North Kesteven
DISTRICT COUNCIL

Application by Beacon Fen Energy Park Ltd for an order granted development consent for the Beacon Fen Energy Park

Written Representation

A report prepared by North Kesteven District Council

(ID F8D379496)

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1.0 Terms of Reference

1.1 This report comprises North Kesteven District Council's Written Representation (WR) in relation to the Beacon Fen Energy Park. The content of the WR is consistent with the themes and overall conclusions set out in the Council's Local Impact Report (LIR).

2.0 Scope, Purpose and Structure of the Written Representation

2.1 Following on from the positive, neutral and negative impacts of the development identified in the Council's LIR, this report has been prepared to highlight the ways in which the proposed development either aligns or conflicts with local and national policy based upon the applicant's submissions.

2.2 The Council's LIR contains information relating to the site planning history, the description of the proposals, the characteristics of the surrounding area and the overarching legislative and policy context relevant to the proposals including summaries of the relevant NPSs and relevant policies from the adopted Central Lincolnshire Local Plan (2023). It also sets out applicable local guidance and strategy adopted by the Council.

2.3 Consistent with the Council's LIR, this WR focusses on five specific topic areas where to a greater or lesser degrees in each case, there are particularly pronounced policy conflicts and tensions within both national and local policy and guidance or an absence of information (or departure from best practice assessment methodologies), or both; which the Council considers should be bought to the Examining Authority's (ExA) attention.

2.4 As stated at paragraph 27.5 of the Council's LIR, these are:

- Impacts on Best and Most Versatile (BMV) agricultural land
- Landscape and Visual Impact including Residential Visual Amenity
- Cultural Heritage Impacts (above ground)
- Battery Energy Storage System (BESS) and Fire Safety
- Ecology, Biodiversity and Biodiversity Net Gain

2.5 The Council's LIR was debated by its Planning Committee on 2 September 2025 and who endorsed the submission of a WR framed around the above topic areas.

2.6 As set out in paragraph 27.6 of the Council's LIR, while it also identified 'negative' impacts in relation to ES topics relating to landscape and visual, ecology (including Biodiversity Net Gain), cultural heritage, access and traffic, water resources and flood risk, soils and agricultural land, BESS/fire safety and extended period of outage and cumulative effects. The Council does not offer any additional comments here and would refer the ExA to our LIR for further information. The Council also set out 'positive' impacts in relation to climate change and 'neutral' impacts in relation to air quality, noise and vibration, socioeconomics, access and traffic, water resources and flood risk, glint and glare and cumulative effects. In respect of these topics deemed to have a neutral effect, subject to the ExA taking account of statutory and other consultee comments where applicable, the Council is satisfied that in principle there

are mitigation measures associated with these topic areas which are capable of resolution by the Requirements set out in Schedule 2 of the draft DCO. We will continue to engage with the applicant in relation to the wording of the Requirements.

2.7 The LIR also set out the Council's comments on the wording of the Requirements and Procedure for Discharge of Requirements as set out in Schedule 2 and 16 respectively of the draft DCO.

3.0 Impacts on Best and Most Versatile (BMV) agricultural land

3.1 The Council's LIR sets out the relevant national and local planning policies. Central Lincolnshire Local Plan (CLLP) policies are summarised in Table 8.1. In respect of BMV agricultural land, the relevant paragraphs of EN-1 are set out in paragraphs 21.1-21.7 and relevant CLLP policies are set out at paragraphs 21.8-21.9. The Written Ministerial Statement (15 May 2024) is referred to at paragraph 21.10 of the Council's LIR.

3.2 The Council's LIR refers to the local impacts from development on BMV agricultural land at Section 21, paragraphs 21.14-21.33

3.3 The Council has appointed Landscope agricultural consultants to provide it with specialist advice on soils and agriculture. The full comments by Landscope are attached at Appendix A.

3.4 **Agricultural Land Classification:** the agricultural land surveyed represents a total of 529ha of Solar Array Area and 45ha of Bespoke Access Route Corridor. Landscope found that a detailed Agricultural Land Classification (ALC) survey has been undertaken by a professional team in agreement with Natural England and the results are considered reliable. The survey has informed the design of the development and the outline Soil Management Plan (oSMP).

3.5 The Cable Route Corridor has not been surveyed but the ES is based on higher grades of agricultural land (predominantly Grade 2 with some Grade 1 and Grade 3 land) and it would be unlikely that the impact would be worse after survey unless all the land is Grade 1 classification.

3.6 As shown in Table 14.13 of Chapter 14 of the ES, the predicted impact on agricultural land use will be as follows:

- **Solar Array Area:** this comprises 529ha of agricultural land. The actual area proposed to be under solar arrays for the lifespan of the development will be 395ha. Of this, 191ha will comprise BMV land (ES paragraph 14.6.2) and is considered to be a temporary loss due to the fixed lifespan of the development for 45 years. Part of the land will be under built development (access tracks and roads, construction compounds, BESS, substation and transformer stations). Whilst the proposals have sought to avoid Grade 2 agricultural land in particular, the avoidance of BMV land has not been possible and built development will result in the permanent loss of 14.25ha BMV land due to permanent 'sealing over' for the duration of the solar farm.

- **Bespoke Access Corridor:** this comprises 45 ha of agricultural land. The provisional ALC data show that it is comprised entirely of Grade 3 agricultural land i.e. showing a predominantly moderate likelihood of BMV land (ES paragraph 14.5.9). The area that would be utilised during construction will be 18.91ha. Within the Bespoke Access Corridor, there will be a permanent loss of 3.42ha of BMV land and temporary loss of 12.94ha of BMV land during the construction of the access road. During the operational phase, the road together with associated drainage ditches and verges will cover an area of 4.42ha. This land is considered to be permanently 'sealed over' for the duration of the solar farm given that the Bespoke Access Corridor is stated as likely being retained for the operational duration of the development. The remaining land within the Bespoke Access Corridor will be returned to agricultural use and it is assumed there will be no loss of agricultural land quality subject to the recommendations in the Appendix 14.4 Outline Soils Management Plan being adopted.
- **Cable Route Corridor:** this comprises 183ha of agricultural land. This land has not yet been surveyed but using provisional ALC data, it shows that 28.18ha would be Grade 1 and 145.73ha would be Grade 2 agricultural land i.e. showing a high and moderate BMV likelihood (ES paragraph 14.4.7). Table 14.13 of the ES estimates that 39ha of land would be utilised for the cable route, 13.71ha for construction compounds, 1.8ha for air insulated switchgear system and 0.90ha for cable sealing end. Of this, a permanent loss of BMV would equate to around 2.70ha using the provisional ALC data approach.

3.7 The amount of BMV land across the whole development likely to be permanently lost due to 'sealing over' as a result of the proposed development would therefore be in the region of 20.37ha. The total permanent loss of agricultural land (in general, across all 5 grades) would be 56ha. IEMA guidelines say that the permanent sealing of land above 20ha (including temporary development where there would be a reduction in soil quality) is a major adverse environmental impact. This threshold would be reached for the permanent 'sealing over' of land of BMV land assuming that the soil augering/sampling and subsequent ALC gradation has been carried out in line with industry standards, and it would also be reached for agricultural land across all grades. It is noted that paragraph 14.13.18 of the ES concludes that there would be a major and significant environmental effect for the solar array area due to the permanent loss of agricultural land based on a loss of >20ha of Grade 2, 3a and 3b land (23.31ha).

3.8 The ES acknowledges that the broader loss of agricultural land for built development within the proposed development would be a major adverse impact. However, the Council has some concerns over how information about the impact on land use on agricultural land is covered in Table 14.13 as it does not include the amount of agricultural and BMV land, in particular, which would be lost due to new green infrastructure (temporary and permanent) and BNG provision within the solar array area and bespoke access corridor. Other NSIP projects – notably the Springwell solar farm - have assessed that certain elements of green infrastructure (temporary and permanent) and BNG provision should be classed as a 'permanent loss' on the basis that not all of those green infrastructure elements (especially woodland planting) would be reverted to agriculture at the end of the operational period.

3.9 Overall, Table 14.13 shows that the proposed development would lead to the loss of 493.27ha of agricultural land of which 277.3ha would be BMV land (56%). This can be broken down to 20.37ha permanent loss and 256.93ha temporary loss of BMV land (47%).

3.10 **Soil Management:** Soil structure can be significantly damaged during the construction phase of the process. There is a lot of trafficking of vehicles on the land to erect panels and if this work is undertaken when soils are wet, there can be significant damage. Much of this damage can be remedied post-construction but not all and it is possible that long term drainage issues occur on the site due to the construction.

3.11 The oSMP includes the cable route in order to minimise the impact on soil structure, land drainage and ultimately on soil quality. This is covered in ES paragraphs 14.4.19-20 and 14.6.8. Landscope advise that the reality is that contractors are under immense pressure to complete works in accordance with a work programme and will inevitably undertake works in substandard conditions in order to complete their contractual obligations.

3.12 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 of the panels and buried cables will often prohibit this during the life of the solar farm and as such remedies can only be completed at the end of term when all infrastructure has been removed. If the soil is in a substandard condition during the operation of the solar farm, carbon sequestration is reduced and infiltration of water can also be reduced, leading to localised standing water and the reduction in soil quality.

3.13 There is a programme for decommissioning and re-instatement of the land. Whilst this is detailed and can be conditioned as part of a consent, even possibly with a s106 planning obligation, it remains to be seen whether it will be effective in leading to the land being returned to productive agriculture.

3.14 With reference to cumulative impacts at a District and County Level, the Council considers that the scale of the project and the amount of BMV land impacted, makes the impact significant at both District and County level. The ES argues that the area amounts to only 1% of the farmed area of Lincolnshire, however, the cumulative effect is assessed by the Council as being significant for both the District and across Lincolnshire. There are several other large solar schemes approved or proposed across the wider area that contribute to this impact.

3.15 For a project of this scale, there is an impact as the development will tie up the land for up to 45 years. The loss of such a large area of land would normally be considered significant at District level, even though the majority of the use by area is 'temporary' and reversible. Any permanent loss of land due to construction or through biodiversity enhancements may affect this assessment.

3.16 The ES acknowledges that the broader loss of agricultural land for built development within the development would be a Major Adverse impact. However, there are some concerns over how information about the impact on land use on agricultural land is covered in Table 14.13 as it does not include the amount of agricultural and BMV land,

in particular, which would be lost due to new green infrastructure (temporary and permanent) and BNG provision within the Solar Array Area and Bespoke Access Corridor.

3.17 As above, other NSIP projects (such as the Springwell Solar Farm) have assessed that certain element of green infrastructure (temporary and permanent) and BNG provision should be classed as a permanent loss on the basis that not all of those green infrastructure elements (especially woodland planting) would be reverted to agriculture at the end of the operational period.

3.18 Across Lincolnshire, the estimated proportion of BMV is 71.2% while across North Kesteven the proportion of BMV is 67%, slightly lower than the Lincolnshire average. This still covers two-thirds of agricultural land and is well above the national average. The table of effects in ES Chapter 14 indicates that on a site specific level there will be a loss of 529ha of agricultural land associated with the Beacon Fen main solar array, of which 250ha will be BMV land – and as above comprised of areas of BMV which are variously classed as either temporary/reversible or where 'sealing over' is assumed.

3.19 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 (exceeding the 20ha IEMA guidance threshold) especially given the 45-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.

3.20 Finally, as confirmed in the ES there is no current commitment to mitigation by grazing. The ES does not assume that grazing under the solar panels will be provided, instead it takes a worst case scenario where the land is removed from agricultural production during the operational phase (paragraph 14.7.18). The applicant advises that whilst the land within the Solar Array Area may be available for grazing during the operational phase, however, this has not been confirmed at this stage. The applicant therefore confirms that their assessment is 'based on a "worst case" assessment that approximately 529 ha of land within the Solar Array Area remains out of agricultural production for the duration of the operational phase'.

3.21 The oSMP, however, includes guidance on how grazing could be incorporated into the operational phase to maintain agricultural production whilst also providing biodiversity benefits. The applicant has based the guidance on the BRE (2014) guidance document and the Solar Energy UK (2022) good-practice document.

3.22 As there is no guarantee of grazing as a means of managing the grassland below the solar panels, there will be a significant loss of agricultural land for 40 years as a result of the solar farm and the contribution that agriculture makes towards economic activity within North Kesteven and more widely across the County. The latter is recognised in paragraph 187(b) of the NPPF. The provision of conservation grazing beneath the solar panels would offer some continuation of agricultural use on the agricultural land including BMV land. The Council's position is that it should be

provided in line with best practice guidance by BRE (2014) 'Agricultural Good Practice Guidance for Solar Farms'.

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

4.0 Landscape and Visual Impact (and Residential Visual Amenity)

4.1 The Council's LIR sets out the relevant national and local planning policies. CLLP policies are summarised in Table 8.1. In respect of landscape and visual impact, the relevant paragraphs of EN-1 and EN-3 are set out in paragraphs 13.1-13.4 and relevant CLLP policies are set out at paragraphs 13.5-13.6.

4.2 Lincolnshire County Council has commissioned specialist advice from AAH consultants on the impacts of the solar farm on landscape and visual impacts in a shared arrangement with the District Council. The Council's written representation on landscape and visual impact is based on their comments.

4.3 The Council's LIR refers to the local impacts from development on landscape and visual impact at Section 13, paragraphs 13.14-13.78.

4.4 **AAH comments on Landscape Impact:** the Future baseline is covered in paragraphs 6.5.66 to 6.5.68. The author judges that the landscape of the Site and Study Area will remain in its current state in the future. The development of solar farm projects and energy infrastructure (such as overhead lines and pylons, and associated sub stations and converter stations) in the region is not acknowledged to be a factor in the future baseline of the Study Area. This is a landscape undergoing extensive change to land-use, predominantly changing from agriculture to renewable and energy infrastructure development.

4.5 AAH have concerns regarding effects on the national and regional landscape character areas. The mass and scale of these projects combined has the potential to lead to a change in landscape character over an extensive area across these published character assessments. The landscape character of the 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.

4.6 To calibrate this change to the landscape, these schemes combined, if built, would clearly require the update of any published landscape character assessment, including at a national level (NCA's), so as to include large scale solar as a defining land use characteristic as well as agriculture. This is a clear and marked change to landscape character, and several schemes have already been approved, with many others in the planning system. It should also be noted that other renewable and energy infrastructure projects (such as solar, BESS, hydrogen, pylons and cables along with associated infrastructure) are planned in the region, including NSIP/DCO schemes as

well as Town and Country Planning Act (TCPA) scale projects. These will all combine to change the character of the wider landscape.

4.7 This baseline process, undertaken by the applicant, resulted in several landscape receptors being identified as likely to be affected by the development identified as "Sensitive Receptors". These are presented in Table 6.4 and include both landscape elements or features of the Site and Study Area (e.g. vegetation and hedgerows, land use, landscape pattern), as well as Landscape Character, which we have assumed are the published landscape character areas as identified in paragraphs 6.5.3 to 6.5.20 of the LVIA, providing an overview of published character assessments. AAH consider that this identification and list is confusing and used inconsistently in the subsequent assessment, which goes on to assess *Landscape Character – Site Level*; and *Effects on Landscape character – Local landscape character*.

4.8 The way section 6.5.64 is written is that these are the receptors that the LVIA will assess the change to, however the actual receptors are the Site and wider character areas. Also confusingly, the construction effects on each of the landscape receptors are then broken down with subheadings into *landscape elements* and *landscape character*, but the 'Operational' effects are not broken down in the same way, mixing together these two aspects (character and elements). AAH consider that some clarity and re-structuring would assist in clarity of this section, specifically clearly laying out the landscape receptors identified, summarising the likely elements to be affected within these, assessing the list of landscape receptors breaking down into effects on elements and character.

4.9 For clarity, AAH have assumed the following are the landscape baseline receptors:

- Site level;
- Fenland Sub Area;
- Central Clays and Gravels Sub Area;
- Holland Reclaimed Fen LCA;
- Bicker to Wyberton Settled Fen LCA; and
- South Holland Fen LCA.

4.10 The Landscape Assessment is detailed within section 6.6 of the LVIA, referring to *Appendix 6.3: Landscape Character Baseline and Sensitivity* which includes a clear assessment of 'Value' only, and therefore would suggest Appendix 6.3 is erroneously titled as it does not contain an assessment of 'Susceptibility', or subsequently combine value and susceptibility for a judgement on 'Sensitivity'. Similarly, the statement in paragraph 6.6.7 that *"the landscape assessment is based on the determination of relevant landscape sensitivity set out in Appendix 6.3: Landscape Character Baseline and Sensitivity (Document Ref: 6.3 ES Vol. 2, 6.3.15)"* is not correct as Appendix 6.3 provides an overall character summary and Value Assessment only. Nowhere within the LVIA have AAH located a detailed assessment of landscape susceptibility, with only a summary (as stated in paragraph 6.6.7: *"…summarised in the following section"*) provided for the 'susceptibility' and 'sensitivity' of the site and local landscape character areas. The applicant should clarify the process adopted.

4.11 In line with the methodology, the assessment of the landscape effects considers the change to the identified landscape receptors at construction, operation (both years 1 and 15) and decommissioning. This includes 'Landscape Character Effects' within the Order Limits (which would be direct) and 'Landscape Effects' within 'Published Landscape Character Areas' (which would be both direct and indirect). However, as identified above, only 'Landscape Elements' are considered at the construction stage, not at operation. This provides an inconsistent approach and AAH request the applicant provide clarity as one of the main landscape effects will be the change in land use of the areas of above ground development from arable fields to a solar development.

4.12 The LVIA identifies 'Significant' landscape effects at the phases of construction, operation (year 0), operation (year 15), and decommissioning phases. The following effects upon identified landscape receptors are identified in the LVIA:

- At **Construction** the following receptors were assessed as having the following landscape effects:
    - Site level: **Major adverse: Significant**
    - Fenland Sub Area: **Moderate adverse (significant)**

- At **Operation (Year 0)** the following receptors were assessed as having the following landscape effects:
    - Site level: **Major adverse: Significant**
    - Fenland Sub Area: **Moderate adverse: Significant**

- At **Operation (Year 15)** the following receptors were assessed as having the following landscape effects:
    - Site level: **Moderate adverse: Significant**

- At **Decommissioning,** effects would be similar to those at the construction phase, however, the Site and local landscape will benefit from established planting associated with the scheme.

4.13 These 'Significant' effects represent direct effects on the landscape of the entirety of the site. At year 15, the Order Limits (the entirety of the site) has been assessed as having a 'Significant Residual effect' even when mitigation planting has established. The landscape character area of the Fenland Sub Area has been judged by the LVIA author as having 'Significant' effects at Construction and Operation Year 1 only, with landscape effects judged as reducing to 'Minor Adverse' through the establishment of mitigation planting.

4.14 While AAH acknowledge the establishing planting as part of the mitigation proposals will add a positive element to this landscape, they consider that the urbanising element of large scale solar on open, agricultural land is a definite and adverse change to the baseline of the Fenland Sub Area. New planting will offset some of the adverse elements of the scheme, however AAH disagree with the applicants' findings that the residual effects on the Fenland Sub Area would subsequently reduce to 'Minor Adverse'; instead AAH judge it would remain as 'Moderate adverse' and therefore 'Significant' (negative).

4.15 Even with mitigation planting in place, the scheme is still a direct, large scale land use change across all fields in which above ground infrastructure is proposed. This would be an addition of new elements that will replace a key characteristic of this landscape, influencing overall character, and being a major addition, albeit affecting a relatively localised area of the LCA. As acknowledged in paragraph 6.6.63 *"The openness of the fenland landscape will be altered with some modifications to the field pattern and greater presence of planting introduced to accommodate the Proposed Development".* AAH also have concerns in regards to the mitigation planting itself causing adverse effects by being out of character with this open fenland, e.g. through the introduction of 3.5m high hedgerows.

4.16 The proposed localised removal of vegetation is identified in the assessment of landscape effects; however, it is unclear whether this includes vegetation works on the wider highways network, and what this would entail. AAH strongly recommend limiting vegetation loss along the site boundaries for access or sight lines, or along construction access routes, because this has the potential to change the character of the local landscape beyond the limits of the development.

4.17 **AAH comments on Visual Impact:** The Visual Assessment is provided within section 6.6 of the LVIA and detailed within *Appendix 6.4: Visual Assessment*. As outlined above, AAH have not located an assessment of value or susceptibility relating to visual receptors, with only a final judgement of 'Sensitivity' of visual receptor provided within Appendix 6.4 with no explanation as to how this judgement has been arrived at.

4.18 The LVIA chapter does not provide any narrative in regard to the assessment to the value of views experienced by receptors or the susceptibility of receptors to changes in their view. While an assessment of sensitivity is provided within Appendix 6.4 of the baseline panoramas (viewpoints), none is provided for the receptors themselves. This does not fully align with guidance provided within the Landscape Institute's *Technical Guidance Note LITGN-2024-01 'Notes and Clarifications on aspects of the 3rd Edition Guidelines on Landscape and Visual Impact Assessment (GLVIA3)'.*

4.19 AAH have also raised concerns about other aspect of the Visual Baseline as set out in paragraphs 5.1 to 5.10 and 5.12 of their comments (Appendix B).

4.20 Regarding the significant visual effects at Construction phase, these are typically identified for receptors on the road and PROW network, along with multiple residents in the local area, that are in close proximity to the Development with limited or absent screening allowing for clear views.

4.21 The significant visual effects at Construction phase are listed in a concise form in paragraph 5.15 of AAH's comments (Appendix B) and below.

- **<u>At Construction:</u>**
    - **Major Adverse** (Significant) visual effects for:

Solar Array Area

- Residents of Ewerby Thorpe Farm (R1a);
- Residents of Ewerby Thorpe Lodge (R1b);
- Residential receptors at Property Group R2, including; Howell Fen Farmhouse (R2a), Asgarby Barns (R2b) and Westmorelands Farm (R2c);
- Residential receptors at Gashes Barn (R4);
- Residential receptors at Property Group R20, including; Crown Cottage (R20a) and Keepers Cottage (R20b);
- Users of sections of PRoW Ewer/8/2,Ewer/8/1, Ewer/9/1, Ewer/12/1, Skym/8/1 along and adjacent to the River Slea/Kyme Eau;
- Users of Bridleway Ewer/1103/1;
- Users of Black Drove/Ferry Lane/Halfpenny Toll Lane;
- Users of Howell Fen Drove

Cable Route Corridor

- Residential receptors at Property Group R9 including, Crow Lane Farm, White House, Broadhurst Farm;
- Residents of Property White House Farm (R10);
- Residents of Property Poplar Tree Farm (R11);
- Residents of Property Villa Farm (R12).
- Residential receptors at Property Group R5 - Star Fen Farm, The Bungalow, Star Fen Cottage, Windward, Berrick Cottage, Decoy Farm;
- Residential receptors at Property Group R15 - Meadow View, Dovecote Farm, Cozee Cottage, Highland House, Gauntlet Bridge Farm, Fen Lodge, Crow Hall.
- Users of PRoW network to the east of Great and Little Hale PRoW Nos. GtHa/2/1, LHal/4/1 and GtHa/2/1;
- Users of PRoW network to north west of Heckington, West of Solar Array Area, including: Heck/12/1, Heck/14/1, Heck/2/4;
- Users of PRoW Bick/2/1.

Bespoke Access Road

- Users of PRoW to the west of Asgarby Lane, including; KkLT/6/1ASHo/2/1, KkLT/4/2 and KkLT/5/1

- **Moderate Adverse** (Significant) visual effects for:

Solar Array Area

- Residential receptors at Property Group R3 Copperhill Kennels Cattery Waithe Farmhouse The Grange, Ferry Farm and Mere House

Cable Route Corridor

- Residential receptors at Property Group R6 - Courtrow Farm, The Paddocks, Winkhill;
- Residential receptors at Property Group R13 - Kingtree Lodge, Cowbridge Farm;
- Residential receptors at Property Group R14 - Butlers, Acorn Lodge, Milldrain Lodge;
- Residential receptors at Property Group R18 - Garwick Farm, Strawberry Cottage, Bramble Cottage, White House, Fen House.
- Residential receptors at Property group R7 - Hall Farm, The Farm House, Poplar Farm.
- Residential Receptors at Great Hale (only identified in Appendix 6.4, Table 1.20 – not identified in the main LVIA assessment section, which we assume is an omission)
- Residential Receptors at Northorpe Village (only identified in Appendix 6.4, Table 1.20 – not identified in the main LVIA assessment section, which we assume is an omission)
- Transport receptors from some sections of the A17 (The views will also include the views of temporary access tracks.)
- Transport receptors using the of local road network adjacent to and crossing the southern extent of the Cable Route Corridor including Tilebarn Lane and Bicker Drove.

Bespoke Access Road

- Users of PRoW to the east of Asgarby Lane, including; ASHo/3/1 and Ewer/1103/1 KkLT/4/2 and KkLT/5/1
- Users of the A153;
- Users of Asgarby Lane; and
- Users of Heckington Lane/Halfpenny Toll Lane

4.22 These **'**Moderate' and 'Major Adverse' (negative) effects are considered to be 'Significant' and would result from the proposed construction activity seen at close range across a wide extent of a view. While these receptors are relatively localised, with limited long-range views of the construction activity, AAH disagree with the LVIA that they are low in number, as the list within AAH's full comments (paragraph 5.15 and above) clearly identifies. The construction phase will affect a high number of visual receptors across a wide area.

4.23 The significant visual effects at Operation (Year 1) are listed in a concise form in paragraph 5.15 of AAH's comments (Appendix B) and below.

- **<u>At Operation (Year 1):</u>**
  - **Major Adverse** (Significant) visual effects for:
    Solar Array Area

    - Residents of Ewerby Thorpe Farm (R1a);

- Residents of Ewerby Thorpe Lodge (R1b);
- Residential receptors at Gashes Barn (R4);

- **Moderate Adverse** (Significant) visual effects for:

  Solar Array Area

  - Residential receptors at Property Group R2, including; Howell Fen Farmhouse (R2a), Asgarby Barns (R2b) and Westmorelands Farm (R2c);
  - Residential receptors at Property Group R3 - Copperhill Kennels Cattery Waithe Farmhouse The Grange, Ferry Farm and Mere House – not identified in the main LVIA assessment section (which is assumed to be an omission)
  - Residents of Property White House Farm (R10);
  - Residential receptors at Property Group R20, including; Crown Cottage (R20a) and Keepers Cottage (R20b);
  - PRoW network near the River Slea, including; PRoW Ewer/8/2, Ewer/8/1 and Anwi/2/2;
  - Users of Bridleway Ewer/1103/1;
  - Users of Black Drove/Ferry Lane/Halfpenny Toll Lane;
  - Users of Howell Fen Drove

  Bespoke Access Road

  - Users of PRoW to the west of Asgarby Lane, including; KkLT/6/1ASHo/2/1, KkLT/4/2 and KkLT/5/1

4.24 These represent a large reduction in receptors experiencing 'Significant' effects and also several receptors have reduced in the level of Significance from 'Major' to 'Moderate' adverse (but which remain 'Significant'). AAH would expect this level of reduction, which is predominantly from the Cable Corridor and Bespoke Access Road having construction effects, but limited adverse effects once completed being either below ground (cable), or through a change in the ground surface (road), which would have limited wider visibility.

4.25 While there are still several receptors identified as experiencing 'Significant' adverse visual effects from the development, AAH query as to how views that are temporary in nature (at construction) to those of a long term/permanent change are able to reduce, especially as at this stage, any mitigation planting is yet to establish and is subsequently providing limited screening or integration of the development. This needs to be clarified.

4.26 The significant visual effects at Operation (Year 15) are listed in a concise form in paragraph 5.15 of AAH's comments (Appendix B) and below:

- **<u>At Operation (Year 15):</u>**
  - **Major Adverse** (Significant) visual effects for:

- Residential receptors at Gashes Barn (R4);

- **Moderate Adverse** (Significant) visual effects for:

  Solar Array Area

  - Residents of Ewerby Thorpe Farm (R1a);
  - Residents of Ewerby Thorpe Lodge (R1b);
  - Users of the PRoW network near the River Slea, including; PRoW Ewer/8/2, Ewer/8/1, Ewer/9/1, Ewer/12/1 and Anwi/2/2

  Bespoke Access Road

  - Users of PRoW to the west of Asgarby Lane, including; KkLT/6/1ASHo/2/1, KkLT/4/2 and KkLT/5/1

4.27 These represent a further reduction in receptors experiencing 'Significant' effects through the establishment of mitigation planting over 15 years from planting. The LVIA therefore identifies that several visual receptors will experience 'Significant' adverse effects over the remaining 30 years (45 years in total) of the development.

4.28 At decommissioning, effects would be similar to those at the construction phase, however the site and local landscape will benefit from established planting associated with the scheme, which would provide screening and integration in views.

4.29 AAH have noted several errors in transcribing 'Significance' of effect from Appendix 6.4 Visual Assessment into the main LVIA text, for example where some effects that are judged as 'Major' in Appendix 6.4 have been described as 'Moderate' in the main narrative, or have not been identified at all. The Council requests this is further reviewed and the main LVIA chapter accurately reflects the assessment carried out in Appendix 6.4 as often 'Significant' effects are underplayed or not identified, leading to a misinterpretation of potential visual effects.

4.30 One example is for Residential receptors at Gashes Barn (receptor R4); the LVIA chapter and subsequent summary Table 6.8 judges this to have a 'Moderate Adverse' Year 15 residual effect, whereas Table 1.21 of Appendix 6.4 judges year 15 residual effects at 'Major Adverse'. Subsequently, the RVAA judges Gashes Barn (R4) in Table 1.1 as a 'Moderate Adverse' Year 15 residual effects. The Council requests that the judgements are reviewed thoroughly and a tracked change LVIA is provided to fully assess the findings of the visual assessment and comment upon individual judgements.

4.31 However, notwithstanding this, the development has been identified in the LVIA as resulting in a significant change to a variety of visual receptors during construction and in the early years of operation and maintenance, with significant *residual* visual effects much reduced in number, which suggests a potential over reliance upon mitigation planting to screen the proposals without full attention to the potential impact of this screening on the landscape. AAH's concern is that mitigation planting must be well

considered at any detailed design stage, and not simply put in place to screen views of development at the cost of the existing view.

4.32 These residual 'Significant' effects have been identified as arising from sensitive users on the road and PROW network, along with residents that are in close proximity to the development. The identified reduction in several 'Significant' visual effects relies upon the successful establishment of the mitigation planting scheme and a robust Outline Landscape and Ecological Management Plan (OLEMP) that is carried out for a suitable period of time.

4.33 Subsequently, AAH disagree with several reductions in level of significance of effect at year 15 through the establishment of mitigation planting. The assumption made for several receptors is that by screening views of the scheme with planting, the level magnitude of effect will also reduce. In several instances the view from receptors will be completely altered from that of the existing, baseline view, predominantly from blocking or foreshortening expansive views across an open rural landscape. These are predominantly from residential properties in close proximity to the Solar Arrays, for example:

- R1 Group Receptor: Ewerby Thorpe Farm and Ewerby Lodge;
- R2 Group Receptor: Howell Fen Farmhouse, Asgarby Barns, Westmorelands Farm (potential views of Solar Array Area and Cable Route Corridor);
- R3 Group Receptor: Copperhill Kennels Cattery, Waithe Farmhouse, The Grange, Ferry Farm and Mere House;
- R4 Gashes Barn;
- R20 Group Receptor: (Howell) including Crown Cottage and Keepers Cottage.

4.34 The outlook from residents in these properties will be altered and foreshortened, which is clearly illustrated on the Appendix 6.5 – Residential Visual Amenity Assessment Figure 1a,b,c - Howell Fen Farmhouse; Figure 2a,b,c - Keepers Cottage; and Figure 3a,b,c Crown Cottage.

4.35 AAH judge that the year 15 effect on all these nearby residential receptors will be at least 'Moderate' and 'Significant'. The solar panels are proposed to be located very close to these receptors and the mitigation planting itself, designed to screen panels, is changing the view detrimentally; completely changing the character and openness of the view, and in AAH's opinion appearing out of character in this location. Even with a larger offset of development, or an increased landscape buffer, the open views would predominantly be foreshortened and changed compared with the existing. The year 15 assessment must be compiled based on changes to the baseline, not on how successfully the development is being screened from view.

4.36 **Residential Visual Amenity:** Residential Visual Amenity has been considered as part of the LVIA. Views from Residential Receptors and Settlements are also considered within the LVIA, however no reference is made within the LVIA to Appendix 6.5, although Figure 6.7 Residential Properties illustrates the location of residential

properties and settlements. From this it is unclear as to how the Residential Visual Amenity Assessment (RVAA) and LVIA have been coordinated, relying on the reader cross referencing findings. It would be useful for the LVIA to provide a clear statement in this regard, and also how the RVAA has informed the LVIA assessment of Views from Residential Receptors and Settlements as well as the overall site layout and mitigation.

4.37 RVAA methodology is included within Section 1.18 of the LVIA methodology within Appendix 6.2. The methodology is considered to be sound and reflects Landscape Institute guidance '*TGN 2/19: Residential Visual Amenity Assessment'*, however the main LVIA does not state that it has considered this process explicitly, whether the Residential Visual Amenity Threshold (RVAT) has been met by any of the assessed properties. The detailed visual assessment within Appendix 6.4, at Table 1.20, references Appendix 6.5 only once for residents at Ewerby Thorpe Hamlet, however is not mentioned or referenced again for the remainder of the properties, the majority of which appear in both the RVAA and LVIA chapter.

4.38 RVAA is a stage beyond Landscape and Visual Impact Assessment and focuses exclusively on private views and private visual amenity, whereas the LVIA process is typically associated with public views from public areas. The Landscape Institute's Technical Guidance Note *2/19: 'Residential Visual Amenity Assessment'* provides further detail and that that the RVAT is reached when the change to visual amenity of residents in individual properties identified as *"having the greatest magnitude of change".*

4.39 The RVAA has utilised a study area of 250m which is reasonable, with TGN 2/19 not being explicit in defining a study area for RVAA. The baseline identified sixteen groups of properties within the 250m study area, which are listed in Table 1.1. Of these, properties where operational phase 'significant' effects have been predicted are as follows

- R1 Group Receptor: Eweby Thorpe Farm; and Ewerby Lodge
- R2 Group Receptor; Howell Fen Farmhouse; Asgarby Barns; and Westmorelands Farm
- R4 Gashes Barn
- R20 Group Receptor; Crown Cottage; and Keepers Cottage

4.40 On this scheme, due to the scale and extents, as well as height of some elements (e.g. substations) we would anticipate that some residents will experience 'Significant' adverse visual effects from several properties, as laid out in the RVAA. Of particular concern is R4 Gashes Barn which is judged to reach the Residential Amenity Threshold due to the proximity of works and the scheme design and layout, which will surround this property.

4.41 Gashes Barn is an isolated property located within an agricultural landscape, and as set out in the planning history referred to in section 5 it was converted to a residential dwelling by virtue of a 2004 planning permission. It currently has predominantly open boundaries. Gashes Barn would be entirely surrounded by solar arrays at a distance

of 150m to the north, 165m to the east, 205m to the south and 185m to the west. The proposed substation and BESS would be approximately 1,030m to the south west. There would be views of the solar arrays from all aspects of the property and its associated access road. The RVAA concludes that this is likely to be perceived as 'overwhelming' but not 'overbearing' in the medium term until Year 10.

4.42 While it is judged that the degree of effect would reduce with the establishment of planting, this is very much dependent upon the successful implementation of a robust management regime to ensure establishment, and even with established planting the property would remain surrounded by the development, completely changing the current open rural outlook and context for residents, and remains a significant concern. Again, established mitigation planting will aid in screening the development, however the open views will be foreshortened drastically.

4.43 However, we agree with the RVAA that while the remaining properties as assessed will experience 'Significant' effects, it is unlikely that these will reach the RVAT through as a result of the development.

4.44 The 'Embedded Mitigation' section of the LVIA (paragraph 6.3.15 onwards) also goes on to explain how the site layout and mitigation has responded to properties, stating *"Reduction in the extent of the proposed solar PV panels to provide buffers from nearby residential receptors",* which is also stated in Appendix 2.3 'Embedded Mitigation', however it is not explicit as to how adverse effects from properties have been fully considered as part of an iterative process. Offsets and buffers are mentioned throughout the submission, however these predominantly refer to ecological or drainage constraints, or consideration of noise. Section 5.3.2 of the 'Design and Access Approach Document' mentions discussions with the occupiers of Gashes Barn and discussions of buffers.

4.45 We have been unable to locate as to what these buffers are, and how they have been established - both in the case of R4 Gashes Barn, but also other properties in close proximity (R1, R2, and R20). Offsets and buffers from sensitive receptors on the whole look minimal, and further clarification on the depth and extent of these and how they have been considered as part of an iterative process would be beneficial. As previously stated in this review, we have concerns regarding the proximity of the development to these properties, and also that the scheme will completely change the baseline views, with panels and subsequently established planting (at year 15) foreshortening views and blocking open and expansive views across this landscape. This is demonstrated on Figure 1a,b,c - Howell Fen Farmhouse; Figure 2a,b,c - Keepers Cottage; and Figure 3a,b,c – Crown Cottage within Appendix 6.5.

4.46 The success of the landscape mitigation to meet the objectives laid out in the management plan - to integrate and screen proposals, promote conservation and protection of the environment, and encourage ecological and habitat diversity - is highly dependent upon the successful management and maintenance of the new planting, as well as the protection of exiting trees and hedgerows. The maintenance operations provide an initial overview of operations; however, we would expect the

management plan to be developed further, well beyond the initial 5-year period, particularly if landscape and visual effects are being assessed at 15 years.

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

4.48 Monitoring of the proposals is a key aspect of the mitigation plan and is something which needs further development to ensure there is sufficient robustness to deal with the challenging climatic conditions when it comes to establishing new planting. The updating of the management plan every 5 years after the initial establishment period will go some way to ensuring that it is kept valid and can respond to issues and trends effectively, such as climate change. Plant replacements should also be considered, and also for a longer period then a “standard” 5 years, and cover for scenarios where there are large areas that have not established, or areas of significant die back beyond a 5 years period.

4.49 While the submission includes landscape proposals, these are of a high level and it would be expected that if the project proceeds much more detailed plans would to be submitted and subsequently agreed with the appropriate consultee/authority prior to the commencement of any works, which would be secured as a Requirement of the DCO. This would include clear detail of the areas of landscape mitigation, location and types of planting (species), as well as number, density and specification.

4.50 We accept that planting can be an effective way to screen development proposals and add valuable landscape and ecological elements into the landscape, however this needs to be carried out in a way that is sensitive to the existing landscape character or meet any aims of a published character assessment to improve or introduce new planting to an area. While residual visual effects have been assessed as reducing at 15 years through mitigation planting, this is completely dependent upon the successful establishment of the planting and it growing in a manner that is anticipated within the LVIA, and illustrated on the accompanying visualisations. This is always going to be a risk that if the planting does not establish as anticipated, the residual effects will likely be higher than initially judged.

4.51 This is an open landscape, and planting to simply screen could have detrimental impacts. The PROW and local roads in the study area enjoy an open aspect across most areas of the Study Area, for example from adjacent residential properties with views across the and land beyond. Therefore, care needs to be taken to prevent the loss of this character through an overbearing set of mitigation proposals. It is noted that appropriate development offsets, and with careful design, will go some way to address the matter raised.

4.52 **Cumulative Landscape and Visual Effects:** the ES considers cumulative landscape and visual effects with Heckington Fen Solar Park, Vicarage Drove Solar

Farm, Bicker Fen Solar Farm and Little Hale Solar Farm; the latter having recently been granted planning permission on appeal (planning application reference 23/1021/FUL; appeal reference APP/R2520/W/25/3363027).

4.53 No 'Significant' landscape or visual cumulative effects are identified in the LVIA. However, we do not support this and have concerns regarding cumulative effects due to the unprecedented number and extent of renewable energy projects and associated infrastructure in the county and region. The mass and scale of several NSIP scale energy projects, along with planned National Grid projects, combined with Beacon Fen has the potential to lead to adverse effects on landscape character over an extensive area across multiple published character areas.

4.54 The landscape character of Lincolnshire will be altered over the operational period through an extensive area of land use change, and introduction of energy infrastructure in an area that is predominantly of agricultural character and land use; solar development is not identified within current published character assessments at a local, regional or national scale. While it is not suggested that agriculture will not remain as a defining characteristic, over a short period of time large scale solar and other energy infrastructure will undoubtably become a widespread characteristic in the county. Subsequently, we judge that solar development would be a key characteristic in any updates to published character assessments from local to national scale.

4.55 However, given the absence of a unified, county-wide landscape character baseline across Lincolnshire, this presents a challenge when assessing cumulative effects over a strategic county-wide scale to consider all of these energy projects. Therefore, an approach we are promoting is to extract common landscape attributes of the area from the multiple character area assessments that cover the region, enabling a reasoned, evidence-led baseline, and subsequently assessment, of cumulative landscape effects across the wider county area.

4.56 For example, across Lincolnshire:

- the 'Land Use' is predominantly arable agriculture;
- 'Field Patterns' are predominantly medium to large-scale;
- the 'Topography' has a predominantly flat to gently undulating landform;
- 'Perceptual Qualities' are predominantly quiet and with a rural character and high levels of tranquillity;
- the 'Settlement Pattern' is generally dispersed villages and market towns;
- 'Vegetation & Tree patterns' are generally open with sparse or isolated tree cover; and
- regarding 'Views & Openness', there is generally a strong sense of openness, big skies, and expansive views.

4.57 Therefore, across the region, based on these shared characteristics large scale solar development and new energy infrastructure would create cumulative change of the landscape character through an extensive land use change, directly affecting the

perceived openness, and rural tranquillity. We judge large scale solar, battery and energy infrastructure will subsequently be a distinctive key characteristic across the county/region as a whole.

4.58 This would also be an issue when experienced sequentially for visual receptors travelling through the wider landscape and experiencing these schemes across potentially several kilometres, albeit with gaps between the schemes. However, repeated views and presence of large scale solar would undoubtably increase the susceptibility of receptors to changes in view through 'visual fatigue' in which viewers experience a diminishing capacity to absorb or tolerate repeated or similar visual stimuli (solar development) along routes, eroding the rural landscape character and increasing a broader perception of landscape industrialisation.

4.59 GLVIA3 defines types of cumulative visual effect as either: Combined (in the same view) or Sequential. Table 7.1 of GLVIA3, regarding Sequential Cumulative visual effects states that *"Sequential: Occurs when the observer has to move to another viewpoint to see the same or different developments. Sequential effects may be assessed for travel along regularly used routes such as major roads or popular paths".*

4.60 We judge that the sequential effects would be felt throughout the area, with PROW users, that are more susceptible to changes in their view, moving slowly and often engaging with the landscape attentively. Travel along these PROW presents successive experience with solar infrastructure, creating a sequential visual effect. PROW users traveling along several rights of way have been identified within the applicants LVIA as having significant adverse visual effects at year 15.

4.61 If users of these routes had previously, or would subsequently, travel on rights of way or other linear routes with views of other solar schemes (as identified in the LVIAs associated with these projects) the implication is that users would likely experience sequential visual effects across two or more schemes, even at Year 15 when mitigation should have matured. Combined with receptors traveling long distances along road corridors in the region with views of the scheme, this can form a coherent visual narrative; a rural area increasingly defined by clustered energy-infrastructure development.

4.62 By way of summary and conclusions, AAH state that by virtue of its scale and massing, the development would result in 'Significant' adverse (negative) effects on local landscape character and visual amenity during all key phases (construction, early operation, and at year 15).

4.63 The proposals would fundamentally alter the character of the site and its surroundings, replacing open, agricultural fields with extensive solar infrastructure. This represents a substantial and long-term change to the openness, tranquillity, and rural character of the area. Whilst the LVIA categorises residual effects as partially reversible, we consider that, given the likely operational lifespan and scale, the change should be regarded as effectively permanent in landscape and visual terms.

4.64 Significant adverse visual effects are also predicted for a range of receptors, due to the transformation from rural agricultural views to those containing large-scale solar arrays. We have highlighted some issues with the visual assessment within the LVIA and compliance with the recent Landscape Institute *Technical Guidance Note LITGN-2024-01,* and we also have concerns that the mitigation planting itself could generate adverse visual effects though blocking or foreshortening views and appearing out of context.

4.65 Cumulative landscape and visual effects with other renewable energy and infrastructure projects across the county present a further concern. Whilst the immediate cumulative schemes within the ES are relatively modest, the scale of other NSIP and large-scale energy projects proposed in the wider area raises the potential for extensive alteration of the regional landscape character. The combined effect of these developments could be a marked and enduring change, both directly through a change in land use and introduction of solar as a key element, and also in the perception and experience of the landscape, particularly for visual receptors travelling through the landscape and experiencing sequential effects. This is a clear and marked change to landscape character.

4.66 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 need to be in accordance with BS:5837 'Trees in Relation to Construction' and any subsequent arboriculture method statements, again this should be approved by the appropriate authority.

4.67 In particular, this should ensure that existing trees, and 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.

4.68 While the submission includes landscape proposals (as shown on *Figure 6.31: Landscape Strategy Plan*, secured via Work Order 9 on the Works Plans and DCO), these are of a high level and it would be expected that if the project proceeds much more detailed plans would to be submitted and subsequently agreed with the appropriate authority prior to the commencement of any works and secured through Requirements of the DCO. This would include clear detail of the areas of landscape mitigation, location and types of planting (species), as well as number, density and specification. The mitigation illustrated on the layout plans has been utilised to assess the landscape and visual effects of the scheme; therefore, we would expect any detailed landscape proposals to consist of the area and extent shown on these plans as a minimum.

5.0 Cultural Heritage Impacts (above ground)

5.1 The Council's LIR sets out the relevant national and local planning policies. CLLP policies are summarised in Table 8.1. In respect of cultural heritage, the relevant paragraphs of EN-1 are set out in paragraphs 15.1-15.4, relevant CLLP policies are set out at paragraphs 15.5-15.6 of the Council's LIR.

5.2 The Council's LIR refers to the local impacts from development on cultural heritage in Section 15, paragraphs 15.7-15.15.

5.3 **Above Ground Heritage Assets:**

5.4 Subject to the comments below, the Council is broadly satisfied with the methodology, analysis and outcomes of the ES chapter on Cultural Heritage in relation to the above ground heritage assets. The key sensitive designated receptors are listed at paragraph 8.6.5 of the ES Chapter on Cultural Heritage while non-designated receptors are listed at paragraph 8.6.6. Embedded mitigation includes creating buffer areas to increase the distance between the site and nearby heritage assets.

5.5 The Council agrees that at the construction stage, the Bespoke Access Road would have a Moderate Adverse (significant) effect on Grade I Listed St Andrew's Church, Asgarby (paragraph 8.7.7 and Table 8.8). It considers, however, that there would be a similar impact on Grade II Listed Asgarby Hall whose principal elevations look over the historic parkland where the new road would be in full view. Asgarby Hall is not included in Table 8.8 for assessment during the construction phase despite being listed as a key sensitive designated receptor in paragraph 8.6.5. The Heritage Statement identifies that there is potential for impacts to the hall as a result of the introduction of the access road.

5.6 During the operational stage, due to the use of the Bespoke Access Route for maintenance purposes, the Council considers that a medium magnitude of impact should be ascribed to Grade I Listed St Andrew's Church leading to a Moderate Adverse (significant) effect.

5.7 The Bespoke Access Route would also impact on the setting of Grade II Listed Boughton House which is not particularly considered in the ES leading to a slight adverse effect being identified during the Operational Phase only (Table 8.9). Boughton House is not included in Table 8.8 for assessment during the construction phase despite being listed as a key sensitive designated receptor in paragraph 8.6.5. The Council considers that the assessment undertaken in relation to Boughton House is insufficient. The Heritage Statement identifies that there is potential for impacts to the house as a result of the introduction of the access road.

5.8 Turning to the Solar Array Area, the impact on Howell Hall (Grade II listed) during the operation phase (Table 8.9) should be upgraded to Minor Adverse in the Council's opinion due to its landscape setting and open views towards the solar array. It is recognised that a buffer has been included, however, the setting and views from the curtilage of the property will still be adversely affected.

5.9 Kyme Tower (Grade I listed and associated 'Remains of medieval monastery, moated manor house, fishponds and post-medieval garden'; a scheduled monument) has

been considered under the operational phase (Table 8.9) but not given significant weighting in the ES. The Council disagrees with the conclusion that the existing landscape will remain unchanged especially when considering the cumulative impact with Heckington Fen solar farm. Instead, it considers that the magnitude of impact should be at least 'medium'. The Council notes that the setting of Kyme Tower was given some weight in the Secretary of State's decision for the Heckington Fen solar farm as follows:

'4.13 The Secretary of State also agrees that the Proposed Development will contribute to a cumulative adverse effect on Kyme Tower's setting, albeit to a lesser extent than the potential additional harm of the emerging Beacon Fen Energy Park, that amounts to less than substantial harm to the heritage asset's significance. The Secretary of State therefore agrees with the ExA that the cumulative effects on the historic environment contribute to less than substantial harm at the lower end of the scale which should be ascribed moderate negative weight.'

5.10 Finally, the Council considers that insufficient weight has been ascribed to non-designated heritage farmsteads. Despite an acknowledgement of a high magnitude of impact on some occasions with the result of a slight adverse impact, there is little bespoke mitigation proposed to each asset with a reliance on embedded mitigation. The farmsteads include:

- Unnamed Farmstead, Ewerby and Evedon (non-designated HER MLI121913)
- Westmorelands, Asgarby Fen Farm (non-designated HER MLI121926)
- Gashes Barn (non-designated HER MLI121916)

5.11 It is clear that there will be an impact on the setting of designated and non-designated heritage assets and it is positive that, for the most part, this has been recognised in the ES. The significance and special interest of these assets will be affected by the changing landscape conditions arising from the proposed layout of the solar farm. The Council considers that greater weight and bespoke consideration of Kyme Tower, Asgarby Hall, St Andrew's Church, Boughton House and Howell Hall together with non-designated heritage farmsteads is required in order to inform a bespoke mitigation strategy for these heritage assets rather than a reliance on embedded mitigation.

6.0 Battery Energy Storage System and Fire Safety

6.1 The Council's LIR sets out the relevant national and local planning policies. CLLP policies are summarised in Table 8.1. In respect of battery storage and fire safety, EN-1, EN-3 and EN-5 are silent on this matter, however, there is guidance produced by the Department for Energy Security and Net Zero and the National Fire Chiefs Council as set out in paragraph 24.11 of the Council's LIR. The relevant CLLP policies are set out at paragraphs 24.9-24.10 of the Council's LIR.

6.2 The Council's LIR refers to the local impacts from the battery energy storage system in Section 24, paragraphs 24.11-24.23.

6.3 In light of the rapidly growing volume of BESS facilities across the country, it has been recognised that appropriate health and safety standards are required and in

recent years, new guidance has been emerging. In April 2024, the Department for Energy Security and Net Zero produced Health and Safety in Grid Scale Electrical Energy Storage Systems guidance which is applicable to this application. In addition, the National Fire Chiefs Council has produced Grid Scale Battery Energy Storage System planning – Guidance for Fire and Rescue Services in 2023, with an update (still in draft) that was due in 2024.

6.4 Notwithstanding the isolated location of the BESS relative to centres of population and noting a separation distance of over 800m to the closest residential properties at Ewerby Thorpe Farm and Ewerby Lodge, the Council has strong concerns about the potential risk to human health arising from fire related accidents at BESS developments.

6.5 The ES notes that there are several battery storage technologies available to system designers, and while it is likely that the chosen BESS design at Beacon Fen will be based on a lithium-ion battery cell type, the exact technology and system will be determined at the detailed design stage. The applicant notes though that it has been assumed that Lithium Iron Phosphate (LFP) cells, a popular type of chemistry within the lithium-ion battery type, and used on other sites being developed in the UK market, will be utilised. The applicant suggests that this is a 'reasonable worst-case' scenario for the purposes of evaluating fire risks and outlining safety provisions.

6.6 The degree to which the Planning Act (2008) can compel what is essentially and ultimately a matter of customer choice is unclear. However, research suggests that LFP cells have an advantage over other lithium-ion chemistries in relation to thermal and chemical stability, which improves battery safety, as well as having a higher charge/discharge cycle life. The Council's view is that the ExA should consider this matter through the Examination.

6.7 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.

6.8 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 planned 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 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.

6.9 Table 17.3 of the ES briefly explains that the main potential hazard of BESS failure is thermal runaway and, if not controlled, fire. The Council notes that Lincolnshire Fire and Rescue Service have been consulted and the relevant legislation has influenced the proposal design. ES paragraph 17.5.6 also describes the fire safety precautions that will be taken and makes reference to the outline Battery Safety Management Plan (oBSMP)

6.10 As above the Council notes from the outline Battery Safety Management Plan (oBSMP) that it has been assumed the BESS would utilise Lithium Iron Phosphate (LFP) lithium-ion battery technology. The oBSMP includes at Appendix 1, an Assessment of Unplanned Atmospheric Emissions from BESSs which concludes that the overall impact of unplanned emissions on existing sensitive human receptors would not be significant. The Appendix, Table 4.2 'Modelled Human Health Sensitive Receptor Locations' considers 14 sensitive receptor locations, meteorological and land topography data, and assesses the location and size/composition of the proposed BESS as shown on the submitted site layout plan.

6.11 Dispersion modelling was undertaken and for the purposes of assessing impacts on sensitive human receptors, short term emissions from nitrogen dioxide, carbon monoxide, hydrogen fluoride and methane were included in the dispersion modelling. The modelling states that the concentrations of these substances associated with an unplanned atmospheric emission from a potential fire at the BESS are less than 10% of the relevant National Air Quality Objectives and Workplace Exposure Limits.

6.12 The oBSMP describes the proposed BESS layout, fire service access and provision of firefighting water and equipment. Further fire risk-focussed studies will be undertaken to inform the overall design solution at detailed design stage in consultation with the Lincolnshire Fire and Rescue Service (LFRS) and in accordance with the National Fire Chiefs Council guidance. It is not clear whether a further Assessment of Unplanned Atmospheric Emissions will be undertaken at detailed design stage.

6.13 Notwithstanding the isolated location of the BESS relative to centres of population and noting a separation distance of over 800m to the closest residential property, the Council still maintains concerns about the potential risk to human health arising from fire related accidents at BESS developments.

6.14 The Council will defer to comments from LFRS to be provided as part of LCC's LIR and also advise the ExA to have regard to advice from the UK Health Security Agency (UKHSA).

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

7.0 Ecology, Biodiversity and Biodiversity Net Gain

7.1 The Council's LIR sets out the relevant national and local planning policies. CLLP policies are summarised in Table 8.1. In respect of ecology, biodiversity and biodiversity net gain, the relevant paragraphs of EN-1 and EN-3 are set out in paragraphs 14.1-14.3, relevant CLLP policies are set out at paragraphs 14.4-14.10 of the Council's LIR.

7.2 The Council's LIR refers to the local impacts from development on cultural heritage in Section 14, paragraphs 14.12-14.16.

7.3 The Council has commission specialist advice from AECOM on the topic of ecology. AECOM's full detailed comments are attached at Appendix C and D.

7.4 Overall, AECOM's assessment is that the ecological information and assessments accompanying the application contain a significant number of omissions and/or lack clarity on relevant points. These include matters relating to how prior advice (at EIA Scoping or Preliminary Environmental Impact Report stages) has been addressed, clarity on the methods used and the data underpinning the conclusions reached. The Council would welcome the opportunity to discuss with the applicant how to resolve these issues, however, as currently submitted the ES chapter on ecology is not considered sufficiently robust to accurately assess the likely impacts on ecological interests across the site.

7.5 In summary, omissions highlighted include:

- Insufficient discussion and evidence relating to aquatic surveys and whether impacts on aquatic plants were considered
- The survey effort for quail (a Schedule 1 bird species) notes only four phases of survey in the period mid-May to the end of July as opposed to the required six surveys as set out in prior advice
- There is an inconsistent approach to the assessment of impact on wintering birds whereby the solar array has been aggregated with the Cable Route and Bespoke Access whereas the latter are two geographically discrete areas
- No attempt appears to have been made to update the survey baseline on Schedule 1 birds (barn owl, quail and other species that could occur) since the 2022 survey of the solar array area. While the consequences of development for skylark is covered, the consequences for the long term suitability of the site for wintering birds of open farmland is not clearly assessed. This includes further consideration of cumulative impacts.
- Supplementary data should be provided to verify the status and value of individual hedgerows. If hedgerows are assessed as being of Local Wildlife Site quality they would have a 'county' nature conservation value, not 'local' as stated. This data is also required to support agreement of the BNG baseline.
- A number of significant adverse effects on the conservation status of ecological receptors are predicted during construction, however the mitigation for these impacts is not confirmed or demonstrated to be adequate so 'significant residual effects' cannot be discounted. This includes significant effects on:

    (i) Qualifying bird species of The Wash SPA and Ramsar site;

(ii) The qualifying otter population of The Wash and North Norfolk Coast SAC;
(iii) Great crested newt – a European Protected Species;
(iv) Barbastelle bat – a protected and threatened species; and
(v) Water vole – a protected and threatened species

7.6 The BNG Strategy cannot be agreed until the applicant provides the full BNG Metric for examination and the good practice requirements for evidence are met. The Metric is one of the primary documents necessary for agreement of the BNG Strategy. At present, the Council is not satisfied that the currently BNG Strategy is robust as the evidence is weak and some of the assumptions seem unrealistic.

7.7 AECOM's comments on the BNG Metric are attached at Appendix D. Examples of specific concerns include that the baseline information provided with the report does not account for all habitats, certain habitats have been mistranslated, and the habitat mapping does not appear sufficiently accurate. The 'proposed' habitat plan does not account for all land within the Order Limits; for example, the bespoke access road is not accounted for. Furthermore there does not appear to be any consideration of, and compensation for, impacts on woodland and trees within the submitted BNG information.

7.8 On BNG, the Council notes a current commitment to delivering 30% habitat units, 10% hedgerows and 10% watercourses. However, we note that the Examining Authority assigned 'great weight' (positive) in the overall planning balance in relation to EN010123 (Heckington Fen solar park) where a minimum of 65% BNG was committed to by Requirement. In addition to providing a robust approach to BNG calculations, as mentioned above, we would expect the applicant to be able to significantly exceed a minimum of 10% BNG across all three habitat types within the Beacon Fen development, consistent with policy S14 'Renewable Energy' of the CLLP which requires proposals for ground-based photovoltaics to be 'accompanied by evidence demonstrating how opportunities for delivering biodiversity net gain will be maximised'.

8.0 Conclusion

8.1 In conclusion, as per the Council's Planning Committee Report and Local Impact Report, the Council raises overall support for solar development in the context of the CLLP policies S14 'Renewable Energy' and S16 'Wider Energy Infrastructure' where ground based solar photovoltaic and association infrastructure / battery energy storage, including commercial large scale proposals are under a 'presumption in favour' of approval unless, amongst other things clear and demonstrable harm arises. However, given the concerns raised in relation to the five specific areas described above comprising loss of BMV agricultural land, landscape and visual impact, cultural heritage, the battery energy storage system and fire safety and ecology, biodiversity and biodiversity net gain; the Council wish to raise an objection to the Beacon Fen Energy Park on those matters for the reasons set out in this representation.

Appendix A

August 2025

Review of Soil and ALC for Beacon Fen Solar Project (LIR)

On behalf of North Kesteven Council

LANDSCOPE
LAND & PROPERTY

Summary of Situation

I have considered the ES Chapter, agricultural land classification reports for the main area of the site, together with the outline soil management plan and various other documents.

The ALC land surveyed represents a total area of 517 hectares and 45 hectares of Access Corridor. The overall ALC results have fed into the baseline data on soils and agriculture, as set out in Chapter 14 of the Environmental Statement. The site has been fully appraised for ALC and maps and detail were provided. Land Research Associates undertook a reconnaissance survey and Wardell Armstrong have undertaken a more detailed ALC survey of the main Array area.

The ALC reports have been undertaken by a professional team in agreement with Natural England and the results are considered reliable. The oSMP should deal with construction, operation and decommissioning concerns. Land drainage is always an issue to consider on the heavier soils, but a plan is in place.

The cable route corridor has not been surveyed, the ES is based on higher grades of agricultural land and it would be unlikely that the impact would be worse after survey, unless all the land is Grade 1 classification.

There is some difference concerning the permanence of environmental measures when considering the return of BMV land to agriculture at the end of the project life.

1. The Site and Proposal

The Proposed Development comprises the installation of solar photovoltaic (PV) generating modules, battery storage facilities, and grid connection infrastructure with a capacity in the region of 600MW.

The Site is situated to the north of Heckington, adjacent to Ewerby Thorpe located within the administrative boundary of North Kesteven District Council, in the county of Lincolnshire.

2 Background to Soils and Agriculture

Consultation was had with Natural England to discuss the initial agricultural land classification survey and the consideration of Best and Most Versatile (BMV) land in the development of the design. Natural England requested a full agricultural land classification survey to be undertaken of the site and access corridor. A detailed agricultural land classification survey has been undertaken in order to assess agricultural classification within the Site, including the access routes. This survey has informed the design-development and the outline Soil Management Plan (oSMP).

3 Agricultural Land Classification

The soil types and ALC Map results are presented in **Appendix 1**.

Agricultural Land Classification Summary of The Site

Table 4: Summary of ALC within the Application Boundary.			
ALC or other land category	**Area (ha)**	**Percentage % within application boundary**	**Percentage % of Surveyed area (excluding land marked as 'other')**
Grade 2 (very good)	14.61	2.8	2.9
Subgrade 3a (good)	235.51	44.6	46.0
Subgrade 3b (moderate)	261.43	49.5	51.1
Other	16.62	3.1	
Total	**528.17**	**100**	**100 (511.55 ha)**

The ALC surveys were conducted in line with BSSS and Natural England guidance and at 1 auger per hectare.

The ES states:-

14.4.7 As a detailed soil survey had not been carried out for the Cable Route Corridor (including the Bicker Fen substation extension works) at the time of this assessment, the baseline for this area was informed by the above desk-based sources.

Cable Route Corridor

14.5.6 The current boundary of the Cable Route Corridor is approximately 183 ha and provisional ALC data shows that this is comprised predominantly of Grade 2 (145.73 ha, 79.57%) agricultural land, with portions of Grade 1 (28.18 ha, 15.39%) and Grade 3 (9.24 ha, 6.28%). The Cable Route Corridor shows a High and Moderate BMV likelihood.

14.5.25 The provisional ALC data indicates that despite the occurrence of similar soil types to those found within the Solar Array Area, the land within the Cable Route Corridor has a higher overall potential to be BMV. It is expected that this is due to the occurrence of more Wetness Class II and III conditions across the Cable Route Corridor due to better drainage.

Bespoke Access Corridor

14.5.9 The current boundary of the Bespoke Access Corridor Area is approximately 45 ha and the provisional ALC data shows that this is comprised entirely of Grade 3 agricultural land (Detailed ALC surveys have been completed on the Bespoke Access Corridor Area). The Bespoke Access Corridor Area shows a Moderate Likelihood of BMV with a small area of High Likelihood of BMV in the southwest of the Bespoke Access Corridor Area.

Solar Array Area

This comprises 529ha of agricultural land. The actual area proposed to be under solar arrays for the lifespan of the development will be 395ha. This will comprise 191ha of BMV land and is considered to be a temporary loss due to the fixed lifespan of the development for 40 years. Part of the land will be under built development (access tracks and roads, construction compounds, BESS, substation and transformer stations). Whilst the proposals have sought to avoid Grade 2 agricultural land in particular, the avoidance of BMV land has not been possible and built development will result in the permanent loss of 14.25ha BMV land due to permanent 'sealing over' for the duration of the solar farm.

14.6.2 75% (395.62 ha) of the Solar Array Area would be covered by the solar arrays, which would be piled directly into the ground without prior soil removal. Of this 11.69 ha is Grade 2, 180.02 ha is Subgrade 3a, and 203.92 ha is Subgrade 3b. In total the solar panels would cover 191.71 ha of 'best and most versatile' (BMV) land.

14.6.3 The requirement for directly impacting the soil by stripping, temporary stockpiling or storage would be associated with the construction of the access tracks and roads within the Solar Array Area, construction compounds, BESS, substation and transformer stations (referred to here as 'built infrastructure'). Using the breakdown in Table 14.13 the total area of proposed built infrastructure on agricultural soil is estimated to be 23.31 ha of the Solar Array Area which constitutes 4.4% of the agricultural soil within the Solar Array Area.

4 Soil Management Plan

Soil structure can be significantly damaged during the construction phase of the process. There is a lot of trafficking of vehicles on the land to erect the panels and if this work is undertaken when soils are wet, there can be significant damage. Much of this damage can be remedied post construction but not all and it is possible that long term drainage issues occur on the site due to the construction.

Soil Damage During Construction

Soil structure can be significantly damaged during the construction phase of the process. There is a lot of trafficking of vehicles on the land to erect the panels and if this work is undertaken when soils are wet, there can be significant damage. Much of this damage can be remedied post construction but not all and it is possible that long term drainage issues occur on the site due to the construction.

The oSMP includes the cable route in order to minimise the impact on soil structure, land drainage and ultimately soil quality. Further guidance is available in published documents.

The ES States

14.4.19 Soils of differing texture and structural development may be subject to a range of potential impacts during and following reinstatement.

14.4.20 For example, the incorrect handling/reinstatement of a heavy textured (clay rich) soil whilst in a plastic state may cause permanent or semi-permanent soil compaction. The resulting soil profile will have a reduced natural drainage compared to the undisturbed soil profiles and a subsequent increased risk of soil loss (erosion) due to surface water run-off. Whereas sandy soils are more resistant to compaction pressures and have a greater capacity to recover from compaction without intervention or management. Sandy soils will also remain more permeable if compaction does occur and the drainage potential of these soils is therefore more easily maintained upon reinstatement.

14.6.8 The OSMP details the requirements for the development of a site-specific SMP which will required as part of the construction phase. In addition to the ALC surveys already conducted for the Solar Array Area and Bespoke Access Corridor, a detailed soil survey of the Cable Route Corridor will be carried out pre-construction to inform the site-specific SMP.

The reality often is that contractors are under immense pressure to complete works in accordance with a work programme and will inevitably undertake works in substandard conditions in order to complete their contractual obligations.

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 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.

There is a programme for decommissioning and re-instatement of the land. Whilst this is detailed and can be conditioned as part of a consent, even possibly with S106, it remains to be seen whether it will be effective in leading to the land being returned to productive agriculture.

Cumulative Impact at District and County Level

14.5.12 Table 14.11 displays the total agricultural land within Lincolnshire County Council boundary and is calculated based upon the provisional ALC data and post 1988 ALC data. For the purpose of assessing the amount of Subgrade 3a and Subgrade 3b land within the administrative boundary, the Grade 3 provisional calculations assume a 50/50 split between Subgrade 3a and Subgrade 3b.

Table 14.11 Provisional ALC Data and Post 1988 Data Combined with Administrative Boundaries

ALC GRADE	LINCOLNSHIRE COUNTY COUNCIL BOUNDARY (HECTARES OF LAND)
Grade 1	75568.28 ha
Grade 2	186336.8 ha
Subgrade 3a	148602.9 ha
Subgrade 3b	148345.9 ha
Grade 4	14762.45 ha
Non-agricultural	25655.91 ha
Total	599272.2 ha

The scale of the project and the amount of BMV land, I consider makes the impact significant at both District and County level. The information argues that the area of amounts to only 1% of the farmed area of Lincolnshire. However, the cumulative effect is significant for Lincolnshire and the District. There are a several other large solar schemes proposed or approved across the wider area that contribute to this impact.

For a project of this scale there is an impact the project will tie up the land for up to 40 years. The loss of such a large area of land would normally be considered as significant at District level, even though the use is 'temporary'. Any permanent loss of land due either to construction or through biodiversity designation may affect this assessment.

The ES acknowledges that the broader loss of agricultural land for built development within the proposed development would be a major adverse impact. However, there are some concerns over how information about the impact on land use on agricultural land is covered in Table 14.13 as it does not include the amount of agricultural and BMV land, in particular, which would be lost due to new green infrastructure (temporary and permanent) and BNG provision within the solar array area and bespoke access corridor.

Other NSIP projects – notably the Springwell solar farm - have assessed that certain elements of green infrastructure (temporary and permanent) and BNG provision should be classed as a permanent loss on the basis that not all of those green infrastructure elements (especially woodland planting) would be reverted to agriculture at the end of the operational period.

Across Lincolnshire the estimated proportion of BMV is 71.2%; across North Kesteven the proportion of BMV at 67% is slightly lower than the Lincolnshire average, but this still covers two thirds of agricultural land, and is well above the national average.

Overall, the proposed development would lead to the loss of 528ha of agricultural land of which 250ha would be BMV land (47%).

Cable route

It has been agreed that the cable route involves temporary disturbance of the soils to enable a trench to be dug and the cabling to be inserted. This will not involve the sealing or downgrading of the land quality. An ALC survey of the cable route has not yet been carried out, but the Outline Soil Management Plan (oSMP) will include the route.

The route of the offsite Grid Connection Route Corridor has been ALC surveyed. The cable route will be underground and laid either through open trenching or through directional drilling where open trenching is not possible.

As each section of cable is laid it will be back filled, and farming would be able to re-commence on this land.

As ever the trenching works may damage land drainage locally and a suitable record of condition and re-instatement plan is required.

Ecological Effect

There is some conflict between maintaining the land in agricultural production and improving biodiversity. Whilst not incompatible, site based issues, such as soil type(s) and local agricultural practices may create future problems. The biodiversity 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 and in the conditioning of any consent.

BMV Land 'Take'

The overall ALC findings are found in tables in the ES chapter. Nearly 50% of the site is assessed as BMV. The total area of BMV land – mostly Grade 3a, and the remainder is non BMV being Grade 3b - moderate quality.

BMV land is considered as temporarily used under the panels, although 40 years is a long period. The amount of BMV land to be lost 'permanently' (mainly due to green infrastructure) is significant.

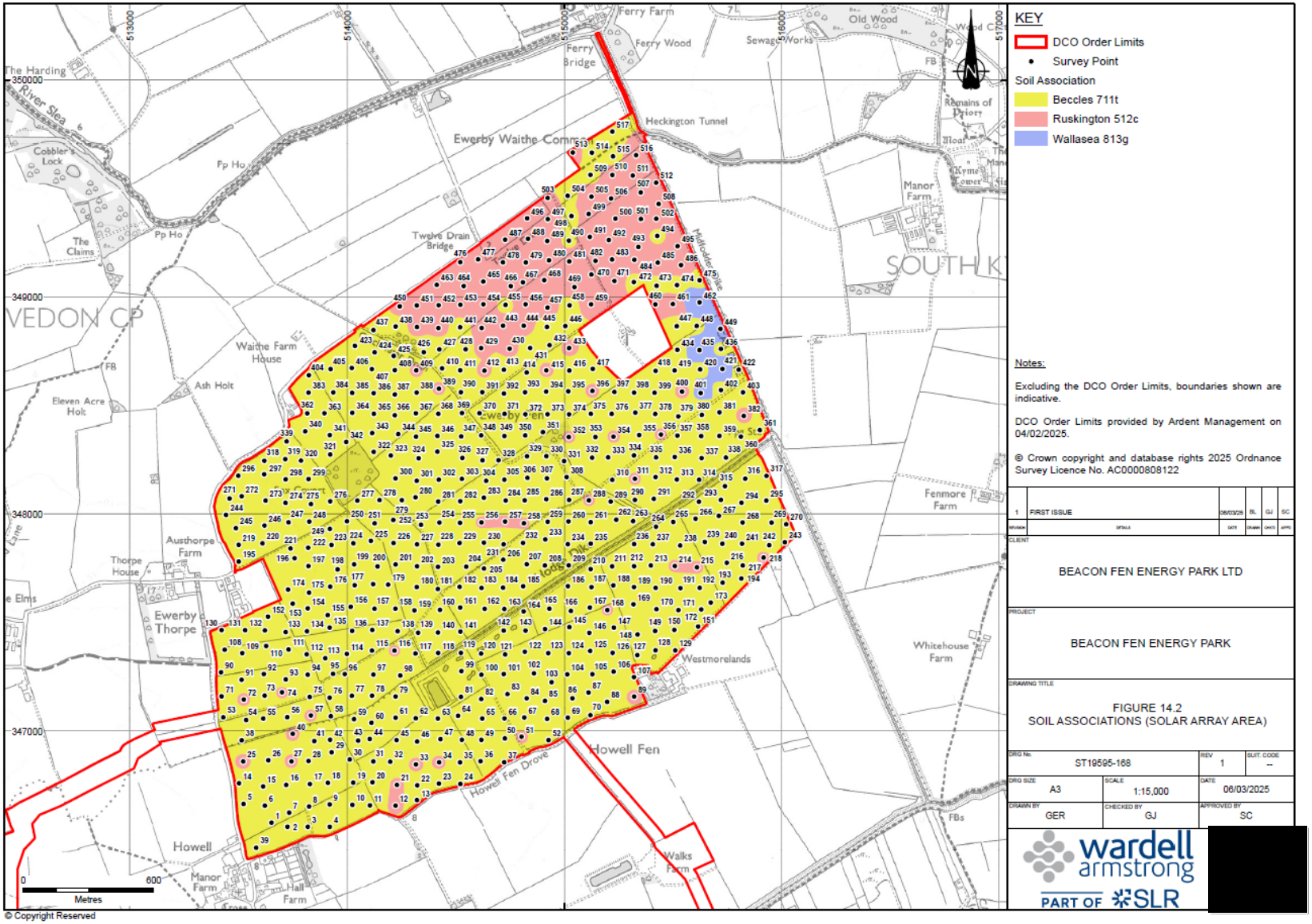
Nevertheless, the whole area is productive farmland, which will be removed from mainly arable farming for 40+ years and at best, a lower intensity grass based system will replace it. The loss of arable production is I consider locally significant and in view of other projects in the wider District and County potentially cumulatively significant.

Whilst the scheme includes measures to remove the panels at the end of the project, this will remain an uncertainty as very few largescale solar farms have been decommissioned in the UK to compare.

Spatial Approach and Methodology for Assessment of Significance

The report follows the recent guidelines found in the IEMA Soils and EIA document. It argues that the impact on actual loss of BMV land is therefore small. This is only correct if it is accepted that the temporary loss of around 520 hectares of land is not included in this assessment. I recognise that Natural England consider the main use as temporary, however local policies may take a different view.

Appendix 1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Survey Point
Soil Association
Beccles 711t
Ruskington 512c
Wallasea 813g
Notes:
Excluding the DCO Order Limits, boundaries shown are indicative.
DCO Order Limits provided by Ardent Management on 04/02/2025.
© Crown copyright and database rights 2025 Ordnance Survey Licence No. AC0000808122
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PROJECT
BEACON FEN ENERGY PARK
DRAWING TITLE
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REV 1
SUIT. CODE --
DRG SIZE A3
SCALE 1:15,000
DATE 06/03/2025
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CHECKED BY GJ
APPROVED BY SC
wardell armstrong
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Metres
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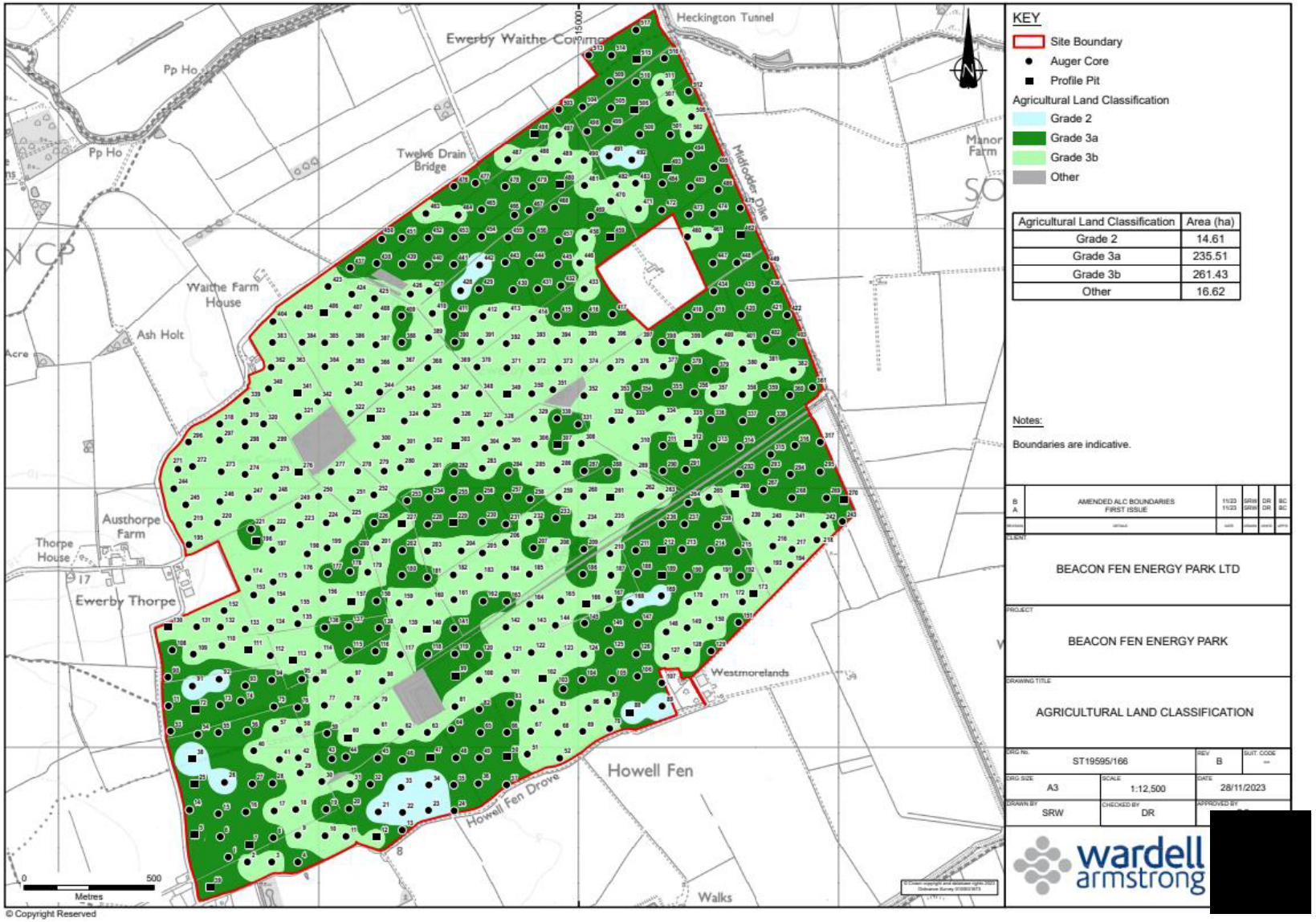
Appendix 2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Heckington Tunnel
Pp Ho
Pp Ho
Twelve Drain Bridge
Midfodder Dike
Manor Farm
Waithe Farm House
Ash Holt
Acre
Austhorpe Farm
Thorpe House
Ewerby Thorpe
Westmorelands
Howell Fen
Howell Fen Drove
Walks
0
500
Metres
© Copyright Reserved
KEY
Site Boundary
Auger Core
Profile Pit
Agricultural Land Classification
Grade 2
Grade 3a
Grade 3b
Other
Agricultural Land Classification | Area (ha)
Grade 2 | 14.61
Grade 3a | 235.51
Grade 3b | 261.43
Other | 16.62
Notes:
Boundaries are indicative.
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A FIRST ISSUE 11/23 SRW DR BC
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PROJECT
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DRAWING TITLE
AGRICULTURAL LAND CLASSIFICATION
DRG No. ST19595/166
REV B
SUIT. CODE
DRG SIZE A3
SCALE 1:12,500
DATE 28/11/2023
DRAWN BY SRW
CHECKED BY DR
APPROVED BY
wardell armstrong

Appendix B

AAH consultants

LANDSCAPE AND VISUAL REVIEW

OF THE DEVELOPMENT CONSENT ORDER (DCO) APPLICATION

FOR THE BEACON FEN ENERGY PARK

FOR

LINCOLNSHIRE COUNTY COUNCIL

&

NORTH KESTEVEN DISTRICT COUNCIL

August 2025

Landscape and Visual Review

Quality Assurance – Approval Status

Version	Date	Prepared by	Checked by	Approved by	Version Details
1	11/08/25	Oliver Brown	Tom Ferraby	Oliver Brown	Draft Issued for comment
2	19/08/25	Oliver Brown	Tom Ferraby	Oliver Brown	Issued for LIR

Landscape and Visual Review

Contents

Appendices:

1.0 Introduction

Purpose of the Landscape and Visual Review

1.1 AAH Consultants (**AAH**) has been commissioned to prepare a review of the Landscape and Visual elements of the Development Consent Order (**DCO**) Application for the Beacon Fen Energy Park (the '**Development'**), submitted to the Planning Inspectorate in April 2025 and accepted for Examination in May 2025, on behalf of Lincolnshire County Council (**LCC**) and North Kesteven District Council (**NKDC**). This follows on from AAH providing landscape and visual consultation with the applicant on behalf of LCC and NKDC at the Scoping and Statutory Consultation stages of the project. Relevant Representation comments on Landscape and Visual matters are provided within **Appendix A** for reference.

1.2 The purpose of this report is to carry out an independent review of the landscape and visual elements of the DCO submission, with a focus on a review of the Landscape and Visual Impact Assessment (**LVIA**) chapter, Chapter 6, of the Environmental Statement (**ES**), and is structured the guidance provided within the Landscape Institute *Technical Guidance Note 1/20 (10 Jan 2020): Reviewing Landscape and Visual Impact Assessments (LVIAs) and Landscape and Visual Appraisals (LVAs)*, which is included within **Appendix B** for reference.

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

About AAH Planning Consultants and The Author

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

1.5 This review has been prepared by Oliver Brown, who is a Chartered Landscape Architect within AAH, with over 20 years' experience in landscape design and assessment, and extensive

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

Relevant Documents

1.6 The Landscape and Visual review is based on the following documents (including sub-appendices) submitted to the Planning Inspectorate, which are available at: https://national-infrastructure-consenting.planninginspectorate.gov.uk/projects/EN010151/documents

The information downloaded and initially reviewed is as follows (which include any associated sub-appendices, and based on the document: *EN010151– Beacon Fen Energy Park Examination Library*):

- **Plans / Drawings / Sections**
  - 2.1 Location Plan
  - 2.2 Land Plans
  - 2.4 Works Plan
  - 2.5 Streets rights of way and access plans
  - 2.5 to 2.31 Illustrative plans and sections, and Bicker Fen layouts
- **3.1 Draft Development Consent Order**
- **Environmental Statement**
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  - 6.4.43c Figure 6.32 Vegetation Removal Plan

- **Other Documents**
  - 5.5 Planning Statement
  - 5.6 Design and Access Approach Document

Please note: this review is of the information available at the time of writing. Throughout the Pre-Examination and Examination process additional information will likely be submitted, including updates and amendments to some of the documents listed above.

Previous Consultation

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

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

1.8 Section 6.3 of the LVIA details the consultation undertaken during the preparation of the DCO, with Table 6.1 summarising the relevant consultation carried out for landscape and visual matters, and AAH have subsequently issued a Relevant Representation (**RR**), included within Appendix A of this review, as part of the pre-examination process to summarise the high level comments on the submission and key areas for the subsequent DCO examination to cover.

2.0 Presentation of the LVIA

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

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

LVIA Chapter

2.1 The LVIA and associated figures, appendices and documents provide a thorough analysis of landscape and visual effects of the Development, and the level of information and detail is appropriate for the scale and type of development. The assessment overall is laid out in a logical manner, however the LVIA chapter does not read easily and the process of assessment is not fully explained within the chapter with items or steps in the process not clearly introduced, or lacking consistency in referencing appendices. For example, *Views from Residential Receptors and Settlements* (paragraph 6.5.43) references the detailed visual assessment at Appendix 6.4, but subsequent receptor groups do not include this reference – we would suggest an overarching introductory paragraph prior to these groups would have been more suitable stating that the intention is to identify receptors with potential views desk based study and ZTV carried out, then from this field work carried out to

identify visual receptors, and subsequently a detailed assessment is provided at Appendix 6.4, with a summary. This would set the scene and describe what is being subsequently presented within the chapter.

2.2 The LVIA has predominantly been carried out to best practice and guidance, primarily the *Guidelines for Landscape and Visual Impact Assessment (GLVIA3)* by the *Landscape Institute*, by a Chartered Landscape Architect. However, we have identified issues with some areas of the LVIA, that we have provided narrative on below, and the DCO examination provides an opportunity to explore these in more detail.

2.3 As a general note: Throughout the LVIA chapter, some references are missing, predominantly from Tables, which needs addressing and updating at an appropriate time to make navigation easier. However, for this review we have assumed the Table numbers are based on the list provided on Page 5.

2.4 The LVIA clearly draws a distinction between **landscape effects** and **visual effects**, with the main chapter focussing on likely **'Significant'** effects. Paragraph 6.4.20 of the LVIA clarifies that Significant Effects *"are described as being of a Major or Moderate adverse/beneficial level." a*nd the effects that are *"assessed as Minor or Negligible"* are Not Significant. Paragraph 1.15.6 of Appendix 6.2 identifies that any deviation from this would be clearly explained in the assessment. This is acceptable, and provides a clear and transparent threshold to identifying Significant landscape and visual effects.

2.5 Paragraph 1.15.4 of Appendix 6.2 clarifies professional judgement is applied to determine the significance of the effects by combining sensitivity of receptor and magnitude of change as presented on Figure 1.1. Professional judgement is promoted within GLVIA3, however it is important that the application of this judgement be explained and transparent throughout.

2.6 The ES presents an assessment of a 'worst case' scenario of the Development, based on design parameters presented in section 2.4 of ES *Chapter 2: Proposed Development*. This is clarified in paragraph 2.3.1 which clarifies that *"use of design parameters has been incorporated into the assessment to present a likely worst-case assessment of the potential environmental effects"*, which is in accordance with the Rochdale Envelope Approach. However, the LVIA is not explicit in this regard, and while paragraph 6.3.9 provides information on parameters that have been used at each phase of the scheme, in no location states or clarifies that the LVIA has been undertaken on a worst-case scenario regards to assessing the maximum parameters

laid out in Chapter 2 and areas shown on Figure 2.4: Works Plan – only worst case in regards to winter views is clarified.

2.7 It has been assumed that the maximum parameters have been used for all elements within the LVIA chapter, however it should be clarified at the examination stage that this is the case. This includes an assumption that the assessment includes that all vegetation proposed to be removed on *Figure 6.32 Vegetation Removal Plans* and identified in Schedule 13 of the DCO would, ultimately, be removed. However, if proposed mitigation areas and existing retained vegetation proposals are changed in later, detailed design stages, the findings of the LVIA are likely to also change. Landscape mitigation, and vegetation retention and protection, needs to be clarified and guaranteed as the assessment relies heavily upon it to reduce the residual landscape and visual effects of the Development.

2.8 Paragraph 6.3.10 (bullet 7) identifies the potential for a 4m high acoustic fence may be required. Could it be clarified as to whether this has been considered in the LVIA or included on visualisations as this may present a monolithic element within the scheme, potentially of a substantial length.

2.9 Paragraph 6.3.12 identifies a 50m working width for the Bespoke Access Road. This is a very wide corridor that may be affected by construction for a 6m wide road. We have concerns regarding this affecting existing vegetation, and seek clarifications on vegetation protection throughout these works and as to whether the 50m would be utilised only for the road construction or if plant and vehicles would track across this very wide corridor to access the Solar Array construction area.

2.10 The LVIA assesses landscape and visual effects at the main phases: **construction; operation** and **decommissioning**, with operation phase considered with and without established landscape mitigation (year 1 effects and year 15 effects). The main phases of the project are detailed within *Chapter 2*. The LVIA considers the scheme in isolation, and *Chapter 18* of the ES considers the scheme **cumulatively** with other environmental matters, as well as similar type and scale projects in the local area.

LVIA Appendices

2.11 The Appendices produced as part of the LVIA provide detailed supporting information relating to the assessment. The appendices are clearly laid out and easy to follow and locate pertinent

detailed information relating to the main chapter. The appendices are listed within section 6.1.3 of the LVIA, and are referenced throughout the report to support the findings and provide additional information.

LVIA Figures

2.12 The Figures produced as part of the LVIA are appropriate in the level of detail provided and clarity of information presented. The figures are clearly listed within section 6.1.3 of the LVIA, and are referenced throughout the report to support and illustrate the findings.

2.13 However, we do note that the PDF files on larger more complex drawings have been saved and uploaded in a format that makes viewing and navigation difficult, regularly freezing on screen or crashing. This has been tested on several AAH computers with the same occurrence. We would suggest that the applicant review the plans (e.g. layout plans, landscape plans, and vegetation removal plans) and re-upload as flattened PDFs or split into smaller files to aid viewing.

3.0 Methodology and Scope

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

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

LVIA Methodology

3.1 The LVIA Methodology is presented in section 6.4 of the LVIA and *Appendix 6.2: Landscape and Visual Impact Assessment Methodology*. Reference is made in section 1.1.4 of *Appendix 6.2* to industry guidance, including GVLIA3, however we note that there is no reference to *Notes and Clarifications on aspects of GLVIA 3, LITGN-2024-01, Landscape Institute* which was published in August 2024. This TGN provides some key updates and clarifications that are applicable to LVIA being carried out, and we would seek confirmation from the applicant as to whether this has been utilised within the methodology and subsequently the assessment. Paragraphs 1.1.1 and 1.1.2 of Appendix 6.2 clarify the difference between **landscape effects** and **visual effects**, and subsequent compliance with GVLIA3 by assessing both as interrelated but separate components.

3.2 The process and stages of assessment are presented, including a baseline assessment, the detailing and review of the design, assessment of sensitivity (by assessing value and susceptibility), an assessment of magnitude of impact (in relation to size, scale, geographical

extent, duration and reversibility) of the Development on the baseline conditions, and a determination of the significance of effects at all phases of the scheme (construction, year 1, year 15 and decommissioning).

3.3 The study area selection is explained within paragraphs 6.4.1 and 6.4.2 of the LVIA. The Study area is illustrated in Figure 6.1. The radius of the study area of 5km from the Order Limits has been defined for the LVIA. A brief justification within paragraph 6.4.2 for extending the Study Area to 5km, stating: *"It is considered that beyond this distance the Proposed Development is unlikely to give rise to significant landscape or visual effects."*. We have not identified anything on Site that would contradict the statement that there would not be Significant effects beyond 5km, and typically distance reduces the likelihood of this occurring. However, at the construction phase (and potentially operation with maintenance and replacement operations) traffic movement to and from the Site may have effects beyond 5k, although this is unlikely.

3.4 The methodology in Appendix 6.2 is clear and detailed, with Section 1.3 to 1.10 covering landscape effects and Section 1.11 to 1.14 covering visual effects. Section 1.15 of *Appendix 11.2* clarifies how the level or significance of landscape and visual effects are determined by combining judgements regarding the sensitivity of the receptor and the nature or magnitude of the effect arising from the Development.

3.5 Tables within the methodology provide criteria for assessment of value, and susceptibility, and subsequently how these have been combined to provide a judgement on sensitivity. These tables provide clear indicative criteria of the assessment of landscape and visual value, susceptibility, sensitivity and magnitude of effects. The utilisation of professional judgement is promoted within the methodology, and should an effect be different to that presented within the tables, and we would expect any deviation be clearly explained within the main assessment.

3.6 The assumptions made on plant growth rates in Section 6.3.30 are generally acceptable, however we would state these are at the higher end of the scale as to what we would deem acceptable for a fifteen-year period: fifteen years being the period that residual effects have been assessed in the LVIA. We would query as to whether the plant growth rates allow for issues during the establishment period, and allow for any plant replacements to be carried out along with planting establishing should there be plant failures or lack of acceptable growth. These plant growth rates are dependent upon the successful implementation of a robust and well considered OLEMP, which is covered in further sections of this review.

3.7 Given the stated operational time of 45 years, there is a concern regarding the assumptions of reversibility and duration. Having reviewed the sections relating to this from GLVIA3 and other related guidance, it is clear that this project is long term. Given that 45 years is comparable to at least one generation, there is some considerable strength to the consideration that this would amount to a permanent project, as opposed to a temporary one, especially considering the average lifespan of building design is circa 50 years. If deemed a permanent Development, which it is our position, this is likely to have a bearing on the judgements of effects, as typically a temporary scheme reduces the magnitude of a change. Therefore, the majority of judgements on longer term effects (15 years+) need to be re-visited and adjusted so as to be permanent, and not *reversible*.

3.8 We would also recommend that the applicant consider fully that in this 45-year timescale, the panels, inverters, batteries and other associated elements will likely be replaced. It is not clear within the submission the frequency that this would likely be, however on similar projects this has been at least once for panels, however Inverters and batteries may be more regularly. This should be clarified and also how this has been captured within the LVIA. Also, given the pace of technology, it should be considered if it is likely that the panels could be replaced on numerous occasions. At this stage we would need additional information regarding the phases of replacements in order to consider whether there is one single construction stage, or a series of staged re-construction stages, and activity and deliveries, potentially of large-scale equipment, be for the life of the scheme.

ZTV Methodology

3.9 The process of modelling Zones of Theoretical Visibility (ZTVs) and subsequent presentation on Figures 6.1 and 6.2 is summarised in paras. 6.5.40 to 6.5.42. Section 1.19 within Appendix 6.2 provides a methodology and parameters of the ZTV generation and paragraph 6.3.28 (bullet 2) clarifies that the *"ZTV for the Proposed Development has been modelled on a worst case scenario with PV Array heights at 3.5m and 3.9m and the tallest elements of the Solar Array Area, the HV transformers at up to 13m*". The methodology, execution and presentation on Figures 6.1 and 6.2 is acceptable, with elements modelled to their maximum parameters.

Photomontage Methodology

3.10 The process of obtaining photography and delivering photomontages is presented within paragraphs 1.20 to 1.24 of *Appendix 6.2*. This states that photomontages were prepared in accordance with the Landscape Institute *TGN 06/19 Visual Representation of Development Proposals*. However, the methodology does not clarify the parameters the scheme has been modelled to or if the photomontages have been presented to the maximum allowed parameters provided within *Chapter 2: Proposed Development;* this should be clarified as to whether the visualisations present a 'worst case' visualisation, or not.

4.0 Appraisal of Landscape Baseline and Effects

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

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

Landscape Baseline

4.1 The Landscape Baseline is considered in section 6.5 of the LVIA, with Figure 1.1 illustrating the Scheme Location and Order limits and Figure 6.1 illustrating the 1, 2 & 5km Search Areas. The Site covers 757.6 hectares of predominantly agricultural land, which comprises an area of 529.2 hectares proposed for solar arrays along with 183.1 hectares of cable route corridor (connecting to the Bicker Fen National Grid substation) and 45.3 hectares of bespoke access corridor (referred to as the Bespoke Access Road). The Site is located in Lincolnshire County, with the majority of the order limits within North Kesteven, however the southern extent of the cable corridor and works associated with the Bicker Fen Substation located within the administrative area of Boston Borough Council.

4.2 The landscape baseline follows the LVIA methodology and begins by identifying baseline landscape characteristics, as well as relevant designations, of the study area and the Site. This is summarised in the LVIA chapter and further detail is provided in *Appendix 6.3: Landscape Character Baseline and Sensitivity*. Paragraphs 6.5.3 to 6.5.20 provide an overview of published character assessments, utilising a hierarchy of these from National Character Areas to Local. Table 6.3 goes on to usefully summarise the key characteristics of the published Landscape Character Areas within the Study Area. We have assumed the author acknowledges that the Site and Study Area reflect the boundaries and characteristics of the published character assessments, however a clear statement on this would clarify.

4.3 Paragraphs 6.5.22 to 6.5.38 go on to provide a narrative on the existing landscape baseline of the Site and surroundings, with paragraph focussing on the main Site area (solar arrays etc.), the cable route and then the wider study area. This is a useful narrative and provides the authors own judgement on the landscape character and baseline that may be affected directly (within Order Limits) and likely indirectly (wider study area). The LVIA acknowledges the low lying and relatively flat fenland landscape crossed with drainage dykes and ditches, dominated by arable land use and open, relatively un-developed, character of the Site and Study area.

4.4 The Future baseline is covered in paras. 6.5.66 to 6.5.68. The author judges that the landscape of the Site and Study Area will remain in its current state in the future. The development of solar farm projects and energy infrastructure (such as overhead lines and pylons, and associated sub stations and converter stations) in the region is not acknowledged to be a factor in the future baseline of the Study Area. This is a landscape undergoing extensive change to land-use, predominantly changing from agriculture to renewable and energy infrastructure Development. We have concerns regarding effects on the national and regional landscape character areas. The mass and scale of these projects combined has the potential to lead to a change in landscape character over an extensive area across these published character assessments. The landscape character of the 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.

4.5 To calibrate this change to the landscape, these schemes combined, if built, would clearly require the update of any published landscape character assessment, including at a national level (NCA's), so as to include large scale solar as a defining land use characteristic as well as agriculture. This is a clear and marked change to landscape character, and several schemes have already been approved, with many others in the planning system. It should also be noted that other renewable and energy infrastructure projects (such as Solar, BESS, Hydrogen, Pylons and cables along with associated infrastructure) are planned in the region, including NSIP and DCO schemes as well as TaCPA scale projects. These will all combine to change the character of the wider landscape.

4.6 This baseline process, undertaken by the applicant, resulted in several landscape receptors being identified as likely to be affected by the Development identified as "Sensitive Receptors". These are presented in Table 6.4 and include both landscape elements or features of the Site and Study Area (e.g. vegetation and hedgerows, land use, landscape pattern), as

well as Landscape Character, which we have assumed are the published landscape character areas as identified in paragraphs 6.5.3 to 6.5.20 of the LVIA, providing an overview of published character assessments. This identification and list is confusing and used inconsistently in the subsequent assessment, which goes on to assess *Landscape Character – Site Level*; and *Effects on Landscape character – Local landscape character*. The way section 6.5.64 is written is that these are the receptors that the LVIA will assess the change to, however the actual receptors are the Site and wider character areas. Also confusingly, the construction effects on each of the landscape receptors are then broken down with subheadings into *landscape elements* and *landscape character*, but the Operation effects are not broken down in the same way, mixing together these two aspects (character and elements). Some clarity and re-structuring would assist in clarity of this section: Clearly lay out the landscape receptors identified, summarise the likely elements to be affected within these; Assess the list of landscape receptors breaking down into effects on elements and character.

4.7 For clarity, we have assumed the following are the landscape baseline receptors:

- Site level;
- Fenland Sub Area;
- Central Clays and Gravels Sub Area;
- Holland Reclaimed Fen LCA;
- Bicker to Wyberton Settled Fen LCA; and
- South Holland Fen LCA.

Landscape Assessment

4.8 The Landscape Assessment is detailed within section 6.6 of the LVIA, referring to *Appendix 6.3: Landscape Character Baseline and Sensitivity* which includes a clear assessment of Value only, and therefore would suggest Appendix 6.3 is erroneously titled as it does not contain an assessment of Susceptibility, or subsequently combine value and susceptibility for a judgement on Sensitivity. Similarly, the statement in paragraph 6.6.7 that *"The landscape assessment is based on the determination of relevant landscape sensitivity set out in Appendix 6.3: Landscape Character Baseline and Sensitivity (Document Ref: 6.3 ES Vol. 2, 6.3.15)"* is not

correct as Appendix 6.3 provides an overall character summary and Value Assessment only. Nowhere within the LVIA have we located a detailed assessment of landscape susceptibility, with only a summary (as stated in paragraph 6.6.7: *"…summarised in the following section"*) provided for the susceptibility and sensitivity of the Site and local landscape character areas. Could this process be clarified by the applicant.

4.9 The landscape assessment commences with construction effects at paragraph 6.6.30, with Operational Landscape Effects at para 6.6.54 which consider both Year 1 and Year 15 Effects.

4.10 In line with the methodology, the assessment of the landscape effects considers the change to the identified landscape receptors at construction, operation (both years 1 and 15) and decommissioning. This includes Landscape Character Effects within the Order Limits (which would be direct) and Landscape Effects within Published Landscape Character Areas (which would be both direct and indirect). However, as identified above, only Landscape Elements are considered at the construction stage, not at operation. This provides an inconsistent approach and request the applicant provide clarity as one of the main landscape effects will be the change in land use of the areas of above ground development from arable fields to a solar development.

4.11 The LVIA identifies Significant landscape effects at the phases of **construction, operation (year 0), operation (year 15)**, and **decommissioning** phases. The following effects upon identified landscape receptors are identified in the LVIA:

- At **Construction** the following receptors were assessed as having the following landscape effects:
    - Site level: **Major adverse: Significant**
    - Fenland Sub Area: **Moderate adverse (significant)**
- At **Operation (Year 0)** the following receptors were assessed as having the following landscape effects:
    - Site level: **Major adverse: Significant**
    - Fenland Sub Area: **Moderate adverse: Significant**
- At **Operation (Year 15)** the following receptors were assessed as having the following landscape effects:

- Site level: **Moderate adverse: <u>Significant</u>**

- At **Decommissioning,** effects would be similar to those at the construction phase, however, the Site and local landscape will benefit from established planting associated with the scheme.

4.12 These 'Significant' effects represent direct effects on the landscape of the entirety of the Site. At year 15, the Order Limits (entirety of the Site) has been assessed as having a Significant Residual effect even when mitigation planting has established. The landscape character area of the Fenland Sub Area has been judged by the LVIA author as having Significant effects at Construction and Operation Year 1 only, with landscape effects judged as reducing to Minor Adverse through the establishment of mitigation planting.

4.13 While we acknowledge the establishing planting as part of the mitigation proposals will add a positive element to this landscape, we consider that the urbanising element of large scale solar on open, agricultural land is a definite and adverse change to the baseline of the Fenland Sub Area. New planting will offset some of the adverse elements of the scheme, however we disagree with the applicants' findings that the residual effects on the Fenland Sub Area would subsequently reduce to Minor adverse: we judge it would remain as Moderate adverse and Significant. Even with mitigation planting in place, the scheme is still a direct, large scale land use change across all fields in which above ground infrastructure is proposed. This would be an addition of new elements that will replace a key characteristic of this landscape, influencing overall character, and being a major addition, albeit affecting a relatively localised area of the LCA. As acknowledged in paragraph 6.6.63: *"The openness of the fenland landscape will be altered with some modifications to the field pattern and greater presence of planting introduced to accommodate the Proposed Development",* we also have concerns in regards to the mitigation planting itself causing adverse effects by being out of character with this open fenland, e.g. introduction of 3.5m high hedgerows.

4.14 Localised removal of vegetation is identified in the assessment of landscape effects; however, it is unclear whether this includes vegetation works on the wider highways network, and what this would entail. We strongly recommend limiting vegetation loss along Site boundaries for access or sight lines, or along construction access routes, because this has the potential to change the character of the local landscape beyond the limits of the Development.

5.0 Appraisal of Visual Baseline and Effects

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

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

Visual Baseline

5.1 The Visual Baseline is considered in section 6.5 of the LVIA, and describes in paragraph 6.5.39 that visual receptors are identified in the Study Area likely to be affected by the Development. The process of identifying visual receptors is presented as a two-stage process, although this is not explicit in the narrative, and relies on the reader to already have a basic understanding of the LVIA process with several matters covered under the heading of ZTV Analysis, including defining the visual study area:

- Stage 1 (as described from paragraph 6.5.40) is a desk-based assessment which commenced with the Development of a Zone of Theoretical Visibility (**ZTV**) analysis, used to assist and identify potentially sensitive receptors.
- Stage 2 comprises fieldwork across the Site and Study Area utilising the ZTVs generated to identify visual receptors likely to experience views of the construction, operation or decommissioning of the Development and identify and capture representative views (viewpoints).

5.2 Paras. 6.5.43 to 6.5.58 provide a useful overview of the visual receptors that have been identified as having views towards the main Site area. This is broken down into Residential Receptors and Settlements (from paragraph 6.5.43), views from PROW (from paragraph 6.5.49), views from people at work (from paragraph 6.5.53), and views from Roads (from paragraph 6.5.55). Subsequently from paragraph 6.5.59 the process of selecting viewpoints representative of the range of views and viewer types likely to experience views of the Proposed Development is provided. It is clarified that desktop research, ZTVs and fieldwork has informed this decision. Viewpoint locations are shown on Figures 6.1 and 6.2.

5.3 However, no overall narrative of the visual baseline has been provided. This would be a useful addition, e.g. extensive open views across the landscape due to flat topography and limited vegetation.

5.4 Paragraph 6.5.43 states that a relatively limited number of residential receptors experience views towards the Site, however we would note that those that do have views are close range (adjacent to the Order Limits) and experience open, clear views across the site and currently benefit from an open view of this rural landscape.

5.5 Visual receptors likely to be affected by the Development are identified in Table 6.5 as: Residents of properties with views of the Proposed Development; Recreational receptors along the PRoWs with views of the Proposed Development; People at work with views of the Proposed Development; and People travelling along major transport corridors and local roads. This is a high-level summary and provides a general statement as to the likely potential impacts.

5.6 Views from Residential Receptors and Settlements are considered within the LVIA, with *Figure 6.7 Residential Properties* illustrating the location of residential properties and settlements. However, no reference is made within the LVIA to *Appendix 6.5: Residential Visual Amenity Assessment*. From this it is unclear as to how the Residential Visual Amenity Assessment and LVIA have been coordinated, relying on the reader cross referencing findings, which we assume are the same. It would be useful for the LVIA to provide a clear statement in this regard, and also how the separate assessment has informed the LVIA assessment of Views from Residential Receptors and Settlements as well as fed into the overall site layout and mitigation.

5.7 We have not located an assessment of value or susceptibility relating to individual visual receptors, with only a final judgement of Sensitivity of visual receptor provided within Appendix 6.4. While an assessment of Sensitivity is provided within Appendix 6.4 of the baseline panoramas (viewpoints), none is provided for the receptors themselves. This does not fully align with guidance provided within LI *Technical Guidance Note LITGN-2024-01.* This clarification by the LI clearly states that the focus of a visual assessment should be on visual receptors, with viewpoints being utilised to illustrate potential views. Section 6(7) of LITGN-2024-01 section on: "*Assessing viewpoints or visual receptors?*" clarifies:

"The focus of the visual assessment should be the visual receptors (i.e. the people as set out within paragraph 6.31. of GLVIA3). The purpose of viewpoints is covered at paragraph 6.19 (i.e. for illustration of the visual effects)."

5.8 This approach does cause some confusion, and it should be clarified as to how this has fed into the assessment of receptor sensitivity. The main LVIA chapter does not make reference to the sensitivity of visual receptors either. This appears as an omission in the process. Similarly, paragraph 6.6.89 states that *"The visual assessment has been informed by a viewpoint assessment using a selection of viewpoints".* We would stress that the viewpoints are there to illustrate views only, assisting the reader understand effects on receptors.

5.9 The selection of the nineteen viewpoints formed part of the pre-application consultation and includes locations recommended as part of this process. These viewpoints are located on Figures 6.1 and 6.2 and presented as baseline photographs within *Figures 6.8 to 6.26.*

Visualisations/Photomontages

5.10 Viewpoints representative of the visual receptors were identified through consultation and agreed upon. This baseline process resulted in the identification of four viewpoints to be developed as Type 3 visualisations/photomontages and presented in *Figures 6.27 to 6.30 which demonstrate the scheme as Existing; Year 1 and Year 15.* A brief methodology for photography and visualisations is provided in Sections 1.20 to 1.24 *Appendix 6.2: Landscape and Visual Impact Assessment Methodology*, which clarifies that the photomontages have been prepared to *Landscape Institute's TGN 06/19* . However, it is not clear as to the parameters the proposals have been modelled to, and it should be clarified if these represent a worst case scenario based on maximum design parameters provided within Chapter 2.

Visual Assessment

5.11 The Visual Assessment is provided within section 6.6 of the LVIA and detailed within *Appendix 6.4: Visual Assessment*. As outlined above, we have not located an assessment of value or susceptibility relating to visual receptors, with only a final judgement of Sensitivity of visual receptor provided within Appendix 6.4 with no explanation as to how this judgement has been arrived at. The LVIA chapter does not provide any narrative in regards to the assessment to the value of views experienced by receptors or the susceptibility of receptors to changes in their view. While an assessment of Sensitivity is provided within Appendix 6.4 of the baseline panoramas (viewpoints), none is provided for the receptors themselves. This does not fully align with guidance provided within LI *Technical Guidance Note LITGN-2024-01.*

5.12 Appendix 6.4 provides a detailed viewpoint assessment (of the 19 viewpoints), and a detailed assessment of identified visual receptor groups in Tables 1.20 to 1.22, which are broken down into: residents in settlements; property groups; individual properties; recreational receptors using the recreational path network and facilities; and users of the transport network. The visual receptors identified in Tables 1.20 to 1.22 do not have any reference back to the viewpoints, which requires the reader to cross reference information. As viewpoints are there to represent views from receptors, it would be useful if this was clearly referenced in the tables in regards to what viewpoint is representative of a certain visual receptor.

5.13 The visual assessment commences with construction effects for the Solar Array Area at paragraph 6.6.92, Cable Route Corridor at 6.6.105, and Bespoke Access Road at 6.6.118. Operational Visual Effects (year 1 and year 15) for the Solar Array Area at paragraph 6.6.127, Cable Route Corridor at 6.6.144, and Bespoke Access Road at 6.6.164.

5.14 The LVIA identifies Significant visual effects at the **construction, operation (year 1), operation (year 15)**, and **decommissioning** phases.

5.15 The following Significant effects are identified in the LVIA Chapter:

- **At Construction:**
    - **Major Adverse** (Significant) visual effects for:
      Solar Array Area
        - Residents of Ewerby Thorpe Farm (R1a);
        - Residents of Ewerby Thorpe Lodge (R1b);
        - Residential receptors at Property Group R2, including; Howell Fen Farmhouse (R2a), Asgarby Barns (R2b) and Westmorelands Farm (R2c);

- Residential receptors at Gashes Barn (R4);
- Residential receptors at Property Group R20, including; Crown Cottage (R20a) and Keepers Cottage (R20b);
- Users of sections of PRoW Ewer/8/2,Ewer/8/1, Ewer/9/1, Ewer/12/1, Skym/8/1 along and adjacent to the River Slea/Kyme Eau;
- Users of Bridleway Ewer/1103/1;
- Users of Black Drove/Ferry Lane/Halfpenny Toll Lane;
- Users of Howell Fen Drove

Cable Route Corridor

- Residential receptors at Property Group R9 including, Crow Lane Farm, White House, Broadhurst Farm;
- Residents of Property White House Farm (R10);
- Residents of Property Poplar Tree Farm (R11);
- Residents of Property Villa Farm (R12).
- Residential receptors at Property Group R5. Star Fen Farm, The Bungalow, Star Fen Cottage, Windward, Berrick Cottage, Decoy Farm;
- Residential receptors at Property Group R15. Meadow View, Dovecote Farm, Cozee Cottage, Highland House, Gauntlet Bridge Farm, Fen Lodge, Crow Hall.
- Users of PRoW network to the east of Great and Little Hale PRoW Nos. GtHa/2/1, LHal/4/1 and GtHa/2/1;
- Users of PRoW network to north west of Heckington, West of Solar Array Area, including: Heck/12/1, Heck/14/1, Heck/2/4;
- Users of PRoW Bick/2/1.

Bespoke Access Road

- Users of PRoW to the west of Asgarby Lane, including; KkLT/6/1ASHo/2/1, KkLT/4/2 and KkLT/5/1

- **Moderate Adverse** (Significant) visual effects for:

Solar Array Area

- Residential receptors at Property Group R3 Copperhill Kennels Cattery Waithe Farmhouse The Grange, Ferry Farm and Mere House

Cable Route Corridor

- Residential receptors at Property Group R6. Courtrow Farm, The Paddocks, Winkhill;
- Residential receptors at Property Group R13. Kingtree Lodge, Cowbridge Farm;
- Residential receptors at Property Group R14. Butlers, Acorn Lodge, Milldrain Lodge;
- Residential receptors at Property Group R18. Garwick Farm, Strawberry Cottage, Bramble Cottage, White House, Fen House.
- Residential receptors at Property group R7. Hall Farm, The Farm House, Poplar Farm.
- Residential Receptors at Great Hale (only identified in Appendix 6.4, Table 1.20 – not identified in the main LVIA assessment section, which we assume is an omission)
- Residential Receptors at Northorpe Village (only identified in Appendix 6.4, Table 1.20 – not identified in the main LVIA assessment section, which we assume is an omission)
- Transport receptors from some sections of the A17 (The views will also include the views of temporary access tracks.)

- Transport receptors using the of local road network adjacent to and crossing the southern extent of the Cable Route Corridor including Tileban Lane and Bicker Drove.

Bespoke Access Road

- Users of PRoW to the east of Asgarby Lane, including; ASHo/3/1 and Ewer/1103/1 KkLT/4/2 and KkLT/5/1
- Users of the A153;
- Users of Asgarby Lane; and
- Users of Heckington Lane/Halfpenny Toll Lane

These are typically identified for receptors on the road and PROW network, along with multiple residents in the local area, that are in close proximity to the Development with limited or absent screening allowing for clear views. These **Moderate** and **Major Adverse** effects are considered to be Significant and would result from the proposed construction activity seen at close range across a wide extent of a view. While these receptors are relatively localised, with limited long-range views of the construction activity, we disagree with the LVIA that they are low in number, as the list above clearly identifies. The construction phase will affect a high number of visual receptors across a wide area.

- **<u>At Operation (Year 1):</u>**

  - **Major Adverse** (Significant) visual effects for:

    Solar Array Area

    - Residents of Ewerby Thorpe Farm (R1a);
    - Residents of Ewerby Thorpe Lodge (R1b);
    - Residential receptors at Gashes Barn (R4);

  - **Moderate Adverse** (Significant) visual effects for:

    Solar Array Area

    - Residential receptors at Property Group R2, including; Howell Fen Farmhouse (R2a), Asgarby Barns (R2b) and Westmorelands Farm (R2c);
    - <u>Residential receptors at Property Group R3 Copperhill Kennels Cattery Waithe Farmhouse The Grange, Ferry Farm and Mere House – not identified in the main LVIA assessment section, which we assume is an omission)</u>
    - Residents of Property White House Farm (R10);
    - Residential receptors at Property Group R20, including; Crown Cottage (R20a) and Keepers Cottage (R20b);
    - PRoW network near the River Slea, including; PRoW Ewer/8/2, Ewer/8/1 and Anwi/2/2;
    - Users of Bridleway Ewer/1103/1;
    - Users of Black Drove/Ferry Lane/Halfpenny Toll Lane;
    - Users of Howell Fen Drove

    Bespoke Access Road

    - Users of PRoW to the west of Asgarby Lane, including; KkLT/6/1ASHo/2/1, KkLT/4/2 and KkLT/5/1

These represent a large reduction in receptors experiencing Significant effects and also several receptors have reduced in the level of Significance: from Major to Moderate adverse (but remain Significant). We would expect this reduction, which is predominantly from the Cable Corridor and Bespoke Access Road having construction effects, but limited adverse effects

once completed being either below ground (cable), or a change in the ground surface (road), which would have limited wider visibility. While there are still several receptors identified as experiencing Significant adverse visual effects from the Development, we would query as to how views that are temporary in nature (at construction) to those of a long term/permanent change are able to reduce, especially as at this stage, any mitigation planting is yet to establish and is subsequently providing limited screening or integration of the Development. This needs to be clarified.

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

  - **Major Adverse** (Significant) visual effects for:
    - Residential receptors at Gashes Barn (R4);

  - **Moderate Adverse** (Significant) visual effects for:
    Solar Array Area
    - Residents of Ewerby Thorpe Farm (R1a);
    - Residents of Ewerby Thorpe Lodge (R1b);
    - Users of the PRoW network near the River Slea, including; PRoW Ewer/8/2, Ewer/8/1, Ewer/9/1, Ewer/12/1 and Anwi/2/2

    Bespoke Access Road
    - Users of PRoW to the west of Asgarby Lane, including; KkLT/6/1ASHo/2/1, KkLT/4/2 and KkLT/5/1

These represent a further reduction in receptors experiencing Significant effects through the establishment of mitigation planting over 15 years from planting. The LVIA therefore identifies that several visual receptors will experience Significant adverse effects over the remaining 30 years (45 years in total) of the development.

- **At Decommissioning,** effects would be similar to those at the construction phase, however, the Site and local landscape will benefit from established planting associated with the scheme, which would provide screening and integration in views.

5.16 We have noted several errors in transcribing Significance of effect from Appendix 6.4 Visual Assessment into the main LVIA text, for example where some effects that are judged as Major in Appendix 6.4 have been described as Moderate in the main narrative, or have not been identified at all. We request this is further reviewed and the main LVIA chapter accurately reflects the assessment carried out in Appendix 6.4 as often Significant effects are underplayed or not identified, leading to a misinterpretation of potential visual effects. One example is for Residential receptors at Gashes Barn (R4): the LVIA chapter and subsequent summary Table 6.8 judges this to have a Moderate Adverse Year 15 residual effect, whereas Table 1.21 of Appendix 6.4 judges year 15 residual effects at Major Adverse. Subsequently the RVAA judges Gashes Barn (R4) in Table 1.1 Moderate Adverse Year 15 residual effects. We

request the judgements are reviewed thoroughly and a tracked change LVIA is provided for us to fully assess the findings of the visual assessment and comment upon individual judgements.

5.17 However, notwithstanding this, the Development has been identified in the LVIA as resulting in a Significant change to a variety of visual receptors during construction and in the early years of operation and maintenance, with Significant *residual* visual effects much reduced in number, which suggests a potential over reliance upon mitigation planting to screen the proposals without full attention to the potential impact of this screening on the landscape; mitigation planting must be well considered at any detail design stage, and not simply put in place to screen views of development at the cost of the existing view. These residual Significant effects have been identified as arising from sensitive users on the road and PROW network, along with residents that are in close proximity to the Development. The identified reduction in several Significant visual effects relies upon the successful establishment of the mitigation planting scheme and a robust OLEMP that is carried out for a suitable period of time.

5.18 Subsequently, we disagree with several reductions in level of significance of effect at year 15 through the establishment of mitigation planting. The assumption made for several receptors is that by screening views of the scheme with planting, the level magnitude of effect will also reduce. In several instances the view from receptors will be completely altered from that of the existing, baseline view, predominantly from blocking or foreshortening expansive views across an open rural landscape. These are predominantly from residential properties in close proximity to the Solar Arrays, for example:

- R1 Group Receptor: a. Ewerby Thorpe Farm b. Ewerby Lodge;
- R2 Group Receptor: a. Howell Fen Farmhouse, b. Asgarby Barns c. Westmorelands Farm, (Potential views of Solar Array Area and Cable Route Corridor);
- R3 Group Receptor: 3a Copperhill Kennels Cattery 3b Waithe Farmhouse 3c The Grange 3d Ferry Farm & Mere House;
- R4 Gashes Barn;
- R20 Group Receptor: Howell including; 20a Crowne Cottage 20b Keepers Cottage.

5.19 The outlook from residents in these properties will be altered and foreshortened, which is clearly illustrated on the *Appendix 6.5 – Residential Visual Amenity Assessment* Figure 1a,b,c - Howell Fen Farmhouse; Figure 2a,b,c - Keepers Cottage; and Figure 3a,b,c.

5.20 We judge that the year 15 effect on all these nearby residential receptors will be at least Moderate and Significant. The panels are proposed to be located very close to these receptors and the mitigation planting itself, designed to screen panels, is changing the view detrimentally; completely changing the character and openness of the view, and appearing out of character in this location. Even with a larger offset of development, or increased landscape buffer, the open views would predominantly be foreshortened and changed to the exiting. The year 15 assessment must be on changes to the baseline, not on how successfully the development is being screened from view.

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

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

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

Cumulative Methodology

6.1 Cumulative landscape effects are considered in *Chapter 18: Cumulative Effects*, and the approach to landscape and visual effects contained within paragraph 6.4.11, with paragraphs 6.4.12 to 6.4.13 relating to Cumulative Landscape Effects and paragraph 6.4.14 relating to Cumulative Visual Effects. Section 6.9 of the LVIA provides a summary of the Assessment of Cumulative Landscape and Visual Effects.

6.2 The cumulative landscape and visual effects section within ES Chapter 18 is dealt with separately in *Table 18.3 Inter-Project Cumulative Effects Assessment*, and provides a clear assessment of the cumulative landscape and visual effects.

6.3 The Cumulative Study Area for landscape and visual is identified within *Table 18.2* of Chapter 18 which clarifies that a 5km zone of influence from the order limits has been considered for cumulative Landscape and Visual matters.

Cumulative Landscape and Visual Effects

6.4 Cumulative landscape and visual effects are those that: *"may result from adding new types of change or from increasing or extending the effects of the main project when it is considered in isolation"*.

6.5 Table *6.7 of the LVIA* identifies the schemes that have been considered, and of those four have been identified for inclusion for assessment of cumulative landscape and visual effects:

- *Heckington* Fen Solar Park;
- Vicarage Drove;
- Bicker Fen Solar Farm; and
- Little Hale Solar Farm.

6.6 No Significant landscape or visual cumulative effects are identified in the LVIA. However, we have concerns regarding cumulative effects due to the unprecedented number and extent of renewable energy projects and associated infrastructure in the region. The mass and scale of several NSIP scale energy projects, along with planned National Grid projects, combined with Beacon Fen has the potential to lead to adverse effects on landscape character over an extensive area across multiple published character areas. The landscape character of the Lincolnshire region will be altered over the operational period through an extensive area of land use change, and introduction of energy infrastructure in an area that is predominantly of agricultural character and land use; solar development is not identified within current published character assessments at a local, regional or national scale. While it is not suggested that agriculture will not remain as a defining characteristic, over a short period of time large scale solar and other energy infrastructure will undoubtable become a widespread characteristic in the region. Subsequently, we judge that solar development would be a key characteristic in any updates to published character assessments from local to national scale.

6.7 However, given the absence of a unified, county-wide landscape character baseline across Lincolnshire, this presents a challenge when assessing cumulative effects over a strategic county-wide scale to consider all these energy projects. Therefore, an approach we are promoting is to extract common landscape attributes of the area from the multiple character area assessments that cover the region, enabling a reasoned, evidence-led baseline, and

subsequently assessment, of cumulative landscape effects across the wider county area. For example, across Lincolnshire: the Land Use is Predominantly arable agriculture; Field Patterns are predominantly medium to large-scale; the Topography has a predominantly flat to gently undulating landform; Perceptual Qualities are predominantly quiet and with a rural character and high levels of tranquillity; the Settlement Pattern is generally dispersed villages and market towns; Vegetation & Tree patterns are generally open with sparse or isolated tree cover; and regarding Views & Openness, there is generally a strong sense of openness, big skies, and expansive views. Therefore, across the region, based on these shared characteristics large scale solar development and new energy infrastructure would create cumulative change of the landscape character through an extensive Land Use change, directly affecting the perceived openness, and rural tranquillity. We judge large scale solar, battery and energy infrastructure will subsequently be a distinctive key characteristic across the region as a whole.

6.8 This would also be an issue when experienced sequentially for visual receptors travelling through the wider landscape and experiencing these schemes across potentially several kilometres, albeit with gaps between the schemes. However repeated views and presence of large scale solar would undoubtably increase the susceptibility of receptors to changes in view through visual fatigue in which viewers experience a diminishing capacity to absorb or tolerate repeated or similar visual stimuli (solar development) along routes, eroding the rural landscape character and increasing a broader perception of landscape industrialisation.

6.9 GLVIA3 defines types of cumulative visual effect as either: Combined (in same view) or Sequential. Table 7.1 of GLVIA3, regarding Sequential Cumulative visual effects states: *"Sequential: Occurs when the observer has to move to another viewpoint to see the same or different developments. Sequential effects may be assessed for travel along regularly used routes such as major roads or popular paths"*

6.10 We judge that the sequential effects would be felt throughout the area, with PROW users, that are more susceptible to changes in their view, moving slowly and often engaging with the landscape attentively; Travel along these PROW presents successive experience with solar infrastructure, creating a sequential visual effect. PROW users traveling along several rights of way have been identified within the applicants LVIA as having significant adverse visual effects at year 15. If users of these routes had previously, or would subsequently, travel on rights of way or other linear routes with views of other solar schemes (as identified in the LVIAs

associated with these projects) the implication is that users would likely experience sequential visual effects across two or more schemes, even at Year 15 when mitigation should have matured. Combined with receptors traveling long distances along road corridors in the region with views of the scheme, this can form a coherent visual narrative: a rural area increasingly defined by clustered energy-infrastructure development.

Residential Visual Amenity and Settlements

6.11 Residential Visual Amenity has been considered as part of the LVIA. Appendix 6.5: *Residential Visual Amenity Assessment* provides a detailed assessment of Residential Visual Amenity. Views from Residential Receptors and Settlements are also considered within the LVIA, however no reference is made within the LVIA to *Appendix 6.5*, although *Figure 6.7 Residential Properties* illustrates the location of residential properties and settlements. From this it is unclear as to how the Residential Visual Amenity Assessment (**RVAA**) and LVIA have been coordinated, relying on the reader cross referencing findings. It would be useful for the LVIA to provide a clear statement in this regard, and also how the RVAA has informed the LVIA assessment of Views from Residential Receptors and Settlements as well as the overall site layout and mitigation.

6.12 RVAA methodology is included within Section 1.18 of the LVIA methodology within Appendix 6.2. The methodology is sound and reflects Landscape Institute *TGN 2/19: Residential Visual Amenity Assessment*, however the main LVIA does not state that it has considered this process explicitly, or reference RVAA or whether Residential Visual Amenity Threshold (**RVAT**) has been met by any properties. The detailed visual assessment within Appendix 6.4, at Table 1.20, references *Appendix 6.5* only once for residents at Ewerby Thorpe Hamlet, however is not mentioned or referenced again for the remainder of the properties, the majority of which appear in both the RVAA and LVIA chapter.

6.13 RVAA is a stage beyond Landscape and Visual Impact Assessment and focuses exclusively on private views and private visual amenity, whereas the LVIA process is typically associated with public views from public areas. The Landscape Institute's Technical Guidance Note *2/19: 'Residential Visual Amenity Assessment'* provides further detail and that that the Residential Visual Amenity Threshold (**RVAT**) is reached when the change to visual amenity of residents in individual properties identified as *"having the greatest magnitude of change".*

6.14 The RVAA has utilised a study area of 250m which is reasonable, with TGN 2/19 not being explicit in defining a study area for RVAA. The baseline identified sixteen groups of properties within the 250m study area, which are listed in Table 1.1. Of these, properties where operation phase significant effects have been predicted are as follows:

- R1 Group Receptor: Eweby Thorpe Farm; and Ewerby lodge.
- R2 Group Receptor; Howell Fen Farmhouse; Asgarby Barns; and Westmorelands Farm.
- R4 Gashes Barn.
- R20 Group Receptor; Crown Cottage; and Keepers Cottage.

6.15 On this scheme, due to the scale and extents, as well as height of some elements (e.g. Sub stations) we would anticipate that some residents will experience Significant adverse visual effects from several properties, as laid out in the RVAA. Of particular concern is R4 Gashes Barn which is judged to reach the Residential Amenity Threshold due to the proximity of works and the scheme, which will surround this property. While it is judged that this would reduce with the establishment of planting, this is very much dependent upon the successful implementation of a robust management regime to ensure establishment, and even with established planting the extent as this property being surrounded by the development, completely changing the current open rural outlook and context for residents remains a concern. Again, established mitigation planting will aid in screening the development, however the open views will be foreshortened drastically.

6.16 However, we agree with the RVAA that while the remaining properties will experience Significant effects, it is unlikely that these will reach the RVAT through the Development of Beacon Fen.

6.17 The *Embedded Mitigation* section of the LVIA (para. 6.3.15 onwards) also goes on to explain how the site layout and mitigation has responded to properties, stating *"Reduction in the extent of the proposed solar PV panels to provide buffers from nearby residential receptors", which is also stated in Appendix 2.3: Embedded Mitigation,* however it is not explicit as to how adverse effects from properties have been fully considered as part of an iterative process. Offsets and Buffers are mentioned throughout the submission, however these predominantly refer to ecological or drainage constraints, or consideration of noise. Section 5.3.2 of the Design and Access Approach Document mentions discussions with Gashes Barn and

discussions of buffers. We have been unable to locate as to what these buffers are, how they have been established, both in the case of R4 Gashes Barn, but also other properties in close proximity (R1, R2, and R20). Offsets and buffers from sensitive receptors on the whole look minimal, and further clarification on the depth and extent of these and how they have been considered as part of an iterative process would be beneficial. As previously stated in this review, we have concerns regarding the proximity of the development to these properties, and also that the scheme will completely change the baseline views, with panels and subsequently established planting (at year 15) foreshortening views and blocking open and expansive views across this landscape. This is demonstrated on Figure 1a,b,c - Howell Fen Farmhouse; Figure 2a,b,c - Keepers Cottage; and Figure 3a,b,c within *Appendix 6.5.*

7.0 Mitigation and Design

The following section provides a review of the Mitigation and Design, based on the following criteria:

- *Is there evidence of an iterative assessment-design process and it is clear that this has informed the site redline, layout and primary and secondary mitigation?*
- *How appropriate is the proposed mitigation?*
- *Are potential cross-over topics, such as heritage or ecology, addressed and incorporated within the mitigation?*
- *Is the long-term management of existing and proposed vegetation properly addressed in any management plans to promote establishment?*

Evidence of Iterative Process

7.1 The scheme has been presented as evolving through an iterative process, with the landscape and visual findings feeding back into the design.

7.2 This is clarified in paragraph 6.3.15 which states that: "*Environmental considerations have influenced the Proposed Development throughout the design development process of the Solar Array Area and the site selection process for the Cable Route Corridor and the Bespoke Access Corridor".* Paragraph 6.3.16 goes on to state: *"The iterative design process has been informed by the Landscape and Visual Assessment, developing design principles".*

7.3 Paragraph 6.3.17 describes how the scheme has responded to landscape and visual matters, and responded to statutory consultation feedback and environmental surveys. The design appears to demonstrate some evolution through different stages of the masterplan. The mitigation appears to respond to the identified landscape and visual effects; however we would like further detail on distances and extent of proposed landscape buffers and planting. The Order Limits do appear very development heavy, with green space, buffers and habitat creation limited in area. Offsets and buffers to residential properties appear very limited considering the number of these sensitive receptors, and would benefit from further information being provided to understand distances from property lines to nearest development, fence line and mitigation planting.

7.4 As previously identified, we also have concerns regarding mitigation planting which may appear to be out of character and potentially jarring in views. This is an open landscape with boundaries predominantly defined by drainage ditches and some carriageway hedgerows. While there is an aspiration to increase areas of woodland blocks and improve connectivity, the planting scheme in reality appears as a way to screen views of the scheme, which in turn blocks currently open views and reduces the perception of an openness in this landscape.

Mitigation Measures

7.5 Landscape and Ecology proposed as part of the Scheme is covered by Work Order 9, which is subsequently located according to the Works Plans (Figure 2.4). However, on the works plans, these areas only show as isolated blocks, with the site boundary and field boundaries not covered by Work Order 9. It needs to be clarified how these boundary landscape areas are secured on site as currently all these areas fall outside any of the Work Order hatches indicated on the Legend of Figure 2.4 appearing as white, and subsequently not linked to any Work Order.

7.6 Paragraph 6.3.20 of the LVIA provides a summary of the landscape mitigation measures illustrated in the Landscape Strategy Plan**.** *Appendix 6.6: Outline Landscape and Ecology Management Plan* (OLEMP) provides information regarding the establishment and maintenance of the planting associated with the Development, as shown on *Figure 6.31: Landscape Strategy Plan*.

7.7 The success of the landscape mitigation to meet the objectives laid out in the management plan - to integrate and screen proposals, promote conservation and protection of the environment, and encourage ecological and habitat diversity - is highly dependent upon the successful management and maintenance of the new planting, as well as the protection of exiting trees and hedgerows. The maintenance operations provide an initial overview of operations; however, we would expect the management plan to be developed further, well beyond the initial 5-year period, particularly if landscape and visual effects are being assessed at 15 years. The long-term reduction in landscape and visual effects, presented in the LVIA, are based on the long-term success of the landscape mitigation, and therefore the management plan should cover at least this period, and should be in place and actively managed for the lifetime of the project. Similarly, any early planting (pre-construction) should

be included in the maintenance plan as the reduction in effects described in the LVIA are also based on the assumption that this too will have established as planned.

7.8 Monitoring of the proposals is a key aspect of the mitigation plan and is something which needs further development to ensure there is sufficient robustness to deal with the challenging climatic conditions when it comes to establishing new planting. The updating of the management plan every 5 years after the initial establishment period will go some way to ensuring that it is kept valid and can respond to issues and trends effectively, such as climate change. Plant replacements should also be considered, and also for a longer period then a "standard" 5 years, and cover for scenarios where there are large areas that have not established, or areas of significant die back beyond a 5 years period.

7.9 While the submission includes landscape proposals, these are of a high level and it would be expected that if the project proceeds much more detailed plans would to be submitted and subsequently agreed with the appropriate consultee/authority prior to the commencement of any works, which would be secured as a Requirement of the DCO. This would include clear detail of the areas of landscape mitigation, location and types of planting (species), as well as number, density and specification.

7.10 We accept that planting can be an effective way to screen development proposals and add valuable landscape and ecological elements into the landscape, however this needs to be carried out in a way that is sensitive to the existing landscape character, or meet any aims of a published character assessment to improve or introduce new planting to an area. While residual visual effects have been assessed as reducing at 15 years through mitigation planting, this is completely dependent upon the successful establishment of the planting and it growing in a manner that is anticipated within the LVIA, and illustrated on the accompanying visualisations. This is always going to be a risk, and if the planting does not establish as anticipated, the residual effects will likely be higher than judged.

7.11 This is an open landscape, and planting to simply screen could have detrimental impacts. The PROW and local roads in the study area enjoy an open aspect across most areas of the Study Area, for example from adjacent residential properties with views across the and land beyond. Therefore, care needs to be taken to prevent the loss of this character through an overbearing set of mitigation proposals. It is noted that appropriate development offsets, and with careful design, will go some way to address the matter raised.

8.0 Conclusions and Recommendations

The following section provides an overall summary and conclusion on the suitability of the Landscape and Visual elements of the DCO Application and whether they are sufficient to support an informed decision. This includes the adequacy of the LVIA, reviewed in accordance with the Landscape Institute *Technical Guidance Note 1/20 (10 Jan 2020): Reviewing Landscape and Visual Impact Assessments (LVIAs) and Landscape and Visual Appraisals (LVAs)*.

Finally, there are recommendations for further information that should be provided to assist in the examination of the DCO Application.

Summary and Conclusions on the LVIA

8.1 The LVIA and associated figures, appendices and documents provide a generally comprehensive assessment of the Development, with an appropriate level of detail for a scheme of this scale and context. The assessment process is relatively well presented, with baseline conditions and predicted effects set out in a structured way. Significant effects on both landscape character and visual amenity are identified; however, there are several areas where further clarity or additional work is considered necessary.

8.2 By virtue of its scale and massing, the Development would result in Significant adverse effects on local landscape character and visual amenity during all key phases (construction, early operation, and at year 15). The proposals would fundamentally alter the character of the site and its surroundings, replacing open, agricultural fields with extensive solar infrastructure. This represents a substantial and long-term change to the openness, tranquillity, and rural character of the area. Whilst the LVIA categorises residual effects as partially reversible, we consider that, given the likely operational lifespan and scale, the change should be regarded as effectively permanent in landscape and visual terms.

8.3 Significant adverse visual effects are also predicted for a range of receptors, due to the transformation from rural agricultural views to those containing large-scale solar arrays. We have highlighted some issues with the visual assessment within the LVIA and compliance with the recent Landscape Institute *Technical Guidance Note LITGN-2024-01,* and we also have concerns that the mitigation planting itself could generate adverse visual effects though blocking or foreshortening views and appearing out of context.

8.4 Cumulative landscape and visual effects with other renewable energy and infrastructure projects across the county present a further concern. Whilst the immediate cumulative schemes within the ES are relatively modest, the scale of other NSIP and large-scale energy projects proposed in the wider area raises the potential for extensive alteration of the regional landscape character. The combined effect of these developments could be a marked and enduring change, both directly through a change in land use and introduction of solar as a key element, and also in the perception and experience of the landscape, particularly for visual receptors travelling through the landscape and experiencing sequential effects. This is a clear and marked change to landscape character.

8.5 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 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.

8.6 While the submission includes landscape proposals (as shown on *Figure 6.31: Landscape Strategy Plan*, secured via Work Order 9 on the Works Plans and DCO), these are of a high level and it would be expected that if the project proceeds much more detailed plans would to be submitted and subsequently agreed with the appropriate authority prior to the commencement of any works and secured through Requirements of the DCO. This would include clear detail of the areas of landscape mitigation, location and types of planting (species), as well as number, density and specification. The mitigation illustrated on the layout plans has been utilised to assess the landscape and visual effects of the scheme; therefore, we would expect any detailed landscape proposals to consist of the area and extent shown on these plans as a minimum.

APPENDIX A

AAH Landscape and Visual Relevant Representation

Technical Memorandum 5 (AAH TM05)

Beacon Fen Solar Farm

Relevant Representation Landscape and Visual Comments

Lincolnshire County Council & North Kesteven District Council

Introduction

On behalf of Lincolnshire County Council (**LCC**), and North Kesteven District Council (**NKDC**), AAH Consultants have reviewed the relevant Landscape and Visual elements of the Beacon Fen Solar Farm Application to provide initial comment to be incorporated within a Relevant Representation statement from both LCC and NKDC.

Beacon Fen, which is proposed on land to the north of Heckington, would have a generation capacity of approximately 400 megawatts (MW) of electricity per year, with a 600MW BESS. The scheme is located within Lincolnshire, within administrative area of North Kesteven District Council but approximately 10% of the works fall within the Boston Borough Council area, which is limited to the southern extent of the Cable Route Corridor. However, from a landscape and visual perspective, due to the scale of the proposed scheme it has been considered in its entirety, with views and wider landscape effects from all areas of jurisdiction being considered.

The documents that have been accessed and reviewed are available on the Planning Inspectorate Website at:
https://national-infrastructure-consenting.planninginspectorate.gov.uk/projects/EN010151/documents

A full review of the landscape and visual elements of the scheme is currently being carried out, but this Technical Memorandum summarises our initial comments. This full review will be included within the individual Local Impact Reports (**LIR**) submitted by LCC and NKDC later in the examination process. This will include a review of the submitted Landscape and Visual Impact Assessment (**LVIA**) chapter and associated appendices and figures of the ES to *Technical Guidance Note (TGN) 1/20 Reviewing Landscape and Visual Impact Assessments (LVIAs) and Landscape and Visual Appraisals (LVAs),* 10th January 2020, by the Landscape Institute (**LI**).

Landscape Effects

As a result of its mass and scale, it is clear that the proposed development would lead to some Significant Adverse effects upon the existing landscape and visual baseline, which is reflected within the submitted LVIA.

The development has the potential to transform the local landscape by altering the character on a large scale. This landscape change also has potential to affect wider landscape character, at a regional or county scale, by replacing large areas of agricultural or rural land with solar development, affecting the current openness, tranquillity and agricultural character, that are defining characteristics of the area. We are particularly concerned with identifying the landscape character effects through changes to the land use over an extensive area of agricultural land.

Significant landscape effects are subsequently identified within the LVIA chapter with the identification of Significant adverse effects at a Site level and to Published Landscape Character Areas at Construction, Year 0 Operation and Year 15 Residual. The assessment judges that the only

Significant Residual landscape effects are at Site level, with Significant effects on the Fenland and Holland Reclaimed Fen Sub Areas at Construction and Operation reduced after 15 years to Not Significant. While these Significant effects are of a concern, the judgement within the LVIA appears to be well reasoned, but a more detailed review will interrogate these findings and alignment with the methodology.

Visual Effects

The scale and extent of development would also lead to Significant Adverse effects on views from visual receptors, resulting in a change to the views experienced of an agricultural or rural landscape to a landscape containing large scale solar development.

The development has been identified in the LVIA chapter as resulting in a Significant change to a variety of visual receptors at Construction, Year 0 Operation and Year 15 Operation. Significant Residual visual effects largely arise from sensitive users in close proximity to the development where it is not possible to sufficiently screen views of the development.

While we acknowledge that the new planting and habitat creation will be valuable assets within the context of the surrounding agricultural landscape, they are part of a large-scale solar development. The planting, if it establishes as predicted, will also go some way in screening and integrating proposals in views. However, we note that the reduction in Significant landscape and visual effects predominantly relies upon the successful establishment of the planting scheme.

Cumulative Effects

The cumulative landscape and visual effects of the proposed development are considered in Chapter 18 of the ES, specifically in Table 18.3, which concludes that there are no cumulative landscape and visual effects**.**

While a 5km study area has been utilised for schemes to be considered for Inter-Project landscape and visual effects, due to the extent and proximity of additional NSIP scale solar schemes in the area, we would suggest the examination is utilised to explore the potential for significant effects from these schemes. Schemes further afield, such as Springwell Solar, Leoda Solar and Fosse Green, are also of concern, despite the intervening distances between these developments.

We 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 multiple schemes across potentially several kilometres, albeit with gaps between some of the projects. However repeated views and presence of large scale solar would combine over time to create a greater perception of change.

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

projects (such as Solar, BESS, Hydrogen, Pylons and cables along with associated infrastructure) are planned in the region, including NSIP and DCO schemes as well as TaCPA scale projects, which together will change the character of the wider landscape.

Mitigation & maintenance

The Solar Farm would evidently deliver landscape and ecological improvements through mitigation areas and planting. However, this will be dependent upon the information set out in the Outline Landscape and Ecology Management Plan and Figure 6.31 Landscape Strategy Plans which illustrate the mitigation, which should be further explored, and we assume would be refined at the detailed design stages.

The *DCO* should include for approval of any subsequent detailed landscape and ecological mitigation scheme (planting works), as referenced in Schedule 2 of the DCO. This should clearly link to any landscape mitigation scheme that is submitted as part of the scheme, and subsequently that which has been assessed as part of the LVIA. This should not just be a management plan, but a detailed landscape scheme clearly identifying plant species, numbers and specifications along with planting details.

The *DCO* should also include for an appropriate period of landscape maintenance, that ties into a period of time identified in the Outline Landscape and Ecology Management Plan, and would expect an initial 15-year period of management and maintenance as a minimum, which would align with the assessed residual landscape and visual effects. This would subsequently be regularly reviewed and monitored at a reasonable period, such as every 3 to 5 years and implemented for the lifetime of the project. This should include for a reasonable plant replacement program, such as following a significant loss or failure to thrive, to ensure the planting scheme meets the aims and objectives laid out in the submission.

Control of vegetation removal

Proposed vegetation removal is identified within the Draft DCO, Figure 6.32 Vegetation Removal Plans and Appendix 6.6 Arboricultural Impact Assessment. Clear vegetation removal processes should be put in place to ensure any vegetation loss is aligned with these plans and schedules and further removal or works is agreed with the relevant parties prior to any works being carried out. This should clearly relate to vegetation removal plans and AIA, and this must also include vegetation removal or works to facilitate wider highways and access works, such as for abnormal loads.

Tom Ferraby BA(Hons) Dip LA & Oliver Brown CMLI
AAH Landscape

[redacted]

[redacted]

5th June 2025

APPENDIX B

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

Landscape Institute Technical Guidance Note

Reviewing Landscape and Visual Impact Assessments (LVIAs) and Landscape and Visual Appraisals (LVAs)

Technical Guidance Note 1/20 (10 Jan 2020)

The purpose of this guidance is to establish a framework for carrying out reviews of LVIAs and LVAs, analysing in a structured and consistent way if the assessment reflects the approach advocated in GLVIA3 and has led to reasoned and transparent judgements. Use of this framework should in due course further raise the standard of assessments

1. Introduction

The third edition of the *Guidelines for Landscape and Visual Impact Assessment* (GLVIA3) was published in April 2013. It has been widely welcomed, accepted and adopted for use in assessing the effects of projects on landscape and visual amenity and since publication been promoted by Landscape Institute (LI) training events.

GLVIA3 sets out that assessment of effects on the landscape and visual resource that may result from a development proposal may be undertaken formally as Landscape and Visual Impact Assessment (LVIA) typically as part of an Environmental Impact Assessment (EIA) or less formally as a Landscape and Visual Appraisal (LVA). The LI strongly recommends that GLVIA 3 is followed when undertaking these assessments and that the resulting LVIAs and LVAs should be objective with clear thinking, easy to follow, and demonstrate how they have informed appropriate siting, design, and mitigation.

The main difference between an LVIA and LVA is that in an LVIA the assessor is required to identify 'significant' effects in accordance with the requirements of Environmental Impact Assessment Regulations 2017, as well as type, nature, duration and geographic extent of the effect whilst an LVA does not require determination of 'significance' and may generally hold less detail.

In the case of LVIAs, The Regulations have further implications for landscape professionals:

- Reg. 18 (5) stipulates that the developer must ensure that the ES is prepared by '*competent experts'* and that the developer must include a statement "*outlining the relevant expertise or qualifications of such experts".*

- Reg 4 (5) places obligations on the relevant planning authority or the Secretary of State because they "…*must ensure they have, or have access as necessary to, sufficient expertise to examine the Environmental Statement."*

Note that the terms 'competent expert' and 'sufficient expertise' are not defined in the EIA Regulations. The Landscape Institute, in the absence of formal certification of specific competence, considers that a 'competent expert' would normally be a Chartered Member of the Landscape Institute who, has substantive experience of undertaking and reviewing LVIAs. This may be evidenced by the assessor's CV, by reference to previous assessments, and by endorsement by other senior professionals.

Following on from GLVIA3, which focusses on how to *undertake* LVIAs/LVAs, this document provides guidance on how to *review* LVIAs or LVAs prepared by others. Such review may be undertaken from within the organisation which produced the LVIA/LVA, e.g. as part of a QA process, or by third parties on receipt of LVIAs and LVAs, such as landscape and or planning professionals in public sector bodies.

This guidance sets out a framework for carrying out such reviews in a structured and consistent way that reflects the approach to assessment advocated in GLVIA3 and use of it should further raise the standard of assessments.

2. Existing advice and guidance

GLVIA3 Chapter 8, under the heading "Review of the landscape and visual effects content of an Environmental Statement", says:

"8.35 Competent authorities receiving Environmental Statements will often subject the documents to formal review of both the adequacy of the content and of their quality. The review process will usually check that the assessment:

- *meets the requirements of the relevant Regulations;*
- *is in accordance with relevant guidance;*
- *is appropriate and in proportion to the scale and nature of the proposed development;*
- *meets the requirements agreed in discussions with the competent authority and consultation bodies during scoping and subsequent consultations.*

8.36 The summary good practice points in this guidance should assist in review of the landscape and visual effects content of an Environmental Statement. In addition, several existing sources may also help anyone involved in reviewing this topic to decide what to look for:

- *IEMA has developed a series of general criterial for reviewing Environmental Statements and registrants for the EIA Quality Mark*[1] *must meet the criteria…*
- *The former Countryside Commission published criteria for reviewing the landscape and countryside recreation content of Environmental Statements…*
- *Appendix 1 of Scottish Natural Heritage's Handbook on EIA* [2]*contains useful tests to help judge the landscape and visual effects content of Environmental Statements…"*

In addition, European Commission guidance on ES review[3], published in 2001 and, although directed at whole ES review rather than topic specific review, has also provided useful pointers.

This review framework has been developed in this context.

[1] IEMA EIA Quality Mark, IEMA website: [redacted] [accessed 200110]

[2] Scottish Natural Heritage, A handbook on environmental impact assessment v5, 2018, SNH website: https://www.nature.scot/sites/default/files/2018-05/Publication%202018%20-%20Environmental%20Impact%20[redacted] [accessed 200110]

[3] European Commission, Guidance on EIA-EIS Review, Luxembourg: Office for Official Publications of the European Communities 2001 ISBN 92-894-1336-0, EC website: [redacted] [accessed 200110]

3. Carrying out the review

There are three main components of a review of a LVIA or LVA leading to a report containing the overall conclusion in respect of the completeness, competency and reliability of the LVIA/LVA.

1. **Checking the methodology used to undertake the assessment, the criteria selected (including balance between), and the process followed;**
2. **Checking the baseline, content and findings of the assessment;**
3. **Checking the presentation of the assessment findings.**

As a starting point when undertaking a review, the reviewer will need to define the structure and process to be followed by for example setting out a set of headings or questions against which the LVIA or LVA is examined. Setting out standard or systematic questions will allow consideration being given to each step and each element covered in the assessment. The "good practice" bullet points at the end of each chapter in GLVIA3, noted above, may provide a starting point for such an approach. It is also important to bear in mind the principle of proportionality (cf. EIA Directive). Both the LVIA (or LVA) and the Review should have a defined scope and level of detail which is proportionate and reasonable to allow an informed decision to be reached.

In order to improve consistency and quality of reviews of LVIAs and LVAs the Landscape Institute has produced this framework. Those who undertake reviews should follow this framework and modify or adapt the framework to the Review being carried out and set out the reasons for such modifications.

Step 1. Checking methodology, criteria and process

In this phase, the reviewer will check the methodology, scope and process used in the assessment and how these relate to GLVIA 3. This involves reviewing the following:

a) Does the scope of the assessment meet the requirements set out in the Scoping Opinion and/ or as defined in the LVIA or LVA and if substantively different, are the reasons clearly set out and explained?
b) What consultations have been carried out and have responses been acted upon?
c) Has the scope and methodology of the assessment been formally agreed with the determining authority? If not, why not?
d) As part of the methodology, has the terminology been clearly defined, have the criteria to form judgements including thresholds been clearly defined and have any deviations from good practice guidance (such as GLVIA3) been clearly explained?
e) Does the assessment demonstrate a clear understanding and provide a separate consideration of landscape and visual effects?
f) Does the assessment demonstrate comprehensive identification of receptors and of all likely effects? and
g) Does the assessment display clarity and transparency in its reasoning, the basis for its findings and conclusions?

Step 2. Check the baseline, content, and findings of the assessment

As part of this stage in the review process the reviewer will consider the description of the baseline, both in narrative as well as in illustrations by plans, photographs and drawings etc. This may also include publicly available aerial photography, books, online resources, local plans and management plans.

The reviewer may also consider that a site visit may be necessary either to complement or to verify baseline information. The site visit and potential visits to viewpoints are also useful to check actual findings of the assessment.

This stage of the review typically includes further tests:

a) What is the reviewer's opinion of the scope, content and appropriateness (detail, geographic extent) of both the landscape and the visual baseline studies which form the basis for the assessment of effects (supported by appropriate graphic such as ZTVs etc as appropriate)?
b) Has the value of landscape and visual resources been appropriately addressed (including but not necessarily limited to) considerations of: local, regional and national designations; rarity, tranquillity, wild-land and valued landscape?
c) Have the criteria to inform levels of sensitivity (both landscape and visual) and magnitude of change have been clearly and objectively defined, avoiding scales which may distort reported results?
d) How well is the cross-over with other topics, such as heritage or ecology, addressed?
e) Is there evidence of an iterative assessment-design process?
f) Is it clear how the methodology was applied in the assessment, e.g.: consistent process, use of terms, clarity in reaching judgements and transparency of decision-making?
g) How appropriate are the viewpoints that have been used?
h) How appropriate is the proposed mitigation, both measures incorporated into the scheme design and those identified to mitigate further the effects of the scheme, and mechanisms for delivering the mitigation?
i) What is the reviewer's opinion of the consistency and objectivity in application of the criteria and thresholds set out in the methodology for assessing the sensitivity of receptors, the magnitude of changes arising from the project, the degree/nature of effects, and the approach to judging the significance of the effects identified, in the case of EIA projects?
j) What is the opinion on the volume, relevance and completeness of the information provided about the development or project including, where relevant, detail about various development stages such as construction, operation, decommissioning, restoration, etc.?
k) Does the document clearly identify landscape and visual effects which need to be considered in the assessment? and
l) Have levels of effect have been clearly defined and, in the case of LVIA, have thresholds for significance been clearly defined and have cumulative landscape and visual effects been addressed?

Step 3. Critique of the presentation of the findings of the assessment

This phase is perhaps the most straightforward. It involves examining the 'presentation' of the assessment including report text, figures/ illustrations, visualisations, and other graphic material forming the LVIA or LVA, and answering the following:

a) Does the LVIA/ LVA display transparency, objectivity and clarity of thinking, appropriate and proportionate communication of all aspects of the assessment of landscape and visual effects, including cumulative effects.
b) Have the findings of the assessment been clearly set out and are they readily understood?
c) Has there been clear and comprehensive communication of the assessment, in text, tables and illustrations?
d) Are the graphics and/or visualisations effective in communicating the characteristics of the receiving landscape and visual effects of the proposals at agreed representative viewpoints?
e) Are the graphics and/or visualisations fit for purpose and compliant with other relevant guidance and standards? and
f) Is there a clear and concise summation of the effects of the proposals?

Overall Conclusion: Report the review

The final step of the review process is to use the reviewer's findings to draft a short report which would include (but need not be limited to):

1. Confirmation of the brief issued to the reviewer setting out the scope of the review;
2. A summary of how the review was undertaken);
3. A summary of findings of the review of the assessment methodology;
4. A summary of findings of the review of the scope of the assessment;
5. A summary of findings of the review of the actual assessment of effects;
6. A summary of findings of the presentation of the assessment;
7. A summary statement by the reviewer in respect of appropriateness, quality, comprehensiveness, compliance and conformity with relevant guidance and regulations;
8. Recommendations for further information to be sought (if necessary); and
9. Overall conclusions on the adequacy of the assessment and whether it is sufficient to support making an informed planning decision.

The report can also include further information not covered here but relevant to reporting on the compliance (or otherwise) of the LVIA or LVA with GLVIA3 or matters of competence or expertise. This guidance provides a summary framework for reviewing and reporting only; the Landscape Institute continues to regard GLVIA3 as the primary source of guidance for undertaking LVIAs and LVAs.

4. Further information

For further information or to provide feedback on the guidance in use, please refer to the Landscape Institute's website, using the search terms GLVIA. At the time of publication, material is likely to be found in the following section: [redacted]

Authored by Mary O'Connor FLI on behalf of the GLVIA Panel and approved by LI Technical Committee
Nov 2019

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Document history
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Appendix C

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22 May 2025

Our Reference 60468641 Beacon Fen DCO

Dear [redacted]

Beacon Fen Energy Park DCO – Ecology Review (updated 22/05/2025)

The ecological information and assessments accompanying the DCO application contain a number of omissions and/or lack clarity on relevant points. These include matters relating to how prior advice (e.g. at Scoping and PEI Report stages) has been addressed, clarity on the methods used, and the data underpinning the conclusions reached.

It is likely that most points can be suitably resolved, but clarifications and further information will be required to achieve this.

I have reviewed all of the documents that I consider relevant to agreement of the ecological impact assessment and provide comments for each within the table appended below.

The BNG Strategy cannot be agreed until the Applicant provides the BNG Metric for examination, and the good practice requirements for evidence are met. The Metric is one of the primary documents necessary for agreement of the BNG Strategy.

Yours sincerely

David Broughton BSc MSc MPhil CEnv
MCIEEM
Associate Ecologist
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Report	Section/paragraph	Comment
Chapter 7 Ecology	Table 7.1 – Summary of Consultations	Not all of the responses provided address the prior comments, and some comments cannot be verified. As noted elsewhere, the botanical survey results do not evidence attention to scarce arable flora, with implications for the impact assessment. The response on the approach to aquatic surveys references the terrestrial invertebrate survey approach. It also cannot be verified from the method and results that the botanical report specifically addressed aquatic plants. The response to survey effort for quail (a Schedule 1 bird species) is incorrect. The survey dates given in the breeding bird survey report clearly identify (Table 3-2) four phases of survey in the period mid-May to the end of July which is the survey period for quail. Therefore the required six surveys in this period (as fully referenced in the prior advice) were not completed. **Supplementary information should be provided that addresses the above points and the original comments.**
Chapter 7 Ecology	General (birds)	The assessment of birds within the chapter and appendices is not consistent. The solar array in isolation is stated to be of local value for wintering birds, whilst the data for the Cable Route and Bespoke Access (two geographically discrete areas connected via the land in the solar array) appears to have been aggregated and county value has been concluded for this combined area. **This approach needs to be explained given the solar array is also likely to have an elevated value if the data is aggregated with that for other areas.** Potential impacts on barn owl have not been assessed despite the identification of nesting habitat at the southeast corner of the solar array near Carr Dyke. **What are the implications for this protected species?**

Report	Section/paragraph	Comment
		No attempt appears to have been made to update the baseline on Schedule 1 birds (barn owl, quail and other species that could occur) since the 2022 survey of the solar array. This could be overlooked if a more precautionary approach had been taken. However, no clear attention is given to such species in the Chapter and no mitigation provision is identified for Schedule 1 birds, either in terms of the embedded mitigation or the additional mitigation. **What would the approach be to reconfirming the status of such species prior to construction and protecting them, and how will this be secured?** The impact assessment of birds is rather weak given the limited coverage and the decision to assess wintering and breeding birds together. The relevant considerations in relation to wintering and breeding birds are not fully comparable, and the consequences for species dependent on arable farmland are different from those dependent on other habitats. While the consequences for skylark is covered, the consequences for the long term suitability of the site for wintering birds of open farmland is not clearly assessed. This also has potential relevance for the cumulative impact assessment. **A more robust, evidence based assessment should be provided for this diverse assemblage of species with divergent habitat requirements and sensitivities.**
Chapter 7 Ecology	7.5.16-7.5.17 (baseline)	Scarce arable flora are discussed within a section on grassland. Such species would not be expected in grassland, so it is not surprising that none were found. It is also noted that the underpinning Appendix contains no methods or results to demonstrate attention to this specialist group of plants dependent on cultivated land. **Further explanation is required to explain why these species were surveyed for within unsuitable habitats rather than within cultivated land**.
Chapter 7 Ecology	Table 7.7	It is stated that most hedgerows are species-poor which is not supported by the habitat map in the botanical survey report for the solar array. It is also

Report	Section/paragraph	Comment
		stated that none are of LWS quality, which again is not supported by the botanical survey report for the solar array (paragraph 4.1.14). Hedgerows of LWS quality would have a county nature conservation value, not local as stated. **Supplementary data should be provided to allow review and verification of the status and value of individual hedgerows.** This data is also required to support agreement of the BNG baseline.
Chapter 7 Ecology	Table 7.8	It is stated that no trees suitable for roosting bats will be removed or affected. This statement requires review (given the incorrect assumption elsewhere that all trees will be retained and protected) with reference to the schedule of Tree Works given in the Arboricultural Impact Assessment. **Clarification is required on this point.**
Chapter 7 Ecology	Section 7.4	It is not explained how the Rochdale Envelope has been applied in relation to ecology to ensure a robust worst case (pending detailed design post-determination) assessment of potential impacts and effects. For example, the works at the Bicker Fen substation, and the potential tree and woodland losses identified in the Arboricultural Impact Assessment do not appear to have been considered. Further, the assumptions on retention of habitats after decommissioning (e.g. 7.6.92) seem (without further explanation) unreasonable and not securable. **Clarification is required on this point.**
Chapter 7 Ecology	7.6.55 CONFIDENTIAL	CONFIDENTIAL The assessment of badger is not adequate, particularly given the baseline is incomplete. I identify no baseline data to understand the impact on badger from the Bespoke Access and Cable Route. The number of setts that would be affected by the Proposed Development is not stated, and it is not identified whether a development licence would be needed. Standing advice states “Where possible development proposals should avoid negative effects on badgers. Where this is not possible, the developer will

Report	Section/paragraph	Comment
		need to include adequate mitigation or, as a last resort, compensation measures in their development proposal to allow you to make a planning decision." As a transparent assessment has not been provided it is not possible to verify that these requirements have been met. It is not clear if any mitigation or compensation strategies need to be secured. **Additional information and assessment should be provided.** The relevant impact pathways to address are given in the standing advice.
Chapter 7 Ecology	7.6.58-7.6.60	Insufficient assessment has been provided to understand the worst case implications for water vole. The number of crossings of occupied habitat, and the number of animals likely to be affected is not clearly defined. The impact assessment does not address the extensive impacts on ditch habitats stated in Section 7.7 i.e. 30m of habitat disturbance on each ditch crossed by the Cable Route and up to 50m (motorway width!) for the Bespoke Access. **Supplementary assessment should be provided to address the need for a robust, evidence-based assessment of potential impacts.**
Chapter 7 Ecology	Section 7.6 (impact assessment)	A number of significant adverse effects on the conservation status of ecological receptors are predicted during construction. The mitigation for these impacts is not confirmed or demonstrated to be adequate so significant residual effects cannot be discounted. This includes significant effects on the: - Qualifying bird species of The Wash SPA and Ramsar site; - The qualifying otter population of The Wash and North Norfolk Coast SAC; - Great crested newt – a European Protected Species; - Barbastelle bat – a protected and threatened species; and - Water vole – a protected and threatened species. The impact on LWSs appears to worse at decommissioning than at construction, which merits review. The decommissioning effect is stated to be significant as the conservation status of LWS would be adversely affected. Significant effects on conservation status are also predicted for:

Report	Section/paragraph	Comment
		- Qualifying bird species of The Wash SPA and Ramsar site; - Great crested newt – a European Protected Species; - Wintering birds; and - Barbastelle bat – a threatened species. **This assessment, if correct and unmitigated (see below for comment on this), would indicate a development that conflicts with legislation and planning policy**.
Chapter 7 Ecology	Section 7.7 (Additional Mitigation):	This links with the above points on Section 7.6. It is agreed that where licences are needed these would only be granted if conservation status can be maintained. However, confidence is needed that licences are likely to be granted. In relation to the species named above (Section 7.6): - The mitigation for the impact on qualifying birds (gadwall) is not confirmed as agreed with the Appropriate Nature Conservation Body (Natural England). Based on my prior experience, the 70dB threshold for impact would seem rather high and further assessment and mitigation may be required before it is agreed that there is no likely effect on conservation status. This is primarily a matter for Natural England to resolve/ agree in relation to the HRA, but the EcIA cannot be agreed without confirmation that the mitigation is sufficient. **Further information is required.** - It is not confirmed what mitigation is required for great crested newt or that Natural England has provided a Letter of No Impediment. So, it is not demonstrated that favourable conservation status can be maintained. **Further information is required.** - As the preceding impact assessment should have been made with regard to the embedded mitigation that is integral to the development, it is assumed that additional mitigation is necessary for wintering birds to

Report	Section/paragraph	Comment
		address the significant effect. No mitigation is identified to address this. - The only mitigation for bats is the proposed 'temporary crossings'. It is not clear that this addresses the impacts on bats leading to the conclusion of a significant effect. The Bespoke Access will result in permanent breaches of habitat that will not be resolved by temporary crossings during construction, and it needs to be confirmed that it will be possible to adequately reinstate suitable habitat over the Cable Route after construction. A **clearer impact assessment is required to permit agreement that the mitigation is sufficient.** - It is stated that a licence may be needed for water vole. Given the scale of habitat loss indicated in 7.7.11 (which seems unnecessarily large for watercourse crossings), a development licence may be needed. Such licences require enhancement as well as mitigation, but it has not been demonstrated that enhancement is deliverable and securable. **Insufficient information is provided** to understand the magnitude of impact and consequently demonstrate the predicted impact and significant effect can be adequately addressed.
Chapter 7 Ecology	Section 7.7.12	This identifies habitat losses for works within Bicker Fen substation that do not appear to have been addressed within the impact assessment (Section 7.6) or mitigated e.g. woodland loss. It is stated that worst-case habitat compensation for this may need to be provided within the solar array, it is not demonstrated that this can be accommodated. It is not allowed for in the BNG Strategy. **Supplementary assessment should be provided.**
Chapter 7 Ecology	Section 7.8 (Enhancement)	Measures should only be presented as enhancement if they are certain to be successful. In the case of the waterbody enhancement in 7.8.2 it is not demonstrated that de-silting dry waterbodies will result in ponds that will hold water. The reasons for the current lack of water are not given and there appears to be no corroborating assessment from an appropriate specialist (e.g. a hydrologist). Given this, I would expect Natural England to make similar observations should this be relied on for purposes of a great crested

Report	Section/paragraph	Comment
		newt licence application. **Further information is required.** No enhancement is offered for water vole. As noted above, this could be necessary to secure a licence. **Further information is required.**
Chapter 11 Cumulative	General	There is insufficient clarity on the mitigation for ground nesting birds (wintering birds may also have relevance, see the comment above), so it is not possible to agree there would be no cumulative impacts. Some of the other schemes assessed are in development or at Examination and their mitigation is yet to be confirmed as sufficient. These birds cannot be discounted unless it is agreed that the Beacon Fen mitigation is sufficient to address the project-specific impact on ground nesting birds. My reading of Chapter 7 (7.6.53) is that an impact is predicted but it is not considered significant in isolation. It is also not stated that mitigation will be provided, and the Outline LEMP does not appear to include mitigation for ground nesting birds. Therefore the assessment in Chapter 7 does not preclude potential for cumulative impacts and effects. **Further assessment and information is required.**
Appendices – Energy Park or Whole Development		
Appendix 2.3 Embedded Mitigation	EM2	The statement on retention/protection of all woodlands and trees **should be reviewed** (see related comments below and above).
Appendix 2.4 Outline CEMP	6.7	The details are largely sufficient for current purposes. More precision, e.g. in relation to the locations and coverage of habitat buffers, will be expected from the final CEMP.
Appendix 2.4 Outline CEMP	General	**A commitment should be included** for the provision of a Fish Management Plan to demonstrate suitable mitigation and legislative compliance. This commitment will need to be carried into other documents.
Appendix 2.4 Outline CEMP	6.7.6	The referenced HRA needs to be completed and agreed pre-determination. It is not a matter for agreement post-determination.

Report	Section/paragraph	Comment
Appendix 2.4 Outline CEMP	6.7.11	Specifications for bird and bat boxes are matters to be agreed with the relevant planning authority rather than Natural England, unless they form part of the mitigation strategy for a protected species licence.
Appendix 6.6 Arboricultural Impact Assessment		Three veteran trees were identified within the solar array area, and an additional tree is almost veteran. Nine veteran trees/tree groups occur on the cable route corridor. Six veteran trees occur in the access route corridor. Protective buffers have been applied in accordance with good practice (paragraph 11.1.9), so the requirements of planning policy have been met in relation to the identified trees. The status and level of protection of the veteran trees identified by ecologists in Fox Covert is not stated. **Supplementary information should be provided.** There are some trees that **merit further review and agreement with the NKDC Tree Officer in relation to veteran status**. The recorded sizes and descriptions merit a second opinion to provide confidence that all veteran trees are protected. The relevant trees are T76, T1124 and T1125. The latter two trees are black poplars so are otherwise notable.
Appendix 7.1 Legislation	-	This refers to the relevance of the Hedgerow Regulations and indicates that important hedgerows are addressed in Chapter 7. I can identify no mention of important hedgerows in the chapter or the Heritage chapter, and there is no method statement or data within Appendix 7.11 to indicate that a Hedgerow Regulations survey was completed to identify important hedgerows. **Supplementary information should be provided to explain the approach taken and to clarify the relevance of the Hedgerow Regulations.**
Appendix 7.2 Planning policy	-	No comments.

Report	Section/paragraph	Comment
Appendix 7.3 PEA	-	This document was provided with the PEI Report. The comments made at that time are still applicable. **The habitat information remains limited as a baseline suitable to support a BNG assessment**.
Appendix 7.4 Great crested newt survey	-	This document was provided with the PEI Report. The survey data is now 3 years old. Updated information has been provided as Appendix 7.12. No further comment.
Appendix 7.5 Wintering bird survey	-	This document was provided with the PEI Report. No comments.
Appendix 7.6 Breeding bird survey	-	This document was provided with the PEI Report. The comments made at that time are still applicable. The approach in relation to Schedule 1 birds is not sufficiently defined, and the survey effort for quail was not sufficient to conclude likely absence or determine the extent of habitat usage.
Appendix 7.7 Bat survey	-	This document was provided with the PEI Report. No comments.
Appendix 7.8 Badger survey (CONFIDENTIAL)	-	CONFIDENTIAL The report identifies a number of badger setts within the solar array site including at least four main setts. Buffers have been applied to protect main setts, but there does not seem to be consistent protection of other sett types. Therefore it is not certain setts will not be affected and a badger licence will not be needed. I can identify no comparable baseline data for the Bespoke Access and the Cable Route. This information is not in Appendix 7.20 (Document Ref: 6.3 ES Vol 2 6.3.42), despite a statement to this effect in Chapter 7. **Supplementary information should be provided to provide a full baseline for badger.**
Appendix 7.9 Riparian mammal survey	-	This document was provided with the PEI Report. No comments.

Report	Section/paragraph	Comment
Appendix 7.10 Reptile survey		I agree with the survey approach. No reptiles were found. No further comment.
Appendix 7.11 Botanical survey	Section 2	No suitable methods are described for appraising the status and value of scarce arable flora. Appropriate considerations and methods were identified in the North Kesteven District Council response at PEI Report stage. The relevance of this was first raised in the Council's response to the Scoping Report in 2023. Late July is not an appropriate time to be surveying for arable flora given this period is during or just after the typical period of harvest (as supported by some of the photos within Table 3 of the report) for the cited crops of wheat, oats, field beans and oilseed rape. A post-harvest flush of arable flora (which may not be representative of the assemblage) in fields disturbed by harvest would not reasonably be expected until after early autumn rainfall to stimulate germination. Any conclusions reached in relation to the presence/absence of scarce arable flora are therefore not valid. Late July is also not optimal for appraising grassland and woodland habitats, but there is no reason to expect that any of these habitats will be of county or higher nature conservation value. There remains scope to address comments on arable flora in May and June 2025 so that data can be considered during Examination. **Supplementary information should be provided.**
Appendix 7.11 Botanical survey	Table 2	The habitat identified as 'arable field margins – tussocky' and 'arable field margins – pollen and nectar' would seem to be permanent grassland habitats based on the species lists and photographs provided. In contrast the priority arable field margin habitats apply to temporary habitats sown and managed for biodiversity. Further evidence should be provided to support the habitat classification. Where grassland habitats have been mis-classification then this has implications for agreement of the BNG assessment, which will need to be

Report	Section/paragraph	Comment
		revised. **Supplementary information should be provided.**
Appendix 7.11 Botanical survey	Table 2	The method statement does not explain how the named hedgerows were surveyed and therefore does not demonstrate beyond reasonable doubt that the necessary methods and species lists have been applied to correctly classify the hedgerows. This has implications for agreement of the BNG baseline. A number of hedgerows appear, with reference to the information on Figure 1, to have been incorrectly delimited with reference to standard methods. For example, H9 would appear to border 4 fields so would be 4 hedgerows, H1, H2, H4, H8 are each along two fields and should have been split. Other hedgerows are not clearly labelled and is not clear how these have been delimited. This means has implications for the number of survey sections needed and the data gathered to baseline the hedgerows . For example, two connected 300m hedgerows would each require three survey sections to gather data i.e. six sections in aggregate. If they are treated as one 600m hedgerow then the surveyor would have (if following standard methods) gathered data for just three survey sections. **A supplementary method statement should be provided to clarify the above points.**
Appendix 7.11 Botanical survey	Table 3	Woodland 3 – the description and species list indicates this is lowland mixed deciduous woodland, a priority habitat, not ‘other woodland’. This woodland is shown on the 1st Edition Ordnance Survey map, indicating a long history that would be inconsistent with the current habitat type assigned. Further, it is mapped as the priority habitat within the MAGIC website, and on the Applicant’s Figure 7.4. Mis-classification has implications for agreement of the BNG assessment, which will need to be revised. **Supplementary information**

Report	Section/paragraph	Comment
		should be provided. Figure 7.4 and MAGIC also identify Woodlands 4 and 5 as priority habitat. Woodland 3 may also include irreplaceable habitats. Confirmation is needed that the mentioned trees with veteran features have been appropriately assessed to determine veteran/ancient status, and whether they are relevant to the Proposed Development. **Supplementary information should be provided. If veteran trees are present this had implications for the management actions given in the Outline LEMP.**
Appendix 7.11 Botanical survey	Section 4	There is nothing to indicate specific regard to scarce arable plant species and, as noted above, the survey timing and the indicated target habitats were not appropriate for such species. The narrative strongly implies that the focus of the survey was identification of arable field margin priority habitats. The examples of this habitat given would not be locations where scarce arable flora would reasonably be expected. Appendix 1 indicates a clear focus in sampling towards areas supporting perennial flora rather than cultivated ground supporting annual plant species. Insufficient attention has been given to scarce arable flora and the related advice given by North Kesteven District Council at PEI Report stage in early 2024. **Supplementary information should be provided, see comment above.**
Appendix 7.11 Botanical survey	4.1.14	Hedgerows meeting LWS criteria will be of county value, not local value as stated in Table 2.
Appendix 7.11 Botanical survey	4.1.16/17	This aligns with my position in relation to the woodlands identified in Table 3 i.e. three woodlands are priority habitats. However, this is not reflected by the habitat map provided with the report. **It should be confirmed that the correct habitat type has been used in the BNG assessment.**

Report	Section/paragraph	Comment
		The results of the LWS assessment (which can only be a partial assessment given the timing of the survey could not address ground flora or fungi robustly) identifies that Woodland 3 meets the LWS criteria. It is therefore of county value not local as stated in Table 2.
Appendix 7.12 Great crested newt survey	-	I agree with the survey approach. No further comment.
Appendix 7.13 Bat roost assessment	-	Further survey is needed to confirm the relative suitability of trees for bats. PRF-I and PRF-M cannot be confirmed for features at height based on ground level appraisal alone. However, if all potentially suitable trees are retained no further action would be required and the Proposed Development would align with good practice (impact avoidance). **However, clarification is needed of any implications arising from the tree removal identified in the Arboricultural Impact Assessment.**
Appendix 7.14 Invertebrate survey	-	No comments.
Appendices – Cable Route and Access Road		
Appendix 7.15 Botanical survey	-	The survey was optimally time for early to mid-June. The survey is subject to the same limitations and the same requirements for clarifications as Appendix 7.11. Scarce arable flora is not a relevant consideration where land take is temporary and arable fields will be reinstated back to their baseline state. **Supplementary information should be provided in relation to permanent habitat losses.**
Appendix 7.16 Bat roost assessment	-	All potentially suitable trees are stated to be retained, so no further action would be required and the Proposed Development would align with good practice (impact avoidance). **However, clarification is needed of any implications arising from the tree removal identified in the Arboricultural Impact Assessment.**

Report	Section/paragraph	Comment
Appendix 7.17 Wintering bird survey	-	I agree with the survey approach. No further comment.
Appendix 7.18 Bat activity survey	-	I agree with the survey approach. No further comment.
Appendix 7.19 Riparian mammal survey	-	I agree with the survey approach. The presence of otter and water vole was confirmed, with the latter occurring widely. No further comment.
Appendix 7.20 PEA	Page 33	Grassland at Bicker Substation with Galium verum and Primula veris is not consistent with poor semi-improved grassland. The data was gathered in March which is not an appropriate time of year for grassland survey. This grassland requires re-survey at an appropriate time of year to verify the grassland type given the potential for impact from the development. **Supplementary information should be provided.**
Appendix 7.21 Great crested newt survey	-	I agree with the survey approach. I agree the unsurveyed ponds are low risk given their positions and the types of works proposed. No further comment.
Appendix 7.22 Breeding bird survey	-	Only four of the six survey visits was within the survey period for quail (mid-May to end of July), a Schedule 1 and Endangered bird species. So, the survey effort was less than appropriate to conclude the absence of this species or the extent of habitat usage. Consistent with the preceding solar projects in the District, quail is **a relevant consideration that needs further attention**. Precautionary working methods can be agreed in relation to the cable route given this involves temporary land take.
Figure 6.31 Landscape Strategy Plan	Part B	This seems to be a series of bird survey Figures, is this correct? If not, **the correct Figures should be provided.**
Biodiversity Net Gain and Outline Landscape and Ecological Management Plan (Outline LEMP)		
Biodiversity Net Gain Strategy (Document	General	The metric has not been provided for review and this prevents agreement of the Strategy. **Supplementary information should be provided. The metric**

Report	Section/paragraph	Comment
Ref. 7.3)		**and report also require further review by the Applicant in relation to the observations made below.**
Biodiversity Net Gain Strategy (Document Ref. 7.3)	1.3.14	Reference has not been made to the Central Lincolnshire BNG Guidance. **Confirmation is needed that the Strategy aligns with this**, including the guidance for assigning Strategic Significance, and determining the programme for monitoring. Monitoring should align with the Outline LEMP.
Biodiversity Net Gain Strategy (Document Ref. 7.3)	General	The baseline information provided with the report does not account for all habitats, certain habitats have been mistranslated, and the habitat mapping does not appear sufficiently accurate. Specifically: - The priority woodland habitat identified in Appendix 7.11 is not included. - Examination of aerial imagery shows more grassland within the solar array, on field boundaries and in association with ditches, than appears to have been mapped. - The previously (see above) queried distinction between grassland and arable habitats has relevance to the BNG assessment. I note that some of the arable habitats have been treated as grassland in the Strategy. The inconsistencies between reports needs to be addressed – there can be only one habitat baseline for assessment purposes. - I do not agree with the translation of marshy grassland as cropland. This should be reviewed against the relevant habitat definitions and further explanation provided. - The tall ruderal habitat has been mis-translated for BNG purposes. However, I believe the metric weightings are comparable. - Rural trees are not accounted for. The Arboricultural Impact Assessment identifies at least one hedgerow tree (T81) and two tree groups (G11, G56) that are of sufficient size to need accounting for. The vegetation removal plans indicate that there are other trees that may need to be removed and that should be accounted for on a precautionary basis (in accordance with the Rochdale Envelope

Report	Section/paragraph	Comment
		approach). These are T001 and T019, although others may also have relevance. - Habitats mentioned in Chapter 7 are not covered (or are mistranslated). Specifically, coastal and floodplain grazing marsh. - The length of species-rich hedgerow within the solar array site (30m) given in Table 5 seems way below the extent mapped on the Figure provided in Appendix 7.11. **Supplementary information should be provided.**
Biodiversity Net Gain Strategy (Document Ref. 7.3)	Table 5	The accounting of habitat losses does not appear correct: - There are hedgerow losses identified on the vegetation removal plans that have not been recorded. Where the design is subject to change worst case precautionary assumptions should be made in accordance with the Rochdale Envelope approach so that the impacts of the development are adequately assessed. This can be revised later if this changes at detailed design. - The woodland losses on the bespoke access and cable route corridors recorded in the Arboricultural Impact Assessment do not appear to have not been accounted for. **Supplementary information should be provided.**
Biodiversity Net Gain Strategy (Document Ref. 7.3)	General	The post-development proposals provided within the report do not account for all habitats, certain habitats have been mistranslated, and the habitat mapping does not appear sufficiently accurate: - The proposed habitat plan does not account for all land within the Order Limits. For example, the bespoke access road is not accounted for. - The plan is hard to interpret as it covers the entire site (potentially there are some sheets missing from the document given the plan is not consistent with the baseline plans).

Report	Section/paragraph	Comment
		- Confirmation is required that the calculation of habitat areas e.g. grassland is correct and not over-estimated. The Landscape Strategy Plans (Figure 6.31) appears to show grassland drawn over tracks e.g. the track to Gashes Barn. - It is not clear from the Landscape Strategy Plans (Figure 6.31) if habitat is proposed to be created in the On-site Substation compound and if this is realistic. The colouring of this area is green which could indicate grassland. - Further explanation is needed for the proposed creation of floodplain grazing marsh. There is no record of this habitat at the proposed location north of Gashes Barn within MAGIC so habitat restoration is not possible. Further explanation is needed for how the habitat definition is met, including the hydrological requirements, and how it can function as floodplain grazing marsh for relevant species (which is integral to the definition) given the presence of solar panels. - Use of lowland meadows as a proxy for floodplain grazing marsh (Table 2) needs to be explained, particularly given the emphasis placed on restoration of the latter habitat elsewhere e.g. within Chapter 7 (paragraph 7.6.68). If the latter habitat is proposed then it needs to be demonstrated that the definition for this habitat can be met, as queried above. - It needs to be clarified how the proposed wildflower meadows align with the definition of lowland meadow and that it is reasonably certain (given the definition and practicalities) that this habitat can be delivered. The seed mixture referred to on the Landscape Strategy Plan (EM2) does not meet the species requirements. - There does not appear to be compensation for impacts on woodland and trees. - New culverts over ditches do no not appear to have been accounted for within the watercourse element.

Report	Section/paragraph	Comment
		Supplementary information should be provided.
Biodiversity Net Gain Strategy (Document Ref. 7.3)	2.5.6	The approach detailed is not correct where there are losses of hedgerow trees. **All tree loss should be accounted for in the BNG assessment**.
Biodiversity Net Gain Strategy (Document Ref. 7.3)	General	Insufficient information has been provided to demonstrate that the assumed post-development habitats and condition weightings are reasonably certain and securable e.g. good condition Lowland Meadow, how hedgerows are to be enhanced to species-rich status, and ditch enhancement. **Supplementary information should be provided.** Enhancement of ditches could arise from conversion of arable farmland to grassland but, before agreeing this, confidence is needed that all pre-existing grass headlands have been accounted for (see comment above) as these could influence this assessment. **Supplementary information should be provided.**
Outline LEMP	General	The Outline LEMP needs to be considered within the framework of inter-related documents and there are comparable issues to those raised in relation to Chapter 7 and the BNG Strategy. There are omissions of commitments made elsewhere (e.g. pond enhancement/reinstatement within Chapter 7 – if this is viable (see related comments)). It does not achieve the purpose set out in 2.3.3 to “demonstrate that the broad landscape and ecological mitigation measures … are achievable.” **More detail is required to support the statements and commitments made elsewhere in the Application.**
Outline LEMP	2.2.3	Woodland stand-offs are not consistent with the 15m stand-offs set elsewhere. **Minor amendment is required.** There are no clear proposals within the application for floodplain grazing marsh creation that demonstrate this is deliverable and conforms with

Report	Section/paragraph	Comment
		standard habitat definitions. **Supplementary information should be provided.**
Outline LEMP	2.4.4	The clear statement here is welcome. It does not appear to be reflected in the assessment in Chapter 7 or the BNG assessment.
Outline LEMP	2.4.9-2.4.10	The clear Rochdale Envelope parameters set here are welcome. It is not clear elsewhere in the application that this is what has been assessed and mitigated.
Outline LEMP	2.5.5	Why is the target for native hedgerow creation not 100% native? **Minor amendment is required.**
Outline LEMP	2.5.10	Further review and explanation is needed to demonstrate the ability to provide long term management of hedgerows (and any other habitat) on land within the Site that is outside the Applicant's long term control e.g. within the Cable Route. Where management and monitoring is not certain to be possible long-term this will need to be factored into the BNG assessment. **Supplementary information should be provided.**
Outline LEMP	Table 1.2	I estimate a combined cover of trees species in the order of 50% based on the proportions given. This is not consistent with the definition for scrub habitat. **The habitat type should be reviewed.**
Outline LEMP	2.5.3 onwards	This refers to and provides management prescriptions for woodland, despite this section being indicated as covering scrub habitat. No woodland is allowed for in the BNG Strategy. **The habitat type should be reviewed.**
Outline LEMP	2.5.10	The seed mixture proposed, a grass only EG1 mixture, is not consistent with the definition for neutral grassland. Therefore the Outline LEMP does not match the commitment made on the BNG Strategy or the details provided on the Landscape Plan. **The habitat type should be reviewed.**
Outline LEMP	2.5.12	Noting the above, the reference to conservation grazing seems erroneous in a grassland type of minimal biodiversity value.
Outline LEMP	2.5.14	The management here is not consistent with grassland completely lacking in a

Report	Section/paragraph	Comment
		wildflower component.
Outline LEMP	2.5.17	**Evidence needs to be provided** to demonstrate that the area for floodplain grazing marsh is prone to flooding and therefore suitable. This is not obviously supported by the assessment in Appendix 11.1 Flood Risk Assessment. See comments elsewhere on this proposed habitat.
Outline LEMP	2.5.19	It is not acceptable to provide a lengthy list of plant species and state that species will be chosen from this list. What species and how many are needed to achieve conformity with the target habitat? I would question whether seed is available for a substantial proportion of these species, even if it can be evidenced that the site is suitable for them. **An unambiguous specification should be provided.**
Outline LEMP	2.6	This is stated to be section on habitat enhancement. Much of the content relates to habitat protection and retention not enhancement. Proposals for enhancement must be clearly linked to addressing issues with the baseline status, the evidence for this (e.g. in relation to hedgerows) is weak at present. **This section should be reviewed and supplementary information provided.**
Outline LEMP	2.6.19 onwards	There is little here that is clearly additional and therefore agreeable as substantive enhancement. Low intervention management of woodland is not obviously enhancement and, in all likelihood, reflects the status quo. Pruning trees, retention of existing deadwood, and felling of senescent and diseased trees is not obviously management for landscape and biodiversity. The latter would seem to be a valuable biodiversity resource (and is encouraged elsewhere in the Outline LEMP e.g. creation of veteran features). Why would they need felling on a site with no public access? If felling is necessary for the development (e.g. to protect solar panels) then this tree loss should be accounted for in the BNG assessment. Confidence is also needed that this does not apply to veteran trees. **Supplementary information should be provided.**

Report	Section/paragraph	Comment
Outline LEMP	2.6.21	**Please confirm** that the proposed management of ditches does not conflict with the requirements of the Internal Drainage Board.
Outline LEMP	2.6.22 onwards	This section is stated to be protected species enhancement. Very little is actually enhancement, the majority of the content is maintenance of existing habitats and protection measures. **This section should be reviewed and supplementary information provided.**
Outline LEMP	2.6.30	Contrary to the statement in Chapter 7, no provisions are made for ground nesting birds such as skylark. **Supplementary information should be provided.**

Appendix D

Sylvia Bland

From: Broughton, David [redacted]
Sent: 28 May 2025 18:08
To: [redacted]
Subject: RE: Beacon Fen - additional ecology documents

Categories: Consultee comments

Hi [redacted]

I have given the pdf copy of the Metric a high level review. Comprehensive review is not appropriate without provision of the Excel workbook so that all data is visible (some columns are hidden). The Metric workbook is intended to be the basis for review and agreement of BNG calculations.

My review of the pdf is consistent with my prior comments on the report. I identify nothing that resolves my prior comments.

Specific points that constrain my ability to verify and agree the calculations are as follows:

- Parts of the solar array are covered by the Central Lincolnshire Biodiversity Opportunity Mapping which needs to be taken into account for application of strategic significance. The current weightings applied to baseline and post-development habitats do not appear consistent with the Central Lincolnshire guidance. This should be reviewed as a matter of compliance. Some of the necessary edits to address the guidance might benefit the Applicant.
- I confirm that the priority woodland habitat is not covered in the metric. So there is a discrepancy with the baseline habitat descriptions.
- I remain concerned by the lack of explanation for how good condition lowland meadow, a priority habitat of very high distinctiveness, will be created and the level of confidence in this. This would be a significant on-site gain (67.74 habitat units c. 4% of the total to be created) and therefore confidence is needed the habitat is realistic and securable.
- Not all columns are visible in the pdf, but from those that are it does not look like a delay (between habitat loss and creation) has been applied. This means that habitats would need to be created the same year they are lost, this is an important commitment influencing the calculation and confidence is need that this is realistic/precautionary as an assumption and is securable.
- Culverts have not been included in the calculation.
- The ditch enhancement proposals rely on raising condition through meeting condition assessment criteria A, B and C all of which seem too far outside the Applicant's control to be certain. Criterion A relates to water quality - I have seen no clear evidence to demonstrate this is currently failing. Without clarity on the causes for failure (which may not be restricted to land and activities in the Applicant's control) it is not certain water quality can be improved or how long this will take. Criterion B relates to increasing plant species diversity, in part this relates to water quality but also confidence is needed that the Applicant has full control over how these ditches are managed. It needs to be demonstrated that this is a realistic and securable target for improvement. Criterion C relates to the level of coverage of algae and duckweed -species that proliferate to unfavourable levels with nutrient enrichment. Therefore this links to Criterion A and I don't see how it can be demonstrated with certainty that this can be addressed. Further, I identify no structured aquatic habitat survey data to demonstrate the baseline conditions and therefore inform agreement on the ability to improve and meet Criteria B and C. The ditches are scarcely mentioned in the PEA Report and are not covered in the Botanical Report.
- I identify no data suitable to verify that 1.38km of hedgerows can be converted from the species-poor native type to the species-rich type. How will this be delivered in practice? This is important given hedgerow enhancement represents a third of the length of hedgerows to be created and enhanced, and provides 59% of the hedgerow units.

- There appears to be far more neutral grassland in the metric than has been condition assessed within the Botanical Report. I could not find condition assessments for other habitats e.g. ponds, and there is an absence of evidence to support the condition assessments. Evidence is a requirement of good practice. I emphasis that this does not mean the weightings are not correct, only that the requirements for evidence have not been met.

Regards

David Broughton BSc MSc MPhil CEnv MCIEEM

Associate Ecologist, Nature, UK & Ireland

[redacted]

AECOM

[redacted]

North Kesteven
DISTRICT COUNCIL

Application by Beacon Fen Energy Park Ltd for an order granted development consent for the Beacon Fen Energy Park

Written Representation - Summary

A report prepared by North Kesteven District Council

(ID F8D379496)

Planning Inspectorate reference: EN010151

NKDC reference: 23/0471/NSIP

October 2025

The Council's Written Representation (WR) regarding the Beacon Fen Energy Park, aligns with its Local Impact Report (LIR). The WR focuses on five key areas of concern: loss of Best and Most Versatile (BMV) agricultural land, landscape and visual impacts, cultural heritage, battery energy storage system (BESS) and fire safety, and ecology and biodiversity net gain (BNG).

1. BMV Agricultural Land

The development affects 529ha of agricultural land, with 277.3ha classified as BMV. Approximately 20.37ha will be permanently lost due to infrastructure "sealing over." The Council's consultants, Landscope, highlights concerns about soil degradation, long-term drainage issues, and the lack of guaranteed conservation grazing, which could mitigate agricultural loss. The cumulative impact across Lincolnshire is deemed significant.

2. Landscape and Visual Impact

The Council's consultants, AAH, identify significant adverse effects on landscape character and visual amenity during all phases of development. The solar farm will alter the open, tranquil fenland landscape (the solar array site is located within the Fenland Landscape Character Sub-Area as defined in the North Kesteven District Council 2007 Landscape Character Assessment), introducing industrial elements. Mitigation planting may reduce visibility but risks changing the character of views. The Council questions the robustness of the Landscape and Visual Impact Assessment (LVIA), particularly regarding residential visual amenity and cumulative effects with other regional energy projects.

3. Cultural Heritage

The Council raises concerns about impacts on designated assets such as St Andrew's Church, Asgarby Hall, Boughton House, Howell Hall, and Kyme Tower, as well as non-designated heritage farmsteads. The Council calls for bespoke mitigation strategies beyond embedded measures, noting that some assets were insufficiently assessed during construction and operational phases.

4. BESS and Fire Safety

The Council expresses strong concerns about fire risks associated with lithium-ion battery technology, particularly thermal runaway. While the applicant assumes use of safer Lithium Iron Phosphate (LFP) cells, this is not confirmed. The Council argues that "perception of harm" to public safety is a material planning consideration and urges regulatory clarity and robust safety planning.

5. Ecology and Biodiversity Net Gain

The Council's consultants AECOM, identifies significant omissions and inconsistencies in ecological assessments. Key concerns include inadequate survey data, insufficient mitigation for protected species, and unrealistic BNG assumptions. The Council urges improvements to the BNG Metric and strategy, advocating for a commitment exceeding the statutory 10% minimum, in line with local policy.

Conclusion

While the Council supports solar development in principle, it objects to the Beacon Fen Energy Park due to unresolved concerns in the five highlighted areas. The Council recommends further scrutiny and mitigation to ensure alignment with national and local planning policies.