statement of Common Ground - Lincolnshire Fire and Rescue Service [EN010149/APP/7.24]** [APP-0157]. Please also see the **Outline Battery Safety Management Plan [EN010149/APP/7.14.2]** [REP1-048] for further detail**.**
The BESS's location above a major aquifer raises concerns about potential contamination from hazardous materials like lithium, cobalt, and nickel. Such contamination could have long-lasting and costly effects on groundwater quality and local ecosystems.	A detailed response to this is provided to this query in Table 5-4 "Scopwick & Kirkby Parish Council", of this document.
There is documented evidence that chemicals leach from solar panels. With 1.5 million panels proposed, this has the potential to create significant contamination. EDF must provide guarantees that there will be zero contamination of the land	During the operational life of each solar panel, maintenance operations will ensure that no chemicals or heavy metals will be released from within the panels. Any damaged panels would be removed and replaced in accordance with the **oOEMP [EN010149/APP/7.10.2]** [REP1-040]. Panels that are correctly maintained will not result in any release of chemicals or heavy metals to the environment. There are no expected leaks of chemicals from the BESS as part of normal operation. With faulty, damaged or end-of-life assets, a key method to reducing the risk of chemical impacts is to ensure they are removed and disposed of responsibly. Should there be any unexpected contamination, this would be mitigated and managed in accordance with the measures set out and secured in the **oCEMP [EN010149/APP/7.7.2]** [REP1-060]**, oOEMP [EN010149/APP/7.10.2]** [REP1-040] and **oDEMP [EN010149/APP/7.13.2]** [REP1-046]**.**

Summary Position	Applicant's Response
The installation of millions of glass panels and the alteration of drainage systems increase the risk of flooding in the village. EDF has not provided adequate mitigation plans or taken responsibility for potential property damage due to flooding.	Increased run off from PV panels is negligible due to the rain shadow effect. Any increase in run off generated from hardstanding areas is to be manged on site through the use of sustainable drainage systems. Further detail on run-off and flood risk is detailed within the **Flood Risk Assessment [EN010149/APP/7.16.3]** [REP1-050]. Sustainable drainage systems will also be in place as detailed in the **Outline Drainage Strategy [EN010149/APP/7.16.3]** [REP1-050] to manage run-off from Solar PV Modules.
The development would irreversibly alter the landscape, destroying public rights of way and disrupting local heritage sites. The tranquil countryside that defines our community would be replaced with an industrial complex, negatively impacting residents' mental well-being.	**ES Volume 1, Chapter 10: Landscape and Visual [EN010149/APP/6.1]** [APP-050] presents an assessment of effects on landscape character and visual amenity. The assessment acknowledges that some significant effects on landscape and visual amenity would be experienced for the duration of the operational phase of the Proposed Development. However, the landscape and visual effects of the Proposed Development are largely reversible following decommissioning. Please refer to the Applicant's response in Table 3-4 of the **Response to Relevant Representations [EN101049/APP/8.13]** [REP1-070] which addresses the purported 'industrialisation' of the landscape. The Applicant has developed the design of the Proposed Development to provide a sensitive response to the local environment and reduce potential impacts in accordance with the Project Principles set out in the **Design Approach Document [EN010149/APP/7.3.2]** [REP1-056]. This includes Project Principles 2.1-2.5 which were included to embed a landscape-led approach to the design of the Proposed Development. A full list of Project Principles is provided in the **Design Approach Document [EN010149/APP/7.3.2]** [REP1-056] together with an explanation of how they guided decision making and informed the proposed design. The Applicant recognises that changes to the visual environment can impact upon mental health and wellbeing of residents. It is also acknowledged that assigning an effect on personal perception of the landscape and its mental health and wellbeing value is dependent on subjective interpretation of the landscape as a whole and of views by an individual and collective set of receptors. **ES Volume 1, Chapter 10: Landscape and Visual [EN010149/APP/6.1]** [APP-050] considers the impacts on residential amenity and the users of PRoW. The assessment concludes that significant major and moderate adverse visual effects are likely to occur during the construction, operational (years 1 and 10) and decommissioning phases for

Summary Position	Applicant's Response
	users of PRoWs between Blankney, Scopwick and Kirkby Green extending up to Blankney Walks Lane and the railway on the eastern site boundary. While these changes cannot be fully mitigated, the design includes embedded screening measures to reduce visibility where possible, while additional mitigation measures include the adoption of the **oCEMP [EN010149/APP/7.7.2]** [REP1-060]**, oDEMP [EN010149/APP/7.13.2]** [REP1-046]**, oLEMP [EN10149/APP/7.9.2]** [REP1-064] and the **oSMP [EN010149/APP/7.11.2]** [REP1-042]. Changes to visual amenity on PRoW will be mitigated against in the form of new hedgerow planting or structural planting belts where impacts are expected to be significant, which will result in these impacts becoming not significant by the tenth year of operation. The Applicant also recognises the Relevant Representations from members of the public, Parish Councils and local opposition groups that cite concern about physical and mental health and wellbeing, related to a wider range of factors. The Applicant is content that receptors and health pathways, and individual environmental effects related to health and wellbeing have been appropriately considered, assessed and mitigated for (where practicable) as per the approach agreed at EIA Scoping. There are likely to be localised, residual, negative effects on mental health and wellbeing given its individual and subjective nature. The Applicant has submitted the **Health and Wellbeing Summary Statement [EN010149/APP/8.10]** [REP1-067] at Deadline 1 which is a comprehensive document that consolidates the health elements in one place to demonstrate the consideration of health pathways through the submission.
If this and other applications are approved, our area will become a construction site for nearly a decade, bringing noise, dust, and traffic disruptions. EDF has dismissed reasonable requests for community benefits, such as free electricity for residents. The proposed community benefit fund is insufficient and should be directly	The Applicant has summarised the associated Community Benefits of the Proposed Development, informed through community engagement and consultation, within: **Planning Statement [EN010149/APP/7.2.2]** [AS-018]**,** Section 3.3 and in the **Responses to Relevant Representations [EN010149/APP/8.13]** [REP1-070]**,** Tables 3-4, and 4-16**, Response to First Written Questions (ExQ1) [EN010149/APP/8.14]** [REP1-071]**,** Question 1.12.4

Summary Position	Applicant's Response
managed by our community, ensuring it is index-linked and payable from the start of construction	The **Planning Statement [EN010149/APP/7.2.2]** [AS-018]**,** section 3.3.4, states the Community Benefit Fund would be index linked to the RPI base rate, and section 3.3.3 states how the scheme is envisaged to be managed, in partnership with the local community. Local people would be able to advise on the fund strategy and spend, to prioritise issues that are important to the local area. The approach to the set-up and administration of our Community Funds for the proposed development would follow an approach to previously consented projects, which closely aligns (and will continue to align with) with the UK Governments suggested approach outlined in the current consultation: *Community benefits and shared ownership for low carbon energy infrastructure: working paper.* The key principles of which include: • **Set Values and Duration for Community Funds:** Establishing clear values for community funds associated with each technology across the operational lifetime of the projects; • **Third-Party Administration and Nuanced Fund Distribution:** Utilising a professional third-party organisation to manage funds across multiple impacted communities ensures effective oversight and accountability, ensuring that funds are represent the broader community's interests; • **Use of Community Liaison Officers:** Engaging with local residents and communities, providing consistency and building relationships throughout the lifetime of the proposed development; • **Guidelines for Co-Located Sites**: Implementing clearly defined guidelines for community benefits at co-located sites allowing for equitable distribution of funds based on specific project characteristics. • **Indexation of Funds:** Linking community fund amounts to the Consumer Price Index (CPI) provides a clear and consistent method for adjusting contributions over time. The Applicant has held initial discussions with the Lincolnshire Community Foundation as outlined in **Appendix B-1** of the **Consultation Report [EN010149/APP/5.2]** [APP-021]. The Applicant intends to promote economic benefits for the community through the activities set out in the **Outline Employment, Skills and Supply Chain Plan [EN010149/APP/7.20]** [APP-0153]. The plan describes activities that would promote access to employment, upskilling and re-skilling opportunities for local people.

Summary Position	Applicant's Response
	The Applicant has summarised the matter of subsidised / free electricity for residents within the **Written Summary of Applicant's Oral Submissions at OFH1 [EN010149/APP/8.15]** [REP1-072], section 2.21.

Table 5-2 – Carlton Le Moorland Parish Council

Summary Position	Applicant's Response
The proposed development is close to the village of Brant Broughton. The junction of the road from that village onto the A17 is already busy and has been identified as a dangerous junction where several serious accidents have occurred. Any increase in traffic from contractors or site access will make this position even worse and could result in more serious accidents.	The construction traffic access routes do not include the A17 as noted in **ES Volume 1, Chapter 14: Traffic and Transport [EN010149/APP/6.1.2]** [AS-010] and **ES Volume 3, Appendix 14.1: Transport Assessment [EN010149/APP/6.3]** [APP-123]. As such no significant impact of construction traffic is predicted on the A17.
The size of the proposed site, particularly when combined with the impact of other similar proposals in the area, will result in a long-term loss of large amounts of valuable agricultural land with consequential adverse effects on food security and environmental biodiversity	The assessment of cumulative effects which is detailed in **ES Volume 1, Chapter 16: Cumulative Effects [EN010149/APP/6.1.2]** [REP1-018] considers the effects of existing development and/or approved developments within a 10km 'search area' which is considered the Zone of Influence from the Proposed Development. The list of developments that have been assessed within the 10km radius, which includes other solar developments, BESS, biomass facilities etc. are detailed in **Table 16.3** of **ES Volume 1, Chapter 16: Cumulative Effects [EN010149/APP/6.1.2]** [REP1-018]. An assessment of the inter-project cumulative effects with the proposed National Grid Navenby Substation are detailed in Table 16.4 of **ES Volume 1, Chapter 16: Cumulative Effects [EN010149/APP/6.1.2]** [REP1-018]. Consideration has also been afforded to the adoption of a wider county level study for the cumulative assessment in relation to Best and Most Versatile Land which considers other Solar NSIPs within Lincolnshire and within 1km of the border with Nottinghamshire. This is detailed in Section 16.8 of **ES Volume 1, Chapter 16: Cumulative Effects [EN010149/APP/6.1.2]** [REP1-018]. The Applicant has developed the design of the Proposed Development to provide a sensitive response to the local environment and reduce potential impacts in accordance with the Project

Summary Position	Applicant's Response
	Principles set out in the **Design Approach Document [EN010149/APP/7.3.2]** [REP1-056]. This includes Project Principles 2.1-2.5 which were included to embed a landscape-led approach to the design of the Proposed Development. An assessment of landscape and visual inter-project cumulative effects is detailed in Table 16.11 and in Paragraph 16.7.50 – 16.7.58 of **ES Volume 1, Chapter 16: Cumulative Effects [EN010149/APP/6.1.2]** [REP1-018]. The long list will be kept under review by the Applicant to allow for a robust assessment of inter-project cumulative effects. The Applicant remains committed to updating the cumulative long list as new developments come into the public domain, ensuring that the assessment remains as accurate and comprehensive as possible throughout the examination process. The Applicant has submitted a revised assessment of cumulative effects at Deadline 2. Please refer to **Response to Relevant Representations [EN101049/APP/8.13]** [REP1-070] Table 3-10 (land use) which provides further detail on the associated planning policy and design development in relation to the consideration towards Best and Most Versatile Land and need for the Proposed Development. The impacts on biodiversity are assessed in **ES Volume 1, Chapter 7: Biodiversity [EN10149/APP/6.1.2]** [APP-047]. Due to the embedded design and mitigation proposals no significant residual adverse effects on biodiversity are anticipated. Habitat creation and enhancement proposals are detailed in the **oLEMP [EN10149/APP/7.9.2].** The biodiversity net gain from proposals is substantially above the minimum 10% BNG commitment, as detailed in **ES Volume 3, Appendix 7.14: Biodiversity Net Gain Assessment [EN010149/APP/6.3.2]** [REP1-032].
Technology in the 'renewables' sector is advancing so rapidly that there is a real risk that the current proposals will lock us into an obsolescent solution that will cost significantly more than other options	The proposals for the Proposed Development do not lock the Applicant in to any specific technology for the different components of the scheme. This is to ensure the Applicant can take advantage of the most up to date technology at the time of detailed design of the scheme. Rather than being locked into specific types of technology, the Proposed Development would instead have controls in place referable to its likely environmental impacts, which create parameters and controls over what can be built.

Summary Position	Applicant's Response
	Renewable energy generation, especially using PV, is one of the cheapest forms of energy per MWh.
Safety concerns have not been fully addressed, there have been instances of large-scale uncontrollable fires from storage batteries, and the large number of big storage batteries poses a potential risk. Although the individual risk from one battery unit is small, this is multiplied by the number of proposed storage containers and the potential impact from a fire is large.	The Applicant sets out the risks and mitigations of a thermal runaway event in the **BESS Plume Assessment [EN010149/APP/7.19.2]** [REP1-052] and **Outline Battery Safety Management Plan [EN010149/APP/7.14.2]** [REP1-048]. These documents clearly set out that due to the application of appropriate mitigation measures specific to this site, including testing and on-site spacing, the aggregate risk (all containers) of a cell venting event at approximately once every 7700 years (1.3x10-4 yr-1) for the example BESS array in the Proposed Development. In the very low likelihood of a thermal runaway event, due to the mitigation measures, thermal runaway will not propagate from one container to the next. This means that the impact of a thermal runaway event is not greater than that of one container.
The increasing pace of climate change means that further studies are needed to quantify and address the impact of surface water drainage following large amounts of rainfall.	**Flood Risk Assessment: Appendix - Outline Drainage Strategy [EN010149/APP/7.16.3]** [REP1-050] details the proposed outline drainage strategy for the scheme, taking into account future climatic predictions as detailed in the **Flood Risk Assessment [EN010149/APP/7.16.3]** [REP1-050]. Any precipitation falling on each Solar PV Module will runoff the panels and flow towards / infiltrate in the rain shadow of the down-slope modules. This feature will enable the use of the rain shadow area of the panels to maintain the infiltration potential of the site. Any land drainage systems damaged as part of the development (through piling or other construction methods) will either be reinstated or diverted with equivalent drainage systems, to ensure no lasting changes compared to the baseline. This is secured in the **oCEMP [EN010149/APP/7.7.2]** **[**REP1-060**].** A surface water drainage system will be developed as part of the development, this will capture and manage any additional run off from the site and ensure that pre development run off is maintained with no additional flows entering Scopwick Beck or any other watercourse. A piling risk assessment will be completed to address any potential risks associated with the proposed foundations, with updates to these structures accommodated into the design prior to construction.
'End of life' decommissioning of the solar panels and storage units has not been fully quantified or addressed and the full cost of any decommissioning need to be suitably guaranteed.	The decommissioning process is detailed in **ES Volume 1, Chapter 3: Proposed Development Description [EN010149/APP/6.1.2]** [REP1-022] which states that at the end of the operational (including maintenance) phase, any aboveground infrastructure will be dismantled and removed per industry best practices. Solar PV modules are made up of several materials, including a metal frame. Approximately 99% of the Solar PV modules can currently be recycled. When

Summary Position	Applicant's Response
	decommissioning, options to reuse or recycle materials available at the time will be explored to ensure that as much of the materials as possible are recycled and diverted from landfill. The Proposed Development is anticipated to generate some Waste Electrical and Electronic Equipment (WEEE) through operation and maintenance, and a substantive amount of WEEE at decommissioning which would include Solar PV modules, batteries, and substation equipment, as well as other smaller quantities of WEEE from supporting electrical infrastructure. As such, these would be recovered and recycled by an authorised re-processor as required by the WEEE Regulations 2013. To ensure that this is done to "Best Available Treatment Recovery and Recycling Techniques", a list of up-to-date authorised reprocessors would be established prior to the operational phase of the Proposed Development and kept up to-date throughout the operation and decommissioning phases of the Proposed Development. This is secured through the **oDEMP [EN010149/APP/7.13.2]** [REP1-046] which is secured by a requirement in the **Draft DCO [EN010149/APP/3.1.2]** [REP1-006]. The Applicant is aware of what its obligations would be under the DCO, should development consent for the Proposed Development be granted. It is aware of the decommissioning requirements and commitments it has proposed, and that failure to comply with those requirements would be a criminal offence. Should development consent be granted, the Applicant will factor all required costs including decommissioning costs, within its decision to commence construction of the Proposed Development.

Table 5-3 – Newark and Sherwood District Council

Summary Position	Applicant's Response
Newark and Sherwood would like to bring to the Examining Authorities attention the consideration of cumulative impact of schemes such as this on an area and the duty to consider it. A Cumulative Effects document has been submitted (APP-056) with the Scheme and it is suggested by Newark and Sherwood,	The Applicant is committed to keeping the long and short list under review and updating the cumulative assessment throughout the examination. A revised version of **ES Volume 1, Chapter 16: Cumulative Effects [EN010149/APP/6.1.2]** [REP1-018] has been submitted at Deadline 1 to take account of the Leoda Solar Farm (EN0110016) for which the EIA Scoping Report was submitted in January 2025. At Deadline 2, a full update of the inter-project long and short lists has been submitted, with an assessment cut-off date of 30 May 2025. The same process will be

Summary Position	Applicant's Response
that its suitability against National Policy should be taken into consideration as the Examination moves forward.	repeated for Deadline 4, with an assessment cut-off date of 29 August 2025. This has been set out and committed to within the Deadline 1 cover letter [REP1-001].

Table 5-4 – Scopwick & Kirkby Parish Council

Summary Position	Applicant's Response
What bonds or insurances will be put in place to cover decommissioning and any other disasters that occur due to this development in the 40year lifecycle?	The **oDEMP [EN010149/APP/7.13.2]** [REP1-046] provides for how the decommissioning will take place. The Applicant is aware of its obligations in the **Draft DCO [EN010149/APP/3.1.2]** [REP1-006] with respect to decommissioning as set out in Requirement 19, meaning it would be setting aside funds during the operation of the Scheme to meet the cost of decommissioning. The requirements of the DCO are enforceable and it is a criminal offence to fail to comply with a DCO. The Proceeds of Crime Act 2002 also acts as a further deterrent, and elements of the installed solar PV represent a valuable asset meaning it would be in Applicant's interest financially to decommission the site in order to sell or recycle the panels and other components. A decommissioning bond is not routine for energy DCOs and while similar arguments have been advanced requesting a decommissioning bond in most other solar DCOs, the Secretary of State has not required one for the seven made solar DCOs to date. In Cleve Hill, for example, the ExA came to the conclusion that the Applicant intended to follow good commercial practice and set aside funds during the scheme's lifetime, meaning it was not necessary to require a bond. The ExA further noted that as the enforcement provisions are already rigorous it is not routine for DCOs to impose decommissioning bonds. This was also addressed more recently in the decision for the Mallard Pass DCO where, with the decommissioning requirement in place, the Secretary of State considered there was no need for further controls. The Applicant would also be under an obligation, pursuant to agreements with landowners, to return the land to landowners following decommissioning. Similar considerations apply to the Applicant's obligations during operation, and it would be under an obligation to comply with the DCO requirements in relation to maintenance and operation of the Proposed Development in accordance with the approved operational environmental management plan.

Summary Position	Applicant's Response
Batteries will need to be replaced several times and Panels too. What will happen to this hazardous waste?	The decommissioning process is detailed in **ES Volume 1, Chapter 3: Proposed Development Description [EN010149/APP/6.1.2]** [REP1-022] **]** which states that at the end of the operational (including maintenance) phase, any above ground infrastructure will be dismantled and removed per industry best practices. Solar PV modules are made up of several materials, including a metal frame. Approximately 99% of the Solar PV modules can currently be recycled. When decommissioning, options to reuse or recycle materials available at the time will be explored to ensure that as much of the materials as possible are recycled and diverted from landfill as set out and secured in the **oDEMP [EN010149/APP/7.13.2]** [REP1-046]. Waste that is produced from the Proposed Development will be managed in accordance with the measures set out in the Site Waste Management Plan which forms appendix 1 of the **oCEMP [EN010149/APP/7.7.2] [**REP1-060**]** and will follow the principles of the waste hierarchy. The Proposed Development is anticipated to generate Waste Electrical and Electronic Equipment (WEEE) through operation (including maintenance) and decommissioning, which would include Solar PV modules, batteries, and substation equipment, as well as other smaller quantities of WEEE from supporting electrical infrastructure. These would be recovered and recycled by an authorised reprocessor as required by the WEEE regulations 2014. To ensure that this is done to the "Best Available Treatment Recovery and Recycling Techniques" a list of up to date reprocessor would be established prior to the operational phase of the Proposed Development and kept up to date throughout the operation and decommissioning phases. This is set out and secured in the **oOEMP [EN010149/APP/7.10.2]** [REP1-040] and **oDEMP [EN010149/APP/7.13.2]** [REP1-046]. Any hazardous waste produced from the Proposed Development would be minimal considering that approximately 99% of the Solar PV modules can currently be recycled. Any hazardous waste that is produced from the Proposed Development would be managed and disposed of in line with the measures set out in the **oOEMP [EN010149/APP/7.10.2]** [REP1-040], **oDEMP [EN010149/APP/7.13.2]** [REP1-046] and Section 6 of the Site Waste Management Plan which forms appendix 1 of the **oCEMP [EN010149/APP/7.7.2]** [REP1-060]. Prior to the operation (including maintenance) and decommissioning phase commencing, a Site Waste Management Plan (SWMP) will be prepared by the Applicant which will provide waste estimates, and specify key responsibilities, reporting and auditing requirements and waste recovery targets. The

Summary Position	Applicant's Response
	SWMP will use, as a starting point, the measures detailed within the Outline Site Waste Management Plan which forms Appendix 1 of the **oCEMP [EN010149/APP/7.7.2]** [REP1-060] updated to reflect the circumstances prevailing during the period in which operational and maintenance activities are to be carried out.
The Planning Inspector must take onboard the cumulative effects of all these applications on North Kesteven and the wider Lincolnshire County. A county that relies heavily on agriculture and tourism. If consent is given the impact on both will be devastating. Approximate 9% of farmland will be lost.	The assessment of cumulative effects in **ES Volume 1, Chapter 16: Cumulative Effects [EN010149/APP/6.1.2]** [REP1-018] considers the effects of existing development and/or approved developments within a 10km 'search area' which is considered the Zone of Influence from the Proposed Development. The list of developments that have been assessed within the 10km radius, which includes other solar developments, BESS, biomass facilities etc. are detailed in **Table 16.3** of **ES Volume 1, Chapter 16: Cumulative Effects [EN010149/APP/6.1.2]** [REP1-018]. An assessment of the inter-project cumulative effects with the proposed National Grid Navenby Substation are detailed in Table 16.4 of **ES Volume 1, Chapter 16: Cumulative Effects [EN010149/APP/6.1.2]** [REP1-018]. Consideration has also been afforded to the adoption of a wider county level study for the cumulative assessment in relation to Best and Most Versatile Land which considers other Solar NSIPs within Lincolnshire and within 1km of the border with Nottinghamshire. This is detailed in Section 16.8 of **ES Volume 1, Chapter 16: Cumulative Effects [EN010149/APP/6.1.2]** [REP1-018]. The area of BMV agricultural land within Lincolnshire is estimated to be over 410,000ha. The Proposed Development occupies approximately 0.13% of the BMV land in Lincolnshire, of which 0.002% is assessed as being permanently used as green infrastructure. In combination with other solar developments in Lincolnshire, this would occupy approximately just over 2% of BMV land within Lincolnshire as outlined in **ES Volume 1, Chapter 16: Cumulative Effects [EN010149/APP/6.1.2]** [REP1-018]. The Applicant has developed the design of the Proposed Development to provide a sensitive response to the local environment and reduce potential impacts in accordance with the Project Principles set out in the **Design Approach Document [EN010149/APP/7.3.2]** [REP1-056]. This includes Project Principles 2.1-2.5 which were included to embed a landscape-led approach to the design of the Proposed Development. An assessment of landscape and visual inter-project

Summary Position	Applicant's Response
	cumulative effects is detailed in Table 16.11 and in Paragraph 16.7.50 – 16.7.58 of **ES Volume 1, Chapter 16: Cumulative Effects [EN010149/APP/6.1.2]** [REP1-018]. A number of representations make reference to concerns about the Proposed Development's impact on the local tourism / visitor economy. This is specifically in reference to concerns about: • Changes to the natural environment resulting in fewer visitors, and a reduction in GVA; Effects on specific (accommodation) businesses reliant on tourism; • Effects on heritage assets; and • Effects on PRoW. **ES Volume 1, Chapter 13: Population [EN010149/APP/6.1.2]** [REP1-016] provides an assessment of likely significant effects on tourism, setting out (paragraphs 13.5.43 to 13.5.50) the overall scale and volume of the tourist economy within Lincolnshire and North Kesteven, and identifying the primary tourist sector strengths and specific assets which may be affected by environmental change related to the Proposed Development. This notes that the Stepping Out network appears to be of particular significance to the tourist economy and is heavily endorsed by the North Kesteven tourism office, and that the RAF Digby site is located adjacent to the Order Limits, which is a popular tourist attraction associated with the aviation heritage of North Kesteven. However, the majority of tourist receptors are beyond the study area and therefore impacts to amenity or access to/from these receptors during operation (including maintenance) and construction is likely to be minimal. The assessment at **ES Volume 1, Chapter 13: Population [EN010149/APP/6.1.2]** [REP1-016] considers that the construction phase may have effects on the tourist economy as a result of impacts to visitor experience and behaviours, and linked impacts to tourism business receptor performance, resulting from visual and noise construction effects – the environmental effects from other assessments on tourist receptors are summarised from paragraph 13.7.20 to 13.7.27. As stated in **ES Volume 1, Chapter 10: Landscape and Visual [EN010149/APP/6.1]** [APP-050] there is extremely limited theoretical visibility of the Proposed Development beyond 3km – as such, the assessment of effects on tourism are also considered across North Kesteven with a focus on effects to tourism receptors within a 3km radius of the Order Limits.

Summary Position	Applicant's Response
	Consideration of effects specifically related to users of the PRoW network 'Stepping Out' within and around the Site is set out in response to Lincolnshire County Council's LIR (see LIR 16.7 in Table 3-1), summarising that effects are subjective and localised and unlikely to affect the wider tourist economy.
Current plans for the BESS may be inadequate in respect of water supplies, or for protection of the local public against toxic plumes.	The Applicant has provided further information as part of Deadline 1, please see Q1.9.9 in **Responses to First Written Questions (ExQ1) [EN010149/APP/8.14]** [REP1-071].
The BESS will be sited above a primary aquifer and within a reasonable proximity to RAF DIGBY and the high powered fuel line known as CLH Pipeline System. NFCC 2023 guidelines also specify there should be a minimum of 6 metres spacing around each Battery container. The applicant is stating 3 metres.	Regarding the aquifer, a response to this is provided in Table 5-4 "Scopwick and Kirkby Parish Council". Stakeholders from Exolum Pipeline Systems Ltd (who took over "CLH Pipeline System") and the Ministry of Defence have been engaged throughout the design process and comments incorporated into the design. Detail of agreements can be found in the **Draft Statement of Common Ground - Exolum Pipeline System Ltd [EN010149/APP/7.25]** [APP-0158] and **Draft Statement of Common Ground - Ministry of Defence [EN010149/APP/8.7]** [REP1-082]. The Applicant is discussing protective provisions with Exolum to ensure appropriate protection for its assets is in place. The Applicant has been in regular consultation with the LFRS as noted in 20.9 of the Lincolnshire County Council Local Impact Report [REP1-088]**,** who have had reviewed the design information so far (including spacing and thermal runaway mitigation proposals) and have "no further comments to make at this stage". The extract from the NFCC guidance on page 7 states "A standard minimum spacing between units of 6 metres is suggested unless suitable design features can be introduced to reduce that spacing. If reducing distances a clear, evidence based, case for the reduction should be shown". The Applicant considers that this has been discharged through the discussions with the LFRS; full details of agreements made can be round in the **Draft Statement of Common Ground - Lincolnshire Fire and Rescue Service [EN010149/APP/7.24]** [APP-0157]. Please also see the **Outline Battery Safety Management Plan [EN010149/APP/7.14.2]** [REP1-048] for further detail**.**
This BESS is located on the Lincoln Heath above a significant aquifer. Any pollution entering the aquifer	The potential for groundwater, including the Lincolnshire limestone aquifer, to be adversely impacted by the development has been considered in detail by the assessment in **ES Volume 1,**

Summary Position	Applicant's Response
would be catastrophic. Is the applicant guaranteeing no pollution can enter the aquifer?	**Chapter 11: Land, Soil and Groundwater [EN010149/APP/6.1.2]** [REP1-014]. This considered the current baseline sensitivity of the groundwater, and then identified works during construction, operation or decommissioning that could cause pollution to occur. Mitigation measures to prevent pollution are included in the management plans as detailed below. For the site, the groundwater receptors are assigned high sensitivity in some areas (where there is a principal aquifer and a groundwater source protection zone), and in other locations the groundwater sensitivity is medium or low. Due to the robust mitigation measures that are included in the management plans for all three phases of the Proposed Development, the potential impact on groundwater when mitigation measures are in place is considered to be low adverse and not significant. Proposed mitigation measures that will avoid any pollution to the aquifer, that will be secured by the **oCEMP [EN010149/APP/7.7.2]** [REP1-060], **oOEMP [EN010149/APP/7.10.2]** [REP1-040], and **oDEMP [EN010149/APP/7.13.2]** [REP1-046] include: • completing site investigation work to assess if there is any existing contamination on-site that requires remediation; • measures to prevent disturbance of existing contamination; • emergency procedures to manage accidental spillages and leaks in order to minimise any risk to the soil and groundwater; • completing a piling risk assessment to ensure that potential impacts to groundwater are identified and minimised; and • measures to manage firewater associated with the BESS. Firefighting water will be collected on-site, as secured by the **oOEMP [EN010149/APP/7.10.2]** [REP1-040]. Therefore any contaminants present within this water would not be released to the environment, and would not be able to leach into the groundwater. Run-off from construction areas will be managed during works by the **oCEMP [EN010149/APP/7.7.2]** [REP1-060], and will not be released directly to the soil/groundwater. This will ensure that there is no accidental release of contaminants from working areas into the wider environment. Any run-off from solar panels will be a result of rainwater only, so this can be safely released to the underlying soil without any adverse impacts on soil or groundwater.

Summary Position	Applicant's Response
	During the operational life of each solar panel, maintenance operations will ensure that no chemicals or heavy metals will be released from within the panels. Any damaged panels would be removed and replaced in accordance with the **oOEMP [EN010149/APP/7.10.2]** [REP1-040]. Panels that are correctly maintained will not result in any release of chemicals or heavy metals to the environment.
There is documented evidence that chemicals leach from solar panels. With 1.5 million panels proposed this has the potential to create a significant amount of contamination.	During the operational life of each solar panel, maintenance operations will ensure that no chemicals or heavy metals will be released from within the panels. Any damaged panels would be removed and replaced in accordance with the **oOEMP [EN010149/APP/7.10.2]** [REP1-040]. Panels that are correctly maintained will not result in any release of chemicals or heavy metals to the environment. There are no expected leaks of chemicals from the BESS as part of normal operation. With faulty, damaged or end-of-life assets, a key method to reducing the risk of chemical impacts is to ensure they are removed and disposed of responsibly. Should there be any unexpected contamination, this would be mitigated and managed in accordance with the measures set out and secured in the **oCEMP [EN010149/APP/7.7.2]** [REP1-060]**, oOEMP [EN010149/APP/7.10.2]** [REP1-040] and **oDEMP [EN010149/APP/7.13.2]** [REP1-046]**.**
The applicant has only proposed to remove surface based material at the point of decommissioning. This will leave a huge amount of contamination underground. XLPE cabling has many potential contaminants, and this should not remain in the ground above a primary aquifer.	During the decommissioning phase, all concrete, hardstanding areas, foundations for the infrastructure and any internal tracks will be removed to a depth of up to 1m. It is assumed that all the below ground cables below 1m will be left in situ to avoid disturbance to the soil. This approach reflects common practice for Electricity Distribution Network Operators infrastructure (such as substations) and the associated export cables. It is not anticipated that the cables that are left in situ below 1m buried underground would cause any contamination. The approach to decommissioning would be reviewed prior to this phase of work and will be undertaken in line with industry guidance, any relevant legislation and government policy at the time of undertaking these works as set out and secured within the oDEMP that has been updated at Deadline 2. The approach proposed is consistent with most, if not all, made Orders for NSIP-scale solar schemes to date.
The impact of millions of glass panels, the impact of the piling into the ground, with the real risk of damaging old clay drainage pipes, the alteration of drainage with concrete and hardcore, significantly increases the risk of the village flooding.	Any land drainage systems damaged as part of the development (through piling or other construction methods) will either be reinstated or diverted with equivalent drainage systems, to ensure no lasting changes compared to the baseline. This is secured in the **oCEMP [EN010149/APP/7.7.2]** [REP1-060]. The panels will allow existing overland flow pathways to be maintained with no disruption to flows.

Table 5-5 – Springwell Solar Action Group

Summary Position	Applicant's Response
Lincolnshire relies on agriculture and tourism; these projects will have devastating consequences for both sectors. The loss of farmland will not only impact local farmers but also allied trades. This development is likely to have a detrimental impact on local jobs. Additionally, the industrialization of our landscape will deter tourists, leading to a decline in revenue.	**ES Volume 1 Chapter 13: Population [EN010149/APP/6.1.2]** [REP1-016] submitted at Deadline 1 sets out an assessment of effects on agricultural land holdings, with the significance of effects influenced by the loss or change in quality or integrity of resources, acquisition of land and buildings and changes in accessibility / severance. It also considers the change in agricultural employment capacity in the context of the wider sub-regional agricultural economy. This sets out and assesses the net economic changes relating to agricultural land holdings and employment in existing uses at the Order Limits, and the effect of a short-term, temporary construction workforce and longer-term operational workforce. Overall, the assessment identifies that: • The temporary loss of agricultural land represents approximately 0.3% of agricultural land in Lincolnshire, with an indicative capacity for around 30 FTE jobs based on average employment density. • The agricultural economy in Lincolnshire is substantial (supporting around 8,700 FTE jobs) and is subject to annual and seasonal variations in employment supported, which is far greater than the scale of the indicative loss in employment capacity (and actual known employment). • There are two agricultural operations within the study area. During the construction phase, it is expected that both operations will lose access to a portion of the land normally available. The operators of agricultural activities within the Site anticipate that the reduction in operating capacity would be met entirely through retirement and a pause on recruitment, resulting in net loss of employment supported, but no redundancy. • The Proposed Development will support construction employment over the anticipated four-year construction programme. The Applicant estimates that a peak of 650 construction jobs will be supported for a short time, whilst the average number of workforce staff likely to be present on site across the construction phase is approximately 400 FTEs for four years. • The operational (including maintenance) phase would support around 24 FTE jobs, with some periods requiring short-term, temporary iterative increases in on-site personnel for example for nonroutine maintenance of the panels and connectors, site management and environmental management. The employment supported would include electrical engineering roles likely to require higher level skills and qualifications, as well as site

Summary Position	Applicant's Response
	management, administrative and process/elementary occupations including security and maintenance The Applicant notes that – as amended **paragraph 13.7.16** to **ES Volume 1 Chapter 13: Population [EN010149/APP/6.1.2]** [REP1-016] submitted at Deadline 1 that: *"Engagement with the agricultural operators has confirmed that during the construction (and operational) period the reduction in employment supported would be met entirely through retirement and a pause on recruitment, and would not be expected to result in redundancies".* A number of representations make reference to concerns about the Proposed Development's impact on the local tourism / visitor economy. This is specifically in reference to concerns about: • Changes to the natural environment resulting in fewer visitors, and a reduction in GVA; Effects on specific (accommodation) businesses reliant on tourism; • Effects on heritage assets; and • Effects on PRoW. E**S Volume 1, Chapter 13: Population [EN010149/APP/6.1.2]** [REP1-016] provides an assessment of likely significant effects on tourism, setting out (paragraphs 13.5.43 to 13.5.50) the overall scale and volume of the tourist economy within Lincolnshire and North Kesteven, and identifying the primary tourist sector strengths and specific assets which may be affected by environmental change related to the Proposed Development. This notes that the Stepping Out network appears to be of particular significance to the tourist economy and is heavily endorsed by the North Kesteven tourism office, and that the RAF Digby site is located adjacent to the Order Limits, which is a popular tourist attraction associated with the aviation heritage of North Kesteven. However, the majority of tourist receptors are beyond the study area and therefore impacts to amenity or access to/from these receptors during operation (including maintenance) and construction is likely to be minimal. The assessment at **ES Volume 1, Chapter 13: Population [EN010149/APP/6.1.2]** [REP1-016] considers that the construction phase may have effects on the tourist economy as a result of impacts to visitor experience and behaviours, and linked impacts to tourism business receptor performance, resulting from visual and noise construction

Summary Position	Applicant's Response
	effects – the environmental effects from other assessments on tourist receptors are summarised from paragraph 13.7.20 to 13.7.27. As stated in **ES Volume 1, Chapter 10: Landscape and Visual [EN010149/APP/6.1]** [APP-050] there is extremely limited theoretical visibility of the Proposed Development beyond 3km – as such, the assessment of effects on tourism are also considered across North Kesteven with a focus on effects to tourism receptors within a 3km radius of the Order Limits.
There are old clay drains under the ground, the piling process is very likely to damage many of these. This would have a material impact on the flow of water. The impact of millions of glass panels will prevent rainwater being absorbed across a wide dispersed area, it will be funnelled, causing more rapid runoff.	Appendix A of the **Flood Risk Assessment [EN010149/APP/7.16.3]** [REP1-050] details the proposed outline drainage strategy for the Proposed Development. Any precipitation falling on each solar panel will runoff the panels and flow towards / infiltrate in the rain shadow of the down-slope modules. This feature will enable the use of the rain shadow area of the panels to maintain the infiltration potential of the site. Any land drainage systems damaged as part of the development (through piling or other construction methods) will either be reinstated or diverted with equivalent drainage systems, to ensure no lasting changes compared to the baseline. This is secured in the **oCEMP [EN010149/APP/7.7.2]** [REP1-060]. Sustainable management of the post development situation in terms of vegetation planting and soil type can be used as a means of managing surface water runoff from the solar panels and is secured in the **oLEMP [EN10149/APP/7.9.2]** [REP1-064]. As such, to ensure that there is no increase in surface water runoff, managed sustainable vegetation (with a good soil structure e.g. chisel ploughed soils) will be allowed to grow beneath the solar panels, which will avoid kinetic compaction and ensure that any potential instances of rivulet formation are minimised, and surface water runoff flows over the ground in a natural way.
The applicant has only proposed to remove surface based material at the point of decommissioning. This will leave a huge amount of contamination underground. XLPE cabling has many potential contaminants, and this should not remain in the ground above a primary aquifer. If XLPE cables degrade due to aging, heat, or environmental conditions, small amounts of by-products or additives leach into the soil.	During the decommissioning phase, all concrete, hardstanding areas, foundations for the infrastructure and any internal tracks will be removed to a depth of up to 1m. It is assumed that all the below ground cables below 1m will be left in situ to avoid disturbance to the soil. This approach reflects common practice for Electricity Distribution Network Operators infrastructure (such as substations) and the associated export cables. It is not anticipated that the cables that are left in situ below 1m buried underground would cause any contamination. The approach to decommissioning would be reviewed prior to this phase of work and will be undertaken in line with industry guidance, any relevant legislation and government policy at the time of undertaking these works as set out and secured within the oDEMP that has been

Summary Position	Applicant's Response
	updated at Deadline 2. The approach proposed is consistent with most, if not all, made Orders for NSIP-scale solar schemes to date.
Cable laying will disturb soil layers, changing natural water flow paths and increasing turbidity or altering recharge rates to aquifers. In large-scale installations, cables may act as physical barriers to water flow, modifying hydrology. What standards are being implemented to ensure there is zero impact on the aquifer? Are any of the following actions being taken? Protective measures such as bentonite layers, encasement, or double sheathing to prevent leaching or intrusion.	With respect to aquifer protection please see response provided in Table 5-4 (above). The Applicant has set out a response to issues raised relating to drainage in its **Responses to Relevant Representations** [REP1-070] at Table 4-7: Flood Risk and Drainage and further detail is provided in the **Flood Risk Assessment [EN010149/APP/7.16.3]** [REP1-050] and **Flood Risk Assessment: Appendix A - Outline Drainage Strategy [EN010149/APP/7.16.3]** [REP1-050]. It is not anticipated that the cabling will disturb the soil or change the water flow paths. Mitigation measures to reduce impacts to the soil are set out and secured in the **oSMP [EN010149/APP/7.11.2]** [REP1-042]. There are several methodologies and mitigations that would be used in the design and construction of the cable routes, including the use of bentonite, ducting and direct burial. The most appropriate method would be determined at detailed design and reviewed prior to construction. For further detail, please see the **oCEMP [EN010149/APP/7.7.2]** [REP1-060] and **Grid Connection Statement [EN010149/APP/7.6.2]** [REP1-058].
We are blessed with migrating birds who rely on our countryside for food and breeding. There is clear evidence that birds mistake panels for water and significant numbers are killed as they fly into them.	The assessment on birds and potential for collisions is detailed in **ES Volume 1, Chapter 7: Biodiversity [EN10149/APP/6.1.2]** [REP1-024] **a**nd has also been provided in the Applicants **Response to Relevant Representations [EN101049/APP/8.13]** [REP1-070], as shown in Table 3-9, Table 3-10 and Table 3-13. No likely significant adverse effects are anticipated.
A BESS fire is likely and those in the industry acknowledge this. The question is how big the incident will be and could it be managed. A fire would contaminate the aquifer, leading to groundwater contamination from hazardous materials	The likelihood and size point has been answered in Table 5-2 row 4 Carlton le Moorland Parish Council". The concerns around contamination and the aquifer are responded to in Table 5-4 row 6 "Scopwick and Kirby Parish Council".
Springwell has no connection to the grid. The planning inspector can't grant permission to EDF to build this industrial complex with no legitimate means to connect to the grid.	The Applicant's response to Q1.2.1 in the **Response to First Written Questions (ExQ1) [EN010149/APP/8.14]** [REP1-071] sets out the Applicant's approach to site selection following their discussions NESO in November 2020, identifying capacity on the West Burton to Bicker

Summary Position	Applicant's Response
	Fen and Cottam to Eaton Socon OHLs, due to the decommissioning of coal plants at Cottam and West Burton. The Applicant has addressed these concerns regarding the Navenby Substation application within Table 1-1 of the Response to Action Point 2, Appendix 1 to the **Written Summary of Applicant's Oral Submissions at Issue Specific Hearing 1 (ISH1) [EN010149/APP/8.16]** [REP1-072] and as discussed in ISH1, as set out in agenda item 3 and 4 of **Written Summary of Applicant's Oral Submissions at Issue Specific Hearing 1 (ISH1) [EN010149/APP/8.16]** [REP1-072]. The **Grid Connection Statement** [**EN010149/APP/7.6.2**] [REP1-058] sets out the details of the Applicant's grid connection agreement with National Energy System Operator (NESO) to export 800W (AC) of clean power to the National Electrical Transmission System, via a Point of Connection at a new National Grid Electricity Transmission (NGET) Navenby 400kV Substation.

Table 5-6 – Thorpe on the Hill Parish Council

WR Para Ref.	Summary Position	Applicant's Response
1	The cumulative scale of this proposed project, together with the other associated planned projects, represents an industrialisation of agricultural land and a significant degradation of the current rural character of the landscape.	The assessment of cumulative effects which is detailed in **ES Volume 1, Chapter 16: Cumulative Effects [EN010149/APP/6.1.2]** [REP1-018] considers the effects of existing development and/or approved developments within a 10km 'search area' which is considered the Zone of Influence from the Proposed Development. The list of developments that have been assessed within the 10km radius, which includes other solar developments, BESS, biomass facilities etc. are detailed in **Table 16.3** of **ES Volume 1, Chapter 16: Cumulative Effects [EN010149/APP/6.1.2]** [REP1-018]. An assessment of the inter-project cumulative effects with the proposed National Grid Navenby Substation are detailed in Table 16.4 of **ES Volume 1, Chapter 16: Cumulative Effects [EN010149/APP/6.1.2]** [REP1-018]. The Applicant has developed the design of the Proposed Development to provide a sensitive response to the local environment and reduce potential impacts in accordance

WR Para Ref.	Summary Position	Applicant's Response
		with the Project Principles set out in the **Design Approach Document [EN010149/APP/7.3.2]** [REP1-056]. This includes Project Principles 2.1-2.5 which were included to embed a landscape-led approach to the design of the Proposed Development. An assessment of landscape and visual inter-project cumulative effects is detailed in Table 16.11 and in Paragraph 16.7.50 – 16.7.58 of **ES Volume 1, Chapter 16: Cumulative Effects [EN010149/APP/6.1.2]** [REP1-018]. **ES Volume 1, Chapter 10: Landscape and Visual [EN010149/APP/6.1]** [APP-050] acknowledges that the character and appearance of the landscape within the Order Limits would change from arable farmland to a utility-scale solar PV development, but the Applicant does not consider the terms 'industrialisation' and 'industrialised' applicable to the Proposed Development. The effect on landscape character would arise principally from a change in land cover; ostensibly the introduction of new Solar PV development, Satellite Collector Compounds, BESS, Springwell Substation and ancillary infrastructure such as fencing and CCTV into fields which are currently in agricultural land use. The Solar PV development would, however, be underlain by wildflower rich grassland maintaining a vegetative ground cover throughout the majority of the Site. The extent of manufactured metallic and glass structures introduced into the landscape would be far greater than exists in the landscape at present, but this tract of the landscape is not wild or natural without human influence. It is an intensively farmed, working landscape with some strong built influences such as the A15, overhead powerlines, RAF Digby and occasional utilitarian agricultural buildings. The landform, pattern and underlying landscape fabric of the Order Limits would remain largely undisturbed. No significant cumulative effects on landscape character have been identified with other solar farm developments in **ES Volume 1, Chapter 16: Cumulative Effects [EN010149/APP/6.1.2]** [REP1-018].
2	Despite claims relating to biodiversity net gains, which artificially skew the results to favour grassland over arable land, the actual impact on the natural world will be significant.	A detailed assessment on the impacts is provided in **ES Volume 1, Chapter 7: Biodiversity [EN10149/APP/6.1.2]** [REP1-024]. Due to the embedded design and mitigation proposals no significant residual adverse effects on biodiversity are anticipated.

WR Para Ref.	Summary Position	Applicant's Response
		The 'Statutory Metric' has been used to assess biodiversity net gain. This is the only standard metric which is currently recognised to assess biodiversity net gain in England. The metric assigns various habitat types to their ecological or biodiversity value. For example, modified grassland (species poor grassland or pasture) is assigned the same 'habitat distinctiveness' value as arable temporary grass or clover leys (which is also species poor). **ES Volume 3, Appendix 7.14: Biodiversity Net Gain Assessment [EN010149/APP/6.3.2]** [REP1-032] provides indicative figures substantially above the minimum 10% BNG commitment, demonstrating that the Applicant is expecting to deliver in excess of the minimum. The habitat condition criteria that must be reached to deliver the gain in biodiversity is also set out within **ES Volume 3, Appendix 7.14: Biodiversity Net Gain Assessment [EN010149/APP/6.3.2]** [REP1-032] and will form the basis of post construction monitoring ensuring that the predicted uplift is delivered. This is secured by the **oLEMP [EN10149/APP/7.9.2]** [REP1-064].
3	Footpaths through farmland will be hugely degraded once those footpaths are routed through corridors of solar panels encased by high security fences.	The Applicant notes that Thorpe on the Hill parish is located over 13km to the north west of any above ground infrastructure associated with the Springwell Solar Farm. The Proposed Development would not be visible from any location within the parish or any footpath within 10km of the parish. More generally, the Applicant has established Project Principles to reduce adverse effects on Public Rights of Way including Principle 5.2 (to protect the amenity of the Spires and Steeples Trail) and 5.3 (to consider sequential views and experience of people using local footpaths). These are set out in the **Design Approach Document [EN010149/APP/7.3.2]** [REP1-056] together with an explanation of how they have shaped the design response. This includes but is not limited to: • A minimum 15m offset to Solar PV development on either side of all Public Rights of Way to create a wide walking corridor for users, as secured by the **Design Commitments [EN010149/APP/7.4]** [APP-0138]. • Discounting Solar PV development from specific fields within the Order Limits to break up the amount of development along footpaths and create green

WR Para Ref.	Summary Position	Applicant's Response
		infrastructure corridors aligned to them, as secured by the **Works Plans [EN010149/APP/2.3]** [APP-007]. • Structural planting at appropriate locations to screen views of the Solar PV development from footpaths, as secured by the Green Infrastructure Parameters presented in the **oLEMP [EN10149/APP/7.9.2]** [REP1-064]. Where hedgerows are proposed adjacent to footpaths, security fencing would be placed on the opposite side of the hedge so that they would be screened from the path. The effects of the Proposed Development on visual amenity experienced by users of public rights of way within and closer to the Order Limits are assessed **ES Volume 1, Chapter 10: Landscape and Visual [EN010149/APP/6.1]** [APP-050]. The assessment in this chapter takes account of the fencing proposed around the various components of the Proposed Development and does acknowledge some more localised significant adverse effects on visual amenity.
4	The height and nature of the solar panels will be visually intrusive and even though screening is proposed at some locations, it will take many years before this has reached sufficient maturity to be effective. The proposed development will impact key viewpoints and effectively industrialise the landscape which will change its character and visual appearance for at least 40 years.	The Applicant again notes that Thorpe on the Hill parish is located over 13km to the north west of any above ground infrastructure associated with the Springwell Solar Farm and notes that there would be no impact on any key viewpoints or on the landscape character within or surrounding the parish. More generally, the applicant acknowledges that mitigation planting will take time to mature and the effects on landscape and visual amenity in **ES Volume 1, Chapter 10: Landscape and Visual [APP-050]** are therefore reported in year 1 and year 10. Please refer to the Applicant's response in Table 3-4 of the **Applicant's Response to Relevant Representations** [REP1-070] which addresses the purported 'industrialisation' of the landscape.
5	The construction traffic, to and from the site, will require high levels of movements of HGVs which be forced to use minor roads and, in some cases, pass through quiet rural villages.	The construction traffic access routes are described in **ES Volume 1, Chapter 14: Traffic and Transport [EN010149/APP/6.1.2]** [AS-010] and **ES Volume 3, Appendix 14.1: Transport Assessment [EN010149/APP/6.3]** [APP-123]. None of the proposed routes pass through the village of Thorpe on the Hill.

WR Para Ref.	Summary Position	Applicant's Response
		Construction traffic will be subject to control to ensure that construction HGV traffic remains on the agreed access routes and does not stray onto unsuitable routes. The measures to control, monitor and enforce these routes are set out in the **Outline Construction Traffic Management Plan (oCTMP) [EN010149/APP/7.8.2]** [REP1-062].
6	In the event of a thermal runaway from BESS, there are risks from toxic smoke, and land and water contamination.	The very low risks of a thermal runaway event and any resultant plume have been responded to in Table 5-2 row 4 "Carlton le Moorland Parish Council". The concerns around contamination and the aquifer are responded to in Table 5-4 row 6 "Scopwick And Kirkby Parish Council" of this document.
7	The majority of Solar panels are sourced from areas of China which are dependent upon slave labour for their production.	The Applicant opposes the abuse of human rights and forced labour anywhere in the global supply chain. As part of the procurement process, the Applicant would take a rigorous approach to ensuring its suppliers comply with relevant legislation (such as the Modern Slavery Act 2015) and its requirements as set out in an ethical procurement policy as set out in the **Outline Skills, Supply Chain and Employment Plan [EN010149/APP/7.20]** [APP-0153].
8	Some of the land intended for the solar farm is classified as best and most versatile (BMV) and should be given priority for crop and food production	The Applicant's response to question Q1.9.1 in **Response to First Written Questions (ExQ1) [EN010149/APP/8.14]** [REP1-071] provides further details of the Applicant's approach to the use of BMV land in the Proposed Development. The Applicant has set out a response to issues raised relating to loss of BMV land in its **Responses to Relevant Representations** [REP1-070] at Table 4-11: Land Use. NPS EN-3 paragraphs 2.10.28-34 acknowledge that solar developments may require the use of agricultural land but emphasise that the Best and Most Versatile (BMV) land (Grades 1, 2, and 3a) should be avoided where possible, with poorer quality land prioritised. The Applicant's site selection and design evolution were guided by this principle, aiming to minimise the use of BMV land to the extent practicable.
9	The construction of the solar farm will result in soil compaction and that the subsequent siting of solar panels will result in increased flood risk	Sustainable management of the post development situation in terms of vegetation planting can be used as a means of managing surface water runoff from the solar panels as secured in the **oLEMP [EN10149/APP/7.9.2**] [REP1-064]. To ensure that there is no increase in surface water runoff, managed sustainable vegetation (with a good soil structure e.g. chisel ploughed soils) will be allowed to grow beneath the solar panels, which will avoid kinetic compaction and ensure that any potential instances of rivulet

WR Para Ref.	Summary Position	Applicant's Response
		formation are minimised, and surface water runoff flows over the ground in a natural way.

5.4. Reponses to Category 2 Stakeholder Post-hearing submissions

Table 5-7 – Response to Category 2 Stakeholder Post-hearing submissions

Respondent	Summary Position	Applicant's Response
Councillor Amelia Bailey [REP1-110]	Mental health issues in the UK are rising sharply across all age groups, placing significant pressure on individuals, public services, and the NHS. In 2023 alone, 5 million mental health referrals were made, a 33% increase since 2019, with mental health-related spending set at £16.8 billion for 2023/24. Scientific evidence consistently shows that access to natural environments improves emotional, cognitive, and physiological wellbeing. However, the loss of green spaces due to industrial-scale developments like NSIP solar farms raises serious concerns about future impacts on community mental health. Studies highlight that landscape disruption, construction stress, environmental degradation, and weakened social cohesion can all contribute to increased psychological distress. It is essential that future projects protect natural environments, engage meaningfully with communities, and integrate mental health impact assessments into planning processes to safeguard public wellbeing.	A **Health and Wellbeing Summary Statement [EN010149/APP/8.10]** [REP1-067] (submitted by the Applicant at Deadline 1) provides a summary of the approach to the consideration and assessment of effects of the Proposed Development on human health and wellbeing (both physical and mental health), including a background to the Applicant's approach to consideration of health pathways, determinants and populations / subpopulations through the scoping, pre-application, consultation phases of this application, in the context of guidance around the consideration of health in Environmental Impact Assessment (EIA). The **Health and Wellbeing Summary Statement [EN010149/APP/8.10]** [REP1-067] includes specific information relating to mental health (embedded throughout Section 2 and with specific commentary at Section 5).

Respondent	Summary Position	Applicant's Response
Councillor Marianne Overton [REP1-149]	All the applications should be considered together in order to properly consider their cumulative impact. I have extracted the applications in this central part of rural North Kesteven from the Council website. Government guidance is clear that renewable energy developers should utilise brownfield, industrial, contaminated or previously developed land, and that where development on agricultural land is necessary, lower-quality land should be used in preference to high quality. All the currently proposed renewable energy infrastructure in the area is entirely on agricultural land, much of which is high quality BMV agricultural land. On this scale, this application is contrary to all our local planning policies, severely impacting on the very nature of this particular open landscape and should be refused.	The Applicant is committed to keeping the long and short list under review and updating the cumulative assessment throughout the examination. A revised version of **ES Volume 1, Chapter 16: Cumulative Assessment [EN010149/APP/6.1.2]** [REP1-018] has been submitted at Deadline 1 to take account of the Leoda Solar Farm (EN0110016) for which the EIA Scoping Report was submitted in January 2025. At Deadline 2, a full update of the inter-project long and short lists will be submitted, with an assessment cut-off date of 30 May 2025. The same process will be repeated for Deadline 4, with an assessment cut-off date of 29 August 2025. This has been set out and committed to within the Deadline 1 cover letter [REP1-001]. The update at Deadline 2 has includes a review of the documentation provided by Councillor Marianne Overton. Those schemes listed in *Appendix 2 NKDC Solar and Energy Infrastructure Schemes (over 5MW) January 2025: Nationally Significant Infrastructure Project (NSIP) schemes* had been included in the assessment (where relevant to the Zone of Influence), with Leoda Solar Farm (EN0110016) being included at Deadline 1. A review of the TCPA scheme provided in *Appendix 2 NKDC Solar and Energy Infrastructure Schemes (over 5MW) January 2025: TCPA 1990 – NKDC Solar and Energy Schemes (over 5MW generating capacity)* has been undertaken, and where the criteria for making the long and short list are met (e.g. within the Zone of Influence, planning permission within the last 5 years but not implemented, temporal overlap, sufficient environmental information) have been included.

6. Responses to Deadline 1 submissions – Thematic Responses

6.1. Responses to Written Representations

6.1.1. Written representations received from members of the public and businesses, additional to those included in Sections 2, 3, 4 and 5 of this report, have been grouped by topic and a thematic response has been prepared below. The themes are as follows:

- BESS;
- Biodiversity;
- Cultural heritage;
- Cumulatives;
- Flood risk and drainage;
- General;
- Health
- Landscape and visual;
- Land contamination;
- Land use (including agricultural land and soil);
- Principle of development;
- Socio-economics; and
- Traffic.

6.2. Post-Hearing Submissions

6.2.1. A small number of members of the public submitted post-hearing submissions at Deadline 1 and the Applicant has provided a technical response to the points raised in Section 6.4.

6.3. Thematic Responses

Table 6-1: BESS

WR Ref	Summary Position	Applicant's Response
REP1-132	**Assessment methodology:** concerns that the type of batteries are not yet confirmed.	Concerns related to the type of battery chemistry has been responded to in Table 2-5 LIR 25.18 – 25.20 (above).
REP1-115; REP1-155	**BESS Design:** queries around which separation distance will be adhered to (3m under NFPA 855 or 6m under NFCC guidance).	The Applicant has set out a response to issues raised relating to equipment layout in its **Responses to Relevant Representations [EN010149/APP/8.13]** [REP1-070] at Table 4-1: BESS.
REP1-115; REP1-138; REP1-139	**BESS Impacts:** concerns regarding potential operational impacts from the BESS including noise.	The Applicant has set out a response to issues raised relating to operational impacts including noise in its **Responses to Relevant Representations [EN010149/APP/8.13]** [REP1-070] at Table 4-13: Noise and Table 4-1: BESS.
REP1-115; REP1-124; REP1-131; REP1-132; REP1-141; REP1-143; REP1-154	**Fire Safety:** comments regarding the approach to firefighting and the potential for BESS fires.	The Applicant has set out a response to issues raised relating to thermal runaway risks and emergency response in its **Responses to Relevant Representations [EN010149/APP/8.13]** [REP1-070] at Table 4-1: BESS.
REP1-132	**Proximity to properties:** concerns regarding the proximity of BESS to properties.	The Applicant has set out a response to issues raised relating to BESS proximity to properties in its **Responses to Relevant Representations [EN010149/APP/8.13]** [REP1-070] at Table 4-1: BESS.

Table 6-2: Biodiversity

WR Ref	Summary Position	Applicant's Response
REP1-139; REP1-156; REP1-161	**Biodiversity impacts:** impacts of solar farms on habitats and the increased collision risk for some species.	The assessment of impact on habitats and species is detailed in **ES Volume 1, Chapter 7: Biodiversity [EN10149/APP/6.1.2]** [APP-047] which concludes that the embedded design and additional mitigation measures, are considered sufficient to mitigate impact and no significant residual impacts on biodiversity are anticipated.

WR Ref	Summary Position	Applicant's Response
		The assessment on potential for bird collisions is detailed in **ES Volume 1, Chapter 7: Biodiversity [EN10149/APP/6.1.2]** [APP-047] and has also been provided in the **Responses to Relevant Representations [EN010149/APP/8.13]** [REP1-070], as shown in Table 3-9, Table 3-10 and Table 3-13. No likely significant adverse effects are anticipated.

Table 6-3: Cultural Heritage

WR Ref	Summary Position	Applicant's Response
REP1-115	**Designated heritage assets:** impacts on the Temple Bruer Preceptory Church Scheduled Ancient Monument and consideration of this receptor within ES Appendix 9.1.	The Temple Bruer Preceptory scheduled monument (NHLE 1007686) is also listed as Temple Church Tower (NHLE 1254328) the effects to this asset are agreed with Historic England, LCC and NKDC as detailed in the **Draft Statement of Common Ground – Lincolnshire County Council [EN010149/APP/8.1]** [REP1-066]**, Draft Statement of Common Ground – North Kesteven District Council [EN010149/APP/8.2]** [REP1-077] and **Draft Statement of Common Ground - Historic England [EN010149/APP/8.3]** [REP1-078].

Table 6-4: Cumulatives

WR Ref	Summary Position	Applicant's Response
REP1-109; REP1-112; REP1-143	**No. of applications:** comments regarding the potential in-combination impacts from Springwell and other nearby NSIP solar schemes.	The Applicant has set out a response to issues raised relating to cumulative impacts due to the number of projects in Lincolnshire in its **Responses to Relevant Representations [EN010149/APP/8.13]** [REP1-070] at Table 4-6: Cumulative Impacts.

Table 6-5: Flood Risk and Drainage

WR Ref	Summary Position	Applicant's Response
REP1-121	**Impacts on drains and watercourses:** concerns regarding impacts on land and field drains, and disruption to existing drainage regimes.	Any land drainage systems damaged as part of the Proposed Development (through piling or other construction methods) will either be reinstated or diverted with equivalent drainage systems, to ensure no lasting changes compared to the baseline. This is secured in the **Outline Construction Environmental Management Plan (oCEMP) [EN010149/APP/7.7.2]**. The panels will allow existing overland flow pathways to be maintained with no disruption to flows. The Applicant has set out a response to issues raised relating increased risk of flooding and impacts to drainage regimes its **Responses to Relevant Representations [EN010149/APP/8.13]** [REP1-070] at Table 4-7: Flood Risk and Drainage.
REP1-112; REP1-143	**Siting of development in Flood Zones:** comments stating that insufficient justification has been given for the siting of panels and infrastructure in Flood Zone 3B.	**A Planning Statement Addendum [EN010149/APP/8.12]** [REP1-069] was submitted at Deadline 1 which includes a Solar Panel Siting Assessment, Flood Zone 3b at Appendix 2.

Table 6-6: General

WR Ref	Summary Position	Applicant's Response
REP1-109; REP1-115; REP1-121; REP1-122; REP1-138	**Decommissioning:** questions regarding the decommissioning process and land restoration, including claims that the Proposed Development will be permanent.	The Applicant has set out a response to issues raised relating to decommissioning in its **Responses to Relevant Representations [EN010149/APP/8.13]** [REP1-070] at Table 4-8: General.
REP1-130; REP1-164; REP1-165	**Impacts on residential property values:** concerns that there will be a deleterious effect on house prices.	The Applicant has set out a response to issues raised relating to impacts on residential property values in its **Responses to Relevant Representations [EN010149/APP/8.13]** [REP1-070] at Table 4-8 General.
REP1-130; REP1-146	**Sustainability:** comments regarding the sourcing of panels and sustainability of the supply chain.	The Applicant has set out a response to issues raised relating to the sustainability of the supply chain in its **Responses to Relevant Representations [EN010149/APP/8.13]** [REP1-070] at Table 4-8 General.

Table 6-7: Health

WR Ref	Summary Position	Applicant's Response
REP1-110; REP1-112; REP1-131; REP1-134; REP1-139; REP1-143; REP1-154	**Health impacts:** concerns regarding the impacts on public health and mental wellbeing as a result of the Proposed Development.	The Applicant recognises the representations from members of the public, Parish Councils and local opposition groups that cite concern about physical and mental health and wellbeing, related to a wider range of factors. The Applicant is content that receptors and health pathways, and individual environmental effects related to health and wellbeing have been appropriately considered, assessed and mitigated for (where practicable) as per the approach agreed at EIA Scoping. A **Health and Wellbeing Summary Statement [EN010149/APP/8.10]** [REP1-067] (submitted by the Applicant at Deadline 1) provides a summary of the approach to the consideration and assessment of effects of the Proposed Development on human health and wellbeing (both physical and mental health), including a background to the Applicant's approach to consideration of health pathways, determinants and populations / subpopulations through the scoping, pre-application, consultation phases of this application, in the context of guidance around the consideration of health in Environmental Impact Assessment (EIA).

Table 6-8: Landscape and Visual

WR Ref	Summary Position	Applicant's Response
REP1-125	**Glint and glare:** potential glint and glare impacts on the registered airstrip.	Potential glint and glare effects are assessed in **ES Volume 3, Appendix 5.4: Glint and Glare Study [EN010149/APP/6.3.2]** [REP1-028]**.** Please refer to the Applicant's response in Table 4-11 of the Applicant's **Response to Relevant Representations [EN010149/APP/8.13]** [REP1-070] which addresses similar comments regarding the potential effects of glint and glare.
REP1-109; REP1-139; REP1-140	**Landscape impacts:** comments regarding the potential changes to landscape character and impacts on amenity.	Effects on landscape character are assessed in **ES Volume 1, Chapter 10: Landscape and Visual [EN010149/APP/6.1]** [APP-050]**.**

WR Ref	Summary Position	Applicant's Response
		Please refer to the Applicant's response in Table 4-11 of the Applicant's **Response to Relevant Representations [EN010149/APP/8.13]** [REP1-070] which addresses similar comments regarding the potential effects on landscape character.
REP1-126; REP1-141; REP1-146	**Visual impacts:** impacts on views and impacts from visual intrusion from components of the Proposed Development.	Effects on visual amenity are assessed in **ES Volume 1, Chapter 10: Landscape and Visual [EN010149/APP/6.1]** [APP-050]. Please refer to the Applicant's response in Table 4-11 of the Applicant's **Response to Relevant Representations [EN010149/APP/8.13]** [REP1-070] which addresses similar comments regarding the potential effects on visual amenity.

Table 6-9: Land Contamination

WR Ref	Summary Position	Applicant's Response
REP1-107; REP1-115; REP1-121; REP1-134; REP1-146; REP1-151; REP1-152; REP1-154; REP1-155; REP1-158	**Land contamination:** concerns regarding the impacts on the Lincolnshire Limestone Aquifer.	The Applicant has set out a response to issues raised relating to land contamination in its **Responses to Relevant Representations [EN010149/APP/8.13]** [REP1-070] at Table 4-10: Land Contamination.
REP1-112; REP1-122; REP1-125; REP1-143;	**Potential pollution from panels and BESS:** concerns regarding potential groundwater or aquifer pollution from panels and BESS.	The Applicant has set out a response to issues raised relating to land contamination and potential pollution from the Solar PV modules and BESS in its **Responses to Relevant Representations [EN010149/APP/8.13]** [REP1-070] at Table 4-10: Land Contamination.

Table 6-10: Land Use

WR Ref	Summary Position	Applicant's Response
REP1-107; REP1-112; REP1-124; REP1-125; REP1-130; REP1-138; REP1-139; REP1-141; REP1-143; REP1-152; REP1-168	**Loss of high quality farmland:** comments relating to the loss of high quality farmland and impacts on food production.	The Applicant's response to question Q1.9.1 in **Response to First Written Questions (ExQ1) [EN010149/APP/8.14]** [REP1-071] provides further details of the Applicant's approach to the use of BMV land in the Proposed Development. The Applicant has set out a response to issues raised relating to loss of high-quality farmland in its **Responses to Relevant Representations [EN010149/APP/8.13]** [REP1-070] at Table 4-11: Land Use. NPS EN-3 paragraphs 2.10.28-34 acknowledge that solar developments may require the use of agricultural land but emphasise that the Best and Most Versatile (BMV) land (Grades 1, 2, and 3a) should be avoided where possible, with poorer quality land prioritised. The Applicant's site selection and design evolution were guided by this principle, aiming to minimise the use of BMV land to the extent practicable.

Table 6-11: Noise

WR Ref	Summary Position	Applicant's Response
REP1-131; REP1-151	**Operational noise:** concerns regarding potential operational noise impacts from the BESS and mitigation for nearby properties.	The Applicant has set out a response to issues raised relating to operational noise in its **Responses to Relevant Representations [EN010149/APP/8.13]** [REP1-070] at Table 4-13: Noise. .

Table 6-12: Principle of Development

WR Ref	Summary Position	Applicant's Response
REP1-109; REP1-121; REP1-128; REP1-138; REP1-139; REP1-140;	**Alternatives:** comments relating to the use of rooftops and brownfield locations for solar.	The Applicant's response to Q1.2.1 in the **Response to First Written Questions (ExQ1) [EN010149/APP/8.14]** [REP1-071] sets out why it is necessary to site the proposed development on agricultural land and the Applicant's consideration of brownfield land in its site selection process. The Applicant has set out a response to issues raised relating to alternatives in its **Responses to Relevant Representations [EN010149/APP/8.13]** [REP1-070] at Table 4-14: Principle of Development

WR Ref	Summary Position	Applicant's Response
REP1-141; REP1-146; REP1-154; REP1-156; REP1-157		The Applicant has addressed these concerns within Table 1-1 of the Response to Action Points, Appendix 1 to the **Written Summary of Applicant's Oral Submissions at Issue Specific Hearing 1 (ISH1) [EN010149/APP/8.16]** [REP1-072] and as discussed in ISH1, as set out in agenda item 3 of **Written Summary of Applicant's Oral Submissions at Issue Specific Hearing 1 (ISH1) [EN010149/APP/8.16]** [REP1-072].
REP1-125	**Impacts on residential property and value:** comments regarding potential impacts on residential property values as a result of the Proposed Development.	The Applicant has set out a response to issues raised relating to impacts on property value in its **Responses to Relevant Representations [EN010149/APP/8.13]** [REP1-070] at Table 4-8: General.
REP1-154	**Longevity and efficiency of solar:** questions regarding the reduction in efficiency of panels over time and the ability to meet the 800MW generation capacity.	The Applicant's response to Q1.2.3 in the **Response to First Written Questions (ExQ1) [EN010149/APP/8.14]** [REP1-071] sets out how a reduction in panel array efficiency has been considered in the decision of the solar technology to be used. The Applicant has set out a response to issues raised relating to the efficiency of solar in its **Responses to Relevant Representations [EN010149/APP/8.13]** [REP1-070] at Tables 3-5: Dr Caroline Johnson MP and 4-14: Principle of Development.
REP1-112; REP1-143; REP1-146; REP1-152	**Site selection/suitability:** comments regarding the suitability of the site as Navenby substation is not yet consented.	The Applicant's response to Q1.2.1 in the **Response to First Written Questions (ExQ1) [EN010149/APP/8.14]** [REP1-071] sets out the Applicant's approach to site selection following their discussions NESO in November 2020, identifying capacity on the West Burton to Bicker Fen and Cottam to Eaton Socon OHLs, due to the decommissioning of coal plants at Cottam and West Burton. The Applicant has addressed these concerns regarding the Navenby Substation application within Table 1-1 of the Response to Action Point 2, Appendix 1 to the **Written Summary of Applicant's Oral Submissions at Issue Specific Hearing 1 (ISH1) [EN010149/APP/8.16]** [REP1-072] and as discussed in ISH1, as set out in agenda item 3 and 4 of **Written Summary of Applicant's Oral Submissions at Issue Specific Hearing 1 (ISH1) [EN010149/APP/8.16]** [REP1-072]. The Applicant has set out a response to issues raised relating to site selection and the suitability of the site within the **Responses to Relevant Representations [EN010149/APP/8.13]** [REP1-070] at Table 4-14: Principle of Development.

Table 6-13: Socio-economics

WR Ref	Summary Position	Applicant's Response
REP1-134; REP1-160	**Tourism:** concerns regarding impacts on tourism to the area.	The Applicant has set out a response to issues raised relating to tourism in its **Responses to Relevant Representations [EN010149/APP/8.13]** [REP1-070] at Table 4-16.

Table 6-14: Traffic

WR Ref	Summary Position	Applicant's Response
REP1-122; REP1-130; REP1-143; REP1-154	**Impacts on the A15:** concerns regarding potential impacts on the A15, and commentary stating the Applicant has failed to submit a Stage 1 Road Safety Audit for the A15 or secure sign-off for improvements from the County Council.	The Applicant has set out a response to issues raised in relation to the impact on construction traffic on the in its **Responses to Relevant Representations [EN010149/APP/8.13]** [REP1-070] at Table 3-5. The Applicant has provided a **Road Safety Audit & Designer Response [EN010149/APP/8.18]** [REP1-075] which was submitted at Deadline 1**.**
REP1-138	**Highway safety:** concerns regarding highway safety on local roads and the A15.	The Applicant has provided a **Road Safety Audit & Designer Response [EN010149/APP/8.18]** [REP1-075] at Deadline 1. The conclusions of the independent audit do not identify any significant issues.

6.4. Post-hearing submissions

Respondent	Summary Position	Applicant's Response
James Gallagher [REP1-133]	**Commuter bus service:** it is not clear what the area from which construction workers will be drawn is, which calls into question the effectiveness of the proposed commuter bus service.	The origin points will be determined in full through the final Construction Traffic Management Plan (CTMP) as is normal for this type of development. The final CTMP is secured through the **Draft DCO [EN010149/APP/3.1.2]** [REP1-006].
James Gallagher [REP1-133]	**Impacts on the A15 and underestimation of road safety risks**: peak time delays can be shown to rise significantly, meaning it would be dangerous to allow construction to increase pressure at the	The Applicant is proposing an embargo on traffic through the junction of the A15 / B1202 to address junction capacity concerns raised by LCC. This includes: • That staff movements through the junction will be subject to an embargo between 0700-0900hrs and 1600-1800hrs; and

Respondent	Summary Position	Applicant's Response
	A15/B1202 crossroads in advance of improvements.	• That HGV use through the junction will be supressed between 0700-0900hrs and 1600-1800hrs to no more than 5 HGV movements per direction per hour. These measures will effectively address the impact of traffic through this junction at peak hours.
James Gallagher [REP1-133]	**A15/Green Man Road junction:** the applicant's assessment fails to acknowledge the safety risks at this junction,	Construction traffic will not be turning at the A15 / Green Man Road Junction, and as such will not be contributing to turning accidents occurring from the minor arm of the junction. Construction HGV traffic can be subject to a voluntary speed limit at this location, if this is deemed necessary by LCC as highway authority to address any potential for accidents involving north-south traffic.
James Gallagher [REP1-133]	**Cumulatives:** the applicant's assessment does not consider the impacts of the Navenby Substation or the Navenby BESS.	The cumulative effects associated with Navenby Substation are noted in Table 16.4 of **ES Volume 1, Chapter 16: Cumulative Effects [EN010149/APP/6.1.2]** [REP1-018]. The Traffic and transport elements can be found on Pages 46-48. The planning documents for Navenby Heath BESS (Ref 25/0491/FUL) state that The Navenby Heath BESS project will commence construction in Q4 2032 and the construction period will take up to 18 months. Springwell Solar Farm is expected to be complete in 2031. There is no construction overlap anticipated and no cumulative impact assessment required. The Brant Energy Storage application (Ref 25/0533/FUL) is expected to commence construction in 2027 and take up to 24 months to complete. As such, there is potential for construction traffic to coincide within the Proposed Development study area. Given that the Applicant has proposed an embargo with LCC through the A15 / B1202 junction in network peak periods, there is reduced scope for the Brant Energy Storage scheme traffic (operating between 0800 – 1800 on weekdays) to interact with that of the Proposed Development (embargoed between 0700-0900hrs and 1600-1800hrs). The potential for significant cumulative impacts and the need for additional mitigation is therefore considered to be negligible.

Appendix 1 – Response to NKDC LIR Appendix B

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1. Introduction

1.1. Overview

1.1.1. This appendix provides the Applicant's responses to Appendix B of North Kesteven District Council (NKDC)'s Local Impact Reports (LIR), where external consultants have undertaken a review of the biodiversity documentation within the DCO Application.

1.1.2. This Appendix should be read alongside Section 2 of this document (Response to Deadline 1) which sets out the responses to the NKDC Local Impact Report.

1.2. Response to NKDC's LIR

Table 1-1 – Biodiversity

DCO Application document	Summary Position	Applicant's Response
ES Volume 1, Chapter 7: Biodiversity	General – mitigation hierarchy a) Please provide further detail on how the mitigation hierarchy has been applied or important habitats, and why habitat losses cannot be avoided (irrespective of the ability to compensate for losses). Specifically- what has been done at the design stage to avoid or proactively minimise (e.g. consideration of micrositing) impacts on LWSs and hedgerows (priority habitats) b) The provision of habitat compensation and BNG should not be relied on to make the case for hedgerow loss being acceptable. The first consideration is whether it is necessary and avoidable e.g. HDD versus open cut methods. HDD has not been discounted as an option to avoid other sensitive receptors (Chapter 3, 3.9.7). There would seem to be viable ("reasonably practicable") technical options for avoidance of hedgerow loss for electrical connections and exploration of such measures (e.g. in relation to the 12 important hedgerows) is advised as necessary within the relevant NPS (EN5 paragraph 2.9.19). Paragraph 7.9.7 commits to like for like compensation of all hedgerows. Where is the relevant data reported that can be used to agree the specifications for this recommencement? If this data is not currently available, when will it be collected?	a) A detailed response provided in the Applicant's response to queries raised by NKDC LIR paras 14.15-14.18. The information from the ecology surveys and option appraisal assessments has been used to inform the design from the beginning and throughout the design process to avoid impact to ecological receptors where possible, and minimise impacts where avoidance is not possible. b) The design of the Proposed Development has sought to minimise the amount of hedgerow loss in accordance with Project Principle 2.1 and 4.2 set out in the **Design Approach Document [EN010149/APP/7.3.2]** [REP1-056]. This includes a minimum 10m offset to existing hedgerows wherever reasonably possible and the use of existing access tracks, crossing and / or gaps in the hedgerows for all internal access tracks and cable routes wherever practicable. This is set out in the **Design Commitments [EN010149/APP/7.4]** [APP-0138] for the detailed design of the Proposed Development and is secured by a requirement in the **Draft DCO [EN010149/APP/3.1.2]** [REP1-006]. In some instances, utilising existing tracks, crossing and / or gaps in the hedgerows might not be practicable, or might have greater impacts on the local environment compared to alternative designs. For example, in Springwell Central, utilising the existing access south of the B1191 (Heath Road) adjacent to Scopwick Mill is likely to have a greater detrimental impact on the local environment due to heritage concerns, compared to creating a new access and break in the hedgerow further to the west (part way along on Field Bk03). Elsewhere it may not be possible to accommodate the cable route within an existing gap in the hedgerow and this might necessitate additional vegetation removal.

DCO Application document	Summary Position	Applicant's Response

Open-cut trenching methods will be used for the majority of the cable routing. However, specialist trenchless techniques (such as Horizontal Directional Drilling (HDD)) may be required for crossings of roads such as the A15, environmental receptors (including watercourses and ditches), and other existing below-ground utilities infrastructure. Potential locations for HDD will be considered at the detailed design stage in combination with other design and construction factors such as associated area required and environmental impacts. This will form part of the detailed design approvals to be submitted to the relevant planning authority under Requirement 5 of the **Draft DCO [EN010149/APP/3.1.2]** [REP1-006].

In addition to hedgerow removal for access tracks and cable routes, some hedgerow removal is also required to facilitate highways works. The location of highways works has been carefully considered to reduce impacts on existing hedgerows while also taking account of other environmental constraints such as proximity to residential properties, stakeholder feedback and air and noise impacts. This is detailed in Section 5 (Design Evolution) of the **Draft DCO [EN010149/APP/3.1.2]** [REP1-006].

New hedgerows would be replanted in most of the locations where they are removed including alongside highways works and across cable corridors (the exception would be where operational access into fields needs to be maintained). In addition, extensive new hedgerow and structural planting would be planted in accordance with the Green Infrastructure Parameters presented in the **oLEMP [EN10149/APP/7.9.2]** [REP1-064].

ES Volume 3, Appendix 7.11: Important Hedgerow Survey [EN010149/APP/6.3] [APP-092] details all the hedgerows likely to be affected by the development that have been subject to both UK habitat and Hedgerow Regulations survey. The information contained in this report (including a list of

DCO Application document	Summary Position	Applicant's Response
		hedgerow species for each hedgerow, in the Appendix) is considered sufficient to inform the specification and planting mix for any replacement hedgerows. The commitment for like for like compensation hedgerow planting is secured in the BNG Trading Rules as detailed in **ES Volume 3, Appendix 7.14: Biodiversity Net Gain Assessment [EN010149/APP/6.3.2]** [REP1-032]. The BNG Assessment will be amended in due course taking account of comments and re-issued at Deadline 3.
ES Volume 1, Chapter 7: Biodiversity Table 7.3	This places a caveat ("reinstate where possible") on, and therefore uncertainty over, whether full hedgerow reinstatement can be provided over electrical connections. Please advise on any restrictions on the replanting of hedgerows over electrical connections. Is planting permissible, and are there specific design considerations relating to this and have these been allowed for?	Planting of trees, such as oak and ash, would not be permitted in the sections of hedgerow re-instated over electrical cables, due to potential for damage from deep roots. However, there are no restrictions on planting of native hedgerow shrubs (defined as species usually less than 5m high) due to shallower root systems, therefore hedgerows (comprised of appropriate native hedgerow shrub species) would be re-instated over cables. This will be secured by amendments to the **oLEMP [EN10149/APP/7.9.2]** [REP1-064] to be re-issued at Deadline 3. Re-instatement would not be possible for hedgerow sections removed for vehicle access where required to maintain open access for highway and internal tracks during operation. However, sections of hedgerow removed for passing bays or bellmouths, would be replanted along the edges of the widened roads after construction.
ES Volume 1, Chapter 7: Biodiversity Table 7.6	The embedded mitigation seems comprehensive. I query the stated need (given it conflicts with the wider aim to avoid lighting) for permanent security lighting at emergency exits given these will rarely be used. Why do these areas need to be permanently lit?	The lighting of the Springwell Substation would be in accordance with health and safety requirements, whereby there would be lighting around emergency exits from dusk. Lighting sensors will be implemented around the Springwell Substation for security purposes and a sensitive lighting scheme will be developed to ensure inward and downward distribution of light, avoiding light spill onto existing boundary features. This is secured in the **Design Commitments [EN010149/APP/7.4]** [APP-0138].
ES Volume 1, Chapter 7: Biodiversity	More clarity is needed on the impacts on ground nesting birds and how the calculation has been made to determine that the post-development habitats are	Response provided in Applicant's response to NKDC LIR para 14.27.

DCO Application document	Summary Position	Applicant's Response
Paragraph 7.7.14	adequate to maintain the conservation status of these species (and ideally enhance their status). A similar exercise was completed for the Heckington DCO and should be accessible online. It is not clear how much reliance is placed on land within the array contributing to this, and whether this is realistic and certain (given operational regimes etc). Are all notable ground nesting birds suitably addressed (e.g. quail)?	
ES Volume 1, Chapter 7: Biodiversity Table 7.6	It is stated that embedded mitigation is provided to protect the important scarce arable plant assemblages identified. This is not supported by the BNG figures which show that the fields (BCD105, 115 and Target Notes 9 and 10) where the most diverse assemblage of notable plants was found will be converted to grassland. Please provide further explanation for the mitigation approach for scarce arable flora to demonstrate that this is certain to preserve and improve the conservation status of these species. See also the comment below on Fumaria muralis subsp. neglecta. Pending the above, it is not agreed that there would be no significant effect. There is a potential conflict with Policy S60 of the Local Plan. As noted in Appendix 7.8, the development coincides with a landscape and soil types of known value for scarce arable flora, and therefore where action to conserve scarce arable flora needs to be focussed to achieve the aims of the Lincolnshire Biodiversity Action Plan.	Response provided in Applicant response to NKDC LIR para 14.22.

DCO Application document	Summary Position	Applicant's Response
ES Volume 1, Chapter 16: Cumulative Effects	No disagreement provided that it is demonstrated that the development adequately compensates for its specific impact on ground nesting birds and scarce arable flora. Related comment on this is provided above in relation to Chapter 7.	Response provided in Applicant response to queries raised by NKDC LIR 14.22-14.24 and 14.27
ES Volume 3, Appendix 7.1: Preliminary Ecological Appraisal	In general, the approach, level of detail and conclusions are appropriate, albeit with some exceptions in relation to specific habitats or species groups.	The Applicant has noted this comment. The exceptions are addressed elsewhere via responses to the relevant comments.
ES Volume 3, Appendix 7.1: Preliminary Ecological Appraisal 1.4 Validity of data	Based on the survey dates, the PEA does not obviously meet the requirements defined in this section (or only partially meets). What work has been undertaken to review and update the habitat information prior to submission, particularly in relation to provision of a current baseline for BNG purposes?	Survey work has been undertaken on the site over a considerable period spanning two years and no significant changes in semi natural habitat or land use management have been observed in that time and therefore no substantial changes will have occurred to the species that the habitats present support. The only notable change will have been to arable cropping as the crop in each field changes on a yearly basis. However arable has no value in BNG terms and surveys of species reliant on arable habitats have been undertaken. Therefore, it is considered that there is a robust baseline against which to assess the impacts of the scheme.
ES Volume 3, Appendix 7.1: Preliminary Ecological Appraisal Table 1	What local references have been consulted to determine habitats of strategic significance? Related to this, the BNG report makes no reference to the relevant local guidance that needs to be addressed. The national references cited do not appear to align with the local requirements.	The **oLEMP [EN10149/APP/7.9.2]** [REP1-064] clearly indicates that whilst a Local Nature Recovery Strategy (LNRS) has not yet been produced for Lincolnshire there was reference to both the Lincolnshire BAP and historic biodiversity opportunity mapping from the Greater Lincolnshire Nature Partnership together with the relevant Landscape Character Assessments. All of this information indicates that the habitat creation and restoration proposals identified in the **oLEMP [EN10149/APP/7.9.2]** [REP1-064] are locally appropriate and this has been used to assign appropriate strategic significance within the BNG assessment. **ES Volume 3, Appendix 7.14: Biodiversity Net Gain Assessment [EN010149/APP/6.3.2]** [REP1-032] will be updated to include the Central Lincolnshire

DCO Application document	Summary Position	Applicant's Response
		Biodiversity Net Gain Guidance for Planners, Ecologists & Applicants on strategic significance. The report will be amended in due course taking account of this comment and re-issued at Deadline 3.
ES Volume 3, Appendix 7.1: Preliminary Ecological Appraisal 3.3 UK Hab survey	Noting the survey timings and related limitations in 3.5.7, please provide further detail on how hedgerows have been reliably and correctly surveyed to determine their specific hedgerow types. What methods and species lists were used? Where is the supporting evidence presented? In relation to this it should be noted that the Hedgerow Regulations survey does not provide this as this is not the method used for UKHab survey. This matter was identified previously within the response to the PEIR.	Response provided in Applicant's response to NKDC LIR paras 14.22-14.24.
ES Volume 3, Appendix 7.1: Preliminary Ecological Appraisal 4.2.28	This identifies a very notable plant species that is relevant to the EcIA, if correctly identified. This is Fumaria muralis subsp. neglecta, a species that is endemic, Nationally Rare (based on available data), has not been seen recently, and has only been found in Cornwall previously. Please provide a full impact assessment for this important feature (i.e. International value). Please identify if the data is adequate to understand its full distribution across the site.	Response provided in Applicant's response to NKDC LIR paras 14.22-14.24.
ES Volume 3, Appendix 7.1: Preliminary Ecological Appraisal	Noting the presence of streams and the relevance of this for BNG assessment, please clarify the location of the MoRPh survey results and the competency of the relevant survey team.	The RCA results have been included within **ES Volume 3, Appendix 7.14: Biodiversity Net Gain Assessment [EN010149/APP/6.3.2]** [REP1-032] updated at Deadline 1. The assessment was undertaken by an RCA accredited surveyor with 2 years of RCA experience.

DCO Application document	Summary Position	Applicant's Response
4.2.38 and habitat maps		
ES Volume 3, Appendix 7.8: Notable Arable Flora Survey Paragraph 3.3.1	The survey was not appropriately timed (early June) to reliably survey maize fields. Maize is a sub-tropical plant that is not sown until mid to late April when soil temperatures are suitable. This timing and the preceding cultivation makes it unrealistic to expect full germination of associated notable flora until later in the year. Please provide further comment on why the assessment is adequately precautionary in this context. Was the soil type the same as or different from locations where county value assemblages were recorded?	All the maize fields within the Site, at time of survey, were located on clay-loam soils in Springwell East which were found to be universally poor in arable flora species and contained only common flora species. (The notable arable species identified on Site were found on lighter calcareous soils in central and western areas of the Site). Whilst the survey was conducted at a time of year full germination would not be expected, some degree of germination would have been identified if present. Had there been evidence of growth in the margins of any flora aside from ubiquitous plants such as groundsel and creeping thistle, a later survey would have been recommended. Numerous uncultivated areas were seen (including the unmanaged barley field at TN01) and there was a high degree of confidence that more IAPA scoring species would have been apparent at the time of the survey had they been present. It was therefore considered unlikely that notable arable flora would be present in the maize fields and a further late season survey was not carried out as it was considered unlikely to provide any new findings. Details are provided in **ES Volume 3, Appendix 7.8: Notable Arable Flora Survey [EN010149/APP/6.3]** [APP-089].
ES Volume 3, Appendix 7.8: Notable Arable Flora Survey	As noted in the report, Cynoglossum officinale is a Near Threatened species. What is the impact of the development on this species? Can it be protected and its status improved (if still present at construction)?	Cynoglossum officinale was not found in an arable margin during the survey, but on a trackside in between survey sites. It's a species of disturbed base-rich ground and the lead surveyor (FISC level 6) highlights that it is often found in disturbed or otherwise bare ground where space is allowed for its establishment, in particular around rabbit warrens and on the edges of pastures (it's unpalatable to rabbits), but it also turns up in dune slacks on bare sandy ground. The Applicant is not aware of this species being found on arable field margins, perhaps because disturbance is not consistent enough. Therefore manual management of field margins is unlikely to favour this species, however it is likely to naturally occur in tracksides where rabbits / hares are present. Following development the Site will continue to support populations of rabbits and hares, with the wider field margins incorporated into the design likely to allow a growth in population, which could increase the suitable conditions required for Cynoglossum

DCO Application document	Summary Position	Applicant's Response
		officinale. No specific conservation objectives are considered necessary given its limited presence on Site.
ES Volume 3, Appendix 7.8: Notable Arable Flora Survey Paragraphs 4.1.3-4	Given the narrative in these paragraphs (which seems precautionary and responsive to the results obtained), please provide further explanation for the approach to 'bundling' fields. My reading is the bundles only cover the fields where scarce flora were detected, rather than being responsive (as per 4.1.3) to possible inter-annual variations in occurrence. Confidence is needed that an appropriate area of land has been identified for the maintenance of the conservation status of notable arable flora	The approach to bundling is informed by the extensive site surveys. There were numerous areas in which no flora species on the IAPA list were present - these were not necessarily recorded during the survey as negative results, but added to surveyor confidence that the conservation status of the arable assemblage had been appropriately assessed. Within the assessment fields were considered both individually and at site level ('bundling') to achieve a thorough consideration of the importance of their arable assemblage Additional response with regards to arable plants is also provided in Applicant response to NKDC LIR paras 14.22-14.24 and in the below comment.
ES Volume 3, Appendix 7.8: Notable Arable Flora Survey Paragraph 4.1.4	In bundling the fields, the assessor has deferred to the criteria for assessing sites/ monads (1x1km squares) (Table 3) rather than based on fields (Table 2). This reduces the value placed on the assemblage, discounting some locations as being of county value (I agree that national value might be overstating things). Currently the approach seems insufficiently precautionary given the limited number of fields "bundled" and the relatively small area of land encompassed. There is no guarantee that these species occur more widely in the landscape, so the farmland within the solar farm could be of specific importance for maintaining the status of these species within the county. Please review this given the limitations (which are well covered in the report) on the ability to reliably detect annual plant species.	In **ES Volume 3, Appendix 7.8: Notable Arable Flora Survey [EN010149/APP/6.3]** [APP-089], fields were considered both individually and at site level ('bundling') to achieve a thorough consideration of the importance of their arable assemblage. Bundling often raises the IAPA scores because all species recorded in the area are included - the threshold may be higher than at field level, but it is more likely to be exceeded where sufficient recording effort has taken place, such as in this instance. That is why fields BCD105 and 115 achieve county-level importance when bundled but not individually. We consider it acceptable to include BCD 084 and its surrounding target notes into a bundle with BCD 105 and BCD 115, which would increase the IAPA score to 42 (County Importance) - this was implicit in paragraph 4.1.6. Fields LF03-09 (and their surrounding areas) didn't achieve a measure of importance on the Plantlife scale irrespective of how they were considered. LF field scores were universally low, and the routes between the fields also contained a species-poor assemblage, with the exception of the field at TN01, which achieved only 8, despite containing an unmanaged crop ideal for the proliferation of arable species, had they been present in the seedbank.

DCO Application document	Summary Position	Applicant's Response
		Initially, the first fields surveyed were selected on crop type: maize and sugar beet, to provide samples of early and late cultivation; and known to be cultivated prior to the survey. The survey included an extensive walkover of the Site and field margins of other crops were also chosen for survey where more interesting native arable flora were identified, including a broad bean crop, strips of seed and flower forage and a barley field - see the high IAPA scores for TN6 (broad bean) and TN9 (barley), and the 'widening of scope' referred to in 2.2.4. Negative results were not included, and the walkover routes not shown, however the margins of the fields between the survey sites were species poor, with no IAPA scoring species. Therefore a much wider area was surveyed than is shown. County importance is therefore appropriate for the area around BCD084, 105 and 115. The assemblages at LF03, 04, 05, 08 and 09 merited local importance, as no evidence was seen in these areas.
ES Volume 3, Appendix 7.9: Local Wildlife Site Verge Survey	There will be a permanent loss of land from the affected designations, irrespective of the conclusions of the impact assessment. So, there are planning policy (Local Plan S60 and S61) implications that will need to be assessed at Examination. Please clarify how the data has been used to apply the mitigation hierarchy and to inform the micro-sitting of any necessary passing places to minimise impacts on the biodiversity value of the LWSs concerned. A bespoke mitigation strategy will need to be agreed with relevant stakeholders.	Response provided in Applicant response to NKDC LIR paras 14.15-14.18
ES Volume 3, Appendix 7.9: Local Wildlife Site Verge Survey	Related to the preceding point, rock-rose (Helianthemum nummularium) was recorded. The report does not identify that this is a Near Threatened plant species that is a relevant ecological feature. Please clarify (using standard Red Data Lists and other readily available information) if	Helianthemum nummularium was not found during the Arable Flora Survey and therefore does not appear in **ES Volume 3, Appendix 7.8: Notable Arable Flora Survey [EN010149/APP/6.3]** [APP-089]. It was recorded in **ES Volume 3, Appendix 7.9: Local Wildlife Site Verge Survey [EN010149/APP/6.3]** [APP-090] as present in the road verge Local Wildlife Site (LWS) surveys in the following places: A15 Slate

DCO Application document	Summary Position	Applicant's Response
	any other notable plant species were recorded and if they would be affected	House to Danby LWS quadrat 5 (frequent) and A15 Green Man Road to Cuckoo Lane LWS quadrat 4 (abundant) and quadrat 5 (locally frequent). This survey evaluated the verges for calcareous grassland habitats using a range of indicator species (of which Helianthemum nummularium is one), but individual species conservation statuses were not considered as the emphasis is to assess impacts to the overall habitats. No other notable plant species were found during LWS road verge surveys. Mitigation is outlined in the **oCEMP [EN010149/APP/7.7.2]** [REP1-060] and **oLEMP [EN10149/APP/7.9.2]** [REP1-064] to mitigate for impacts to the LWS verges and specifically the calcareous grassland for which they are designated.
ES Volume 3, Appendix 7.11: Important Hedgerow Survey, Paragraphs 2.2.1.7-8	Please confirm that the methods applied accorded with the requirements set by the Hedgerow Regulations. This is not clear from the method statement. Specifically: Please confirm how many 30m survey sections were completed per hedgerow (the report states only that "an average 30m stretch of hedge" was surveyed). Please explain why ground flora was only recorded with 30m sections, and not the full length of the hedgerow. Please confirm that the full length of each hedgerow was walked to search for the relevant tree species named in the Regulations.	Hedgerow Regulation Surveys were targeted on the section of hedgerow due to be removed, given that these are generally short sections required for access. In general this was one 30m section centered on the area to be removed, not the entire hedge. The remainder of the hedgerows had already been subject to UK habitat survey and BNG condition assessment. The Hedgerow Regulations surveys, as detailed in **ES Volume 3, Appendix 7.11: Important Hedgerow Survey [EN010149/APP/6.3]** [APP-092] have been used to provide additional context in relation to hedgerow importance and mitigation requirements for those sections directly impacted.
ES Volume 3, Appendix 7.11: Important Hedgerow Survey Paragraphs 2.2.1.9	This report does not clarify how hedgerows were assigned to a UKHab type, and cross-references to the PEA report only in relation to the BNG condition assessment. Therefore, this report only provides a Hedgerow Regulations survey and assessment, and the data cannot be relied on for other purposes e.g. for assigning hedgerows to species-rich and poor types in accordance with the UKHab method. Please refer to the	The UK habitat description for hedgerow types were reviewed and then hedgerows were assigned to an appropriate UK Habitat Type in the field, and habitat condition assessment recorded for use with the BNG Metric. Condition assessment data for each hedge is included in **ES Volume 3, Appendix 7.14: Biodiversity Net Gain Assessment [EN010149/APP/6.3.2]** [REP1-032]. Therefore, the BNG baseline is correct. As noted above (response to query on Appendix 7.11 Important Hedgerow survey, Paragraphs 2.2.1.7-8), Hedgerow Regulations Assessment surveys were conducted

DCO Application document	Summary Position	Applicant's Response
	preceding comment for Appendix 7.1. Confidence is needed that the BNG baseline is correct.	on those hedgerows due to be directly affected by the development and the information used to provide additional context in relation to hedgerow importance and mitigation requirements. This information is presented within **ES Volume 3, Appendix 7.11: Important Hedgerow Survey [EN010149/APP/6.3]** [APP-092].
ES Volume 3, Appendix 7.11: Important Hedgerow Survey	Seventeen ecologically important hedgerows and 20 historically important hedgerows are identified (all of which are also priority habitats). Some of these would be impacted. As noted elsewhere, it is not clear how the mitigation hierarchy and other policy has been applied. It is also not clear why certain (if not all) impacts cannot be reasonably avoided. The applicant should provide further information in relation to this.	Response provided in Applicant response to NKDC LIR paras 14.15-14.18.
ES Volume 3, Appendix 7.12: Arboricultural Impact Assessment	The report identifies veteran trees and provides clarity that they can be adequately protected. There are some additional noteworthy trees that merit further attention given their sizes. Losses of large trees cannot be fully compensated, and these trees seem notable within the affected landscape. Are they all retained? I defer to the Tree Officers at the Council to agree that (if impacts are likely) these trees are not veteran. A specific tree of interest is T78 an historic ash coppice with regrowth of 1000mm diameter. Other trees of notable size (relative to others recorded) include T22 (1300mm), T23 (1130mm), T136 (950mm) and T287 (1200mm).	These large trees are all noteworthy (with the highest Category A awarded to them) and all are proposed to be retained as detailed in **ES Volume 3, Appendix 7.12: Arboricultural Impact Assessment [EN010149/APP/6.3]** [APP-093]. They were not considered to have the quantity or quality of features expected for a veteran tree. However, many provide good habitat features and potential veteran status in the future. The trees referenced have the following categories; T22 Cat A123 (1300mm), T23 Cat A123 (1130mm), T078 Cat A2,3, T136 Cat A23 (950mm) and T287 Cat A23 (1200mm). Additional detail on ancient trees is provided in Applicant response to NKDC LIR para 14.51.
ES Volume 3, Appendix 7.14:	The general approach and attention to detail in developing the habitat design is acknowledged. However,	Comment noted.

DCO Application document	Summary Position	Applicant's Response
Biodiversity Net Gain Assessment	there are some matters requiring review and comment before the report can be agreed.	
ES Volume 3, Appendix 7.14: Biodiversity Net Gain Assessment	The BNG assessment will not be agreed until such time that the District Planning Authority has been provided with the original assessment (i.e. the BNG Metric (macro-enabled format)) for examination.	The BNG spreadsheet could not be submitted to PINS as they do not accept Excel spreadsheets, however this will be issued directly to North Kesteven District Council in due course.
ES Volume 3, Appendix 7.14: Biodiversity Net Gain Assessment	Good practice expects use of habitat reference codes to allow plans to be related to the data entered into the metric and the underpinning habitat data/evidence. Currently, there is insufficient clarity on the locations of the assessed polygon and line features identified in the report (including the screenshots of the metric), so there is no way for third parties to check and verify the assessment. Minimum requirements/expectations for transparency have therefore not been met.	Response provided in Applicant response to NKDC LIR para 14.46
ES Volume 3, Appendix 7.14: Biodiversity Net Gain Assessment	The report does not reference the detailed requirements set out within the Central Lincolnshire Biodiversity Net Gain Guidance for Planners, Ecologists & Applicants (May 2024). Please confirm that the BNG assessment is compliant with this guidance and explain how it has been addressed.	**ES Volume 3, Appendix 7.14: Biodiversity Net Gain Assessment [EN010149/APP/6.3.2]** [REP1-032] will be updated to refer to how the assessment is compliant to requirements of Central Lincolnshire Biodiversity Net Gain Guidance for Planners, Ecologists & Applicants (May 2024). The report will be amended in due course taking account of comments and re-issued at Deadline 3.
ES Volume 3, Appendix 7.14: Biodiversity	The outline LEMP states that the development is likely to be phased. Please confirm that this has been considered, and how it will be addressed. The Central Lincolnshire guidance identifies requirements in relation to phased development.	The construction is anticipated to be split into two phases over a 48-month construction period, and subject to consent being granted, the earliest construction is anticipated to start is in 2027. There is a likelihood of overlapping construction works across the different parts of the Site, therefore the phases will be overlapping and therefore in practice, is assumed to be continuous process from start to finish over a period of 48

DCO Application document	Summary Position	Applicant's Response
Net Gain Assessment		months, therefore it is not considered a 'phased' project in the typical sense. An indicative construction programme is set out in Table 3.18 of **ES Volume 1, Chapter 3: Proposed Development Description [EN010149/APP/6.1.2]** [REP1-022]. The **oLEMP [EN10149/APP/7.9.2]** [REP1-064] states that the Proposed Development is likely to be constructed in phases or parts, and this to allow the oLEMP to be discharged in parts. It is envisaged that the detailed LEMP(s) may be prepared, approved, and implemented for individual parts or phases of the Proposed Development. As a result, there could be multiple LEMP(s) prepared in accordance with this **oLEMP [EN10149/APP/7.9.2]** [REP1-064]. Each LEMP will be produced in line with this **oLEMP [EN10149/APP/7.9.2]** [REP1-064] following grant of the DCO and approved by the local planning authority in consultation with relevant parties in advance of the date of commencement of the relevant phase or part of the Proposed Development.
ES Volume 3, Appendix 7.14: Biodiversity Net Gain Assessment	Please provide further explanation for how the habitats within the array have been calculated. What ratio has been used to determine the relative balance between infrastructure and vegetation?	The BNG assessment, as detailed in **ES Volume 3, Appendix 7.14: Biodiversity Net Gain Assessment [EN010149/APP/6.3.2]** [REP1-032], has fully accounted for all permanent development and associated habitat loss. For grassland under the solar PV modules the approach taken is that the installation of solar PV modules does not equate to habitat loss, but equates to habitat modification as the habitat underneath the modules is still present. A precautionary approach has been taken for the habitats within the array areas. It is expected that a relatively herb-rich modified grassland sward will be achievable through creation and suitable management and consider the following condition assessment criteria to be achievable: 6-8 vascular plant species per m2 Varied sward height Scrub<20% of total area Cover of Bracken <20%

DCO Application document	Summary Position	Applicant's Response
		This would usually result in modified grassland achieving moderate condition however it is acknowledged that the areas underneath the solar PV arrays, while being able to support a grassland sward, will cause a shading impact. The proposed condition has been decreased to fairly poor to account for these shaded areas. This approach considers the grassland under and around the arrays as one functional modified grassland area (per array field), instead of splitting each array field into areas directly underneath the array, areas in between the arrays and areas around the sides of the arrays, and assessing them separately.
ES Volume 3, Appendix 7.14: Biodiversity Net Gain Assessment	The accompanying Figures suggest that 'hedgerow with ditch' types may be over-accounted for within the metric. These categories do not apply if the relevant ditch is a watercourse (page 38 of the statutory guidance document).	The habitat surveys, and subsequent riparian mammal surveys, recorded many ditches as dry and therefore not meeting the BNG classification of a ditch in its own right (<5m and water >4 months of the year). Because of this, they were classed as hedgerows associated with bank or ditch as per the guidance
ES Volume 3, Appendix 7.14: Biodiversity Net Gain Assessment	Please confirm that all relevant trees, including hedgerow trees that will be removed, have been accounted for within the metric. Appendix 7.12, Table 2 indicates that there would be losses of c. 29 trees.	The length of hedgerows to be removed have been captured within the metric but not the individual trees to be removed within these hedgerows. This will be addressed and updated in **ES Volume 3, Appendix 7.14: Biodiversity Net Gain Assessment [EN010149/APP/6.3.2]** [REP1-032] to be issued at Deadline 3.
ES Volume 3, Appendix 7.14: Biodiversity Net Gain Assessment Table 2, Principle 2	It is stated that the ES details how the mitigation hierarchy has been addressed. I identify no clear account of this in Chapter 7, particularly in relation to impacts on LWSs and hedgerow loss. Please provide further detail on how the mitigation hierarchy has been applied for important habitats, and why habitat losses cannot be avoided (irrespective of the ability to compensate for losses).	Response provided in Applicant response to NKDC LIR paras 14.15-14.18.

DCO Application document	Summary Position	Applicant's Response
	As an example, there would seem to be viable ("reasonably practicable") technical options for avoidance of hedgerow loss for electrical connections and exploration of such measures (e.g. in relation to important hedgerows) is advised as necessary within the relevant NPS (EN-5 paragraph 2.9.19).	
ES Volume 3, Appendix 7.14: Biodiversity Net Gain Assessment Paragraph 2.2.2	Please provide the methods for how hedgerows have been surveyed to correctly assign their UKHab types. The important hedgerows survey does not meet this need as it is not the prescribed method. This matter was identified previously within the response to the PEIR.	Response provided in Applicant response to NKDC LIR paras 14.22-14.24 and in this document above, in response to queries on Appendix 7.11 Important Hedgerow survey, Paragraphs 2.2.1.7-8 and 2.2.1.9.
ES Volume 3, Appendix 7.14: Biodiversity Net Gain Assessment Paragraph 2.2.4	The approach to assigning strategic significance does not accord with the local requirements.	**ES Volume 3, Appendix 7.14: Biodiversity Net Gain Assessment [EN010149/APP/6.3.2]** [REP1-032] will be updated in line with Central Lincolnshire Biodiversity Net Gain Guidance for Planners, Ecologists & Applicants on strategic significance. The report will be amended in due course taking account of comments and re-issued at Deadline 3.
ES Volume 3, Appendix 7.14: Biodiversity Net Gain Assessment	States no irreplaceable habitats are present within the Order Limits. This does not seem correct. I understand that there is at least one veteran tree (retained) in the Order Limits.	**ES Volume 3, Appendix 7.14: Biodiversity Net Gain Assessment [EN010149/APP/6.3.2]** [REP1-032] will be amended to clarify that the veteran trees are the only irreplaceable habitat on site. The report will be amended in due course taking account of comments and re-issued at Deadline 3.

DCO Application document	Summary Position	Applicant's Response
Paragraph 2.2.5		
ES Volume 3, Appendix 7.14: Biodiversity Net Gain Assessment Table 3	Please provide further explanation for classifying all ponds as "non-priority" habitat. What is the evidence for this assessment?	The pond classification was reviewed in line with information gathered in the PEA survey. Ponds were considered not to pass any of the five criteria for priority habitat. No great crested newts, or other protected species, were recorded in the ponds on site.
ES Volume 3, Appendix 7.14: Biodiversity Net Gain Assessment Table 8	Please explain use of "fairly poor" condition for the legume-rich modified grassland. Please also explain (if this is material to the target condition) how it is reasonable to assume that a varied sward height can be achieved.	See response for **ES Volume 3, Appendix 7.14: Biodiversity Net Gain Assessment [EN010149/APP/6.3.2]** [REP1-032]. A varied sward height would be achieved through the mix of species within the sward, which will provide an element of structural diversity given, and the management of the areas, be it cutting or grazing. Shading from the panels will also influence the growth characteristics of a portion of the sward, which will be different to the areas that are fully exposed to sun.
ES Volume 3, Appendix 7.14: Biodiversity Net Gain Assessment Table 8 and 9	I am not satisfied that it is realistic or precautionary to assume that good quality neutral grassland can be created. In the absence of further clarity on this, I do not think that all necessary criteria can be met. Specific criteria of concern are those relating to sward height and bare ground.	A varied sward height would be achieved through plant species composition, which will be diverse and therefore lead to structural heterogeneity. This will be ensured further by appropriate management, either cutting or grazing, which would be adaptive to avoid a homogenous structure. Bare ground presence is likely given the low level of disturbance provided by wild animals in the local area and shading from panels. Bare ground areas can be provided by mechanical means as a last resort should this not occur, which would form part of the adaptive management. Management and monitoring to establish and maintain good quality neutral grassland is detailed in and secured by the **oLEMP [EN10149/APP/7.9.2]** [REP1-064].

DCO Application document	Summary Position	Applicant's Response
ES Volume 3, Appendix 7.14: Biodiversity Net Gain Assessment Table 10	I agree that it is feasible to achieve hedgerows of good condition. Please provide greater clarity on the balance between new plantings and gapping up of existing hedgerows i.e. the balance between habitat creation and enhancement. This should be distinguished on the relevant Figures. Confidence is needed that any gapping up of existing hedgerows is addressing baseline failures of the relevant criterion (B2), so the assessment needs to be traceable back to the baseline evidence for the relevant hedgerows.	The location of new planting is shown on Appendix 1: Green Infrastructure Parameters of the **oLEMP [EN10149/APP/7.9.2]** [REP1-064]. This includes approximately 15,563m of new hedgerows and 16ha of tree belt planting. Each LEMP would include details of the location, number, species, size and planting density of any proposed planting including the details of any proposed tree, hedgerow and shrub planting. The LEMP(s) would require approval prior to commencement of construction and would be required to be substantially in accordance with the framework set out in the **oLEMP [EN10149/APP/7.9.2]** [REP1-064]. Prior to submission of the detailed LEMP(s), a landscape architect will undertake a detailed survey of all hedgerows within the Order Limits and identify lengths of hedgerow which require infilling of gaps or increasing in density to provide a reasonable degree of screening to mitigate the visual effects of the Proposed Development. Linear gaps of more than 1m and lengths of hedgerow where in the opinion of the landscape architect the hedgerow is sparse or thin will be geo-referenced and recorded. Gaps identified will be infilled with new hedgerow plants and where hedgerows are considered to be insufficiently dense by the landscape architect, a supplementary row of hedgerow planting will be implemented as part of the detailed planting proposals submitted with the LEMP(s). This information is outlined in the **oLEMP [EN10149/APP/7.9.2]** [REP1-064]. In **ES Volume 3, Appendix 7.14: Biodiversity Net Gain Assessment [EN010149/APP/6.3.2]** [REP1-032] the only hedgerow considered enhanced through gap filling is hedgerow 88. The baseline hedgerow length includes the gaps in this instance and influences the baseline condition, failing criteria B2, instead of mapping the smaller sections of hedgerow in between the gaps and considering the gap filling as habitat creation. New hedgerow planting has been considered as habitat creation in the metric.

DCO Application document	Summary Position	Applicant's Response
		Other hedgerows identified for gap filling by the landscape survey mentioned above will be cross referenced with the baseline condition assessment. Hedgerows where gaps are >5m, or make up >10 m, and are identified as suitable for gap filling may be considered as enhanced if they meet the threshold for the next condition up. Hedgerows that don't fail criteria B2 may also have gaps that are filled. These would be considered as retained under BNG unless additional intervention leads to enhancement. Following completion of construction, monitoring of all habitats being created and enhanced for the delivery of biodiversity net gain (including hedgerows) will be undertaken in years 1, 2, 3 and 5, 10, 15, 20, 25 and 30 against the BNG Metric target habitat types and condition.
ES Volume 3, Appendix 7.14: Biodiversity Net Gain Assessment, table 11	This does not mention creation of culverts. Please confirm this is correct, or otherwise amend the metric. Please clarify the location within the statutory guidance that states that watercourses do not need to be enhanced if there is no baseline habitat loss	Culverts will be reviewed in **ES Volume 3, Appendix 7.14: Biodiversity Net Gain Assessment [EN010149/APP/6.3.2]** [REP1-032] and updated, taking account of comments and re-issued at Deadline 3. The river condition assessment for those watercourses that are present has been included with the update to **ES Volume 3, Appendix 7.14: Biodiversity Net Gain Assessment [EN010149/APP/6.3.2]** [REP1-032] submitted at Deadline 1.
ES Volume 3, Appendix 7.14: Biodiversity Net Gain Assessment, Appendix B	Please review the woodland assessment to confirm that criterion F has been assessed correctly. Clearings only need to be considered for woodlands above 10ha size, if the woodland is smaller the maximum 3 points would apply. This would alter the baseline condition score for some of the "other woodlands."	Woodland criterion F will be reviewed in **ES Volume 3, Appendix 7.14: Biodiversity Net Gain Assessment [EN010149/APP/6.3.2]** [REP1-032] and updated for Deadline 3.
ES Volume 3, Appendix 7.14:	Line of trees feature 33 would appear to be an ecologically valuable line of trees as the scoring indicates the presence of >1 veteran trees. Please review and	Line of trees 33 will be reviewed in **ES Volume 3, Appendix 7.14: Biodiversity Net Gain Assessment [EN010149/APP/6.3.2]** [REP1-032]. Report amendments will be carried out in due course taking account of comments and re-issued at Deadline 3.

DCO Application document	Summary Position	Applicant's Response
Biodiversity Net Gain Assessment Appendix B	confirm (so that the baseline is not under-valued) for all line of tree features with reference to the relevant UKHab guidance (which includes a relevant definition for mature trees as a secondary code).	
Outline CEMP, Paragraph 2.1.2	The list of responsible parties omits reference to an ecological specialist. Please review to ensure alignment with expectations set in Table 4. The identified environmental manager cannot be assumed to meet this need.	This change has been be made to the **oCEMP [EN010149/APP/7.7.2]** [REP1-060] which has been updated at Deadline 2.
Outline CEMP, Table 4	The biodiversity provisions seem reasonable. However, I identify no specific provisions in relation to Schedule 1 birds other than barn owl. Quail is a specific risk in relation to works affecting arable farmland. Other Schedule 1 birds are identified in the relevant reports. Please amend to provide clear instruction on these species. Further update may be needed once clarifications have been provided on the matters raised above.	Response provided in Applicant response to NKDC LIR para 14.27. The **oLEMP [EN10149/APP/7.9.2]** [REP1-064] outlines requirement for pre-construction surveys. Pre-construction surveys would identify if quail (or any Schedule 1 species) are present and determine the appropriate course of action should they be nesting in an area subject to impacts.
Outline LEMP	Please note that the Central Lincolnshire guidance requires a HMMP that accords with the statutory templates. Any divergence from the templates (which may be appropriate for a site of this size and potential complexity) should be agreed in advance with the Council.	Noted. The final LEMP will ensure accordance with Habitat Management and Monitoring Plan (HMMP) statutory templates and any divergence will be agreed with the LPA in advance. The **oLEMP [EN10149/APP/7.9.2]** [REP1-064] outlines the requirement for a HMMP.
Outline LEMP	Pending the requested clarifications on the ground nesting bird impact assessment, I am not certain that a specific strategy/specification for ground nesting birds is not a reasonable requirement. At present reliance is	The **oLEMP [EN10149/APP/7.9.2]** [REP1-064] has outlined the strategy with regards to mitigation and enhancement for ground nesting and other bird species as has **ES Volume 1, Chapter 7: Biodiversity [EN10149/APP/6.1.2]** [REP1-024]. It would seem reasonable to place reliance on the mitigation measures we have outlined – monitoring

DCO Application document	Summary Position	Applicant's Response
	placed on the habitat creation and management strategy being sufficient.	outlined in the **oLEMP [EN10149/APP/7.9.2]** [REP1-064] would monitor efficacy of mitigation and ensure remedial action if mitigation not maintaining numbers of farmland birds at baseline levels. Further details on the impact assessment calculations are provided in Applicant response to NKDC LIR para 14.27.
Outline LEMP, Paragraph 5.3.1	I welcome the commitment to provide bat, bird and owl boxes. Please advise on the numbers proposed and the broad specifications for these. This is needed to set the parameters for agreement post-consent, and to permit confidence in the permanence of the habitat provision.	The installation of bat and bird boxes is outlined in the **oLEMP [EN10149/APP/7.9.2]** [REP1-064]. The exact number and specification will be provided at detailed design stage to inform the post consent agreement, in consultation with the LPA.
Outline LEMP, Paragraph 5.3.1	It is welcome that the relevance of soil testing to the agreement of final specifications has been recorded. If action is needed to reduce fertility this will affect the timeline for habitat creation and the related delay entered into the BNG metric. Therefore, there is an important risk needing to be acknowledged, and this may not be fully understood until the time of discharge of Requirements. What (if anything) can be done to address/plan for this risk and provide greater confidence that the committed level of BNG can be achieved later within the Order Limits?	The **ES Volume 3, Appendix 7.14: Biodiversity Net Gain Assessment [EN010149/APP/6.3.2]** [REP1-032] has already been reasonably pragmatic with the level of condition we are expecting post development habitats to achieve being mindful that we may have high nutrient levels. The **oLEMP [EN10149/APP/7.9.2]** [REP1-064] also notes that following soil tests a period of nutrient reduction may be required – for example cropping without fertilizer for a year prior to the reseeding and establishment of habitat. This will be considered at detailed design once the soil survey results are known and the BNG assessment reassessed. A related delay in the metric for nutrient reduction should not be applied in this instance as this would be part of the enhancement or creation process, if needed, which would begin from year 1 and still allow the habitats to meet their predicted condition within the relevant timeframes.
Outline LEMP, Paragraph 7.2.4	The worst-case assumptions/scenario for plantings over utilities are not clearly defined and instead the relevant parameters appear to be left for resolution later. What are the worst-case parameters and how do these affect the BNG assessment?	Planting of trees, such as oak and ash, would not be permitted in the sections of hedgerow re-instated over electrical cables, due to potential for damage from deep roots. However, hedgerows would be re-instated over cables as there are no restrictions on planting of hedgerow shrubs (species usually less than 5m high) due to shallower root systems. This will be secured by amendments to the **oLEMP [EN10149/APP/7.9.2]** [REP1-064] to be submitted at Deadline 3.

DCO Application document	Summary Position	Applicant's Response
		Re-instatement would not be possible for hedgerow sections removed to maintain open vehicle road/track access. However, sections of hedgerow removed for passing bays or bellmouths, would be re-instated along the edges of the widened roads after construction. This has been factored into the BNG assessment as detailed in **ES Volume 3, Appendix 7.14: Biodiversity Net Gain Assessment [EN010149/APP/6.3.2]** [REP1-032].
Outline LEMP, Paragraphs 7.2.5-6	The monitoring approach is not agreed. All habitats should be monitored and reported on in accordance with the Central Lincolnshire guidance. Mitigation for scarce arable flora should be provided for at least 30 years (consistent with the wider habitat requirements) and monitoring should be undertaken to verify that this management is being applied as approved.	Response provided in Applicant response to NKDC LIR para 14.42. The **oLEMP [EN10149/APP/7.9.2]** [REP1-064] outlines requirements for pre-construction surveys
Additional Supplementary Ecology Review of BNG – Appendix B		
	The metric does not include any data relating to trees. In my previous response I noted that there appear to be tree losses and I queried the relevance of these to the BNG calculation.	**ES Volume 3, Appendix 7.14: Biodiversity Net Gain Assessment [EN010149/APP/6.3.2]** [REP1-032] will be updated to capture all tree losses at Deadline 3.
	No irreplaceable habitats are recorded in the metric. I understand that there is at least one veteran tree in the Order Limits.	As stated above, **ES Volume 3, Appendix 7.14: Biodiversity Net Gain Assessment [EN010149/APP/6.3.2]** [REP1-032] will be amended to clarify that veteran trees are the only irreplaceable habitat on site.
	The additional information does not demonstrate that Strategic Significance has been applied in accordance with the Central Lincolnshire BNG guidance. This should be reviewed and the metric amended, as necessary.	This is shown in **ES Volume 3, Appendix 7.14: Biodiversity Net Gain Assessment [EN010149/APP/6.3.2]** [REP1-032] Paragraph 2.2.4.

DCO Application document	Summary Position	Applicant's Response
	I have not been able to verify that all of the woodland entered as 'other woodland' is of this type and not a priority habitat type e.g. the stand northeast of TN10, part of which is shown on the 1st Edition Ordnance Survey map.	**ES Volume 3, Appendix 7.1: Preliminary Ecological Appraisal [EN010149/APP/6.3.2]** [REP1-032] recorded this woodland to be a primarily broadleaved woodland plantation with some Scots Pine. Therefore other woodland, broadleaved is considered to be a suitable classification of this in the Metric.
	Explanation is needed for each incidence of use of the fairly poor condition category.	This is shown in **ES Volume 3, Appendix 7.14: Biodiversity Net Gain Assessment [EN010149/APP/6.3.2]** [REP1-032] Table 8.
	It is not clear to me why the proposed uplifts in condition or distinctiveness of grassland types is enhancement rather than habitat creation. I am not satisfied that the target grassland types are realistically achievable without interventions such as re-sowing.	The metric guidance states that the enhancement function is used when there is 'a change to a higher distinctiveness habitat within the same broad habitat group compared to the baseline state'. Enhancement has therefore been used when considering grassland enhancement from a lower distinctiveness sward to one of higher distinctiveness. This includes interventions such as re-sowing.
	The trading rules do not appear to have been met for hedgerows – refer to the 'Trading Summary Hedgerows' tab.	**ES Volume 3, Appendix 7.14: Biodiversity Net Gain Assessment [EN010149/APP/6.3.2]** [REP1-032] has been updated indicating how the trading rules for hedges will be met and corresponding changes made to the **oLEMP [EN10149/APP/7.9.2]** [REP1-064] as part of the Deadline 1 submission.
	The metric does not record the creation of culverts, are there any affecting wet ditches? Similarly, and as noted in my previous response, clarity is needed on why 10% BNG is not required in relation to watercourses.	The creation of any new culverts will not be required as detailed and confirmed in the **Response to First Written Questions (ExQ1) [EN010149/APP/8.14]** [REP1-071] Q1.4.8. **ES Volume 3, Appendix 7.14: Biodiversity Net Gain Assessment [EN010149/APP/6.3.2]** [REP1-032] was updated at Deadline 1 and a response to this was provided in **Response to First Written Questions (ExQ1) [EN010149/APP/8.14]** [REP1-071] Q1.4.2.
	I have not been able to identify the location of the section of Dorrington Dike coinciding with the Order Limits so I have not been able to verify that this is not a priority habitat. The assessor does not appear to have consulted	The section of watercourse within the Order Limits is a small tributary of the Dorrington Dyke and not the Dorrington Dyke itself. The priority habitats layer was consulted and the watercourse within the Order Limits is not considered a priority.

DCO Application document	Summary Position	Applicant's Response
	the two public access datasets on priority rivers, and these mark parts of this Dorrington Dike/Digby Beck as a priority habitat.	The river condition assessment for those watercourses that are present has been included with the update to **ES Volume 3, Appendix 7.14: Biodiversity Net Gain Assessment [EN010149/APP/6.3.2]** [REP1-032] submitted at Deadline 1.
	The information entered into the metric does not state that the mandatory method has been applied to determine the baseline condition of Digby Dike/Beck i.e. the MoRPh method which must be completed by an accredited surveyor. The metric information refers to an RCA survey (which is a different survey method) but also states that the watercourse was not surveyed. Further explanation is required on the work completed and any limitations associated with this.	The Metric guidance states that you should conduct a 'River Condition Assessment (RCA)' and uses this terminology. The RCA includes two elements: • A field element (the MoRPh survey) which records features of the watercourse within the site and generates a preliminary condition score. • A desk based element to derive the 'river type' of the longer reach. The results of the MoRPh survey and the river type assessment are combined to provide the final condition class (i.e., that used in the Metric). The mandatory method has therefore been used, and conducted by an accredited surveyor. The RCA for those watercourses that are present has been included with the update to **ES Volume 3, Appendix 7.14: Biodiversity Net Gain Assessment [EN010149/APP/6.3.2]** [REP1-032] submitted at Deadline 1.

Appendix 2 - Climate Technical Note

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1.1. Context and purposes of this note

1.1.1. As part of the Environmental Impact Assessment ('EIA'), an assessment of climate was undertaken which is presented in **ES Volume 1, Chapter 8: Climate [EN010149/APP/6.1]** [APP-048]. This technical note does not alter the results or conclusions of that chapter.

1.1.2. This technical note has been prepared by the original author of **ES Volume 1, Chapter 8: Climate [EN010149/APP/6.1]** [APP-048] to supplement and provide additional context to that chapter, with reference to the assessment of GHG savings of the Proposed Development. This is following comments received from Lincolnshire County Council and North Kesteven District Council in response to the Examining Authority's First Written Question 1.5.2 – Baseline for Assessment Comparisons [REP1-089] [REP1-103] and observations made by the SoS in the DCO decision process of recent developments, notably Gate Burton Energy Park (July 2024)[1] and West Burton Solar Project (Jan 2025)[2].

1.1.3. For these two applications, the climate assessment compared the GHG savings of the developments against the most efficient fossil-fuel generated electricity currently in use – that from a Combined Cycle Gas Turbine (CCGT) plant. The decision letter from the SoS for both projects noted that the SoS considered "that comparison to a counterfactual CCGT facility is an inappropriate baseline, noting that 2011 NPS EN-1 requires all combustion power stations with a capacity over 300MW to be constructed Carbon Capture Ready, and he therefore does not consider it viable to use unmitigated emissions as a baseline any longer". Whilst the Decision letters for these projects did not suggest a preferred alternative approach, the SoS did note that the assessment for the West Burton Solar Project included a comparison of the carbon intensity of that development to that of nuclear and offshore and onshore wind energy, and to the current UK grid. In both applications, the SoS was ultimately satisfied that both proposed developments would "result in considerable carbon savings compared to the UK grid average and would support the trajectory to net zero".

1.1.4. **ES Volume 1, Chapter 8: Climate [EN010149/APP/6.1]** [APP-048] also included a comparison of the Proposed Development's carbon intensity with a counterfactual baseline based on a Combined Cycle Gas Turbine (CCGT) facility, an approach previously accepted as appropriate. The chapter made reference to the SoS's decision on the Gate Burton application, and an extract is provided below for context:

8.7.14 Dividing the lifetime emissions of the Proposed Development (3,004,796 tCO_2e) by the lifetime energy generation (35,736,262 MWh) gives a total lifecycle carbon intensity value of 84.1 gCO_2e/kWh.

8.7.15 However, the total lifecycle carbon intensity value cannot be directly compared with the UK grid carbon intensity or projected future intensities, published by the Department for Energy Security and Net Zero and the Department for Business, Energy and Industrial Strategy (2024) [Ref. 8- 22]. This is because those intensities comprise direct operational emissions only, and do not include emissions related to the fuel supply chain or maintenance activities. When calculating the GHG emissions from electricity based upon the fuel mix, renewable energy such as that from solar farms, is assumed to emit 0 g/kWh.

8.7.16 The Proposed Development will provide electricity to the national grid that may otherwise be generated by processes with higher carbon intensities, and the benefit of the Proposed Development, with regards to climate, is to replace the electricity generation from fossil fuels. Therefore, to assess the GHG savings of the Proposed Development, operational emissions from a Combined Cycle Gas Turbine have been used as a comparison, as it is currently the most carbon-efficient fossil-fuelled technology available.

8.7.17 In the July 2024 Decision Letter for Gate Burton Energy Park [Ref. 8-25] the Secretary of State commented that it considered a Combined Cycle Gas Turbine an inappropriate baseline for these comparisons as "2011 NPS EN-1 requires all combustion power stations with a capacity over 300MW to be constructed Carbon Capture Ready". This still holds true in NPS EN-1 (2023) [Ref. 8-5]. The future energy baseline is uncertain, and whilst there are requirements for all combustion power stations with a capacity over 300 MW to be constructed to be 'Carbon Capture Ready', this does not guarantee the application of carbon capture technology, nor the timeframes to which it may be applied. The need for carbon abatement is immediate and technologies that can do so in the short-term, such as the Proposed Development, play a vital role in the pathway to Net Zero. As such, and in the absence of any more appropriate identified methodology, this assessment maintains that a comparison to Combined Cycle Gas Turbine emissions is a robust and appropriate method to understand the level of GHG savings from the Proposed Development.

8.7.18 The carbon intensity of a Combined Cycle Gas Turbine is 354 gCO_2e/kWh, and so the Proposed Development would emit 270 g fewer CO2e per kWh than if the same electricity were generated by a gas fired Combined Cycle Gas Turbine, representing savings of 76%. This is not a direct comparison, as the 84.1 gCO_2e/kWh calculated here is a lifecycle carbon intensity value and the carbon intensity of the Combined Cycle Gas Turbine is assumed to represent operational emissions (not including maintenance, replacement and repair of components). This results in a conservative assessment of emissions savings for the Proposed Development.

8.7.19 Over the proposed 40 years per phase lifetime, the operation of the Proposed Development results in GHG savings of over 9.6 million tonnes CO_2e when compared to Combined Cycle Gas Turbine-generated electricity. It should be noted that, like the UK grid carbon intensities published by the UK Government, this comparison does not account for the embodied carbon in the Combined Cycle Gas Turbine and is therefore a conservative estimate.

1.1.5. The author stands by the comparison to CCGT as the most appropriate methodology to assess the GHG savings of the Proposed Development, as the core objective of renewable energy deployment is to displace electricity that would otherwise be generated using higher-carbon-intensity sources.

1.1.6. Nevertheless, in response to the matters raised in the SoS's recent decision letters and in Lincolnshire County Council Local Impact Report, Sections 2 – 4 of this note assess the GHG savings of the Proposed Development using alternative methodologies. These are as follows:

- Comparison with Grid Electricity Emission Factors for 2024;
- Comparison with projected Grid Electricity Emission Factors to 2050; and
- Comparison to alternative forms of energy.

1.2. Grid intensity comparison: average 2024 electricity grid factor

1.2.1. The UK government publishes annual emissions factors for electricity supplied to the grid, to allow for annual company reporting[3]. For 2024 (the most recently published data) the average grid electricity emission factor is 207.05 gCO2e/kWh. However, this factor reflects "only generator emissions in the operational phase and does not include emissions related to the fuel supply chain or maintenance activities[4]". The UK electricity well-to-tank ('WTT') emissions factor, comprising those emissions associated with the extraction, refining and transportation of primary fuels before their use in the generation of electricity, is 45.9 gCO2e/kWh. Therefore, the overall average grid emission factor, inclusive of WTT, is 252.95 gCO2e/kWh. This is an emissions factor representative of purely operational emissions, and does not include any emissions associated with the construction or decommissioning of the differing energy technologies, or emissions from the operational maintenance, repair and replacement of them.

1.2.2. When deriving this emissions factor, the UK government includes those emissions from fossil fuel-, nuclear- and renewable-sourced energy, as well as those from imported electricity. Since renewable energy sources have no direct operational emissions, the emissions factor for their contribution to the grid is taken as 0 g/kWh4.

1.2.3. It is therefore inappropriate and potentially misleading to compare these UK Government grid emissions factors with the operational emissions of solar developments (which comprise emissions from activities not considered under the government methodology, such as maintenance and repair activities). If the same methodology used in calculating national grid emissions factors was adopted to assess the savings of the Proposed Development, the operational emissions from the Proposed Development

would be 0 gCO_2e/kWh, which would not allow for a meaningful comparison of GHG savings.

1.2.4. If, however, this methodology is adopted, the carbon intensity of the Proposed Development has been calculated as 84.1 gCO2e/kWh across the whole lifecycle (i.e., construction, operation, decommissioning).

1.2.5. The UK average grid factor is calculated purely on operational emissions (emissions associated with fossil-fuel based energy). The carbon intensity of the Proposed Development based purely on operational emissions (repair, replacement and maintenance) is 26.7 gCO2e/kWh.

1.2.6. Table 1 compares the operational carbon intensity of the Proposed Development with the average value for the UK grid in 2024.

Table 1: Comparison of operational emissions from the Proposed Development to the average UK grid factor in 2024

	GHG intensity (gCO_2e/kWh)				
Source	**Fossil fuel emissions**	**Well to Tank emissions**	**Repair, maintenance and replacement emissions**	**Total**	**Source**
Proposed Development	0	0	26.7	26.7	**ES Volume 1, Chapter 8: Climate [EN010149/APP/6.1]** [APP-048]
UK Grid Electricity (2024)	207.05	45.9	Not included	252.95	DESNZ (2024) UK Government GHG Conversion Factors for Company Reporting
Proposed Development as % of UK grid				**10.6%**	

1.2.7. **Error! Reference source not found.** shows that the electricity generated from the Proposed Development contributes to 10.6% of the GHG emissions from the national grid in 2024 per kWh; this is approximately 10 times more efficient than the current UK grid. Using this methodology the Proposed Development therefore significantly contributes to the UK grid's transition to new zero.

1.3. Grid intensity comparison: projected future grid electricity emission factors

1.3.1. Evaluating avoided emissions solely against the current electricity mix—which includes a significant proportion of fossil fuel generation— does not consider the full operational lifespan of solar developments. Over time, the UK's electricity grid is projected to become significantly lower-carbon due to the development of renewable projects such as this, with a declining share of fossil fuels.

1.3.2. DESNZ publishes long-term projected grid electricity emission factors[5]. Table 1 of the DESNZ-published toolkit provides long-run marginal projections of future GHG emissions factors for UK grid electricity generation. According to the guidance, these long-run marginal emissions factors should be used to represent small changes in electricity consumption or generation—such as the addition of new PV generation capacity to the UK grid. These factors support policy analysis against a baseline aligned with a net zero-consistent power sector, making them an appropriate baseline for assessment.

1.3.3. The projected emissions factors are derived from indicative scenarios of the potential future energy generation mix. However, significant uncertainty remains, especially from the mid-2030s onward, making it impossible to precisely estimate the emissions savings from the Proposed Development.

1.3.4. Table 2 provides a comparison of the DESNZ-projected long run marginal grid future electricity emissions factors to the operational GHG intensity for the Proposed Development (0.027 kgCO2e/kWh) in the Project's opening year (2030, which sits within the 5th Carbon Budget) and over the 6th and 7th Carbon Budget periods.

Table 1: Project GHG Intensity comparison to long run marginal grid generation factors in opening year and across 6th and 7th Carbon Budget period

Carbon budget period	Year	Long Run Marginal Generation grid factor (kg CO_2e/kWh)	Project operational GHG intensity as % of Grid factor
5	2030	0.08500	31%

Carbon budget period	Year	Long Run Marginal Generation grid factor (kg CO_2e/kWh)	Project operational GHG intensity as % of Grid factor
	2031	0.06523	41%
	2032	0.05006	53%
6	2033	0.03842	70%
	2034	0.02949	91%
	2035	0.02263	118%
	2036	0.01737	154%
	2037	0.01333	200%
7	2038	0.01023	261%
	2039	0.00785	340%
	2040	0.00602	443%
	2041	0.00568	470%
	2042	0.00362	739%

1.3.5. Due to the increase in renewable energy inputs (such as the Proposed Development), the UK national electricity network is projected to decarbonise significantly over the coming years, consistent with reaching net zero by 2050.

1.3.6. The operational emissions of the Proposed Development are estimated to be larger than projected emissions factors from the 6th Carbon Budget. However, it is important to note, as previously mentioned, that this is not a direct comparison as the renewable energy inputs to calculate the projected electricity emissions factors are taken as 0 kg CO_2e/kWh. The UK electricity grid cannot achieve the projected low emissions factors without renewable energy projects, such as the Proposed Development.

1.4. Comparison to alternative forms of energy

1.4.1. IEMA guidance[6] states that a comparable baseline must be established to serve as a reference point for assessing the impact of a new project. This baseline may include "GHG emissions arising from an alternative project design for a project of this type." If it is assumed that the future energy baseline necessitates increased integration of renewable technologies into

the National Grid, then it may be appropriate to evaluate the impact of a solar development in comparison with other renewable energy technologies.

1.4.2. The carbon intensities of differing technologies are shown in Table 3, and demonstrate that the operational emissions of the Proposed Development are comparable with other low carbon energy generation.

Table 2: Estimated emissions of selected electricity generation technologies

	Energy generation technology	GHG Intensity (gCO_2e/kWh)	Source
Operational	Springwell Solar Farm	26.7	**ES Volume 1, Chapter 8: Climate [EN010149/APP/6.1]** [APP-048
	Combined Cycle Gas Turbine (CCGT)	354	UK Parliament (2015)[7]
Lifetime	Springwell Solar Farm	84.1	**ES Volume 1, Chapter 8: Climate [EN010149/APP/6.1]** [APP-048
	Combined Cycle Gas Turbine (CCGT)	490 (410 – 650)	IPCC AR5[8]
	Solar – rooftop	41 (26 – 60)	
	Solar – utility	48 (18 – 180)	
	Nuclear	12 (3.7 – 110)	
	Hydropower	24 (1.0 – 2200)	
	Onshore wind	11 (7 – 56)	
	Offshore wind	12 (8 – 35)	
	Wind	8 – 20	Wiser et al (2011)[9]
	Wind	12 (1.7 – 81)	National Renewable Energy Laboratory (NREL)[10]

1.5. Conclusions

1.5.1. The GHG assessment outlined in **ES Volume 1, Chapter 8: Climate [EN010149/APP/6.1]** [APP-048] has compared the GHG savings against energy generated by efficient fossil-fuel technology (CCGT). We consider this the most appropriate methodology to assess the GHG savings of the Proposed Development, as the core objective of renewable energy deployment is to displace electricity that would otherwise be generated using higher-carbon-intensity sources.

1.5.2. However, other methodologies have been compared within this technical note, in response to the Lincolnshire County Council Local Impact Report and the matters raised in the SoS's recent decision letters for other solar DCO developments. The findings of these different methodologies showcase that the Proposed Development is comparable with other renewable energy technologies and contributes to the decarbonisation of the UK's electricity grid. These findings further support the conclusion in **ES Volume 1, Chapter 8: Climate [EN010149/APP/6.1]** [APP-048] that the Proposed Development contributes to the UK's transition to net zero and aids in reducing GHG emissions within the energy sector.

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Appendix 3 - Cumulative Waste Technical Note

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1. Cumulative Waste

1.1. Introduction

1.1.1. This technical note has been undertaken in response to the Lincolnshire County Council Local Impact Report [REP1-088] received at Deadline 1 in respect of the proposed Springwell Solar Farm.

1.1.2. The cumulative study applies a similar approach to Tillbridge Solar Project and Gate Burton Energy Park in considering the potential cumulative impacts on waste.

1.2. Study Area

1.2.1. For the purposes of this technical note, the East Midlands region is used as the study area for non-hazardous waste rather than just Lincolnshire or Nottinghamshire, acknowledging that waste is not always processed within the Waste Planning Authority where it is generated and may instead be managed at a regional level.

1.3. Baseline

1.3.1. The data to inform the baseline for this technical note has been derived from the Environment Agency on landfill capacity in 2023 in the East Midlands.

1.4. Future Baseline

1.4.1. There is no published data on future landfill capacity, and accurately predicting void capacity over the lifetime of the development is not feasible.

1.4.2. This study operates under the assumption that future landfill void capacity will remain comparable to current levels. Additionally, under the assumption that the Waste Planning Authority will plan and allocate sufficient landfill capacity to meet future needs, in accordance with Section 3 of the National Planning Policy for Waste.

1.5. Study Assumptions

1.5.1. Two assumptions around recovery rates have been used for the purposes of this technical note to ensure a worst case assessment has been undertaken:

- A “realistic worst case” of 70% recovery rate, based on current and likely future recovery rates. Recovery is defined as reuse, recycling and recover. This is considered appropriately conservative;

- An “absolute worst case” based on the assumption that all construction and demolition (C&D) waste goes landfill. This is considered to be extremely unlikely to occur.

1.5.2. Waste estimates have been generated by using the following assumptions based on project experience and the approach taken on similar projects:

- Estimating PV module waste based on a nominal module capacity of 0.65 kW and weight of 35 kg;
- Assuming that the ratio of other waste to PV module waste for scheme is based on similar projects, 35 kg of total waste by mass comprises PV modules, and the remaining 65% is other waste.

1.5.3. For the purposes of this cumulative study, it is assumed that all schemes are decommissioned over a single five year period and that all waste is non-hazardous.

1.6. Cumulative Waste Study

1.6.1. The approach to the assessment of the inter-project cumulative effects of waste has been informed by the approaches by other solar DCOs that have been through Examination in the Lincolnshire area, including Tillbridge Solar Farm and Gate Burton Energy Park.

1.6.2. The assessment therefore considers other solar development, and a county Zone of Influence (ZoI). Given the Proposed Development’s proximity to Nottinghamshire, the ZoI comprises the county of Lincolnshire, in addition to any solar developments within 1km of the border with Nottinghamshire (to the west of the Proposed Development).

1.6.3. The cumulative solar farm developments have been derived from the Planning Inspectorate’s mapping tool and that of Lincolnshire County Council and Nottinghamshire County Council planning portals and align with the criteria outlined in **ES Volume 1, Chapter 16: Cumulative Effects [EN010149/APP/6.1.3]** [REP1-018] in defining the short list for inter-project cumulative effects.

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1.6.4. Using the study assumptions set out in Section 1.5 of this technical note, a study of the inter-project cumulative effects of waste has been undertaken. The outputs of the study are detailed below in **Table 1.**

Table 1: Cumulative Waste Study

Scheme	Size (MW)	PV panel waste (tonnes)	Other waste (tonnes)	Total waste (tonnes)
Springwell Solar Farm	800	43,077	80,000	123,077
Beacon Fen Energy Park	600	32,308	60,000	92,308
Fosse Green Energy	350	18,846	35,000	53,846
Heckington Fen Solar	500	26,923	50,000	76,923
Mareham Lane Solar	49.99	2,693	5,001	7,694
Leoda Solar Farm	600	32,308	60,000	92,308
Burton Gorse Plantation Solar Farm	63	3,392	6,300	9,692
Tillbridge Solar Project	500	26,923	50,000	76,923
Cottam Solar Project	600	32,308	60,000	92,308
West Burton Solar Farm	480	25,846	48,000	73,846
Mallard Pass Solar Project	350	18,846	35,000	53,846
Fiskerton West Solar	49.99	2,693	5,001	7,694
Steeple Renewables Project	450	24,231	45,000	69,231
One Earth Solar Farm	740	39,846	74,000	133,846
Great North Road Solar Park	800	43,077	80,000	123,077
Little Crow Solar Park	150	8,077	15,000	23,077

Scheme	Size (MW)	PV panel waste (tonnes)	Other waste (tonnes)	Total waste (tonnes)
Meridian Solar Farm	750	40,385	75,000	115,385
TOTAL	7,832,92	421,779	783,302	1,225,081
Cumulative Waste (Assuming all schemes decommissioned within five years)				
Total waste from cumulative schemes		84,356	156,660	241,016
Total waste from cumulative schemes (m^3) (assuming density of 0.31 t/m^3 for PV panels and 1.6 t/m^3 for other waste		272,124	97,913	370,037
Waste to landfill, m^3 (realistic worst case estimate with 70% recovery)		81,637	29,374	111,011
Waste to landfill, m^3 (absolute worst case estimate - assuming zero recycling/recovery)		272,124	97,913	370,037
Current Baseline				
Regional landfill capacity (m^3)[1]				48,997,443
Regional C&D waste arisings (tonnes)[2]				5,174,588

[1] Environment Agency (2023) '2023 Remaining Landfill Capacity' Available online at: https://www.data.gov.uk/dataset/237825cb-dc10-4c53-8446-1bcd35614c12/remaining-landfill-capacity1
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Scheme	Size (MW)	PV panel waste (tonnes)	Other waste (tonnes)	Total waste (tonnes)
Lincs & Notts C&D waste arisings (tonnes)[3]				2,086,000
Comparison Against Current Baseline		**PV panel waste (%)**	**Other waste (%)**	**Total waste (%)**
% of regional landfill capacity required for Scheme (realistic worst case estimate with 70% recovery)		0.16	0.06	0.22
% of regional landfill capacity required for Scheme (absolute worst case estimate)		0.5	0.19	0.69
% of regional C&D waste arisings		1.58	0.57	2.15
% of Lincs & Notts C&D waste arisings		3.91	1.41	5.32

[3] Environment Agency (2022) '2022 Waste Data Interrogator' Available online at: https://www.data.gov.uk/dataset/aa53a313-f719-4e93-a98f-1b2572bd7189/2022-waste-data-interrogator. Based on the approach used for the equivalent assessment completed during the Gate Burton Energy Park examination and Tillbridge Solar Project examination

1.7. Summary

1.7.1. The study demonstrates that under the absolute worse case assessment, cumulative impacts would result in 0.69% of regional landfill capacity to be required for the other existing development and/or approved developments, under the realistic worst case 0.0.22% of regional landfill capacity would be required.

1.7.2. Assuming decommissioning of the other existing development and/or approved developments occurs during a single five year period, waste from the cumulative scheme would equate to approximately 2.15% waste arising in the East Midlands and 5.32% C&D waste arisings in Lincolnshire and Nottinghamshire.

1.7.3. Private sector waste companies will develop these facilities to respond to market demands. Current solar panel waste generation is low, so there is little demand for facilities, hence the limited available capacity presently. Therefore, it is expected that facilities which reuse, recycle, or recover end of-life solar panels will be developed as the quantities of this waste stream increase. The Waste Electrical and Electronic Equipment (WEEE) Regulations place obligations on those who place solar panels on the market to finance the costs of collection, treatment, recovery and environmentally sound disposal; and the landfill tax strongly incentivise reuse, recycling and recovery.

1.7.4. Prior to the operation (including maintenance) and decommissioning phases, further details on the types of waste and waste forecast, along with details on the amount of recycled / landfill waste that is anticipated, will be included in the final OEMP and DEMP. These alongside the resultant location of any waste and the capacity of these waste facilities will be discussed and submitted for approval with the relevant local authority prior to the start of the operation (including maintenance) and decommissioning phases of the Proposed Development.

Springwell
Solar Farm

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Application Document Ref: 8.20
Planning Inspectorate Scheme Ref: EN010149