

Nottinghamshire County Council

Local Impact Report – Steeple Renewable Project

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1. Introduction

- 1.1. Nottinghamshire County Council (NCC) has prepared this report in accordance with the advice and requirements set out in the Planning Act 2008 and the Nationally Significant Infrastructure Projects: Advice for Local Authorities published by the Planning Inspectorate in August 2024.
- 1.2. The guidance states that when the Planning Inspectorate decides to accept an application for a Development Consent Order (DCO) it will invite the relevant local authorities to prepare a Local Impact Report (LIR). The LIR should give details of the likely impact of a project on the local authority's area and should indicate where the local authority considers that the proposed development would have a positive, negative or neutral effect on their area.
- 1.3. The LIR may include any topics that the local authority considers to be relevant to the impact of the development within its administrative area and is a means by which its existing body of knowledge and evidence on local issues can be fully and robustly reported. It is intended to be a technical assessment of impact and does not attempt to conclude on the acceptability of the proposals. The LIR therefore neither sets out objection or support for the application.
- 1.4. In producing the LIR, the County Council has not sought the views of local parish councils and local interest groups as to any particular matters that should be reflected in the report because the parish councils and other local interest groups have the opportunity, through the consultation process, to make their observations direct to the Planning Inspectorate.
- 1.5. The LIR only covers matters and issues where NCC has a statutory function or holds expertise at an officer level, supplemented by external advice as needed. The topics covered are listed below. For all other matters not listed below, NCC will defer to Bassetlaw District Council (BDC), including matters relating to compliance with their local development plan:
- Historic Environment – Built
 - Historic Environment - Buried
 - Biodiversity
 - Landscape and Visual
 - Waste Management
 - Traffic and Transport
 - Public Rights of Way
 - Local Flood Risk
- 1.6. Unless otherwise specified, the LIR only relates to the proposed development insofar as it affects the administrative area of Nottinghamshire.
- 1.7. For each matter above, the LIR will outline the key local issues relevant to the part of the proposal that is located within Nottinghamshire and the extent to which the applicant addresses the issues by reference to the application documentation, including the Environmental Statement (ES) and associated appendices and management plans. The LIR will comment on the effect they would have on the area, either positive, negative or neutral and the magnitude of that effect.

- 1.8. The County Council is a host authority to the proposed Steeples Solar Farm project. It has prepared this Local Impact Report in light of its statutory responsibilities, especially in respect of being the local highway authority including responsibility for rights of way, lead local flood authority, planning authority for mineral and waste development and as the managers of the Historic Environment Record, employing a County Archaeologist function. It is also providing comments on landscape and visual matters through its landscape service linked with its highway agency Via East Midlands.
- 1.9. The County Council and its controlling administration has long supported the transition of Nottinghamshire's legacy of power stations alongside the River Trent to becoming creators and suppliers of green energy. Nottinghamshire through its coal industry in the 20th Century supplied coal fired power stations and has a proud legacy of the energy industry and electrical installations within the Trent Valley. Local communities have benefited from employment within the energy sector and it is the County Councils ambition that the Trent Valley continues to be at the forefront of clean green energy development, using the existing power stations as the basis.
- 1.10. For this reason the County Council worked with Bassetlaw District Council to successfully bid for West Burton to be the home of the testing and scaling of the STEP approach to nuclear fusion in the UK. Proposals are currently being prepared for this project to be subject to consultation before submission through the nationally significant infrastructure project regime in 2028.
- 1.11. The site of the former Cottam power station to the south of the Steeples site is set for transformation into the UK's first nuclear-powered data centre campus. The Cottam data centre project will use Small Modular Reactors to provide clean power for data centres at the site.
- 1.12. The East Midlands Combined County Authority and the East Midlands Mayor are supporting the concept of a Super Cluster of sites along the Trent Valley from Gainsborough to Newark to assist in marketing the area as a hub for future green energy projects.
- 1.13. We cite these projects to illustrate that there are already projects likely to happen and supported by either national or local government which will impact on the locality and the Steeples project must be considered considering the overall impact of the widespread developments planned to take place. It cannot be viewed entirely in isolation.
- 1.14. The new administration of the County Council, elected in May 2025 continues to be pro-environment, pro the creation of secure, affordable and safe energy. It continues the stance of the previous administration in being against the development of large amounts of agricultural land for ground mounted solar. For large-scale solar farms that are NSIPs, the [national policy statement for renewable energy infrastructure](#) advises that such solar farms should be sited on previously developed and non-agricultural land.
- 1.15. The County Council administration takes issue with the concept of "net zero" the legally binding target to reach net zero greenhouse gas emissions by 2050 which is driving the Governments aim of delivering clean power by 2030 through low carbon power sources producing most electricity generation in Great Britain.
- 1.16. This approach is the basis for the explosion in projects for large solar developments in Lincolnshire and Nottinghamshire within easy access to the grid connections at the former power

stations. The approved Gate Burton, Cottam, West Burton and Tillbridge solar projects at nationally significant infrastructure (NSIP) projects in Lincolnshire involve underground cabling to the Nottinghamshire power stations. At present in addition to Steeples, there are NSIP proposals at North/South Clifton (One Earth Solar Farm) and west of Newark (Great North Road). This is in addition to the many solar developments approved by the local planning authorities through the normal planning application process. We are showing the extent of all these projects on a composite plan which is appended to this Local Impact Report Appendix 1. The cumulative impact of this growing list of approved projects will change the face of the wider Trent Valley area and impact on the way the valley is perceived. Whilst there have always been elements of non-agricultural industry in the Nottinghamshire countryside, these proposals are resulting in the wholesale transformation of green fields into glass and steel. We acknowledge that such projects are seen as temporary and reversible but the impact on local people will be felt for several generations.

- 1.17. In addition to the many solar projects in this area, the Trent Valley is also proposed to accommodate a new power line promoted by National Grid Energy Transmission (NGET) connecting land north of the Humber with High Marnham power station which will directly cross the site of the Steeples renewable project to the west of Sturton le Steeple. It appears to the County Council that the two projects are in conflict, and the promoters have reached no satisfactory agreement over the compatibility of their proposals.
- 1.18. We consider that the Steeples project could potentially prejudice delivery of the NGET power line project which may be seen as a higher priority since it is important to have power lines to distribute energy from offshore low carbon production sites into the country. Other energy developments should work around such developments.
- 1.19. These opening remarks serve to illustrate the wider impact of this proposal with others. Local residents have asked for a strategic plan to guide future developments. The present Bassetlaw Local Plan does not adequately reference the many new projects which are emerging. The County Council wishes to work constructively with Bassetlaw District and local residents to create a planning framework to help guide and manage the multiplicity of projects coming forward in this corner of Nottinghamshire.
- 1.20. We understand that Bassetlaw DC have not submitted relevant representations to date regarding the Steeples solar project, and we are unsure if they are planning to submit a Local Impact Report. We have therefore sought to be as comprehensive as possible to identify the significant impacts of this project from our perspective and seek to safeguard our local communities.

2. Project Proposal

- 2.1. The Proposed Development is defined under sections 14(1)(a) and 15(2) of the Planning Act 2008 as a NSIP, as it consists of construction of an onshore generating station in England exceeding 50 megawatts (MW). Associated development (e.g., PV module mounting infrastructure, inverters and transformers) and other ancillary works are also proposed as part of the Proposed Development.

2.2. The order limits of the Steeples Renewable Project consist of approximately 898ha of land comprising of predominantly agricultural land. The site includes also includes part of the existing West Burton Power Station site covering the area around the existing 400kV substation, and a number of local roads:

- Sections of Wheatley Road; Station Road; Gainsborough Road, and Wood Lane in the north-western portion of the Site; and
- Littleborough Road, and Common Lane, in the eastern portion of the Site.

2.3. The nearest settlement to the Site is Sturton le Steeple. There is a network of roads located both within the Site and adjacent to the boundary. The River Trent lies adjacent to the eastern boundary of the Site.

2.4. To allow sufficient flexibility for the final design to be confirmed post consent, the applicant has applied the principles of the 'Rochdale Envelope' to inform the environmental assessment work. This involves the technical assessments being undertaken and based on a defined 'envelope' within which the project will be delivered, featuring maximum and minimum design parameters, so that an assessment of the reasonable 'worst case scenario' can be undertaken. Each environmental topic has used the worst-case parameters within the 'Rochdale Envelope' to determine the potential for significant effects and identify suitable mitigation measures.

2.5. It is currently anticipated that the earliest the Proposed Development will commence commercial operation is the year 2029. It is anticipated that sections of the Proposed Development will commence their electricity generation in stages, rather than await completion of the Proposed Development before any renewable energy enters the National Grid.

2.6. The operational life of the Proposed Development is to be up to 40 years and decommissioning is therefore estimated to take place no earlier than the year 2069. Decommissioning is expected to span approximately 18 months – two years and will be undertaken in one phase.

3. Relevant Planning History

3.1. NCC is the Minerals and Waste Planning Authority for Nottinghamshire and is therefore responsible for determining planning applications for such developments. NCC is also responsible for determining applications submitted for its own developments.

Background to Development Proposal

3.2. Planning permission was originally granted for the development of a sand and gravel quarry including the construction of a new access road and erection of processing plant, ancillary buildings and a wharf facility with restoration to agriculture, woodland and water areas for amenity and nature conservation after-uses at Sturton le Steeple in October 2008 under reference 1/46/06/00014.

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Table 1 - Planning History Nottinghamshire County Council, Applications of Note

Application Reference	Site	Development Description	Distance from Project (km)	Application Status
1/46/06/00014/	Land to the north & east of Sturton le Steeple	The extraction of sand & gravel, construction of new access, erection of processing plant, ancillary buildings & wharf facility. Restoration to agriculture, woodland & water areas for amenity & nature conservation end uses.	Within site limits	Granted October 2008 In March 2012 planning permission was granted under reference 1/46/11/00002/R to extend the implementation deadline set out within the original consent to 8 March 2017.
1/46/11/00002/R	Land to the north & east of Sturton le Steeple	Application to extend the time limit for implementation of sand and gravel extraction, previously granted under planning permission 1/46/06/00014	Within site limits	Granted March 2012
1/16/00354/CDM	Land to the north & east of Sturton le Steeple	to enable the quarry access road to be constructed in two stages: <ul style="list-style-type: none"> The initial stage of developing the quarry 	Within site limits	Granted May 2016

		<p>access road relates to the construction of a 500m section of bound surface adjacent to Gainsborough Road (and the remainder of the haul road laid with stone) and for the use of this road for the removal of the first 100,000 tonnes of mineral from the site.</p> <ul style="list-style-type: none"> • The second stage, which has not yet been constructed, includes the full surfacing of the haul road along its entire length. 		
1/16/00354/CDM		<p>Vary conditions 8 and 11 of planning permission 1/46/11/00002/R to enable the quarry access road to be constructed in two stages. The initial stage incorporates the construction of a 500m section of bound surface adjacent to Gainsborough Road which shall be used for the removal of the first 100,000 tonnes of mineral, thereafter the</p>		<p>Granted May 2016 - The 2016 planning permission was implemented in September 2016 through the construction of the first 500m section of the haul road with a bound surface, but the full length of the road in stone surfacing was not constructed. A small quantity of mineral was extracted in March 2017 and utilised for site engineering</p>

		second stage shall provide for the full surfacing of the haul road along its entire length for the removal of the remaining mineral in the permitted reserve.		purposes, but no mineral has yet been removed from the site.
1/20/00605/CDM		To defer the restoration obligations imposed under Condition 68 of planning permission 1/16/00354/CDM to delay the submission of a revised restoration scheme for the quarry until after the 15 th April 2022. A further s73 permission was granted in April 2022 to again afford more time for mineral extraction and postpone early restoration.		June 2020
1/22/00047/CDM		Variation of the trigger date of conditions 67 and 68 to 31 December 2024 to afford sufficient time for additional surveys, to secure all necessary approvals under non-planning regimes and		This is now the operational permission. Non-material amendments have been approved with respect to completing the rest of the access road. This has now been built out. Other

		implementation works to take place prior to extraction recommencing		preparatory works are ongoing at this time, including the construction of the main processing plant.
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4. Planning Policy Context

4.1. The Secretary of State (SoS) is required to have regard to any relevant national policy statement (NPS), amongst other matters, when deciding whether to grant a DCO. Where there is a relevant NPS in place DCO applications are determined in line with Section 104 of the Planning Act 2008.

4.2. The following NPSs are considered relevant to the determination of this DCO Application and set out the assessment principles for judging impacts of energy projects:

- EN-1 - National Planning Policy Statement for Energy
- EN-3 – National Planning Policy Statement for Renewable Energy Infrastructure
- EN 5 – National Planning Policy Statement for Electricity Networks Infrastructure

4.3. The Development Plan Framework for the impacted area of Nottinghamshire includes the:

- Bassetlaw Local Plan 2020-2038 (May 2024)
- Nottinghamshire and Nottingham Waste Local Plan (September 2025)
- Nottinghamshire Minerals Local Plan (March 2021)

4.4. The subsequent section on the assessment of impacts will refer to relevant national and local policies, as far as they relate to the matters which are covered within this LIR. Other relevant policies from the development plan framework will be referred to within the district council LIR.

5. Assessment of Impacts

This section of the report provides comments from specialist service areas on the technical assessments within the Environmental Statement (ES) submitted with the application and the likely impacts of the proposed development upon Nottinghamshire, focussing on the issues relevant to NCC.

5.1. Built Heritage

5.1.1. Local Policy:

Bassetlaw Local Plan 2020-2038 (May 2024)

- Policy ST40: The Historic Environment
- Policy 41: Designated and Non-Designated Heritage Assets

5.1.2. National Policy:

- Section 5.9 of EN-1 (Historic Environment) acknowledges that the construction, operation and decommissioning of energy infrastructure has the potential to result in adverse impacts on the historic environment above, at and below the surface of the ground (5.9.1)
- Sections 5.9.9 to 5.9.15 lays out requirements for the ES assessment to provide a description of the significance of the heritage assets affected by the proposed development and the applicant should ensure that the extent of the impact of the proposed development on the

significance of any heritage assets affected can be adequately understood from the application and supporting documents.

- Sections 5.9.16 to 5.9.21 presents requirements for mitigation of development impacts on archaeology identified within the order limits.
- Additional guidance for Renewable Infrastructure and Cultural Heritage is presented at Sections 2.10.107 to 2.10.119 of EN-3 and expands slightly on guidance from EN-1.
- Section 2.10.112 and Footnote 94 of EN-3 require assessment to be include information on the Historic Environment Record (HER) and the results of pre-determination evaluation and that this in turn should inform design of the scheme.

General Issues

- 5.1.3. *Setting of Littleborough SAM:* The amended details show that the area around the Littleborough Roman Town Scheduled Ancient Monument (SAM) has now been removed from the project. This is very much welcomed as it would help to preserve most of the significance of the SAM. The detached area to the west of the proposal site, north of Cadow Wood, has also been removed. As illustrated on the contour map on my previous comments, that area was considerably higher (above sea level) than the surrounding landscape so development on that site was likely to have a considerable impact. Again, the removal of that site is welcomed.
- 5.1.4. *Setting of Crow Tree Farm listed building:* Land South of Station Road and west of Crow Tree Farm (Appendix 2) there is a public footpath which goes in a NW to SE direction, which affords views towards 3 prominent local landmarks in the village, all listed, namely the curtilage-listed former agricultural building range next to Crow Tree Farmhouse (now called Oak Barn, Crow Tree Barn and Millers Barn), West End Farm (including its curtilage-listed barns), and the Church of St Peter & St Paul. The open views along this footpath form a key part of the setting of those Listed Buildings, especially the church, and the addition of solar within that immediate area would fail to preserve their setting. It is therefore recommended that the area to the north of the dotted line shown on the attached plan be removed from the proposal, so as to better preserve the setting of those important Listed Buildings.
- 5.1.5. *Setting of grouping of listed buildings along Main Street North Leverton:* in the land adjacent Manor Grove (Appendix 3), North Leverton there is a public footpath that runs through this site. The open countryside contributes to the rural setting of the heritage assets along Main Street, and it is therefore recommended that this area be taken out of the proposal.
- 5.1.6. NCC also has concerns relating to the impact on the wider setting outside of the 3km boundary, which includes North Leverton Windmill.
- 5.1.7. Regarding the LVIA provided with the application we have the following observations:
- The viewpoints and photomontages, taken as a whole, do not provide for a very thorough appreciation of the visual impacts that will be experienced as a result of the solar panels and the proposed screen planting. There are some particularly significant long views of open Trent Valley landscape that take in various listed buildings (in particular the churches and windmill), the proposed solar scheme will

be quite visible in these views and it is hard to imagine how moving through this landscape the appreciation of the rural character of the area will not be negatively impacted. As a result the present distinctively rural, agrarian landscape setting of the Heritage Assets within the valley views will all be harmed.

- The cumulative impact assessment is lacking a ZTV that includes the Gate Burton solar scheme to the east.
- The cumulative impact assessment lacks a thorough examination of moving through and within the surrounding Trent Valley area and the photo montages do not address the potential for various parcels of solar, BESS and other industrial development to be intervisible within views that include designated Heritage Assets.

5.1.8. Regarding the Cultural Heritage chapter and assessment of impacts on setting:

- Burton Chateau grade II* listed building sits on elevated land close to the river Trent on the Lincolnshire (West Lindsey) side of the valley. The development will be visible within the design landscape views from this heritage asset (which was deliberately located within the design landscape of Gate Burton Hall). These views are included in those presented on the Landmark Trust's booking website for Burton Chateau and highlights the importance of the Trent Valley rural, agrarian landscape in promotion of the area to visitors. We disagree with the removal of this asset from thorough examination of impacts on its setting.
- North Leverton Windmill, grade II* listed building is a very significant local tourism and educational resource. The assessment of the impact on the setting of the windmill provided in the ES Cultural Heritage chapter is not a fair representation of the role of the Trent Valley landscape in the appreciation of the windmill as a heritage asset and it does not recognise the significant landmark status of the windmill in the wider landscape views, within which it is a distinctive and very well recognised element of the rural character of the area.
- Impacts on the setting of North Leverton Windmill are likely to be at the highest end of 'less than substantial harm' category with regards to the NPPF.
- The solar scheme has the clear potential to impact on financial viability and thereby on the 'optimum viable use' of both North Leverton Windmill as a visitor destination and to a lesser extent Burton Chateau as a holiday let, thereby causing direct harm to both of these grade II* designated heritage assets. Without the evidence to prove otherwise, we would consider this impact to fall into the 'substantial harm' category with regards to the NPPF.

5.2 Buried Heritage

5.2.1. Local Policy – Bassetlaw Local Plan

- Policy ST40: The Historic Environment
- Policy 41: Designated and Non-Designated Heritage Assets

5.2.2. National Policy Statement for Energy (EN-1) (2023), Section 5.9 Historic Environment

- Section 5.9 of the acknowledges that *the construction, operation and decommissioning of energy infrastructure has the potential to result in adverse impacts on the historic environment above, at and below the surface of the ground* (5.9.1).
- Sections 5.9.9 to 5.9.15 lays out requirements for the ES assessment to provide a description of the significance of the heritage assets affected by the proposed development and the applicant should ensure that the extent of the impact of the proposed development on the significance of any heritage assets affected can be adequately understood from the application and supporting documents.
- Sections 5.9.16 to 5.9.21 presents requirements for mitigation of development impacts on archaeology identified within the order limits.

5.2.3. National Policy Statement for Renewable Energy Infrastructure (EN-3) (2023):

- Additional guidance for Renewable Infrastructure and Cultural Heritage is presented at Sections 2.10.107 to 2.10.119 and expand slightly on guidance from EN-1.
- Section 2.10.112 and Footnote 94 require assessment to be include information on the Historic Environment Record (HER) and the results of pre-determination evaluation and that this in turn should inform design of the scheme.

5.2.4. It is the Council's position that to properly assess the impact of a development upon archaeology, the applicant should provide sufficient desk-based research, non-intrusive survey and intrusive field evaluation to adequately understand the archaeological resource within the scheme and detail the proposed development impacts upon it. This is necessary to design an agreeable Archaeological Mitigation Strategy (AMS) to limit as far as possible the proposed development impacts. The Environmental Statement (ES) must present the full range of findings from this archaeological work and provide an evidential basis for at least an Outline AMS (OAMS) for consideration at Examination.

5.2.5. The scheme proposes significant solar development over a large area of north Nottinghamshire covering approximately 888 hectares and in known areas of high archaeological potential and sensitivity as recorded on the Nottinghamshire Historic Environment Records (NHER). Within the Order Limits, these include numerous known late Iron Age and Roman settlements, sited either side of a major Roman road (Margary 28a) that branched off from Ermine Street and provided an alternative route around the Humber, avoiding the unreliable ferry crossing. The road fords the River Trent at Littleborough at the eastern end of the site and bisects it along the full length to exit north-west of Sturton le Steeples. Significant medieval settlement remains are also known within and around the Order Limits, one of which is protected under the Ancient Monuments and Archaeological Areas Act 1979. It is highly likely that numerous unknown Roman and potentially other period sites are present within the Order Limits.

- 5.2.6. The applicant has submitted an Environmental Statement in support of the application and considers archaeology at Chapter 9, Cultural Heritage ([APP-067](#)). Supporting appendices have also been submitted and comprise:
- Cultural Heritage Technical Baseline ([APP-122](#))
 - Magnitude Surveys Geophysical Survey Report ([APP-123](#))
 - Archaeological Mitigation Statement ([APP-124](#))
 - Outline Written Scheme of Investigation for Pre-Determination Trial Trenching ([APP-125](#))
 - Outline Written Scheme of Investigation for Post-Consent Archaeological Works ([APP-126](#))
- 5.2.7. The applicant's submission relies primarily upon desk-based work and non-intrusive geophysical survey (solely magnetometry). While this has identified several areas of high archaeological potential, the full extent, state of preservation, depth, date and significance of the archaeology has not been established in any meaningful way and the approach to date is significantly flawed in this regard.
- 5.2.8. For solar development, we would expect by Examination for the areas of high archaeological potential and for areas of high ground impact to have been subject to trial trench evaluation. This is necessary to adequately record the extent, presence/absence, state of preservation, depth, date of the archaeological remains present and is the only means to properly establish **significance** which is key to EIA assessment. It is also key to designing an appropriate Archaeological Mitigation Strategy and Footnote 94 of EN-3 is very clear in asserting that: ***The results of pre-determination archaeological evaluation inform the design of the scheme and related archaeological planning conditions.***
- 5.2.9. **The applicant has recently undertaken limited trial trench evaluation of the BESS and substation compounds comprising 16 trenches. While this is welcomed, the overwhelming majority of the site remains un-evaluated and in a state where the applicant does not understand the archaeological resource sufficiently to assess the proposed development impact.**
- 5.2.10. The pre-determination trenching is confined to the BESS and substation area and does not include other areas of infrastructure such as new roads/tracks, cable trenching for both for connecting rows of panel arrays and for grid connection, or for landscaping and ecological management areas. It also fails to include the areas of archaeological sensitivity that their own assessment work has identified.
- 5.2.11. The applicant's Archaeological Mitigation Strategy (AMS) presented at APP-124 is therefore based on insufficient data and is not a reliable document for basing a comprehensive mitigation strategy. The documentation suggests that solar schemes are flexible and that detailed assessment at the application stage is therefore unnecessary (Rochdale Envelope), however this is not support by current guidance, particularly [NSIP Projects – Advice Note Nine \(5.2\)](#): ***'Implementation of the Rochdale Envelope assessment approach should only be used where it is necessary and should not be treated as a blanket opportunity to allow for insufficient detail in the assessment. Applicants should make every effort to finalise details***

applicable to the Proposed Development prior to submission of their DCO application. Indeed, as explained earlier in this Advice Note, it will be in all parties' interests for the Applicant to provide as much information as possible to inform the Pre-application consultation process.' And The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017: ***'The EIA must identify, describe and assess in an appropriate manner...the direct and indirect significant impacts of the proposed development on...material assets, cultural heritage and the landscape.'*** ([Regulation 5 \(2d\)](#))

- 5.2.12. The AMS presents 4 areas of high archaeological potential identified in the geophysical survey report. It proposes that these areas are removed from development. In principle we strongly support this approach, however the data these exclusion areas are based upon are necessarily limited due to a lack of trial trench evaluation. Experience from numerous sites in the County show that geophysics results usually only provide a partial view of the extent of archaeological remains and often fail to identify significant archaeology at all. The full extent of these areas would be established more accurately when combined with trial trenching results. The applicant's own report recognises the limitation of using geophysics as the sole prospection technique at section 7.1. While we support the use of exclusion for these areas, the full extent and nature of the archaeological remains have yet to be sufficiently determined.
- 5.2.13. Further, no provision has been made for intrusive evaluation of any other areas of high potential identified in the desk-based and non-intrusive work presented. The geophysics report records 8 areas of archaeological potential and only 4 have been addressed in the AMS. Further scrutiny of the report also shows that not all potential anomalies have been presented in the interpretation section. For instance, probable enclosures are shown in the greyscale plots in Figure 9 & 10 (western side of the map) but are not shown on the interpretation at Figure 11. Further, many of the greyscale plots show enhanced disturbance, possibly from green waste or changes in geology, across large parts of the site (see Figures 15 & 18) which will have likely obscured any archaeological remains present. In such instances, evaluation trenching is necessary to assess archaeological potential.
- 5.2.14. The Outline Written Scheme of Investigation for Post-Consent Archaeological Works presented at APP-126 is incredibly vague and of little value due to the lack of trial trench evaluation to date. We strongly refute the statements at Sections 2.4, 2.6 and 2.7 and cite again Advice Note Nine and guidance in EN-3 including Footnote 94 as well as the sections that that applicant has quoted which do indeed mention field evaluation. Field evaluation is 'necessary' in areas where no previous disturbance may have removed it (historic quarrying) to prospect as well as characterise archaeology. The applicant's interpretation of Policy is simply incorrect and highly irresponsible in relation to managing risk to the development.
- 5.2.15. In many sections of the post consent (OWSI) that applicant states that 'no confirmed evidence' for each period has been identified or makes assumptions upon dates for features without sufficient evidence to support it. This is entirely down to their flawed and insufficient approach. In general, you are unlikely to identify something if you don't look for it. This is not an acceptable approach to any assessment.
- 5.2.16. The approach presented in the post consent OWSI can be summarised as 'we'll determine the scope of work later'. This provides considerable risk to the applicant or their successors when implementing the consented scheme. However, NCC do agree with sections 5.4 relating to

separate WSI's for each phase of work, section 5.5 relating to contingency trenching and section 5.7 relating to likely requirements for mitigation work. The work will also need an Archaeological Clerk of Works to have oversight of work on the ground and to liaise between the developer's delivery team, consultant, archaeological contractor and relevant stakeholders.

Proposed Impacts

- 5.2.17. Chapter 9 assesses impacts upon archaeology from section 9.7.3 onwards. This section is necessarily very general due to the lack of assessment information as discussed earlier. The area identified in the desk-based work (*Segelocum* Roman town) and the 4 areas identified in geophysical survey have been removed from development which is welcomed. An appropriate management strategy for these areas will need to be presented in detail, however the impact from development in these areas is considered **low**. Until further field evaluation has been carried out, and the archaeological resource has properly defined and understood, and an appropriate and detailed Archaeological Mitigation Strategy designed, the impact from intrusive ground development where it encounters archaeology will be **significant, adverse and negative**.
- 5.2.18. Section 9.7.12 asserts that there will be no direct impacts, however this fails to address concerns around mid-life refits and maintenance and should be considered further.
- 5.2.19. Section 9.7.23 considers decommissioning and makes assumptions on significance of archaeological remains that cannot be supported by the level of assessment work to date. As with the construction phase, until further field evaluation has been carried out, and the archaeological resource has properly defined and understood, and an appropriate and detailed Archaeological Mitigation Strategy designed, the impact from intrusive ground works associated with decommissioning where it encounters archaeology will be **significant, adverse and negative**.

Proposed Mitigation

- 5.2.20. Chapter 9 presents an outline strategy for mitigation and enhancement from Section 9.8 onwards. This is necessarily vague and general due to a lack of proper assessment except for the 4 areas identified in the geophysics and the *Segelocum* Scheduled Monument.
- 5.2.21. Section 9.8.2 provides for trial trenching both pre and post determination. None of this has been undertaken to date and we would expect all the sensitive areas identified and high impact areas to be completed for Examination. To reiterate, until this has been completed, the applicant cannot provide an accurate assessment of archaeological potential or significance.
- 5.2.22. Once a proper trenched evaluation has been undertaken, we would broadly support the measures suggested in Sections 9.8.3, 9.8.4 and 9.8.5, although the specific details for mitigation work will need to be agreed.
- 5.2.23. We broadly support the proposals for the operational phase (Sections 9.8.6 and 9.8.7) but would include further measures for areas where ground works are necessary for refit and

maintenance and have not already been included in assessment or mitigation work prior to construction. **We would also seek to remove any Permitted Development rights in areas that have not been properly assessed or been subject to mitigation work or measures.**

- 5.2.24. We also welcome the approach to preservation areas during decommissioning (Section 9.8.9) but would also seek additional work in areas that have not already been included in assessment or mitigation work prior to construction.

Conclusions

- 5.2.25. The Council has profound concerns regarding the approach that the applicant has taken to archaeology on this site. It lies in an area for particular archaeological potential relating to Roman and later settlement, being bisected by a major Roman road. Numerous significant sites have been recorded around it, including extensive remains on the new quarry adjacent and to the north-east of order limits.
- 5.2.26. The evidence presented to date relies on limited data that has not been investigated adequately to provide any indication on the actual significance of the archaeology present. Currently the applicant can make no reliable statements on significance, extent, date, state of preservation or depth of any of the archaeology that they themselves have identified through non-intrusive work. This is a highly flawed approach and does not meet the basic requirements of planning policy or guidance, or indeed that of the professional standards expected.
- 5.2.27. The limited data presented indicates the presence of significant archaeology across the site, but does not yet provide sufficient site-specific detail on the nature of much of it and therefore cannot assess the development impacts upon it. Further, it does not yet offer an agreeable programme of mitigation work to offset those impacts, although the high-level strategies discussed may be appropriate once the archaeological resource is properly understood.
- 5.2.28. In our experience of sites of this size and potential impact, trenching results are necessary to test the reliability of the geophysics results and are also essential for effective project risk management if the DCO is granted. Failing to adequately evaluate a site of this nature could lead to unnecessary destruction of heritage assets, potential program delays or delivery issues and excessive cost increases that could otherwise be avoided.
- 5.2.29. Where insufficient assessment has been undertaken and excluding the 5 areas already removed from development, the Council's position must be that the development will have a **significant, adverse and negative impact** on the archaeological resource when encountered within the Order Limits.
- 5.2.30. The wording of an appropriate archaeological DCO requirement will depend on the level of assessment work that has been completed by the close of Examination. We recommend that if some evaluation trenching is still outstanding, then wording similar to that for the recently approved Mallard Pass scheme would be appropriate. It is likely that the implementation of further post-consent assessment work and mitigation work will be complicated and we are currently working with Solar Energy UK and the Chartered Institute for Archaeologists to formulate appropriate requirement wording in such instances.

- 5.2.31. This position will alter when the applicant completes an acceptable programme of pre-determination evaluation, presents an agreeable programme for post-consent evaluation and assessment work and is able to submit their detailed and properly informed AMS for Examination.

5.3 Biodiversity

- 5.3.1. The following comments are a summary of the concerns NCC have regarding the ecology impacts (including Biodiversity Net Gain) of the Proposed Development, having reviewed all documents submitted as part of the application for DCO EN010163 – Steeple Renewables Project Examination Library in relation to ecology and BNG. Further comment will be provided at a later stage of the assessment process.

Ecology

- 5.3.2. We have some concerns in relation to the proposed enhancements, namely the works which will be undertaken to complete the enhancements in the biodiversity mitigation areas as further species surveys have largely been omitted from the biodiversity areas, which may be impacted by these proposed enhancement works i.e. works to watercourses, other habitat creation works.
- 5.3.3. Clarification is required on the methodology used for the aquatic invertebrate surveys, as only one survey occasion was completed for each waterbody. This approach does not seem sufficient as one survey occasion for each waterbody is very limiting and any environmental conditions i.e. such as the drought this year may impact the results or provide an inaccurate overview of the species present.
- 5.3.4. The Environmental Statement (ES) chapter considered that both mink and water vole are present in low numbers at the site, yet no mitigation or enhancements specifically for these species has been provided, other than watercourse enhancements, which form part of the BNG works. We would like to see some enhancements proposed specifically for water vole, such as the commitment to the control of mink (an invasive non-native species) and possibly some of the waterbodies enhanced specifically for water vole.
- 5.3.5. The ES chapter states *“The design of the Proposed Development is such that no direct impacts on habitat that could be used by roosting or nesting barn owl will be affected. The need for further survey will be assessed once the construction detail and timing are known, and if the risk of disturbance of a barn owl becomes a possibility”*. At this stage the construction detail and timing should be known and therefore the requirement for further surveys.
- 5.3.6. We require further clarification on badger setts as the impact assessment and mitigation and enhancement sections within the ES Chapter contradict each other. In addition, we would like to see proposed mitigation for this species i.e. buffer zones and gaps in fences with the current known badger setts/evidence of badger (e.g. mammal paths) mapped on a plan. Mammal gaps should also benefit other species observed at the site such as brown hare.
- 5.3.7. No impact assessment for this invasive species has been provided. We would like to see some mitigation as part of the enhancements for these species – e.g. the removal and control of

Canadian waterweed. Over time this species could naturally spread into other watercourses across the site, and we would be keen to remove this issue before it becomes a wider ecological issue across the site and local area.

- 5.3.8. We have concerns about the proposals for the directional drilling proposed underneath the watercourses as no assessment for this appears to have been provided in the ES for the likely impacted species i.e. fish.
- 5.3.9. We also have concerns about impacts on skylarks. The ES chapter estimates that mitigation, as set out in the Skylark Mitigation Strategy, will mitigate approximately 55% (against the 2023 total of 105 territories) to 64% (against the 2024 total of 90 territories) of the territories to be displaced by the proposal solar infrastructure. This is assessed as an ***adverse residual effect significant at a Local level***, as well as an ***adverse cumulative effect significant at the Local to District level***. It is indicated that some further habitat creation will provide 'secondary biodiversity benefits' including providing nesting habitat for skylark, as listed in para 4.8 of the Skylark Mitigation Strategy, which will further increase the total number of post-development skylark territories, but this is not quantified. It would be useful to attempt to do this, whilst recognising the constraints in doing so. Nevertheless, it is apparent that a residual impact on this Red Listed (but still widespread) species would remain.
- 5.3.10. We require more information in relation to the Decommissioning proposals, whilst appreciating that not all impacts are known at this stage. We would like to understand the level of monitoring and surveying proposed to inform the impacts prior to decommissioning. In addition, we would want to see that no decommissioning works are undertaken within nesting bird season and this secured, as the mitigation for ground nesting skylark should increase the number of territories and nests across the site.
- 5.3.11. We would also like some indication about expectations for the Site once the decommissioning has been undertaken, such as whether it will put back into its original use and whether areas such as the grassland margins around the solar arrays and mitigation areas be lost.
- 5.3.12. In relation to the outline CEMP – there are a few sections in the ecology table which state *"These measures are described within the outline CEMP"*. These statements and the lack of details within this document need to be reviewed and updated, as currently the outline CEMP does not provide enough details. In addition there are the following issues which need rectifying/adding to the proposed mitigation:
- The proposed nesting bird surveys, should they be required in nesting bird season, must be undertaken by a suitably qualified and experienced ecologist.
 - In relation to reptiles and amphibians, a directional two-phase cut (with 24 hours left between the two cuts) of the suitable vegetation should be undertaken rather than just progressive removal. This more precautionary approach should be undertaken as no reptile surveys were undertaken and therefore the distribution and populations of any reptiles at the site is currently unknown.
 - Specific hand searches for reptiles, amphibians and hedgehogs should be undertaken immediately prior to any dense vegetation removal works, i.e. hedgerows, tussocky grassland, scrub etc where these species could utilise as refuge or hibernation/breeding sites. This must be undertaken by a suitably qualified and experienced ecologist.

- A buffer plan for the entire site should be made available for review. This would make the buffers easier to understand and implement for the contractor prior to the start of the construction works.
- A 'dark corridor plan' should also be produced, where no artificial lighting will be present (temporary or permanent) to protect light-sensitive (i.e. potential bat roosts, barn owl roosts, badger setts etc.).

5.3.13. In relation to the outline LEMP, there are details missing within this document, with sections stated to be provided in detail as part of the final LEMP. We will review and provide further comments on this document once all details are known, but currently we broadly agree with the outline creation and management prescriptions provided. In addition, we would like to see proposals for areas of tussocky grassland to benefit amphibians and reptiles but also provide more barn owl foraging habitat across the Site.

5.3.14. Further, having reviewed the Figure 6.9 Landscape and Ecological Mitigation Strategy plans, it is noted that some changes have been made to the Eastern Mitigation Area to reflect discussions held in March 2025, particularly in relation to the floodplain grazing marsh area to the north of Littleborough Lagoon. However, a number of further suggestions have not been adopted, and an explanation for this is required. In particular, it was requested that:

- The two scrub blocks should be removed from the 'inverted V' grassland areas in the centre of the Eastern Mitigation Area, to maximised the likelihood of ground nesting birds, including species such as Lapwing, using this area. The scrub can be relocated to peripheral areas.
- Consideration be given to consolidating grassland areas in the Eastern Mitigation Area into one larger block on the eastern side of this area to give ecological benefits as well as potentially simplifying management.

Biodiversity Net Gain

5.3.15. Biodiversity Net Gain (BNG) as it is not a mandatory requirement for NSIPs, and a BNG metric spreadsheet was not available for review at the time of the most recent submission; therefore, more detailed comments will be provided at a later stage.

5.3.16. The BNG proposals and approach to the assessment is well considered and detailed with relevant justifications provided where necessary. Overall, there is proposed to be a net gain for all habitat types, which is to be expected for a solar scheme. There are a couple of clarifications which we would like provided in relation to APP-114 6.3.7 Appendix 7.12 Biodiversity Net Gain, Chapter 5:

- *Individual trees are not recorded separately within the baseline value as they will be retained, except for potentially irreplaceable (veteran) trees, which have been precautionarily listed within the SBM (see irreplaceable habitats subsection in section 4).* Does this mean that any individual trees other than the "irreplaceable" trees have not been included, or that any trees within hedgerows have not been included?
- Hedgerow assessment – we agree with the desk-based approach in principle, but would like clarification if the hedgerows which are to be impacted (i.e. areas removed for access) were also subject to condition assessments? Section 5 reads as if only the

hedgerows with five or more species were surveyed, which might not include those to be directly impacted.

- In addition to the above clarifications, we would like more details in relation to the proposed watercourse enhancements as currently it's not clear what enhancements are proposed at which watercourses and whether they will further impact protected species.

5.4 Landscape and Visual

5.4.1. Local Policy:

- Bassetlaw Local Plan - Policy ST35: Landscape Character

5.4.2. National Policy

- EN-1 confirms that all energy infrastructure projects will have adverse effects on landscape and that projects need to be designed carefully, taking account of the potential impact on the landscape and the aim should be to minimise harm to the landscape, providing mitigation where appropriate. The applicant should carry out a landscape and visual impact assessment and report it in the ES, including cumulative effects, with reference to any local character assessments.
- Further guidance in relation to solar farms is provided in EN-3 which places emphasis on effective screening, including through native hedges, trees and woodlands.

5.4.3. AAH Consultants (AAH) has been commissioned to prepare a review of the Landscape and Visual (L&V) elements of the application documents on behalf of NCC and BDC. The review is presented as a report and is set out in Appendix 4. It provides comments on the presentation of the L&V Chapter of the ES, the methodology and scope of assessment, the appraisal of landscape and visual baseline and effects and the mitigation and design of the project.

5.4.4. This section of the LIR 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). It also includes recommendations for further information that should be provided to assist in the examination of the DCO Application. However, it is recommended that the full report appended to the LIR is read to understand the wider context and reasoning for the conclusions.

5.4.5. The LVIA and the associated figures, appendices and documents provide a thorough analysis of the Development and is appropriate to the scale and context of the Site. The process of assessment is thorough and well explained in the volumes, which include a clear summary of findings and identification of significant effects on the landscape and visual baseline. There are some parts of the assessment that we have highlighted issues with, which are summarised below.

Summary and Conclusions on the LVIA

- 5.4.6. By virtue of its scale and massing, we judge that the Development would result in Significant adverse effects on landscape features, 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 immediate 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.
- 5.4.7. The LVIA and supporting documentation are generally proportionate to the scale of the Development and demonstrate compliance with GLVIA3 and relevant Landscape Institute guidance. The assessment is clearly structured, with separate consideration of landscape and visual receptors, and has been prepared by a competent practitioner. However, a number of methodological, baseline and interpretative issues limit the robustness of the conclusions reached.
- 5.4.8. While the methodology broadly reflects GLVIA3, there are inconsistencies in how Significance is defined when compared with the wider ES methodology. Professional judgement is relied upon throughout, but justification for value and susceptibility, and ultimately sensitivity, and magnitude judgements is limited for both landscape and visual receptors. Greater transparency is also required in explaining how thresholds of Significance have been applied, and in clarifying whether the LVIA has assessed a genuine worst-case scenario under the Rochdale Envelope approach.
- 5.4.9. The landscape baseline description is relatively cursory, with limited analysis of key landscape features and perceptual qualities. The omission of explicit assessment of land use change, from open arable farmland to large-scale solar infrastructure, represents a significant gap, given that we judge this is the most fundamental alteration to landscape character. While beneficial effects are claimed for new planting at Year 1 and Year 15, we seek additional information on these points, as these are likely more accurately described as mitigation, rather than true enhancement. We judge that the scheme would result in Significant adverse landscape effects at construction, operation and decommissioning, with long-term changes to local landscape character that should be considered effectively permanent.
- 5.4.10. The visual assessment identifies a range of receptors, but again transparency on the value and susceptibility of these receptors is lacking. Significant adverse visual effects are identified at construction and early operation, particularly for PROW users and those on the local road network. However, we disagree with the LVIA's conclusion that all significant effects dissipate by Year 15, as the mitigation planting itself alters the baseline character of views, often foreshortening open vistas and potentially introducing new, landscape elements that may appear out of character in this landscape. We also consider that several residential properties within 500m will experience adverse effects that would likely be judged as Significant, whereas the LVIA does not identify any Significant visual effects to residents in properties.
- 5.4.11. Whilst the LVIA concludes no significant cumulative effects, we consider the scale of renewable and grid-related projects in Nottinghamshire and Lincolnshire presents a substantial risk of cumulative and sequential change at regional levels. Large-scale solar and energy infrastructure are likely to become defining characteristics of the regional landscape, altering

openness, tranquillity, and perceived rural character. Sequential effects for PROW and road users are of particular concern, with repeated experiences of large-scale solar resulting in a diminished capacity to tolerate change.

- 5.4.12. The iterative design process is referenced, but buffers, or offsets, to sensitive visual receptors appear limited. Mitigation planting is relied upon heavily to reduce adverse effects, but this in itself has the potential to be out of character in this open arable landscape. The Outline Landscape and Environmental Management Plan (OLEMP) provides a framework for future detailed designs and management of the scheme, but long-term commitments (well beyond 5 years) to establishment, monitoring and replacement planting must be secured. Without this, the predicted Year 15 reductions in effects cannot be relied upon.

5.5 Minerals and Waste Management

5.5.1. Local Policy:

- Nottinghamshire and Nottingham Waste Local Plan (2025)
 - SP1 – Waste Prevention and Re-use
 - SP8 – Safeguarding Waste Management Sites

- 5.5.2. National Policy EN-1 states that proposals should ensure that sustainable waste management is implemented through the waste hierarchy and that disposal of waste should only be considered where other waste management options are not available. The applicant should set out the arrangements that are proposed for managing any waste produced and should include information on how re-use and recycling will be maximised in addition to proposed waste recovery and disposal.

- 5.5.3. It is recognised that the applicant has addressed the comments made by the County Council previously in terms of recognising that the Nottinghamshire Minerals Local Plan (adopted March 2021) forms part of the suite of development plans for the Local Area. However, there is still no reference to the Nottinghamshire and Nottingham Waste Core Strategy and emerging Nottinghamshire and Nottingham Waste Local Plan within the Planning Statement, despite the applicant indicating it has been included within their response to point five in the Consultation Report: Appendix Part H. Neither Plan, or its relevant policies, are referenced within paragraph 6.14 as suggested nor within Appendix C (labelled as Appendix D within the Planning Statement) titled Local Policy Accordance Table. As detailed in our previous response in January, the County Council consider that the application is in accordance with Policy SP1, as it seeks to manage waste high up the waste hierarchy as possible, and Policy SP8 as there are no safeguarding concerns. It would be appreciated if this could be added within the Planning Statement to demonstrate the applicant has considered them.

- 5.5.4. The County Council previously highlighted that the Eastern area of the proposed site lies within the Mineral Safeguarding and Consultation Area for sand and gravel, with the allocated and permitted quarry of Sturton le Steeple also nearby. To ensure the safeguarding of the quarry and mineral resource, the County Council asked the applicant to prepare a Minerals Resource Assessment, something which other similar DCO applications have provided. The applicant however has not submitted a Minerals Resource Assessment but included a section in their

Planning Statement under section 6.11 for mineral safeguarding. The County Council consider that this not sufficient due to reasons set out below.

- 5.5.5. Firstly, paragraphs 6.11.2 to 6.11.10 in the Planning Statement do not mention the permitted and allocated Sturton Le Steeple quarry nor discuss how the application has considered and assessed potential impacts on the quarry in terms of its operation and restoration. Sturton Le Steeple is allocated under [Policy MP2c of the Nottinghamshire Minerals Local Plan](#) and is one of several sites that ensure a steady and adequate supply of sand and gravel in Nottinghamshire to meet expected demand over the Plan period (2036). The quarry has planning permission for extraction (1/22/00047/CDM) until December 2035, with operator Holcim looking to commence extraction in 2026. Considering the resource in the area and the delay in extraction commencing, it is likely that the quarry life will extend beyond 2035 and so will be present at the start of the DCO applications life, if permitted. The County Council believe that the applicant should assess the potential effects of the proposal on the quarry and provide assurance that it will not impact the quarry's operation nor its agreed restoration. This is of particular importance as the applicant proposes to use the quarry's access road, which is due to be removed when the quarry is restored. Whilst the applicant notes that they will work with the quarry operator to avoid any potential conflicts in relation to the access road, further evidence and so reassurance should be provided through a minerals resource assessment.
- 5.5.6. Secondly, the applicant has indicated in section 6.11 of the Planning Statement that the mineral resource (across the wider project area) will not be sterilised due to limited ground disturbance and that it is of a temporary nature meaning that the resource will be available following the decommissioning of the site. The County Council recognise that the nature of development would not physically sterilise the resource but, as detailed in our previous response, the mineral present could be sterilised from an economical and practical sense. If Sturton quarry was to close and be restored, following extraction of its currently permitted mineral reserves, prior to the decommissioning of the DCO proposal, then the access road and processing plant will have been removed from the quarry site, which are considerable financial investments. Once removed it is therefore unlikely that future proposals and extensions for mineral extraction in the locality would be brought forward following decommissioning of the solar farm due to the cost of re-establishing such infrastructure. It is also questionable whether the proposed biodiversity mitigation area, which falls in the mineral safeguarding area, would be fully removed at the decommissioning stage as it would be well established after the expected 40-year lifespan. If this was retained, again this would make future extraction of the resource unlikely due to potential biodiversity loss. Therefore, the applicant should have considered the potential for sterilisation of minerals from an economical viewpoint as well as the actual physical sterilisation of the mineral.
- 5.5.7. The County Council believe that the applicant should have prepared a minerals resource assessment for the application, with this the standard practice for similar DCO applications in the area which have been, partly or fully, in a mineral safeguarding area. The mineral resource assessment should assess the effects the application may have on the resource and the quarry site, considering the points raised above. This would ensure any potential effects on minerals have been fully considered and mitigated where necessary.

- 5.5.8. It is therefore concluded that the impact of the proposal on minerals resource is **uncertain** at this stage, pending completion of the recommended assessment work, but it has the potential to have a negative impact on minerals safeguarding if appropriate measures are not taken to address impacts on the mineral resource and Sturton Le Steeple quarry.
- 5.5.9. As per the applicant's response in [point 5 of the Consultation Report: Appendix Part H](#) to the County Council comments, the applicant has assessed the impacts on waste within [Chapter 17 of the Environmental Statement under Miscellaneous Issues](#). The [Outline Construction and Environmental Management Plan](#) (ES Volume 2, Appendix 4.1) and the [Outline Decommissioning Plan](#) (ES Volume 2, Appendix 4.2) then provide further information on how waste will be managed.
- 5.5.10. These documents detail that the applicant will seek to minimise waste, maximise re-use and recycling opportunities and so follow the waste hierarchy, which the Council supports. At the decommissioning phase, it is therefore assumed that 60 – 89% of all anticipated waste streams will be recycled or recovered, with a new industry to recycle or refurbish to PV modules expected to emerge in the future. The assessment therefore concludes that the impacts are not significant.
- 5.5.11. However, as previously raised by the Council, whilst the scenario that the waste is recycled or recovered is preferable, the recycling capacity facilities to do this for the PV panels is not established, particularly at the scale that will be needed when considering the cumulative impacts of several solar farm schemes in this area expected to finish around a similar time. This issue is recognised in the recently published [Solar Roadmap: United Kingdom Powered by Solar](#) (June 2025) by the Department for Energy Security & Net Zero. Without the development and establishment of sufficient solar panel recycling facilities, this would lead to a large volume of waste in the area at the time that requires disposal. Other similar schemes, for example One Earth, have within their assessment of waste considered an absolute worst-case scenario whereby the waste is not able to be recovered or recycled. They have also considered the local and regional existing landfill capacity to understand potential significance impacts. Whilst the Outline Decommissioning Plan notes that forecasting future landfill capacity is difficult and that disposal of waste to landfill is the worst- case scenario, which the Council agrees with, there is though no detailed assessment of the significance of impact in this worst-case scenario, in relation to application and for cumulative effects, nor the recognition of the growing national issue around the limited landfill capacity. In Nottinghamshire particularly there is a lack of non-hazardous landfill capacity as identified in [Table 11](#) of the new Nottinghamshire and Nottingham Waste Local Plan. As raised in [paragraph 5.58](#) and [paragraphs 7.38 – 7.41](#) of the emerging Plan, due to underlying geology of the area and wider environmental constraints, the scope to provide hazardous and non-hazardous capacity in Nottinghamshire is extremely unlikely. This therefore stresses the importance of considering the absolute worst- case scenario. ■
- 5.5.12. The County Council therefore considers that the assessment of the impact on waste is not sufficient, with it not as detailed as others undertaken by similar schemes. It is considered that the assessment should have considered local and regional landfill capacity and assessed an absolute worst-case scenario. This again helps to stress the importance of developing recycling facilities and so capacity to enable the recovery and recycling of solar panels, for this project

and others within the area, to prevent significant cumulative impacts on declining landfill capacity.

- 5.5.13. It is therefore concluded that the impact on waste management is **uncertain** at this stage, pending completion of the recommended assessment work, but that the project has the potential to have a negative impact upon future landfill capacity if capacity to enable the recovery and recycling of solar panels is not developed.

5.6 Traffic and Transport

Transport Assessment

- 5.6.1. The Highway Authority (HA) has been working closely with the applicant's specialist transport consultant for several months and has helped to steer and develop the proposed strategy and approach to delivering the project.
- 5.6.2. The Transport Assessment (TA) aligns with NPPF principles by providing a detailed evidence base, considering strategic and local highway authority input and proposing mitigation through the Outline Construction Traffic Management Plan (OCTMP).
- 5.6.3. However, in certain aspects the TA does not align with our expectations of what a TA should include to understand the impact of the scheme. Firstly, The TA references pre-application discussions with authorities but lacks detail on broader community consultation, especially regarding traffic impacts on villages like Sturton-le-Steeple and North Leverton. Secondly the TA assumes worst-case traffic scenarios but does not clearly demonstrate how mitigation measures (e.g., minibus use, staggered shifts) will be enforced or monitored, which may affect deliverability. Thirdly while the routing proposed avoids sensitive areas, the report does not fully address cumulative impacts from other committed developments in the area, which gives rise to concerns.
- 5.6.4. In addition, the TA focuses on vehicle routing and mitigation but does not explore opportunities for walking, cycling, or public transport use by the workforce or during operation. The site is rural and inherently vehicle-dependent. While routing is optimised, the TA does not demonstrate how travel demand is reduced beyond basic scheduling.
- 5.6.5. Although the TA concludes that impacts are temporary and manageable, it relies heavily on assumptions (e.g., off-peak scheduling, minibus use) without robust enforcement mechanisms.
- 5.6.6. The TA and the associated Addendum requires further work before the HA is satisfied. The defined route from the A1 to the site using the strategic road network and main road network links is agreed in principle by NCC. The County Council has identified specific queries concerning the proposed 20 Nr field accesses/cross-over points/new entrances for the overland haulage routes that affect the adopted public highway. These are detailed in Appendix 5 and the applicant is asked to address the comments marked in red.
- 5.6.7. One significant area that is far from agreed is how the applicant have carried out the construction related traffic analysis and presented the data to demonstrate overall impact

along the designated HGV delivery route and key junctions. The HA is liaising with applicant to inform them of what needs to be done to provide more clarity on this issue.

Outline Construction Traffic Management Plan (OCTMP)

- 5.6.8. The County Council as HA has assessed (OCTMP) the is broadly happy with the conclusions for this project and my full comments are attached for the record. Pegasus have submitted a further addendum to the OCTMP to the County Council. The document looks a reasonable framework to help reduce construction-related transport disruption and safeguard public safety, but we not in a position to agree a statement of common ground (SoCG), as further clarity and transparency is required about some points.
- 5.6.9. In summary, for the OCTMP there are a few minor issues in respect of how the works programme will integrate with the normal Highways Permits and Licensing system to carry out works in the public highway. The document is also quite light about provisions for the HA to request reviews to arrangements when problems are encountered or how liaison about programme and street works will be organised with VIA EM Ltd – NCC’s Highway Service Partner, but may have a significant impact is there is no explicit commitment for the main contractor to carry out remedial work if construction transport related damage occurs during the 2 year contract.
- 5.8. In terms of how the works programme for constructing this project will integrate with the highway permit system, the County Council has previously agreed wording for inclusion in another Solar DCO which meant that street works would be subject to NCC’s Permit Scheme. This appears to have been omitted from the DCO for this project and the County Council is seeking this in terms of general comments on the DCO.
- 5.9. The County Council understands that the DCO will grant powers which negate the need for S278 agreement related to altering the highway layout and construct accesses. However, this should not circumnavigate the LHA’s technical approval process. The County Council has raised this in terms of other solar NSIP projects and the applicant confirmed that the technical approval process should be described within the OCTMP and, in complying with the CTMP, they would need to secure a technical approval and also cover our costs.
- 5.10. The County Council wishes to confirm that this is covered in the OCTMP for Steeples. Likewise, with TTROs, whilst the DCO grants power to the developer to impose these (subject to our approval), the procedure for notification etc. should also be agreed/described within the OCTMP, further detailed comments on the OCTMP is contained within Appendix 6.

5.7 Public Rights of Way

- 5.7.1. The Definitive Map for the site plan of Steeple Renewables Project highlights that there are at least 35 Public Rights of Way (PRoW) that cross the areas identified on the interactive map site. There are additional RoW adjacent to development areas that are also likely to be impacted.

- 5.7.2. The correct legal alignment of the public right of way can be checked by carrying out an official search, contact row.landsearches@nottsc.gov.uk. Inaccuracies or misalignments of the routes on a legal diversion may result in two paths being legally recorded, generating further inaccuracies and problems. Public Rights of Way (PROW) are the minor highway element of the public highway network and are afforded the same level of protection and control as the major highway network (i.e. all classes of roads including motorways). They are a material condition in the planning process and due attention should be made to the treatment of them in the application for development.
- 5.7.3. They form part of the sustainable transport network that has links to healthy living, reducing carbon footprints, safe non-motorised links to local facilities, so it is important ensure that they are linked to the other networks and are of a good design that encourages safe use.
- 5.7.4. Paragraph 105 of the National Planning Policy Framework (NPPF) states that planning policies and decisions should protect and enhance PROW including taking opportunities to provide better facilities for users. Paragraph 117 states applications should prioritise pedestrian and cycle movements and create places that are safe, secure and attractive, minimising the scope for conflicts between users and vehicles.
- 5.7.5. There are also links with the Nottinghamshire Joint Health and Wellbeing Strategy 2022-2026 to reduce obesity through exercise and ensure opportunities are available in the local area and for general living; and Nottinghamshire Sustainable Community Strategy 2010-2020 which is developed in conjunction with all districts to provide opportunities for safe walking and cycling links and to reduce vehicle use.
- 5.7.6. Partnership working with NCC under Local Transport Plan 2011 – 2026 to promote safe non-motorised routes, connectivity and economic growth. Encouraging developers to engage fully in utilising the available PROW network by upgrading facilities in conjunction with good design principles will help to deliver on these policies.
- 5.7.7. It is rare that the impact on the PROW network would provide a reason to refuse planning permission, however development can have a major impact on the quality of the route. A change in type of user or frequency as a result of the development needs to be accepted by the developer and consideration of the location, amenity and construction of the path as a result. This can all be accommodated appropriately using good design principle from the start to enhance the public willingness to use and make use of the PROW network to achieve the policy aims of sustainable and safe transport corridors linking to the wider network, health and wellness of the local population, provision of good amenity and enjoyment.
- 5.7.8. The Preliminary Environmental Information Report (PEIR) does acknowledge that there are several PROW across the site but perhaps does not fully appreciate the breadth of the network in that area. Overall, the developer shows good consideration and appreciation of how the development will affect PROW in the area.
- 5.7.9. The developer should work with the Rights of Way team on the next stages of design to ensure the following measures and conditions are met:

- Correct route of public rights of way: Note that it is the responsibility of the developer to ensure that their application takes account of the legally recorded route and width of any public rights of way as recorded in the definitive map and statement. This may differ from the line walked on the ground and may mean there are more than one route with public access. The legal width of public rights of way may be much wider than the habitually walked or ridden width. The correct legal alignment of the public right of way can be checked by carrying out an official search, contact row.landsearches@nottsc.gov.uk
- Protection from breaks in public rights of way and vehicle crossings/use of public rights of way: Many public rights of way are valuable as access corridors and as continuous wildlife and landscape corridors. As a matter of principle, PRoW should remain unbroken and continuous to maintain this amenity and natural value. Crossing PRoW with roads or sharing PRoW with traffic significantly affects wildlife movements and the function of the PRoW as a traffic free and landscape corridor. Road crossings of PRoW should be considered only as an exception and in all cases, provision must be made for wildlife access and landscape, and with safe high quality crossing facilities for walkers, cyclists and equestrians according to the legal status of the PRoW. Vehicle access should not be taken along PRoW without appropriate assessment and speed, noise, dust and proximity controls agreed in advance with Nottingham County Council (NCC).
- Protection, Mitigation and Improvements of routes: Public rights of way through the site need to be integrated with the development and provided to a standard to meet the pressures caused by the development. Assessments of current condition need to be undertaken along with proposals for onsite mitigation and improvement measures. This may include upgrades to some footpaths to enable cycling or horse riding and better access for commuters or people with lower agility. If new links across the network are created developer must understand the difference between dedicated and permissive routes. All of the above measures need to be agreed in advance with. All necessary PRoW mitigation and improvement measures onsite need to be undertaken prior to occupation to ensure public amenity is maintained.
- Protection of public rights of way and users: Routes must remain useable at all times during a development's construction lifecycle. This means temporary or permanent surfacing, fencing, structures, standoffs and signing need to be agreed with NCC Countryside Access and provided prior to the commencement of any construction and continue throughout. Access provision for walkers, cyclists and horseriders as vulnerable road users needs to be maintained. This means ensuring noise, dust, vehicle etc impacts are prevented. A detailed plan on keeping the public safe during construction will be required.
- Temporary obstructions and damage: No materials, plant, vehicles, temporary structures or excavations of any kind should be deposited / undertaken on or adjacent to the PRoW that obstructs the PRoW whilst development takes place. Avoidable damage to PRoW must be prevented. Where this takes place repairs to original or better standard should be completed within 24hrs unless a longer repair period is authorised by NCC.

- **Route alterations:** The development should be designed and implemented to fit in with the existing public rights of way network. No changes to the public right of way's legally recorded direction or width must be made without first securing appropriate temporary or permanent diversion through separate legal process. Note that there are legal mechanisms to change PRow when it is essential to enable a development to take place. But these mechanisms have their own process and timescales and should be initiated as early as possible – usually through the local planning authority. Any proposals for temporary closure/diversion need to have an accessible, level, safe and reasonably direct diversion route provided with necessary safety fencing and stand-off to ensure public amenity is maintained for the duration of the disturbance. Within the PEIR it states that a PRow Management Plan will be provided as well as liaising with NCC Rights of Way.
- **Gates / right of way:** Any gates provided in association with the development shall be set back from the public right of way or shall not open outwards from the site across the public right of way.
- **Bridges / drainage:** Any bridges that are on site should be assessed prior to development. Any changes/improvements should be discussed with NCC, and where appropriate the EA and IDB. Flood levels should have been assessed and local drainage issues considered. Development should not further worsen drainage issues but should seek to improve them.
- **Structures/ Furniture (Gates etc):** Any new structure on existing RoW will require authorisation of the highway authority and can only be made under certain criteria. If a structure is required for the control of stock, then only a gate will be approved.
- **Hedges/screening:** Existing boundaries and hedgerows are the responsibility of the landowner to ensure they do not obstruct a PRow. Where additional hedges/natural vegetation is proposed e.g. to shield the public from glint or glare, to coincide with new boundaries or to enhance existing boundaries, a lifetime management regime needs to be agreed with Nottinghamshire County Council as local Highway Authority to ensure that public access is not impeded when the vegetation screen is established or during the development or hedge/screen's lifecycle.
- **Biodiversity Net Gain:** Care should be taken not to include the surface of a PRow in BNG calculations. Any planting should take place at suitable distances from PRow. Making sure that they do not enclose or encroach the PRow. With particular attention to the change in surface and canopy cover as vegetation matures e.g. not planting on the very edge of the PRow. A management regime should be agreed with NCC.
- **Enclosure:** The PEIR documents have acknowledged that there will be a visual impact on sections of PRow. If the line of the right of way is to be enclosed by hedging or fencing, for example to provide security for solar PV arrays, then there should be a 'corridor' (minimum width to be discussed) provided or the recorded width, whichever is the greater. Fencing should not have barbs, razor wire or palisade fencing within the line of the right of way and visual amenity should be maintained. The enclosed path and the hedge/fencing needs to be

maintained to provide the full corridor width for the duration of the development.

- Surface: Surfaces of PRoW must not be disturbed or changed without prior discussion with NCC. For example: a previously grass surfaced path must not have hardstanding laid across without consent.
- Noise and vibration: Consideration should be given the impact of construction, demolition, traffic and BESS facilities on different user groups. Paying special attention to PRoW used by horse riders and the potential of spooking horses. The existing PEIR does acknowledge that it will detail a more thorough survey of the impact on users at a later stage, it is encouraged that special attention is given to where the bridleways and restricted byways pass through the site.
- Offsite mitigation: A contribution may be requested to secure off-site improvements to mitigate the loss of visual amenity and to provide alternatives or extensions of routes in the locality. This could include use of the space between the panels and the field edges (shade zone) which could provide a good opportunity for additional access.
- Information: The developer could consider the installation of a solar powered information board where the right of way enters the site. This will provide information on the wildlife on the site as well as providing information on the power output and how many houses it is supplying at any one time.

5.8 Local Flood Risk

5.8.1. Nottinghamshire County Council (NCC) commissioned AECOM to review the applicant's flood risk assessment and drainage strategy for the Steeple Renewables project (NSIP EN010163). The review evaluates the flood risk assessment (FRA) and surface water drainage strategy, examining their methodologies and consistency with relevant policies and guidance such as the NPPF/PPG, Defra's Non-statutory SuDS Standards, CIRIA C753, and Nottinghamshire County Council's (NCC) Local Flood Risk Management Strategy (LFRMS) Part 5.2. It also assesses the potential impact on local flood risk, considering surface water, ordinary watercourses, and groundwater.

5.8.2. The scope of this review therefore covers the following documentation:

- APP-011 – Site Layout
- APP-066 – ES Chapter 8 (Hydrology, Hydrogeology, Flood Risk and Drainage) – relevant to surface water drainage and flood risk
- APP-117 to APP-119 – Flood Risk Assessment
- APP-120 – Surface Water Drainage Strategy
- APP-161 to APP-163 – ES Chapter 8 Figures
- APP-178 – Flood Risk Assessment

Flood Risk Assessment

- 5.8.3. The document states that consultation was undertaken with several bodies, including the LLFA and TVIDB, with meeting minutes referenced. However, these minutes are not included as claimed, and no further details are provided. It is also noted that in the eastern half of the site, including east of the Catchwater Drain, the ordinary watercourses fall under the management of the Trent Valley IDB. The EA requested that sensitive equipment be raised 300mm above the 'design' 1 in 100 year plus climate change flood level, this has not been confirmed in the flood risk assessment or drainage strategy. No details of proposed watercourse crossings have been provided, including confirmation of the applicable design flood event for their assessment.
- 5.8.4. **The FRA should include the referenced meeting minutes with the LLFA and TVIDB, as stated in the document. This will provide a complete audit trail of stakeholder engagement and ensure transparency. The applicant should demonstrate that sensitive equipment is sited at least 300mm above the designed flood levels. The applicant should provide details of proposed water course crossings.**

Constraints

- 5.8.5. The assessment of constraints appears reasonable and covers the key issues expected at this stage. The site is located on the River Trent floodplain and is intersected by several drains and ditches, with land falling from higher ground in the west towards the river in the east. Parts of the eastern area sit within flood zone 3, protected by a flood defence bund. The underlying ground is mainly clay and mudstone, which have poor drainage potential, although limited infiltration may be possible in localised sand and gravel deposits. A part of the site also lies within a drinking water protected area, meaning that surface water and pollution risks will need careful management.
- 5.8.6. Infiltration testing should be undertaken in accordance with BRE 365.

Existing Drainage

- 5.8.7. The document provides only a general overview of site drainage and lacks detailed information on existing infrastructure in exception of sewer records. No evidence is given of surveys to identify culverts, outfalls, or other drainage assets, leaving the extent and condition of such features unclear. Inclusion of a plan drawing clearly marking existing drainage features such as ditches, culverts, and crossing points would offer clarity but is not deemed essential. Given the rural setting, it is unlikely that existing infrastructure would prevent the drainage strategy from being implemented as proposed.

Flood Risk Assessment

- 5.8.8. The flood risk assessment considers all relevant sources of flooding, each of which is addressed and discussed in the flood risk section of the report. Section 5.2.2 mentions the eastern 40% of the site falls within Flood zone 3 whereas in section 5.2.6 this is noted as 30%. Clarity is needed on which number is accurate, although it has been stated that all development is outside flood zone 3b. Flood defences at the site are mentioned but there is no information on their form and condition. The EA has requested a clear demonstration of how the site drainage and flood risk management measures can adapt to a 62% climate change allowance. At present, no such assessment has been provided, meaning it is not possible to confirm

whether the proposed design will remain resilient under future climate change scenarios. The flood risk assessment does not consider the potential adverse impacts to the BESS in the event of a flood defence breach. It is unclear whether flooding could cause irreparable damage to the BESS units or lead to secondary hazards such as chemical leakage, fire, or debris being washed away. There is also no assessment of the potential risks created for the wider public should equipment or hazardous materials be displaced during a breach scenario.

- 5.8.9. **It is recommended that the applicant undertakes hydraulic modelling at the requested 62% climate change allowance to show the impacts to the site. It is recommended that a breach analysis is undertaken to assess the vulnerability of the BESS to floodwater, including structural stability, potential for washout, and risks associated with potentially hazardous materials throughout construction, operation and decommissioning.**

Stakeholder Engagement

- 5.8.10. Appendix E does not include minutes of direct consultation with the IDB, meaning there is no visibility of what has been agreed with them. **This should be corrected.**

Drainage Design Strategy

- 5.8.11. The overall drainage approach for the solar panels is sensible and in line with standard practice, with runoff allowed to soak into the ground and extra measures such as swales and trenches provided where needed. The strategies for the BESS and the substation also seem generally appropriate, with storage designed for heavy rainfall and, in the case of the BESS, additional measures to contain firewater if an incident occurs. However, there are notable gaps in the submission, and the drainage strategy lacks sufficient detail and appears underdeveloped. The design only considers events up to the 1 in 100 year storm with 25% climate change, but it does not explain what would happen in the event of a larger storm. There is no mention of exceedance flows, how water would safely flow across the site if the drainage system was overwhelmed. Guidance from the LLFA and IDB usually expects clear plans for this, to make sure floodwater is routed away from sensitive equipment or areas and does not cause new risks off site. The strategy also does not explain what would happen if a flow control device became blocked, which is a realistic risk in practice. Some explanation of mitigation measures (for example, emergency spillways, bypasses or inspection regimes) would be expected. The FRA also mentioned that sometimes the ditches and watercourses can be surcharged which has not been accounted for in the model.
- 5.8.12. The strategy includes firewater storage for the BESS but not for the substation. It does not explain why this has been excluded. A clear justification would normally be expected.
- 5.8.13. The strategy assumes solar arrays will not increase runoff, mainly because of vegetation and permeable ground. Extra measures like trenches and swales are proposed on steeper areas. While this is consistent with industry practice, the report provides no quantitative evidence.
- 5.8.14. In the flood risk assessment, it is noted that the Environment Agency requested a minimum of 300 mm freeboard between the solar panels and the 1 in 100 year + cc fluvial flood level. However, this requirement has not been clarified in either the flood risk or drainage reports,

and no details are provided of the proposed heights of the solar panels above ground. This leaves uncertainty as to whether this has been addressed.

- 5.8.15. In addition, there are no details of proposed watercourse crossings, which are normally subject to design and consent requirements. Similarly, while two additional detention basins are mentioned, there is no information on how water quality will be managed in these features, unlike the detail provided for the BESS and substation basins.
- 5.8.16. Greenfield runoff rates have been calculated using the IH124 method via the HR Wallingford SuDS tool. FEH methods are typically preferred, however this method is commonly used.
- 5.8.17. No consideration has been given to whether the solar panels and associated structures can withstand the impacts of lateral flood flows, which is essential to ensure structural stability and prevent damage during flood events.
- 5.8.18. The current assessment does not consider or model the potential loss of floodplain storage resulting from the placement of inverters and transformers. While gravel filled filter trenches are proposed to manage surface water runoff, these measures do not mitigate the displacement of floodwater. In addition, no information is provided on whether the transformers are classed as sensitive infrastructure or whether they will be elevated above the design flood level with an appropriate freeboard. This omission creates uncertainty regarding their resilience in a flood event.
- 5.8.19. It has been noted that a basin is proposed at Sutton le Steeple, however, no details have been provided regarding its layout, sizing, design criteria, or function within the overall drainage strategy. Without this information, the effectiveness of the basin in managing surface water and flood risk cannot be assessed.
- 5.8.20. Groundwater monitoring data indicates that levels are within 1 m of the surface in some locations. It is unclear whether this has been fully considered in the design of filter drains and ponds, particularly with respect to their storage capacity, and potential groundwater surface water interactions. No assessment has been provided on seasonal fluctuations, nor has any commitment been made to ongoing monitoring.
- 5.8.21. Multiple gravel trenches are shown across the site and appear to function as buffers to disrupt overland flow, however, their purpose, capacity, and hydraulic operation are not defined. Applicant states that gravel trenches will be installed around inverter impermeable pads, but no design details have been provided. It is unclear what storage volume they provide, what infiltration rates have been assumed, or whether they outfall to a receptor. Without this information, there is no clarity on how stored water will be managed once the trenches are full. In their current form, there is a risk of channelised flow concentrating towards the site's low points, offering no surface water benefit under exceedance conditions and potentially increasing off-site flood risk.

- 5.8.22. Access tracks are described as impermeable but given their compacted construction, they are likely to increase runoff rates and velocities, with associated scour risk on adjacent drains and watercourses. The tracks also introduce a higher pollution load than the existing baseline. Construction and operational traffic will mobilise silt and sediment, and vehicle use can introduce hydrocarbons, metals, and other contaminants. During rainfall, these contaminants and suspended solids are likely to be washed from the track surface into nearby watercourses if not intercepted. The section does not appear to address these impacts or set out mitigation, leaving uncertainty over both hydrological and water quality effects.
- 5.8.23. While a section on maintenance has been provided, it does not cover how key SuDS components such as swales, ditches, ponds, or filter drains will be managed. Without specific maintenance requirements, there is a risk that these features could lose effectiveness over time through siltation, vegetation overgrowth, blockages, or structural deterioration. This lack of detail creates uncertainty over the long-term resilience and performance of the proposed drainage system.
- 5.8.24. The current documentation does not explain how compaction of the ground during construction activities will be managed. At present, the ground is relatively undisturbed, but sustained traffic from excavators, delivery wagons, and dumpers over the course of the works is likely to compact soils. This compaction could significantly reduce infiltration potential and increase surface water runoff compared to existing conditions, thereby undermining the performance of SuDS features and increasing flood risk.
- 5.8.25. The purpose of the proposed SuDS features is unclear, as they are not connected to any defined drainage system and there is no evidence of catchments discharging into them. The drainage strategy also lacks the necessary detail to demonstrate how the system will operate in practice. Key information is missing, including how runoff will be collected and conveyed to filter drains, how water will enter and pass through these features, the proposed surface materials for the BESS compound and substation areas, whether all the features will be lined, details of penstocks or other flow control structures, and adequately detailed long sections, cross sections, and construction details.

Recommendations and Conclusions

- 5.8.26. It is recommended that the Applicant:
- produce a site wide exceedance routing plan showing primary and secondary flow paths, measures to protect sensitive infrastructure, and ultimate discharge locations. Consider exceedance where surcharging may occur.
 - provide clear justification for excluding firewater management at the substation, confirming either that the risk is negligible or that appropriate alternative containment measures are in place.
 - provide quantitative evidence, such as calculations or modelling, to demonstrate that the solar arrays will not increase runoff, particularly under different ground conditions and maintenance scenarios.
 - demonstrate the drainage features can operate under surcharged conditions.
 - confirm the proposed heights of the solar panels above ground and demonstrate compliance with the Environment Agency's requirement for a 300 mm freeboard above the 1 in 100 year + climate change fluvial flood level.

- provide details of all proposed watercourse crossings and secure the necessary consents. They should also include information on water quality management for the two additional detention basins, to ensure consistency with the approach taken for the BESS and substation.
- provide a detail for the gravel trenches, including confirmed function and design criteria. Storage calculations assumed infiltration rates, and defined outfalls and/or high-level overflows.
- should update the drainage strategy to consider access track runoff, scour potential.

5.8.27. It is recommended that:

- the design of the solar panels and associated infrastructure includes an assessment of resilience to lateral flood flows to ensure structural stability and minimise the risk of damage during flood events.
- the applicant assesses and quantify any loss of floodplain storage resulting from the placement of inverters and transformers including their foundations, and, where necessary, incorporate compensatory storage to ensure no increase in flood risk. The sensitivity of the transformers should be clarified within the FRA/drainage strategy, with confirmation provided on their finished floor levels.
- that detailed information is submitted for the proposed basin in Sutton Le Steeple, including layout plans, design capacity, hydraulic modelling, and supporting calculations, to demonstrate that it has been appropriately designed and will provide the required level of flood risk mitigation.
- that infiltration potential is confirmed through BRE 365 compliant infiltration testing at the proposed SuDS locations to provide robust evidence for the drainage strategy and ensure that alternative measures are appropriately justified if infiltration is not feasible.
- the maintenance plan should be expanded to include specific requirements for each SuDS feature, including inspection frequencies, sediment removal, vegetation management, structural repairs, and safe access for maintenance teams.
- that a soil management plan is developed to address the risk of compaction during construction. This should include measures such as limiting construction traffic to defined haul routes, using low ground pressure machinery where feasible, phasing works to minimise disturbance, and undertaking soil decompaction.
- the Drainage Strategy is updated to demonstrate the purpose and benefits of the SuDS features and how they integrate with the overall drainage strategy. We would like to see outline engineering detail of all proposed drainage and SuDS features. This should include catchment and collection arrangements, inlet and outlet structures, confirmation of pond lining, penstock and flow control details, and clear long sections, cross sections, and typical details for swales, filter drains, ditches, ponds, and associated infrastructure.

Design Parameters

5.8.28. The design parameters are generally well defined and reflect agreement with key stakeholders, including the LLFA and IDB. They cover flood event allowances, buffer distances, easements,

and runoff restrictions for critical assets. However, there are no details of any new crossings provided.

Hydrology, Hydrogeology, Flood Risk and Drainage

5.8.29. How the development could affect rivers, drains, groundwater, flooding, and water quality during construction, operation, and when it is eventually taken down. Flood maps, geology, water quality data, past flood events, and locations of water supplies were assessed. During construction, there's a risk of pollution (chemicals, muddy water, concrete washout) and extra runoff increasing flood risk. To manage this, work areas will be kept away from watercourses, temporary drainage will be used, and new crossings will be designed not to block flows. Any damaged drains will be repaired. Overall, impacts are expected to be minor and not significant. During decommissioning, the same controls and good practice will apply as in construction. An Outline Decommissioning Plan will guide this, including how to deal with cables at the end of their life. Again, impacts on flood risk and drainage are expected to be minor and not significant. An extra opportunity has been identified to help reduce flooding in Sturton le Steeple. The project proposes an additional SuDS basin, designed specifically to hold back surface water flowing across the site from higher ground.

Summary of Recommendations

5.8.30. The information provided in the FRA and supporting drainage documentation is sufficient to outline the overall strategy, and we have no fundamental concerns with the proposed approach. However, there are areas where information is limited or missing, which makes it difficult to confirm full compliance with agreed design parameters. We recommend NCC request further information from the Applicant to address the following:

- Confirm that the IDB has been formally consulted on discharge proposals and watercourse crossings and provide evidence of agreed design principles. Include meeting minutes with the LLFA/IDB
- Provide details of all proposed watercourse crossings, including confirmation of design flood standards, soffit levels, and arrangements to maintain existing flows.
- Confirm that all sensitive infrastructure will be raised a minimum of 300 mm above the 1 in 100 years + climate change fluvial flood level, in line with EA requirements.
- Attenuation storage provision. Applicant to confirm sufficient storage can be accommodated in view of the following:
 - o Variance in greenfield runoff rates. FEH methods would typically be preferred for the estimation of greenfield runoff rates. Surcharged outfalls. There does not appear to have been consideration of potential surcharging and the implications for attenuation storage provision.
- The applicant should provide quantitative evidence to confirm that the solar arrays will not increase runoff.
 - Site wide exceedance routing plan to confirm protection of sensitive infrastructure and no predicted impacts to third parties in line with EA/LLFA agreements.
 - Provide justification for excluding specific firewater storage at the substation or confirm alternative measures to ensure containment in an incident.

- Confirm the drainage system can operate under surcharged outfall conditions.
- Undertake hydraulic modelling at the requested 62% climate change allowance.
- Breach analysis be carried out to assess the BESS's vulnerability to floodwater, including stability, washout.
- Resilience of solar panels and infrastructure to lateral flood flows is assessed to ensure stability and minimise flood damage.
- Loss of floodplain storage from inverter/transformer foundations is quantified, with compensatory storage provided if required, and transformer sensitivity confirmed.
- Design, capacity, and modelling information is provided for the proposed basin at Sutton Le Steeple.
- BRE 365 infiltration testing is undertaken at SuDS locations to confirm feasibility and justify alternatives if infiltration is unsuitable.
- Design, storage, infiltration, and overflow/outfall information for the gravel trenches.
- Update the drainage strategy to address access track runoff, scour potential, and pollution risks.
- Expand the maintenance plan so it includes all SuDS featured.
- It is recommended that a soil management plan is prepared to mitigate compaction risks during construction through defined haul routes, suitable machinery, phasing, and decompaction.
- We recommend that the drainage strategy is revised to fully consider SuDS that integrate with the overall drainage scheme and are not bolted on.

6. Development Consent Order

6.1. NCC has reviewed the draft DCO and has the following comments to make, however these are not exhaustive and NCC may have further comments to make during the examination process.

Part 3 Streets

6.2. The County Council is the Local Highway Authority (LHA) for the order limits of the proposed project. The following comments are made with respect to PART 3 of the Draft DCO (STREETS).

6.3. Article 8 allows the undertaker to perform street works on any of the streets specified in Schedule 3. NCC requires that any street works are subject to the Nottinghamshire County Council Permit Scheme Order 2020, which is made under Part 3 of the Traffic Management Act 2004. This will ensure the LHA is able retain coordination and control of road works to reduce disruption for road users. NCC would refer the applicant to Article 9 of the made 'Tillbridge Solar Order' where this approach was applied.

6.4. Article 9 allows the undertaker to carry out alterations or works to any of the streets specified in Schedule 4. NCC would require such works to be subject to full technical approval from the street authority with the associated costs to the street authority to be covered by the undertaker.

- 6.5. The technical approval process should follow the same process as would be followed in relation to highway works which are secured under a S278 Agreement, pursuant to a planning condition under the Town and Country Planning Act. The process for technical approval should be agreed with NCC and described within the Outline Construction Traffic Management Plan (oCTMP).
- 6.6. Article 10 allows the undertaker to form and lay out temporary and permanent means of access at the locations described at Schedule 5. As above, such works should be subject to full technical approval from the street authority with the costs to the street authority to be covered by the undertaker.
- 6.7. The DCO should require any of the alterations to the streets specified in Schedule 4 and any means of access described at Schedule 5 to be completed to the satisfaction of the street authority.
- 6.8. Article 13 allows the undertaker to impose traffic regulation measures, with the written consent of the traffic authority. NCC would seek clarity on the proposed procedure for consultation and approval of any TTRO and recommends that this is agreed with NCC and described within the oCTMP. Whilst the obligation to publish the proposed measure in one or more local newspaper is noted, it is standard practice within Nottinghamshire for a bulletin to be issued to relevant stakeholders. NCC would request the cooperation of the undertaker in this respect, by either directly issuing the bulletin itself or by supplying the dates/times, locations and diversions and contact numbers for the LHA to issue.

SCHEDULE 2 – Requirements

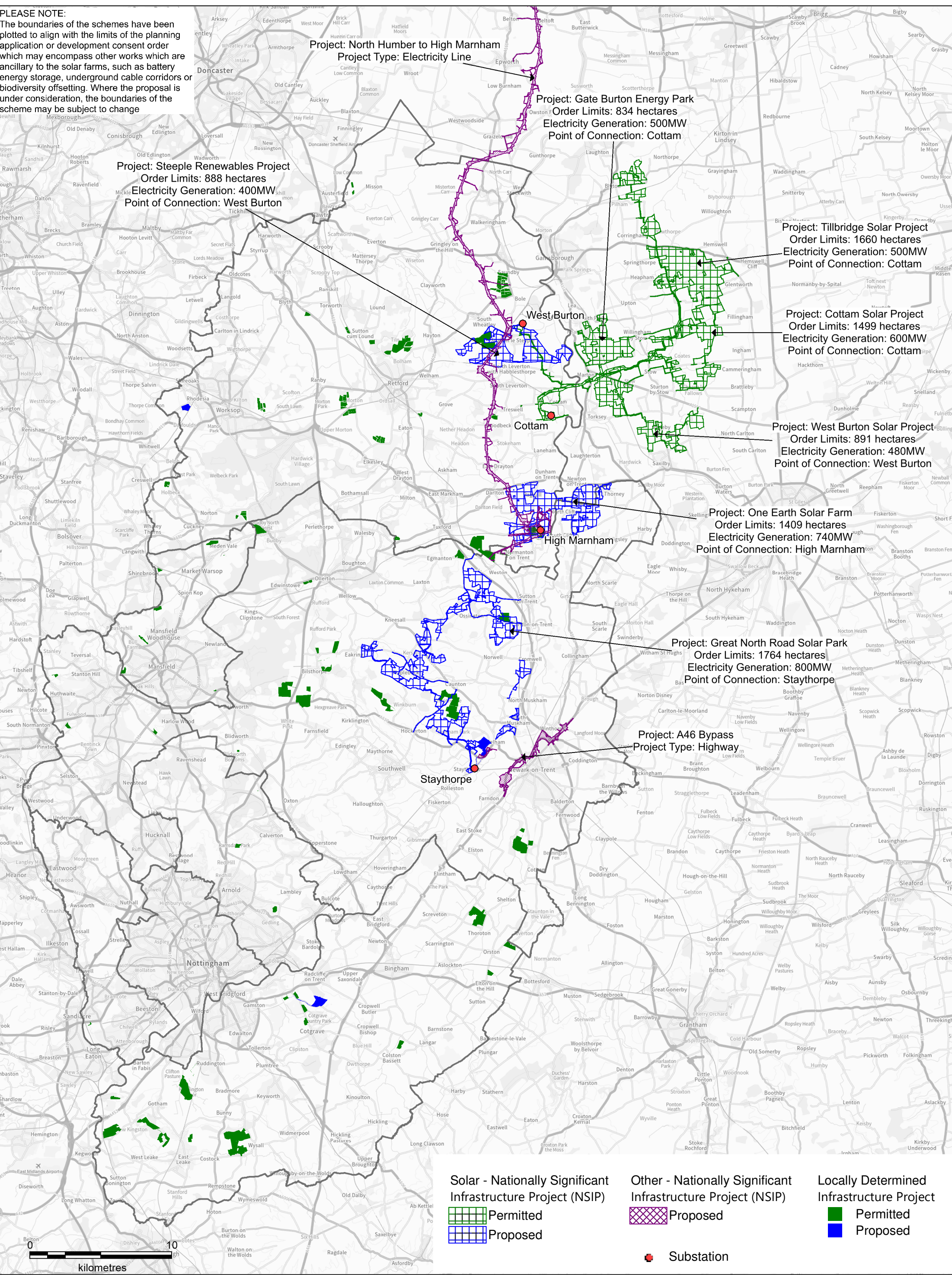
- 6.9. NCC notes the list of requirements at Part 1 of Schedule 2, which are to be discharged by the Local Planning Authority (LPA), which would be Bassetlaw District Council. Several of the requirements relate to the responsibilities of the County Council and it is recommended that these are discharged by the County Council, with any fees payable under Part 2 paid directly to the County Council (rather than the LPA). This includes Requirements 8 (Construction Traffic Management Plan) and 13 (Public Rights of Way Diversions), which should be discharged by the Highway Authority, and Requirement 16 (Surface and Foul Water Drainage) which should be discharged by the Lead Local Flood Authority.
- 6.10. The precise wording of the requirements should be agreed by the LPA and, where relevant, NCC.
- 6.11. In Nottinghamshire, proposals are being developed to reorganise local government which, if implemented, would result in a single tier of local government. Therefore, the dDCO should enable any of the requirements in Schedule 2 to be discharged by a superseding local authority, if necessary.
- 6.12. Part 2 states that where an application has been made to the relevant authority for any consent relating to the requirements, relevant authority must give notice to the undertaker of its decision on the application within a period of 8 weeks, or else the requirement will be deemed consented. NCC considers that notification of a decision within 8 weeks as a standard approach is insufficient.

- 6.13. NCC is particularly concerned with the resourcing of such requirements and therefore considers that a default period equating to Major Environment Impact Assessment development for a planning application of 16 weeks would be more appropriate. As an absolute minimum, the period for determination should be 10 weeks, for parity with the period applied in the recently made Tillbridge Solar Order, though this is still insufficient. Whilst NCC notes that Part 2 includes the option to agree an alternate period, the expectation for 8 weeks would be set by its inclusion in the standard wording.
- 6.14. The project is significant in size and scale and the information submitted for many of the requirements is likely to involve a significant amount of information and an appropriate time period must be afforded for the LPA and/or NCC to consider this, including time to consult with other relevant organisations. This issue would be compounded by the combination of other NSIP projects within the county, should they gain development consent. These projects follow a similar timeline and will place cumulative pressure on the statutory functions of the planning departments and other statutory functions.
- 6.15. NCC notes that where an application to discharge a requirement is made, a fee is to apply and must be paid to the local planning authority for each application. This must apply to the relevant planning authority, which in some cases should be the County Council as LHA and LLFA. Whilst the fee payable would be based upon the fee prescribed under regulation 16(1)(b) of the Town and Country Planning Regulations 2012(a), further clarification could be provided on how this is to be applied. In other DCOs, the exact figure to be paid (index linked) has been negotiated with the Councils and stated in the DCO.

7. Summary

- 7.1. This LIR has undertaken an assessment of the likely issues and impacts that NCC considers will arise from the construction and operation of the Steeples Solar Farm with respect to its administrative area and its areas of expertise and statutory responsibility.
- 7.2. The LIR has identified several negative or inconclusive effects at this stage which NCC believes can be addressed, at least in part, through further assessment work and mitigation measures.
- 7.3. NCC may wish to make further representations as appropriate during the examination and at issue specific hearings particularly with regard to environmental and transport matters discussed within this report. Therefore, the comments contained above are provided without prejudice to the future views that may be expressed by the County Council as an Interested Party in the examination process.

PLEASE NOTE:
The boundaries of the schemes have been plotted to align with the limits of the planning application or development consent order which may encompass other works which are ancillary to the solar farms, such as battery energy storage, underground cable corridors or biodiversity offsetting. Where the proposal is under consideration, the boundaries of the scheme may be subject to change



Remove this area

Crow Tree Farm

Key views

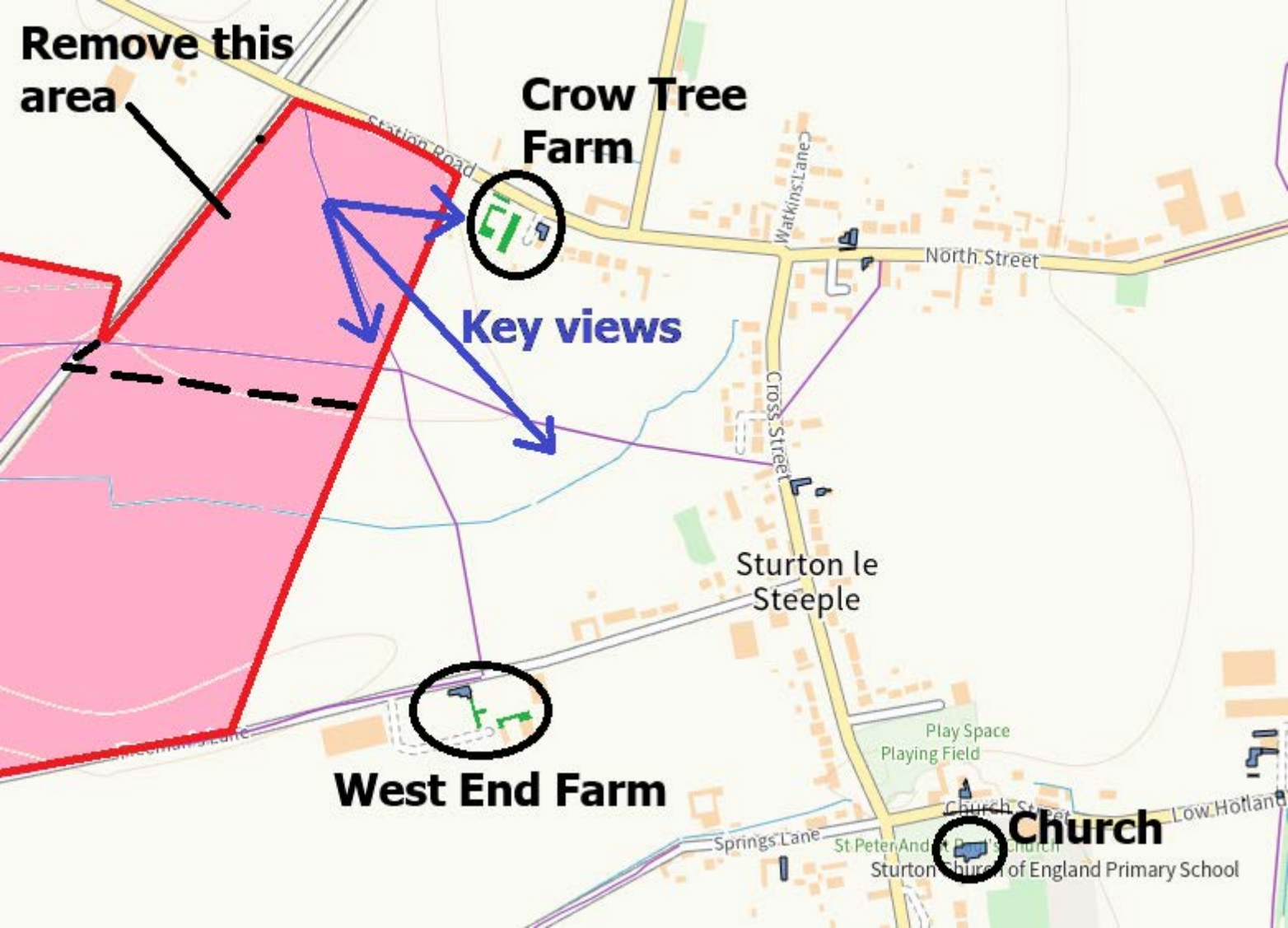
West End Farm

Sturton le Steeple

Church

Play Space
Playing Field

St Peter and Paul's Church
Sturton Church of England Primary School





LANDSCAPE AND VISUAL REVIEW
OF THE DEVELOPMENT CONSENT ORDER (DCO) APPLICATION
FOR THE STEEPLE RENEWABLES PROJECT
FOR
NOTTINGHAMSHIRE COUNTY COUNCIL

October 2025

Landscape and Visual Review

Quality Assurance – Approval Status

Version	Date	Prepared by	Checked by	Approved by	Version Details
1	10/10/25				Issued for comment

Landscape and Visual Review

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Appendices:

Appendix A: AAH TM01 Relevant Representation Landscape and Visual Comments Report Review 14 August 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)*.

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 Steeple Renewables Project (the '**Development**'), submitted to the Planning Inspectorate in May 2025 and accepted for Examination in June 2025, on behalf of Nottinghamshire County Council (**NCC**). While AAH have not been involved at the Pre-Application stage of the project, previous comments on Landscape and Visual matters have been considered within our review, and subsequently Relevant Representation comments on Landscape and Visual matters by AAH have been provided and contained 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: Landscape and Visual Impact and Residential Amenity* [APP-064] of the Environmental Statement (**ES**), and is structured to 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 NCC 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 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 [REDACTED], 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, battery, and energy infrastructure NSIPs 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/EN010163/documents>

Information that has been downloaded and initially reviewed, based on the: *Steeple Renewables Project Examination Library Updated – 06 August 2025*, is as follows (which include any associated sub-appendices or documents):

- **2 - Plans and Drawings Land Plans**
 - 2.2 Works Plans
 - 2.3 Access and Public Rights of Way Plans
 - 2.4 Order Limits
 - 2.5 Field Numbering
 - 2.6 Site Layout
- **3 - Draft Development Consent Order**
 - 3.1 Draft Development Consent Order
- **6 - Environmental Impact Assessment and Habitat Regulations Assessment**
 - 6.1 ES – Non-Technical Summary
 - 6.2.0 Chapter 0 - Contents
 - 6.2.1 Chapter 1: Introduction
 - 6.2.2 Chapter 2: EIA Methodology & Public Consultation
 - 6.2.3 Chapter 3: Site Description, Site Selection and Iterative Design Process
 - 6.2.4 Chapter 4: Proposed Development
 - 6.2.5 Chapter 5: Planning Policy
 - 6.2.6 Chapter 6: Landscape and Visual Impact and Residential Amenity
 - 6.2.16 Chapter 16: Glint and Glare
- **Volume 2 – Technical Appendices**
 - ES Appendix 6.1 Viewpoint Photographs
 - ES Appendix 6.2 Photomontages
 - ES Appendix 6.3 Viewpoint Assessment
 - ES Appendix 6.4 Residential Visual Amenity Assessment
 - ES Appendix 6.5 Arboricultural Impact Assessment
 - ES Appendix 7.14 Outline Landscape Ecological Management Plan
- **Volume 3 - Figures**
 - Figure 1.1 Site Location Plan
 - Figure 2.1 Indicative Site Layout
 - Figure 2.2 Cumulative Schemes Plan
 - Figure 3.1 Site Constraints Plan
 - Figure 3.2 Topographical Survey
 - Figure 3.3 Public Rights of Way Plan
 - Figure 6.1 Site Location Plan
 - Figure 6.2 Landscape Designations
 - Figure 6.3 Topography

- Figure 6.4 Landscape Character Areas
- Figure 6.5a Visual Receptors
- Figure 6.5b Visual Receptors
- Figure 6.5c Visual Receptors (Settlements, A Roads, B Roads and Minor Roads)
- Figure 6.6a Screened Zone of Theoretical Visibility (SZTV) and viewpoint (VP) Locations (10km radius)
- Figure 6.6b SZTV and VP Locations (5km radius)
- Figure 6.6c SZTV and VP Locations (2km radius)
- Figure 6.7 SZTV and Landscape Character
- Figure 6.8a SZTV and Visual Receptors (Settlements, A Roads, B Roads and Long-Distance Routes)
- Figure 6.8b SZTV and Visual Receptors (Settlements, A Roads, B Roads and PROW)
- Figure 6.8c SZTV and Visual Receptors (Settlements, A Roads, B Roads and Minor Roads)
- Figure 6.9 Outline Landscape and Ecology Mitigation Strategy
- **Other Documents**
 - 7.1 Planning Statement
 - 7.3 Design and Access Statement

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)*, pre-application landscape and visual consultation between the applicant and relevant stakeholders was held over approximately a 12-month period; AAH were not involved in any pre-application consultation, and subsequently have referred to the records included within the submission.
- 1.8 Section 6.5 of the LVIA details the consultation/stakeholder engagement undertaken during the preparation of the DCO, with summarising the relevant consultation carried out for landscape and visual matters:
- *Table 6.1 Summary of Landscape and Visual Matters raised by the Planning Inspectorate in the Scoping Opinion*
 - *Table 6.2- Summary of Landscape and Visual Matters raised by Consultees through the Scoping Process,*
 - *Table 6.3- Summary of Landscape and Visual Matters raised by Consultees through the PEIR Process.*
- 1.9 AAH 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.
- 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 The LVIA clearly draws a distinction between **landscape effects** and **visual effects**, with the main chapter focussing on likely '**Significant**' effects. Paragraph 6.3.46 of the LVIA identifies that *"effects described as major, major/moderate and in some cases moderate, may be regarded as significant effects."*, however this is not aligned with the overall judgement of Significance within the overall ES methodology, which is identified in paragraph 2.10.8 of Chapter 2 as *"Major' or 'Moderate' degree of significance it is deemed to be 'significant'".* This approach provides inconsistency with the other chapters of the ES, and while there is scope for discipline specific deviation from the overall ES methodology, we are unsure as to why the LVIA is different in terms of identifying a *Significant* or *Not-Significant* of effect as no justification has been provided. This has the potential to underplay the number and extent of Significant landscape and Visual effects.
- 2.4 Professional judgement is promoted throughout the Methodology in regards to making judgements on value, susceptibility and sensitivity of receptors, as well as assessing magnitude of effect and subsequently the Significance of the overall effect. This is aligned with GLVIA 3; however, it is important that the application of this judgement be explained and transparent throughout. This is particularly important where the significance of Moderate effects is assessed, particularly where these effects are judged to be Not-Significant by the author.
- 2.5 The ES presents an assessment of a 'worst case' scenario of the Development, based on design parameters presented in section 4.4 of ES *Chapter 4: Proposed Development*. This is clarified in paragraph 4.2.2 which clarifies that *"The Applicant is therefore using design parameters which will fix a worst- case scenario for any element of the design"*, which is in accordance with the Rochdale Envelope Approach, as identified in paragraph 4.2.3. However, the LVIA is not explicit in this regard, and while paragraph 6.3.3 states that the LVIA is *"an assessment of the Proposed Development, based on the parameters set out in Chapter 4- Proposed Development"*, it is not clearly stated that the LVIA is assessed on maximum parameters laid out in Chapter 4, or worst case.
- 2.6 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 *Tree Retention and Removal Plans* within the *Appendix 6.5 Arboricultural Impact Assessment* and identified in Schedule 9 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.

- 2.7 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 *Section 6.10* considers the scheme **cumulatively** and **In-combination** with other environmental matters, as well as similar type and scale projects in the local area.

LVIA Appendices

- 2.8 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 6.1.4 of the LVIA, and are referenced throughout the report to support the findings and provide additional information.

LVIA Figures

- 2.9 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.

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 6.3 of the LVIA. Reference is made in section 6.3.6 to industry guidance, including GVLIA3 and *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. Paragraph 6.3.10 clarifies 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, both for the LVIA and the Residential Visual Amenity Assessment (RVAA) is explained within paragraphs 6.3.52 and 6.3.53 of the LVIA. The LVIA Study area of 5km from the Order Limits is illustrated in Figure 6.1. A brief justification within paragraph 6.4.2 for extending the Study Area to 5km, stating: *“Any views of the Proposed Development beyond this distance would be negligible and unlikely to give rise to any effects greater than minor”*. Also, paragraph 6.6.22 clarifies that *“Following desktop research and site visits, it is evident that the core area of actual visibility of the Proposed Development generally extends no more than 1km from the Site in all directions, with the exception of a small number of locations which are slightly more elevated in the landscape”*. We have not identified anything on Site that would contradict these statements and agree that it is unlikely there would 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 to cause Significant effects. Paragraph 6.4.2 also defines the RVAA study area of 0.5km from the Proposed Development, which based on previous experience of similar projects is appropriate.
- 3.4 The LVIA methodology in section 6.3 is clear, with paragraphs 6.3.17 and 6.3.18 covering the sensitivity of landscape features and paragraphs 6.3.19 and 6.3.20 the sensitivity of landscape character. These paragraphs provide criteria for assessment of value and susceptibility, and subsequently how these would be combined to provide a judgement on sensitivity.
- 3.5 The sensitivity of visual receptors is covered in paragraphs 6.3.22 to 6.3.24 providing criteria for assessment of value and susceptibility, and subsequently how these have been combined to provide a judgement on sensitivity. We note the criteria provided for sensitivity of visual receptors is more aligned with just an assessment of susceptibility to change in a view, rather than a combination of value of a view and susceptibility to change combined. Criteria or narrative on assessing the value of a view is limited.
- 3.6 The approach to assessment of magnitude of effect is covered in paragraphs 6.3.25 to 6.3.31, and subsequently paragraph 6.3.32 provides criteria for assessing the magnitude of effects on landscape features and 6.3.33 criteria for assessing the magnitude of effects on landscape character. Criteria for assessing the magnitude of effects on visual receptors is covered in paragraphs 6.3.34 to 6.3.37, with paragraph 6.3.35 providing criteria for assessment. The

criteria for both landscape and visual magnitude of change are relatively brief, however provide basic information to inform judgements.

- 3.7 The level, or Significance, of effects is then covered in paragraphs 6.3.42 to 6.3.46, clarifying 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.
- 3.8 The utilisation of professional judgement is promoted within the methodology, and should an effect be different to that presented within the assessment criteria we would expect this to be clearly explained within the main assessment.
- 3.9 The assumptions made on plant growth rates in paragraphs 6.8.7 and 6.8.8 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.
- 3.10 Given the stated operational time of 40 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 40 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 that the average lifespan of building design is around 50 years. If deemed a permanent Development, which is our position, this may have a bearing on the judgements of effects, as typically a temporary scheme reduces the magnitude of a change. Therefore, it should be clarified by the applicant as to whether the judgements on residual effects (15 years+) have been adjusted so as to be judged temporary or if judged as permanent if the level of effect would increase.
- 3.11 We would also recommend that the applicant consider fully that in this 40-year timescale, the panels, inverters, batteries and other associated elements are 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 need replacing 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

- 3.12 The process of modelling Zones of Theoretical Visibility (ZTVs) and subsequent presentation on a series of ZTV plans (Figures 6.6a to 6.6c, 6.7, and 6.8a to 6.8c) is summarised in paras. 6.6.20 to 6.6.22. We have not located a full methodology for the production of the ZTVs, however the parameters of the ZTV generation are provided in paragraph 6.6.20 which clarifies that the ZTV for the Proposed Development has been *“generated using the final layout proposals and height parameters”*. The execution and presentation on Figures 6.6a to 6.6c, 6.7, and 6.8a to 6.8c is acceptable, with elements modelled to their maximum parameters.

Photography and Photomontage Methodology

- 3.13 The process and methodology of obtaining photography and delivering photomontages is not evident in the LVIA. We have assumed that photomontages were prepared in accordance with the Landscape Institute *TGN 06/19 Visual Representation of Development Proposals*, however in the absence of a methodology, it is not explicit and it is unclear as to the parameters the scheme has been modelled to or if the photomontages have been presented to the maximum allowed parameters provided within *Chapter 4: Proposed Development*; this should be clarified as to whether the visualisations present a ‘worst case’ scenario, 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 6.6 of the LVIA, with Figure 1.1 illustrating the site location and order limits and Figure 6.2 identifying landscape designations as well as illustrating the 5km study area. The Site comprises 888.3 hectares of relatively flat, predominantly agricultural land, which includes areas for solar development, including arrays, BESS and a substation, along with 200 hectares of Biodiversity Mitigation Areas. The order limits also include the area around the existing 400kV substation of the existing West Burton A Power Station. The Site is located in Nottinghamshire County, within the administrative area of Bassetlaw District Council (**BDC**).
- 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, with paragraphs 6.6.1 to 6.5.4 covering Site Context and Landscape Features, with Landscape Character covered from paragraph 6.6.5. An overview of published character assessments is provided, utilising a hierarchy of assessments from National Character Areas at paragraph 6.6.6 to Local character assessments from paragraph 6.6.9. These are relatively cursory descriptions, with little identification of the key features that make up these character areas. We have assumed the author acknowledges that the Site and Study Area reflect the boundaries and characteristics of the published character assessments referenced, however a clear statement on this would clarify.

- 4.3 The baseline landscape character assessment section also provides a judgement on the value or susceptibility for each published character area, but the LVIA does not currently describe how the author has come to this judgement to justify and provide transparency to the baseline.
- 4.4 The landscape character of the Site is described in paragraphs 6.6.14 to 6.6.16, but again this is a very brief description and both judgements on value and susceptibility provided however the process of assessing these has not been described, either in the main body of text, or any associated appendices.
- 4.5 Landscape designations have been covered in paragraphs 6.6.17 to 6.6.19 and shown on Figure 6.2. The AGLV to the east of the Site is of potential concern as it is located close to the eastern order limits. However, as the eastern area of the Site is given over to ecological mitigation, the above ground areas of development are located over 1km away, and subsequently we agree is unlikely to cause significant effects upon this designated landscape.
- 4.6 The LVIA acknowledges the flat agricultural landscape, however beyond this, only relatively cursory observations are made throughout the landscape baseline, providing little information on field pattern or scale, boundary treatments, vegetation across the landscape, or more perceptual qualities, such as tranquillity or openness. Similarly, landscape character assessments are referenced, but little interpretation is provided from these to aid the readers understanding of the character of the Site and Study area, or whether the author judges the published assessments are appropriate for use for the baseline.
- 4.7 The future baseline of the Site and Study Area is not considered within the LVIA; so it is not clear whether or not the author judges that the landscape of the Site and Study Area will remain in its current state in the future. In particular, 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. This is a landscape undergoing extensive and rapid change to land-use, predominantly changing from an agricultural landscape that has change little over the last century beyond more industrial farming methods resulting in larger field patterns and vegetation loss, to a landscape containing multiple large-scale renewable and energy infrastructure Development. We have concerns regarding effects on the regional landscape character, which 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.

- 4.8 To calibrate this change to the landscape, these schemes combined, if built, would clearly require the update of any published landscape character assessment, including at a national level (NCA's), so as to include large scale solar as a defining 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.
- 4.9 This baseline process in the LVIA ultimately has resulted in several landscape receptors being identified as likely to be affected by the Development, however these are only clearly identified and represented in Section 6.7: assessment of effects. It is unclear as to how the author has decided upon the selection of these landscape receptors, and the limited baseline information makes it difficult to understand how these would change from their baseline condition.
- 4.10 While only identified in the assessment of effects, the landscape features selected by the author as baseline receptors appear to favour those elements that will remain unaffected or form part of the mitigation strategy, and not including other features of this landscape, most notably the open arable fields (beyond their vegetation cover) that we judge to be a key landscape feature in this agricultural landscape. The arable fields will be directly and extensively affected through a complete change in land-use.
- 4.11 We have assumed there may be an error in terminology, as the GLVIA3 Glossary does not identify 'Ground Cover' (as utilised in the LVIA), but does define 'Land Cover', which is identified as: *"The surface cover of the land, usually expressed in terms of vegetation cover or lack of it. Related to but not the same as land use"*. GLVIA3 does define 'Land Use' as: *"What land is used for, based on broad categories of functional land cover, such as urban and industrial use and the different types of agriculture and forestry"*. The changes to land use are one of our main concerns in regards to landscape effects, however this is not considered in the LVIA. A more robust and detailed baseline would likely have identified this as a key landscape feature.

4.12 For clarity, we have extracted the following landscape baseline receptors from the assessment section of the LVIA:

- Landscape Features:
 - Vegetation and Ground Cover:
 - Woodland and Individual Trees
 - Hedgerows
 - Ground Cover
 - Topography
 - Drainage and Water Features
- Landscape Character:
 - National Character Area (NCA) 48: Trent and Belvoir Vales
 - 'Mid Notts Farmlands' Character Area
 - 'Trent Washlands' Character Area
 - Landscape Character of the Site
- Landscape Designations
 - West Lindsey District Area of Great Landscape Value

4.13 We re-iterate that none of these landscape receptors have been described in any detail within the baseline section of the LVIA to understand their importance or inform the assessment of value or susceptibility to change in a transparent way.

Landscape Assessment

4.14 The Landscape Assessment is detailed within section 6.7 of the LVIA, with Table 6.7 of the LVIA outlining the potential landscape effects. The landscape assessment commences with construction effects at paragraph 6.7.6, with Operational Landscape Effects at para 6.7.31 which considers both Year 1 and Year 15 Effects.

4.15 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. The assessment is broken down into effects on landscape features and a separate assessment of landscape character.

4.16 We judge that by reason of its mass and scale; the Development would lead to Significant Adverse effects upon the existing landscape baseline. The Development has the potential to transform the local landscape by altering key features and character on a large scale. This landscape change also has potential to affect wider landscape character by replacing large areas of agricultural or rural land with solar development, affecting the current openness, tranquillity and agricultural character, that are defining characteristics of the area. We are particularly concerned about the landscape character effects through changes to the land use

over an extensive area of land. Significant landscape effects are subsequently identified within the LVIA chapter with the identification that the Steeples Renewables Project would “*cause notable effects upon the Landscape Character of the Site, due to the extent and size of the Proposed Development*” (as identified in paragraph 6.7.47)

- 4.17 However, in regards to landscape features, the LVIA does not identify any longer term significant adverse effects through the development of a large-scale solar farm in a rural location, with the LVIA stating at paragraph 6.7.31 that “*Once construction is completed there would be no further adverse effects on the landscape features of the Site*”. The LVIA goes on to identify Minor Beneficial effects at year 1 and Moderate Beneficial effects at Year 15 (once mitigation planting has established) on baseline features of: Woodland and Individual Trees; Hedgerows; and Ground cover.
- 4.18 We would query how any beneficial landscape effects would be evident through the development of a large-scale solar farm in a rural location, and this does not align with the findings of several other similar LVIAs associated with schemes in both the Nottinghamshire or Lincolnshire regions. While we acknowledge that retention of existing features and the establishment of new areas of planting will introduce positive elements to the landscape and strengthen aspects of landscape character, this is in place to *mitigate* the adverse landscape and visual effects of the Development.
- 4.19 We would also challenge the landscape assessment that at Year 1 the planting would make any discernible improvement to landscape features to be judged as having Beneficial effects; The LVIA identifies Minor Beneficial effects at Year 1 from proposed planting. While it is acknowledged that extensive new hedgerows are proposed, and these *could* be considered as enhancements where they reinstate or strengthen historic field patterns, however we would seek clarification on the planting scheme and where the line between mitigation and enhancement is assumed by the applicant. This can be a very nuanced point, however to clarify: mitigation reduces harm (such as implemented to screen proposals); enhancement creates a net benefit (going beyond what is required to reduce harm). Overlapping the two risks overstating positive outcomes. At Year 1 such planting will not yet contribute materially to landscape character or views. Any beneficial contribution of planting through enhancement, if deemed as such, should therefore only potentially be attributed to the longer-term (Year 15) scenario rather than to Year 1. At Year 1, the effect should more appropriately be assessed as neutral to minor adverse, with any potential beneficial effects

only emerging as the hedgerows establish and begin to function within the wider landscape framework, but this would only be the case if the planting is judged to be enhancement rather than mitigation.

- 4.20 At year one, this will be immature planting and contribute little, if anything, to the current landscape character or features. Plastic tree guards, disturbed or bare soil, newly laid mulch and small, immature plant stock may even *increase* the perception of adverse effects at Year 1, meaning early effects are more often neutral or adverse. The examination process provides the opportunity to review and interrogate these judgements, as while the new planting and habitat creation will ultimately (year 10 to 15) add valuable assets across this area, this is through the introduction of a large-scale solar development in an agricultural landscape and this planting is there to mitigate this. It should also be noted, that the establishment of any planting scheme is down to the ongoing maintenance operations and suitable planting conditions, that would be secured through a robust OLEMP, which is covered in detail below.
- 4.21 Paragraph 6.7.6 states that *“all vegetation is to be retained bar limited removals of hedgerows to facilitate access tracks, with existing gaps utilised for access where possible”*. However, over 1km of existing hedgerows are proposed to be removed to facilitate the scheme. We do not judge this to be only limited removals, and would suggest this would amount to a significant removal of existing hedgerows.
- 4.22 Subsequently, we disagree that *“Once construction is completed there would be no further adverse effects on the landscape features of the Site”*, as stated in paragraph 6.7.31. All direct effects on landscape features are unlikely to be reversed at operation year 1 as any mitigation planting will not have established. The assessment must assess against changes to the baseline, not changes between construction and operation. For example, the existing hedgerows will still have been removed at operation, and large areas of agricultural land will still have changed the Land Use from agriculture to that of a solar farm. Retaining existing areas of vegetation, removing over 1km of hedgerows and newly planted immature stock will not generate any positive effects to these landscape features over the baseline conditions. Therefore, we disagree that at Year 1 any minor beneficial effects on landscape features will be evident.
- 4.23 Similarly, at year 15, we question the judgement made at paragraph 6.7.32 that Moderate Beneficial effects will be evident on any landscape features once mitigation planting has established. Our understanding is that the planting is there to mitigate the solar development,

and has not been proposed to enhance this landscape. However, we would welcome clarification from the applicant in this regard.

- 4.24 Landscape character effects at varying scales have been considered from paragraph 6.7.16. While the landscape character effects will be relatively localised, we judge that these will be direct within the Mid Notts Farmlands character area and the Trent Washlands character area. The LVIA identifies that the visibility of the scheme across these character areas is limited, however landscape effects do not need to be seen to have adverse effects. We judge that these changes to land use, along with a perception of development and urbanising effect would particularly affect the Mid Notts Farmlands character area, and would result in a Significant adverse effect at all phases (construction and operation). The Development will also have direct adverse effects across the Site, again which would have a Significant adverse effect across the Site at all phases (construction and operation).
- 4.25 Effects on the West Lindsey District Area of Great Landscape Value are considered in paragraphs 6.7.49 to 6.7.50. Any landscape effects would be indirect, and due to the distance between above ground elements of the Development and the AGLV, adverse effects are likely to be relatively limited.
- 4.26 The LVIA identifies Significant landscape effects at the phases of **construction, operation (year 1), operation (year 15), and decommissioning** phases. The following significant effects upon identified landscape receptors are identified in the LVIA:
- At **Construction** the following receptors were assessed as having the following landscape effects:
 - Hedgerows: **Major – moderate (adverse): Significant**
 - Ground Cover: **Major – moderate (adverse): Significant**
 - Landscape Character of the Site: **Major/Moderate (adverse): Significant**
 - At **Operation (Year 0)** the following receptors were assessed as having the following landscape effects:
 - Landscape Character of the Site: **Major/Moderate (adverse): Significant**
 - At **Operation (Year 15)** the following receptors were assessed as having the following landscape effects:
 - Hedgerows: **Moderate (beneficial): Significant**
 - Landscape Character of the Site: **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.

- 4.27 We do not agree with several judgements of Moderate landscape effects within the LVIA as being deemed Not Significant. While we agree that professional judgement should guide the final assessment and the LVIA process should not be solely based on matrices or tables, we would expect that in the majority of cases, a Moderate effect would be deemed Significant, whereas in the LVIA the majority of Moderate effects are judged as not Significant.
- 4.28 In summary, 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 Site and Study Area. New planting will offset some of the adverse elements of the scheme, however we disagree with the applicants' findings that overall beneficial effects would be evident, and we seek clarification from the applicant in regards to beneficial judgements at year 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.

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 6.6 of the LVIA, and the visual baseline is described in paragraph 6.6.20 utilising the SZTV plans (Figures 6.6a-c) to illustrate the extent of visibility of the Site from the surrounding landscape. The process of identifying visual receptors is presented as a two-stage process:

- Stage 1 (as described from paragraph 6.6.20) is a desk-based assessment which commenced with the Development of a SZTV analysis, used to illustrate the theoretical extent of where the Proposed Development would be visible from AND assist and identify potentially sensitive receptors.
- Stage 2 comprises fieldwork across the Site and Study Area utilising the SZTVs 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. 6.6.24 to 6.6.36 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 (from paragraph 6.6.24), views from Users of publicly accessible bridleways and footpaths (from paragraph 6.6.28), and views from Users of the transport network (from paragraph 6.6.33). Subsequently from paragraph 6.6.37 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 and twenty-six viewpoints have been included, of these Visualisations have been prepared for eight viewpoints (viewpoints 1, 2, 6, 12, 13, 14, 17 and 20). Viewpoint locations are shown on Figure 6.6a-c and are presented in Appendix 6.1.

5.3 Similar to the landscape baseline, the visual receptors identified by the author as having potential for effects from the scheme are only clearly listed and identified in the assessment of effects. For clarity, we have extracted the following visual receptors from the assessment section of the LVIA:

- Residential Receptors
 - Sturton le Steeple
 - North Leverton with Hablesthorpe
 - South Wheatley
 - Fenton
 - Individual properties
- Users of publicly accessible bridleways and footpaths
 - Trent Valley Way
 - Other Public Rights of Way
- Users of the transport network
 - A620
 - A156
 - A631
 - Minor roads
 - Leverton Road / Sturton Road
 - Station Road/ Wheatley Road
 - Littleborough Road / Low Holland Lane
 - Three Leys Lane/ Fenton Lane
 - North Street/Common Lane
 - Freeman's Lane
 - Springs Lane

5.4 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 the assessment of effects in section 6.7.

Visualisations/Photomontages

- 5.5 Viewpoints representative of the visual receptors were identified through initial Site work by the applicant to represent a range of visual receptors, distances and directions from the Development. These were refined through consultation and subsequently agreed upon. This baseline process resulted in the identification of eight viewpoints that have been developed as Type 3 visualisations/photomontages and presented in *Appendix 6.2* which demonstrate the scheme in summer and winter as Existing; Year 1 and Year 15. No clear methodology for visualisations is provided in the LVIA, however paragraph 6.6.40 clarifies that they have been “prepared in line with Landscape Institute guidance, ‘Visual Representation of Development Proposals, Technical Guidance Note 06/19, September 2019’”. We have assumed the proposals have been modelled to the maximum design parameters provided within *Chapter 4* to represent a worst-case scenario, however this should be clarified.

Visual Assessment

- 5.6 The Visual Assessment is provided within section 6.7 of the LVIA. As outlined previously, 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 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.
- 5.7 The LVIA provides a detailed assessment of identified visual receptor groups, which are broken down into: Residential Receptors (paragraph 6.7.51); Users of publicly accessible bridleways and footpaths (paragraph 6.7.70); and Users of the transport network (paragraph 6.7.91).
- 5.8 The visual assessment covers construction, Operational (year 1 and year 15) and decommissioning visual effects.
- 5.9 The LVIA identifies Significant visual effects at the **construction, operation (year 1), operation (year 15), and decommissioning** phases. The following Significant effects are identified in the LVIA Chapter:
- At **Construction** and **Operation (Year 0)** the following receptors were assessed as having the following visual effects:
 - Trent Valley Way: **Major to moderate (adverse) Significant**

- Other Public Rights of Way (additional detail provided in Appendix 6.6): **Major to Moderate or Major (adverse) Significant**
 - Minor roads: **Major to Moderate (adverse) Significant**
- At **Operation (Year 15)**: no visual receptors were assessed as having Significant visual effects.
 - 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 These Significant effects are identified in the LVIA for receptors on the road and PROW network; however, no residents were identified as having Significant visual effects at any phases of the Development. We would anticipate that there would be some reduction in receptors experiencing Significant effects at year 15 through the establishment of mitigation planting over 15 years, however we disagree with the judgement that there will be no Significant visual effects at Year 15. This is exacerbated by several judgements of Moderate Adverse visual effects within the LVIA as being deemed Not Significant. While we agree that professional judgement should guide the final assessment and the LVIA process should not be solely based on matrices or tables, we would expect that in the majority of cases, a Moderate effect would be deemed Significant, whereas in the LVIA the majority of Moderate visual effects are judged as not Significant.
- 5.10 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 adverse 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 magnitude of 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.
- 5.11 Additionally, 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, for example this is illustrated on viewpoints: 2A, 2B, 2C, 6B, 12, 13A, 14A, 17A, 17B, 17C, and 17D.

- 5.12 The outlook from receptors that are represented by these viewpoints and visualisations will be altered and foreshortened. Simply screening proposals with vegetation does not make the change in view acceptable. We have looked at how the baseline view has altered and, while we accept some of the viewpoints listed above include energy infrastructure, the openness of the view is completely changed from that of the baseline. 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 existing. 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 and In-Combination effects are considered in Section 6.10 of the LVIA, and the approach to cumulative landscape and visual effects contained within paragraphs 6.10.2 to 6.10.3, with Table 6.6 providing the *Shortlisted Cumulative Schemes within the LVIA 10km Zol*.
- 6.2 The methodology for assessment of cumulative landscape and visual effects is detailed in paragraphs 6.3.49 to 6.3.51, which along with the approach set out in paragraph 6.10.2 to 6.10.3 provides a clear, but brief, methodology on the assessment of the cumulative landscape and visual effects.
- 6.3 The Cumulative Study Area for landscape and visual is identified within paragraph 6.10.2 which clarifies that a 10km 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: *“of the Proposed Development in combination with other existing, approved or proposed schemes”*.
- 6.5 Table 6.6 of the LVIA identifies 14 schemes that have been shortlisted and considered for inclusion for assessment of cumulative landscape and visual effects.
- 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 the Steeple Renewables Project have the potential to lead to adverse effects on landscape character over an extensive area across multiple published character areas. The landscape character of the Nottinghamshire and 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. We also foresee that solar development will 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 Nottinghamshire and 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 East Nottinghamshire and western 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. It is our view that large-scale solar, battery and energy infrastructure will become 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 undoubtedly 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 would involve repeated contact with solar infrastructure, and would lead to a sequential visual effect. PROW users traveling along several rights of way have been identified within the applicants LVIA as having adverse visual effects. 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 LVIA's 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

- 6.11 Residential Visual Amenity has been considered as part of the LVIA. *Appendix 6.4: Residential Visual Amenity Assessment* provides a detailed assessment of Residential Visual Amenity. Views from Residential Receptors and Settlements are also considered within the LVIA.
- 6.12 RVAA methodology is included within Section 1.2 of the RVAA methodology within Appendix 6.4, and references and reflects Landscape Institute *TGN 2/19: Residential Visual Amenity Assessment*.
- 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 500m which is reasonable, with TGN 2/19 not being explicit in defining a study area for RVAA. The baseline identified forty properties or clusters within the 500m study area, which are listed in Table 1.
- 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 adverse visual effects from several properties. However, no properties were judged to experience Significant visual effects, and it is unlikely that these will reach the RVAT through the Development of the Steeples Renewable Project.
- 6.16 We wish to query that all the following were assessed as having Moderate effects, yet none have been identified as having subsequent Significant effects:
- 1. St Ives, Gainsborough Road, Sturton Le Steeple,
 - 11. Keepers Cottage, Leverton Road,
 - 12. The Old Vicarage, Sturton Road,
 - 17. Properties on Mill Close, North Leverton,
 - 18. Properties off Main Street and Manor Grove North Leverton,
 - 20. Orchard Lodge, Sturton Road, South Wheatley,
 - 24. 7no. properties on Wheatley Road,
 - 27. Properties on Station Road, Sturton Le Steeple,
 - 30. Properties on Cross Street, Crown Court, and Caddow View, Sturton Le Steeple,
 - 33. The Croft, Freeman's Lane, Sturton Le Steeple,

- 36. Properties on Leverton Road, Sturton Le Steeple,
- 37 Low Holland House, Low Holland Lane, Sturton Le Steeple

- 6.17 These properties have close-range views of the Development. While mitigation planting is proposed, this in itself has the potential to have adverse effects through shortening views. Some of these properties or clusters would have close-range views of larger or taller elements, for example, *1. St Ives, Gainsborough Road, Sturton Le Steeple*, which would have close-range views of the Development, including the substation which is only 220m away, with panels approximately 250m away. The main access is also close to these properties, which would likely have views, or experience the presence of, vehicles traveling in close proximity. Mitigation planting is identified as reducing the visual impact; however, the planting itself is likely to foreshorten and change the outlook and visual amenity for these residents. This is a concern, and we would therefore judge effects be Significant for these residents.
- 6.18 Paragraph 1.4.7 goes on to explain how the Site layout and mitigation has responded to properties, stating that an *“important part of the design process included minimising the visual effects that would be experienced by residents of the closest dwellings”*. 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, however these often seem limited in distance for several properties with approximate distance to nearest built element being under 250m for several properties or clusters and six of these being 160m away or closer.
- 6.19 As previously stated in this review, we have concerns regarding the proximity of the Development to these properties, and also that the scheme has the potential to 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. No photographs from properties/clusters have been provided to illustrate this point.

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 6.8.2 which states that: *“primary mitigation adopted in relation to landscape and visual matters is that which has been embedded within the design of the Proposed Development and comprises the consideration given to avoiding and minimising landscape and visual effects during the evolution of the Proposed Development layout”*. Paragraph 6.8.2 goes on to clarify that the process has involved ‘mitigation by design’.
- 7.3 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 – particularly between sensitive visual receptors. Offsets and buffers to residential properties appear limited in places, considering the number of these sensitive receptors, and would benefit from further information being provided to understand distances from property lines to the nearest development area, 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 Works No. 8, which is subsequently located according to the Works Plans (Figure 2.2). However, on the works plans, these areas only show as isolated blocks to create the large habitat areas for ecological mitigation, with the Site boundary and field boundaries that make up a large part of the mitigation not covered by Works No. 8. 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 2.2 appearing as white, and subsequently not linked to any Work Order. Works No. 1 is shown running right up to the order limits, which would suggest that based on a Rochdale envelope approach utilising spatial parameters of the works plans, elements that fall under Works No. 1 (solar PVs) could be located right on the Site boundary with no offset secured for planting. If the scheme is committing to providing suitable boundary offsets, these should be reflected on the works plans.
- 7.6 Paragraph 6.8.1 of the LVIA provides a summary of the landscape mitigation measures illustrated in the Landscape Strategy Plan. *Appendix 7.14 Outline Landscape and Environmental Management Plan* provides information regarding the establishment and maintenance of the planting associated with the Development, as shown on *Figure 6.9 Landscape and Ecological Mitigation Strategy*.
- 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 existing trees and hedgerows. The maintenance operations provide an initial overview of operations; however, we would expect the management plan to be developed further, well beyond the initial 5-year period, particularly if landscape and visual effects are being assessed

at 15 years. The long-term reduction in landscape and visual effects, presented in the LVIA, are based on the long-term success of the landscape mitigation, and therefore the management plan should cover at least this period, and should be in place and actively managed for the lifetime of the project. Similarly, any early planting (pre-construction) should be included in the maintenance plan as the reduction in effects described in the LVIA are also based on the assumption that this too will have established as planned.

- 7.8 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 and varying pest challenges. Plant replacements should also be considered, and also for a longer period than 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 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.

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 for the Steeple Renewables Project 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 By virtue of its scale and massing, we judge that the Development would result in Significant adverse effects on landscape features, 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 immediate 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.
- 8.2 The LVIA and supporting documentation are generally proportionate to the scale of the Development and demonstrate compliance with GLVIA3 and relevant Landscape Institute guidance. The assessment is clearly structured, with separate consideration of landscape and visual receptors, and has been prepared by a competent practitioner. However, a number of methodological, baseline and interpretative issues limit the robustness of the conclusions reached.
- 8.3 While the methodology broadly reflects GLVIA3, there are inconsistencies in how Significance is defined when compared with the wider ES methodology. Professional judgement is relied upon throughout, but justification for value and susceptibility, and ultimately sensitivity, and magnitude judgements is limited for both landscape and visual receptors. Greater transparency is also required in explaining how thresholds of Significance have been applied, and in clarifying whether the LVIA has assessed a genuine worst-case scenario under the Rochdale Envelope approach.

- 8.4 The landscape baseline description is relatively cursory, with limited analysis of key landscape features and perceptual qualities. The omission of explicit assessment of land use change, from open arable farmland to large-scale solar infrastructure, represents a significant gap, given that we judge this is the most fundamental alteration to landscape character. While beneficial effects are claimed for new planting at Year 1 and Year 15, we seek additional information on these points, as these are likely more accurately described as mitigation, rather than true enhancement. We judge that the scheme would result in Significant adverse landscape effects at construction, operation and decommissioning, with long-term changes to local landscape character that should be considered effectively permanent.
- 8.5 The visual assessment identifies a range of receptors, but again transparency on the value and susceptibility of these receptors is lacking. Significant adverse visual effects are identified at construction and early operation, particularly for PROW users and those on the local road network. However, we disagree with the LVIA's conclusion that all significant effects dissipate by Year 15, as the mitigation planting itself alters the baseline character of views, often foreshortening open vistas and potentially introducing new, landscape elements that may appear out of character in this landscape. We also consider that several residential properties within 500m will experience adverse effects that would likely be judged as Significant, whereas the LVIA does not identify any Significant visual effects to residents in properties.
- 8.6 Whilst the LVIA concludes no significant cumulative effects, we consider the scale of renewable and grid-related projects in Nottinghamshire and Lincolnshire presents a substantial risk of cumulative and sequential change at regional levels. Large-scale solar and energy infrastructure are likely to become defining characteristics of the regional landscape, altering openness, tranquillity, and perceived rural character. Sequential effects for PROW and road users are of particular concern, with repeated experiences of large-scale solar resulting in a diminished capacity to tolerate change.
- 8.7 The iterative design process is referenced, but buffers, or offsets, to sensitive visual receptors appear limited. Mitigation planting is relied upon heavily to reduce adverse effects, but this in itself has the potential to be out of character in this open arable landscape. The Outline Landscape and Environmental Management Plan (OLEMP) provides a framework for future detailed designs and management of the scheme, but long-term commitments (well beyond 5 years) to establishment, monitoring and replacement planting must be secured. Without this, the predicted Year 15 reductions in effects cannot be relied upon.

APPENDIX A

AAH Landscape and Visual Relevant Representation

Technical Memorandum 1 (AAH TM01)

Nottinghamshire County Council, Steeples Renewables Project: Relevant Representation Landscape and Visual Comments

Introduction

AAH Consultants, on behalf of Nottinghamshire County Council (**NCC**), has reviewed the relevant Landscape and Visual elements of the Steeples Renewables Project DCO Application to provide initial comment to be incorporated within a Relevant Representation statement from NCC. The Steeples Renewables Project (Reference: EN010163) submission documents are available on the Planning Inspectorate Website at:

<https://national-infrastructure-consenting.planninginspectorate.gov.uk/projects/EN010163/documents>

Information that has been downloaded and initially reviewed, based on the: *Steeple Renewables Project Examination Library Updated – 06 August 2025*, is as follows (which include any associated sub-appendices or documents):

- **2 - Plans and Drawings Land Plans**
 - 2.2 Works Plans
 - 2.3 Access and Public Rights of Way Plans
 - 2.4 Order Limits
 - 2.5 Field Numbering
 - 2.6 Site Layout
- **3 - Draft Development Consent Order**
 - 3.1 Draft Development Consent Order
- **6 - Environmental Impact Assessment and Habitat Regulations Assessment**
 - 6.1 ES – Non-Technical Summary
 - 6.2.0 Chapter 0 - Contents
 - 6.2.1 Chapter 1: Introduction
 - 6.2.2 Chapter 2: EIA Methodology & Public Consultation
 - 6.2.3 Chapter 3: Site Description, Site Selection and Iterative Design Process
 - 6.2.4 Chapter 4: Proposed Development
 - 6.2.5 Chapter 5: Planning Policy
 - 6.2.6 Chapter 6: Landscape and Visual Impact and Residential Amenity
 - 6.2.16 Chapter 16: Glint and Glare
- **Volume 2 – Technical Appendices**
 - ES Appendix 6.1 Viewpoint Photographs
 - ES Appendix 6.2 Photomontages
 - ES Appendix 6.3 Viewpoint Assessment
 - ES Appendix 6.4 Residential Visual Amenity Assessment
 - ES Appendix 6.5 Arboricultural Impact Assessment
 - ES Appendix 7.14 Outline Landscape Ecological Management Plan
- **Volume 3 - Figures**
 - Figure 1.1 Site Location Plan
 - Figure 2.1 Indicative Site Layout
 - Figure 2.2 Cumulative Schemes Plan

- Figure 3.1 Site Constraints Plan
- Figure 3.2 Topographical Survey
- Figure 3.3 Public Rights of Way Plan
- Figure 6.1 Site Location Plan
- Figure 6.2 Landscape Designations
- Figure 6.3 Topography
- Figure 6.4 Landscape Character Areas
- Figure 6.5a Visual Receptors
- Figure 6.5b Visual Receptors
- Figure 6.5c Visual Receptors (Settlements, A Roads, B Roads and Minor Roads)
- Figure 6.6a Screened Zone of Theoretical Visibility (SZTV) and viewpoint (VP) Locations (10km radius)
- Figure 6.6b SZTV and VP Locations (5km radius)
- Figure 6.6c SZTV and VP Locations (2km radius)
- Figure 6.7 SZTV and Landscape Character
- Figure 6.8a SZTV and Visual Receptors (Settlements, A Roads, B Roads and Long Distance Routes)
- Figure 6.8b SZTV and Visual Receptors (Settlements, A Roads, B Roads and PROW)
- Figure 6.8c SZTV and Visual Receptors (Settlements, A Roads, B Roads and Minor Roads)
- Figure 6.9 Outline Landscape and Ecology Mitigation Strategy
- **Other Documents**
 - 7.1 Planning Statement
 - 7.3 Design and Access Statement

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.

This Technical Memorandum (**TM**) includes initial comments; a full review of the landscape and visual elements of the scheme is currently being carried out and this full review by AAH will be included within the individual Local Impact Reports (**LIR**) submitted later in the process by NCC. This will include a full review of the submitted LVIA chapter 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**)

We judge that by reason of its mass and scale, the proposed development would lead to Significant Adverse effects upon the existing landscape and visual baseline, which is reflected within the applicants 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 by replacing large areas of agricultural or rural land with solar development, affecting the current openness, tranquillity and agricultural character, that are defining characteristics of the area. We are particularly concerned about the landscape character effects through changes to the land use over an extensive area of land. Significant landscape effects are subsequently identified within the LVIA chapter with the identification that the Steeples Renewables Project would “*cause notable effects upon the Landscape Character of the Site, due to the extent and size of the Proposed Development*”.

However, in regards to landscape features, the LVIA does not identify any significant adverse effects through the development of a large scale solar farm in a rural location, with the LVIA stating that “*Once construction is completed there would be no further adverse effects on the landscape features of the*

Site". The LVIA goes on to identify Minor Beneficial effects at year 1 and Moderate Beneficial effects at Year 15 (once mitigation planting has established) on baseline features of: Woodland and Individual Trees; Hedgerows; and Ground cover.

These judgements will be interrogated within the detail LVIA review; however, we would query how any beneficial effects would be evident through the development of a large-scale solar farm in a rural location, and this does not align with the findings of several other similar LVIAs associated with schemes in both the Nottinghamshire or Lincolnshire regions. While we acknowledge that establishment of new areas of planting will introduce positive elements to the landscape and strengthen aspects of landscape character, this is to mitigate the adverse effects of the development. We would also query the landscape features selected by the author as baseline receptors as they appear to favour those elements that will remain unaffected or form part of the mitigation strategy, ignoring the open arable fields that we judge a key landscape feature in this agricultural landscape. The arable fields will be directly and extensively affected through a complete change in land-use. We have assumed there may be an error in terminology, as the GLVIA3 Glossary does not identify 'ground cover' (as utilised in the LVIA), but does define *Land cover*, which is identified as: "*The surface cover of the land, usually expressed in terms of vegetation cover or lack of it. Related to but not the same as land use*". GLVIA3 does define *Land use* as: "*What land is used for, based on broad categories of functional land cover, such as urban and industrial use and the different types of agriculture and forestry*". The changes to land use are one of our main concerns in regards to landscape effects.

We would also challenge the assessment that at Year 1 the planting would make any discernible improvement to landscape features to be judged as having beneficial effects. This would be immature planting and contribute little to the current character or features, and we would not anticipate any beneficial effects from this. The examination process provides the opportunity to review and interrogate these judgements, as while the new planting and habitat creation will add valuable assets across this area, this is through the introduction of a large-scale solar development in an agricultural landscape.

The scale and extent of development would also lead to Significant Adverse effects on views from visual receptors, changing from views experienced within an agricultural or rural landscape to that of a landscape containing large scale solar development. The development has been identified in the LVIA as resulting in a Significant change to a variety of visual receptors during construction and in the early years of operation, with Significant residual visual effects much reduced in number. Significant effects largely arise from sensitive users along PROW and residents where it is not possible to sufficiently screen views of the development. However, we do note that the reduction in Significant visual effects relies upon the successful establishment of the mitigation planting scheme.

We do not agree with several judgements of Moderate landscape or visual effects being deemed Not Significant. While we agree that professional judgement should guide the final assessment and the LVIA process should not be solely based on matrices or tables, we would expect that in the majority of cases, a Moderate effect would be deemed Significant, whereas in the LVIA the majority of Moderate effects are judged as not Significant.

Paragraph 6.3.46 of the LVIA identifies that "*effects described as major, major/moderate and in some cases moderate may be regarded as significant effects.*", however this is not aligned with the overall judgement of Significance within the ES, as described in paragraph 2.10.8 as "*Major' or 'Moderate' degree of significance it is deemed to be 'significant'*". This approach provides inconsistency with the other chapters of the ES, and while there is scope for discipline specific deviation from the overall ES methodology, we are unsure as to why the LVIA is different as no justification has been provided, and this has the potential to underplay the number and extent of Significant landscape and Visual effects.

The cumulative landscape and visual effects of the proposed development are considered in Section 6.10 of the LVIA. No Significant cumulative effects have been identified within the LVIA. However, we do have concerns about cumulative effects across the region; Cumulatively, the mass and scale of several NSIP scale energy projects combined with the Steeples Renewables Project has the potential to lead to adverse effects on the landscape baseline over an extensive area across multiple published character areas. The landscape character of the Nottinghamshire 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 agricultural land use; Subsequently, solar development is not identified within current published character assessments. While it is not suggested that agriculture will not remain as a defining characteristic, over a short period of time large scale solar will undoubtable become a widespread characteristic in the Nottinghamshire region, as well as Lincolnshire to the east (with some schemes spanning the county boundary). Subsequently, we judge that solar development would be a key characteristic in any updates to published character assessments from local to national scale.

However, given the absence of a unified, county-wide landscape character baseline across Nottinghamshire, 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

The Steeples Renewables Project would evidently deliver landscape and ecological assets 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 6.9 – Landscape and Ecological Mitigation Strategy* drawings which illustrate the mitigation, which should be further explored, and 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 DCO Schedule 2, Requirement 3, Requirement 3 and Requirement 6. This should clearly link to any landscape mitigation scheme that is submitted as part of the DCO, and subsequently that which has been assessed as part of the LVIA.

The DCO and LEMP 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, and then 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 also consider plant replacements beyond the initial 5-year period and account for extensive areas of die-back or plant failures for the lifetime of the project. This is to ensure the mitigation planting is fulfilling its role beyond an initial “standard” 5-year period.

██████████ CMLI

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14 August 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)

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 LVIA's 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 LVIA's, 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 LVIA's. 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* LVIA's/LVA's, this document provides guidance on how to *review* LVIA's 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 LVIA's 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 criteria for reviewing Environmental Statements and registrants for the EIA Quality Mark¹ must meet the criteria...*
- *The former Countryside Commission published criteria for reviewing the landscape and countryside recreation content of Environmental Statements...*
- *Appendix 1 of Scottish Natural Heritage’s Handbook on EIA ²contains useful tests to help judge the landscape and visual effects content of Environmental Statements...”*

In addition, European Commission guidance on ES review³, published in 2001 and, although directed at whole ES review rather than topic specific review, has also provided useful pointers.

This review framework has been developed in this context.

¹ IEMA EIA Quality Mark, IEMA website: <https://www.iema.net/eia-quality-mark> [accessed 200110]

² Scottish Natural Heritage, *A handbook on environmental impact assessment v5*, 2018, SNH website: <https://www.nature.scot/sites/default/files/2018-05/Publication%202018%20-%20Environmental%20Impact%20Assessment%20Handbook%20V5.pdf> [accessed 200110]

³ European Commission, *Guidance on EIA-EIS Review*, Luxembourg: Office for Official Publications of the European Communities 2001 ISBN 92-894-1336-0, EC website: <http://ec.europa.eu/environment/archives/eia/eia-guidelines/g-review-full-text.pdf> [accessed 200110]

3. Carrying out the review

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

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

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

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

Step 1. Checking methodology, criteria and process

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

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

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

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

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

This stage of the review typically includes further tests:

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

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

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

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

Overall Conclusion: Report the review

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

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

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

4. Further information

For further information or to provide feedback on the guidance in use, please refer to the Landscape Institute's website, using the search terms GLVIA. At the time of publication, material is likely to be found in the following section: <https://www.landscapeinstitute.org/technical/glvia3-panel/>

Authored by [REDACTED] on behalf of the GLVIA Panel and approved by LI Technical Committee
Nov 2019

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Document history

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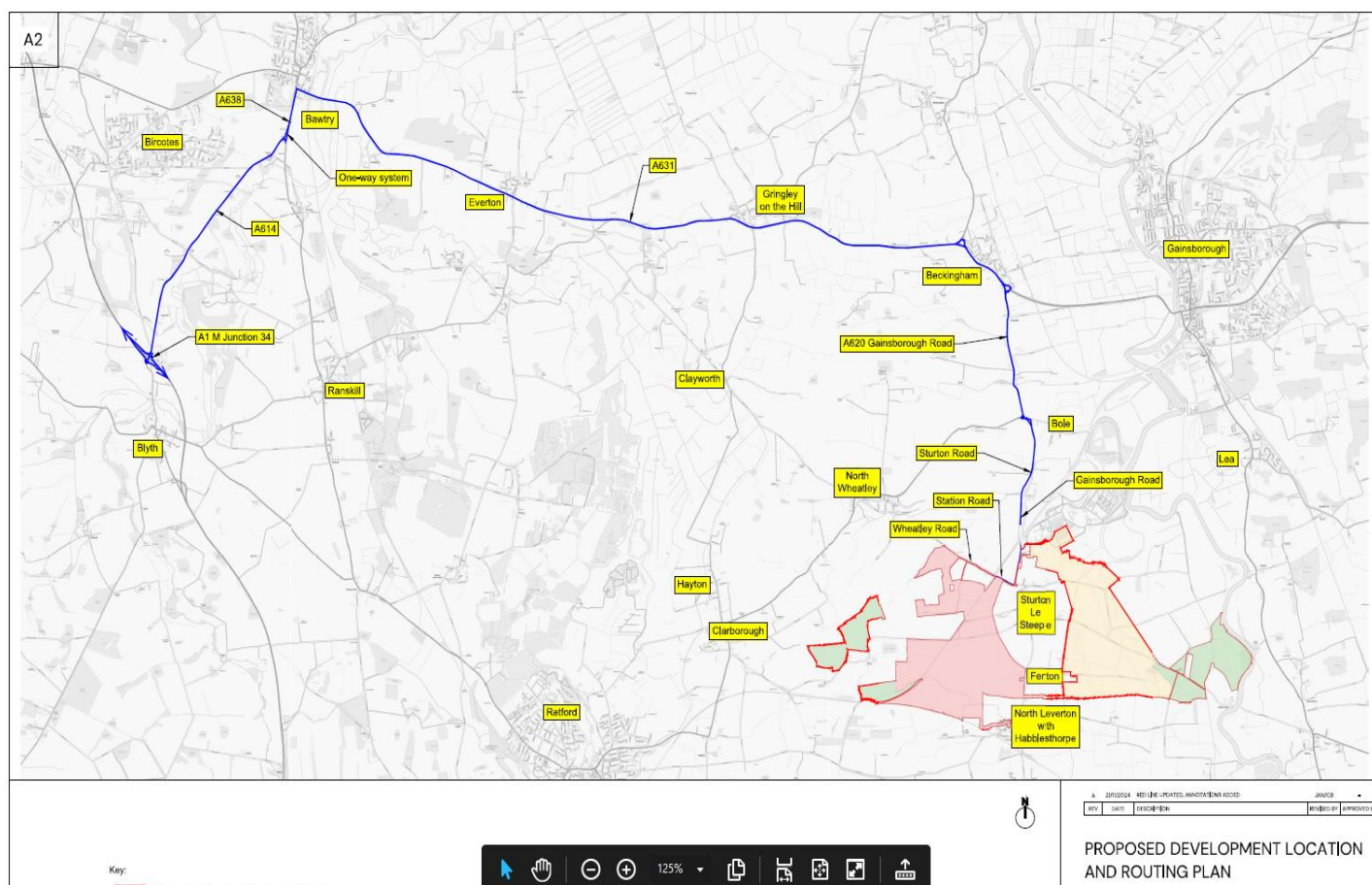
Appendix 5 - Steeples Renewables Project Sturton Le Steeple

NCC Highways comments for Local Impact Report.

Please refer in particular to comments in red within this assessment

Project Overview

- **Applicant:** Steeple Solar Farm Ltd.
- **Location:** Sturton-le-Steeple, Nottinghamshire.
- **Development:** A 450MW solar PV farm with 150MW energy storage over 888.3 Ha
- **Status:** Nationally Significant Infrastructure Project (NSIP) under the Planning Act 2008.
- **24 months 2027-2029 (6 days a week)**
- **Accessed by a dedicated HGV delivery route SRN to MRN to LRN – most sensitive roads Gainsborough, Station & Wheatly Rd**



Site Context

- Two land parcels near former West Burton coal fired PS, Sturton-le-Steeple, North Leverton, North Wheatley, and Fenton.
- Within Bassetlaw District Council (LPA) and Nottinghamshire County Council (LHA).

- Construction traffic will also pass through Doncaster Council and National Highways jurisdictions.

Policy Compliance

- Aligns with:
 - National Policy Statements EN-1 and EN-3.
 - National Planning Policy Framework (NPPF).
 - Nottinghamshire Local Transport Plan and Highways Design Guide.
 - Bassetlaw Local Plan.

Construction Traffic Strategy

- **Duration:** 24 months (2027–2029), 6 days/week.
- **Routing:** Via A1(M) J34 → A614 → A638 → A631 → A620 → Gainsborough Road.
- **Access Points:** 20 site access points, field/crossovers/new entrances including primary and secondary compounds (eastern & western).
- **Haul Routes:** 15 internal haul routes to minimise local disruption.
- **Vehicle Types:** HGVs, minibuses, vans, and cars (with emphasis on shared transport).
- **Environmental Weight Restriction 18 tonnes for Steeples area – to stop HGV's rat running through villages** deliveries & construction workers exempt – confirmed by Bernie McGuckin VIA TM 21-02-25

Summary of accesses affecting public highway

Plate 5.1 – Extract of Site Access Locations Drawing



Source: RES Site Access Locations (Drawing Reference: 04954-RES-ACC-DR-PE-004 09.05.2025 REV1)

East parcel field assemblage – (Primary accesses 1-5)

All plans in Appendix E need road names annotating/adding & notes about future use of access i.e. permanent/temporary feature

- **Access 1 Wheatley Rd** <https://maps.app.goo.gl/AjaAvNPU9nqJTc4o7> note headwall & highway ditches, further expansion of access/culverting will need consent from NCC LLFA flood.team@nottsc.gov.uk. National Speed Limit 60mph road, SSD provided 120m but should be 215m – Needs speed survey to justify any reduction or will require localised speed reduction and traffic management when in use - Contact [REDACTED] (Head of Traffic Management) [REDACTED] [\[REDACTED\]@viaem.co.uk](mailto:[REDACTED]@viaem.co.uk)

Design needs Road Safety Audit (RSA 2).

Note Temporary Traffic Management/Regulation Orders (TTRO) in the form of speed reductions are only effective if used on a short-term basis. From experience just placing a random 30 or 40mph speed limit in the middle of nowhere without any real reason for the public to work out why; Usually ends up with near to zero compliance, especially if they are left in place for a considerable length of time. Regrettably, highway users get complacent and the TTRO benefit would be negligible or even worse if the drivers using the access with the substandard sightlines think that drivers coming past on the main route will be driving the speed limit. Also, it does mean other more legitimate temporary speed limits may well be treated with the same contempt by the disgruntled drivers. We know that there will be minimal to no Police enforcement in these remote rural locations. Any necessary TTRO's need to be organised, and their use duration agreed with [REDACTED] (Head of Traffic Management) [REDACTED] [\[REDACTED\]@viaem.co.uk](mailto:[REDACTED]@viaem.co.uk)

Would CCTV cameras like the ones used by National Highways for 50 mph speed restrictions assist with this issue or even dummy cameras?

Access 2 Wheatley Rd/ Wood La <https://maps.app.goo.gl/FN5dnuSCvxGgE4yt7> 40mph SSD provided 120m ok. **Needs RSA 2** no S278 agreement completed but consented 20/00117/FUL Field Farm Wood La S Le S SOLAR Aug 2020. Tree trunk affects western SSD envelope but classed as intermittent partial obstruction – should be ok **but clearly mark intentions on the DRG.**

Restricted byway – land owners/users permission?

Access 3 Station Rd Primary Compound B <https://maps.app.goo.gl/d24UcdeyndhGqpQV9> 40mph running into 30 mph eastbound SSD provided 120m & 70m's ?? EB **Both SSD's need be 120m's Needs RSA 2**

Access 4 Gainsborough Rd to Rose St Power Station - Already suitable

<https://maps.app.goo.gl/qrAtGNtdDRThYvJr9> Purpose built S278 access to power station NSL 60mph SSD provided 215m ok **bus stop nearby** no need for RSA2

Access 5 Gainsborough Rd access to Quarry Primary Access Compound A – Already suitable <https://maps.app.goo.gl/15BYevMUmjH6M1o57> Purpose built former S278 to quarry NSL 60mph SSD provided 215m ok no need for RSA 2

Access 6a & b Common La 4 arm X Rds <https://maps.app.goo.gl/4SRd1oze6rDzjizcA> Narrow single track poor surfacing NSL 60mph SSD provided 70m's **should be 215m** - vehicles likely to be travelling slower than maximum speed because of constrained environment/poor surface? **Existing road surface does not look like it would be suitable for sustained HGV use. Field accesses would also need to wider if HGV's need to turn onto/off this narrow road, likely requires 7.5m's wide for both side accesses.**

Access 7 Common La priority access <https://maps.app.goo.gl/foJK9Y6i7ef2nEVZ8> Ditto dual status - All-purpose highway (APH) & restricted byway 32 S Le S **RSA 2. See comment access 6 poor surface & more room for manoeuvring to prevent over-running the verges.**

Access 8 Common La priority access <https://maps.app.goo.gl/GpdzVHJ15SfZmcJv5> Ditto but still APH & restricted byway 32 **See comment access 6 poor surface & more room for manoeuvring to prevent over-running the verges.**

Access 9a & b Common La 4 arm X Rds <https://maps.app.goo.gl/e6a1pnDwk2tjfQdT7> Ditto Restricted Byway 32 only **See comment access 6 poor surface & more room for manoeuvring to prevent over-running the verges. Land owners permission?**

Access 10a & b Littleborough Rd 4 arm X Rds <https://maps.app.goo.gl/w2hzHYAgiGi71XdB8> APH narrow 2 way track better surface Cof E Primary School to east on North St should be avoided NSL 60mph SSD provided 70m's – concerned about this as environment dictates speeds could be higher than 40mph? **SSD should be 215m's Needs RSA 2**

Access 11a & b Upper Ings La 4 arm X Rds No google map link available Narrow poorly surfaced single track - **restricted byway 33 only Landowners permission.**

Access 12 Fenton La priority access No google map link available BW 19 North Leverton with Habbleshthorpe

Access 7, 8, 9, 10, 11, 12 are all accessed driving over the catchwater drain bridge on Common Lane. I believe this has been assessed in terms of weight and width limit – [REDACTED] **VIA EM**

confirmed bridge decking strengthened in 1991 to 40 T GVW. Any reprofiling – mods etc need AIP Process. HGV's need to be restricted to 10 mph to reduce impact loading.

<https://maps.app.goo.gl/QPJkbFguCt6a8vNV7>

<https://maps.app.goo.gl/xAXTpDNnGsUS4ZSZ9>

West parcel field assemblage (mainly affects minor public highway only not APH)

Access 13 Wood La priority access Secondary Compound C No google map link available - private track but restricted byway 30 S Le S – single vehicle running width – near a bend? SSD provided 37m

Access 14 Wood La priority access No google map link available - private track but restricted byway 30 S Le S – single vehicle running width – near a bend? SSD provided 37m

Access 15 Freemans La 4 arm X Rds Restricted byway 31 S Le S

Access 16 High House Rd priority <https://maps.app.goo.gl/buP8SrWKMadTHJCo8> Bridleway 26 S Le S **Railway bridge nearby – height restriction unknown reference MAC3 207 Rail Authority**

Access 17 Springs La 4 arm X Rds Secondary Compound B
<https://maps.app.goo.gl/1aUDMBimd6tvfLYz5> Restricted byway 31 S Le S

Access 18a & b Dog Holes Lane 4 arm X Rds Footpath 41 S Le S

Access 19 Unnamed private internal road quarry & power station priority – Primary Compound A via access 5

Access 20 Leverton Rd priority <https://maps.app.goo.gl/ufUjAJi2ZHv5ygZX8> All-purpose highway - speeds potentially higher 2 way road - Academy & Health Centre to the south **and traffic needs to be banned in this direction** – 30 mph SL SSD provided 70m & 47m's to south **needs Temp Traffic Management as reduced visibility provided**

All using 15 dedicated overland haul routes to minimise disruption

Road Safety Audits page 31 of TA 5.102 – only some junctions identified? 1,3,6a&b,7,8,10a&b

Access 2 requires RSA 2 and is not listed above.

No indicative details of surface treatment and drainage of access i.e. to be surfaced for at least 20m's to accommodate a 16.5m long HGV/low loader.

Any change to surfacing of minor highways PRow needs the prior approval/authorisation of [REDACTED]@viaem.co.uk

Traffic Generation

Developed from first principles using material-equipment and workforce required

Based on 537 HGV's per month of 4.3 week month 6 days a week-10 hours day) gives average of 21 deliveries (42 No 2-way) per day

- **Peak Delivery Month (Month 7):** *Call a head management system will be used*
 - ~76 daily delivery trips. (152 two way)
 - ~92 daily workforce trips. (184 two way) i.e. 336 No 2-way i.e. average 34in/out per hour

- **Peak Workforce Month (Month 22):**
 - ~2 daily delivery trips. (4 two-way)
 - ~173 daily workforce trips. (346 two way) i.e. average 35in/out
- **Operational Phase:** ~14 two-way trips/day, negligible impact.

The above needs clarity for 1-way and 2-way trips and summary of conversion into Passenger Car Units (PCU) - so the reader is clear what is being considered.

Abnormal Indivisible Loads (AIL) – circa 10 vehicles in total for transformers on 16.5m low loaders – usually managed by police & specialist contractors in liaison with the LHA and does not generate any significant issues.

Highway Safety

Accidents/Personal Injury Collisions (PIC) data – looked at 5 years data 01/08/19 to 31/07/24 from VIA's STAT 16 data

Also checked Crashmaps for any correlations - No obvious clusters or blackspots that would require detailed analysis.

- **Personal Injury Collision (PIC) Data:**
 - 17 incidents over 5 years (14 slight, 3 serious, 0 fatal).
 - No significant safety concerns identified.
- **Road Safety Audits:** Required for key access points.

Committed Development Consideration – how has this been translated into the traffic flow diagrams?

- Nine nearby developments assessed for cumulative traffic impact.
- Worst-case scenario modelling used.
- No overlapping peak construction periods expected.

Traffic Impact Assessment

- **Key Junctions Assessed:**
 - A1(M) Blyth Interchange. (National Highways)
 - Bawtry Signal Junction. Month 7 49 PCU's & Month 22 129 PCU's (Doncaster MBC)
 - Saundby Road/Gainsborough Road/Sturton Road Roundabout. 49 PCU's & 179 PCU's NCC's responsibility - Have the PCU's for Month 7 been converted properly? HGV trips?

VIA Signals Design feedback regarding capacity assessments at Bawtry Signals & Saundby roundabout.

Data appears fractured and needs further explanation/clarity – treatment of deliveries worker movements - 2-way trips – conversion to PCU's/movements appear inconsistent – Is this all correct?

There is a defined route from Wheatley Rd - Station Rd S Le S to the A1 (the major source of traffic), so we would expect to see turning counts on all the junctions between the primary site entrance and the A1, so that the impact can be assessed at all the key junctions along this route. This needs to be applied for 2025 base traffic Do Minimum (DM), growthed future year 2029 base traffic DM, + committed development, then all this as a Do Something (DS) with your forecasted development flows added. This enables a straightforward comparison to be made. Your assessment does not seem to follow this logic and there is no information for the major roundabout at A631/A161 Beckingham Rd roundabout, or any other junctions enroute. Has committed development been added into the assessment?

I believe the traffic signals in Bawtry are in Yorkshire and the junction falls under the control of Doncaster Metropolitan Borough rather than Notts CC.

The Station Rd, Beckingham and Bole roundabouts have development flow data, but no modelling provided? and the TA concludes that no mitigation is required as the works are short term, but over 2 years? so do not require mitigation. Especially when the worst-case flow increase of 179 PCU's is quite significant.

Whilst the HA is not necessarily looking for wholesale capacity improvements at affected junctions, we need to understand the traffic impact over the project duration. i.e. the level of capacity impact and where this will occur in the form of increased dynamic loading on concentrated parts of the highway. This will identify where we need to focus any monitoring for potential deterioration associated with construction movements.

Looking at the TA addendum - Month 7 appears to be the worse forecast with HGV deliveries per day of 153 in/out (x 2 = 306 PCU's) and workforce of 183 in/out (183 PCU's). Total 489 PCU movements on the junction over a 10-hour period, (or have I misunderstood this).

Similarly for month 22 converting 2 ways trips into PCU's = $8 + 346 = 354$ PCU movements i.e. 177 PCU's travelling north & south (this coarsely matches flow diagram 5)

I would expect the PCU flow diagrams to show combinations of delivery & workforce movement, whereas Month 7 shows delivery only - PCU's 49 in/out i.e. 98 movements at the junction in both peak am & pm – so 489 movements less 98 over the remaining day of circa 8 hours i.e. 25 PCU's in/out per hour because of movement restrictions to minimise environmental impact and reduce congestion at sensitive times.

Normally movement restrictions are imposed by the LPA to minimise impact and to avoid peak hour school traffic, so averaging figures out do not paint a realistic profile of what will occur daily.

Example planning condition

No construction work including deliveries or removal of material, plant, equipment, machinery and waste will be made to or from the site between the hours of 07:30 to 09:00, 15:00 to 16:00, and 17:00 to 18:00 Monday to Friday to avoid peak time background traffic. (Note these times consider peak school traffic at any nearby schools affected and can be extended if this is not relevant). All deliveries on Saturdays will be between the hours of 08:00 and 13:00, with no deliveries at all on Sundays and Bank holidays, unless otherwise agreed in writing with the Local Planning Authority (LPA)

Trip Note from Chapter 6 of the main TA

Based on 537 HGV's per month of 4.3 week month 6 days a week-10 hours day) gives average of 21 deliveries (42 No 2-way) per day

- **Peak Delivery Month (Month 7):** Call a head management system will be used
 - ~76 daily delivery trips. (152 two way)
 - ~92 daily workforce trips. (184 two way) i.e. 336 No 2-way i.e. average 34in/out per hour
- **Peak Workforce Month (Month 22):**
 - ~2 daily delivery trips. (4 two-way)
 - ~173 daily workforce trips. (346 two way) i.e. 350 No 2-way i.e. average 35in/out per hour

The HA needs to understand the traffic impact looking at peaks of the perceived operation throughout the day.

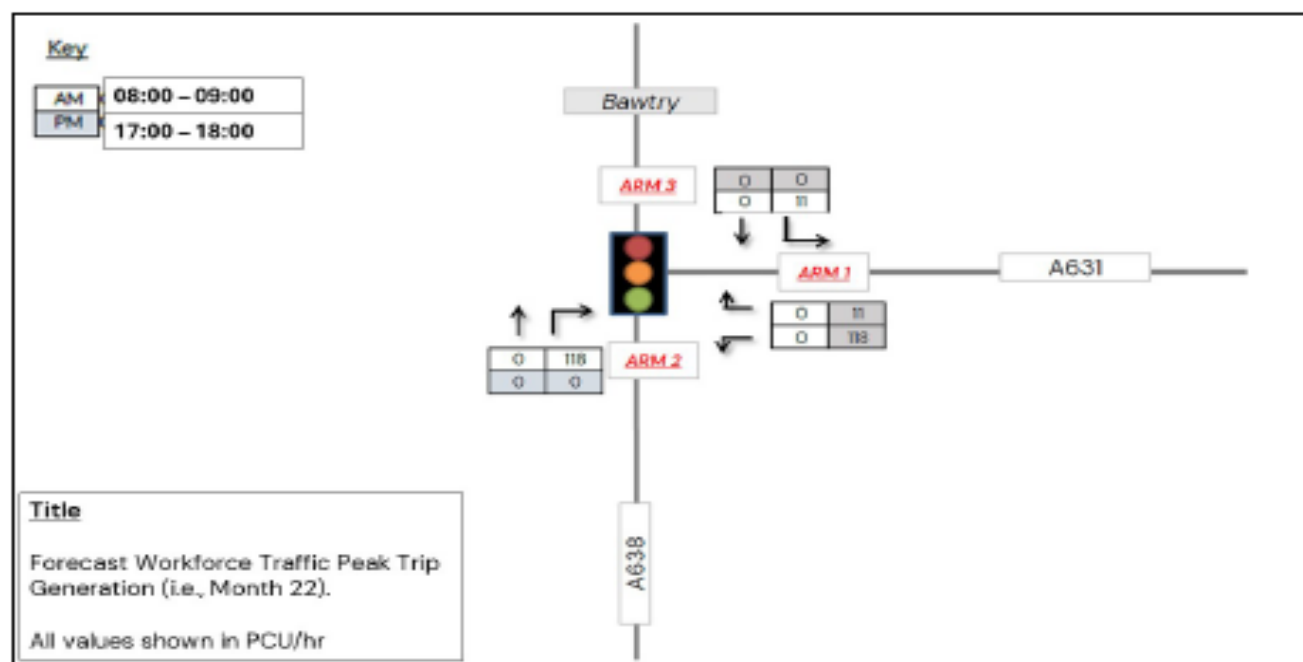
Note - could this information be presented for each month for a typical day say from midnight to 23.00 to give a daily profile for HGV's movements, then the workforce with a combined diagram of both,(in single PCU's). I believe it would be better to see representative samples of the operation over the project duration, say at month 1, month 7, month 14 and month 22 ? Or maybe even for each month of the whole operation. Then interested parties can easily see the operational profile for a standard weekday over a specific month. From this you can determine the anticipated peak hour flows and compare this with the recorded turning counts for existing cars and HGV's (base) and growthed future year scenarios with development flows added.

28-05-25 Most of the day

29-05-25 10.00-12.45

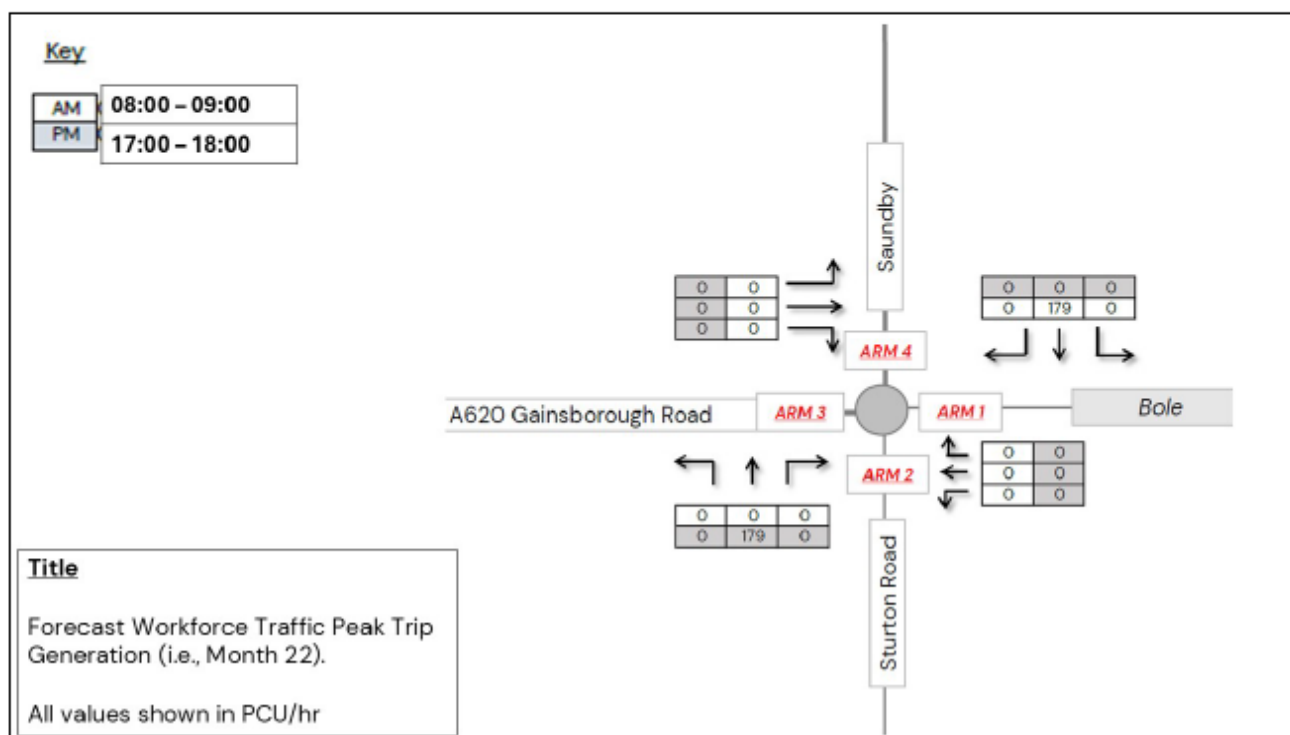
During Month 22 of the construction program, the forecast traffic impact at Bawtry Signal Junction in a robust, worst-case scenario is equivalent to 129 PCUs per hour.

Plate 8.3 – Forecast Workforce Traffic Peak Trip Generation at Bawtry Signal Junction



During Month 22 of the construction program, the forecast traffic impact at Saundby Road/Gainsborough Road/ Sturton Road Roundabout in a robust, worst-case scenario is equivalent to 179 PCUs per hour.

Plate 8.4 – Forecast Workforce Traffic Peak Trip Generation at Saundby Road/Gainsborough Road/ Sturton Road Roundabout



- **Findings:**
 - Temporary impacts during peak construction.

- Mitigation via scheduling and routing.
- No junction capacity issues anticipated.

Mitigation Measures

- **Outline Construction Traffic Management Plan (OCTMP)** includes:
 - Abnormal Indivisible Loads (AIL) Plan.
 - Construction Worker Travel Plan.
 - Cable Routing CMP.
 - PRow Management Plan.
 - Traffic scheduling and routing enforcement.

Conclusion

- Safe and appropriate access arrangements.
- No significant impact on local or strategic highway networks.
- Mitigation measures in place.
- No transport-related reason to prevent DCO consent.

TA Addendum purpose - Supplement the original TA with updated traffic survey data and analysis due to accelerated Development Consent Order (DCO) timelines.

Forecasted trip generation is derived from first principles (quantities & loads). I have accepted these at face value, as they appear sensible to me. The recorded 2025 baseline flows have used TEMPRO growth to estimate future baseline flows in 2029 and they can only use one route in/out, so there is not much choice for distribution and assignment. They appeared to have mentioned 9 sites for committed development then not included them – How have these been considered? The traffic flow diagrams seem to have jumped some steps.

Will junctions 2 & 3 handle the additional forecasted flows. I am not sure why they have missed out the A631-Beckingham Rd A161 Island - Is it because flows on Beckingham Rd will be minor?

Construction Traffic Forecast

- **Peak Construction Delivery (Month 7):**
 - 153 delivery trips/day
 - 183 workforce trips/day
 - Total: 336 two-way trips/day
- **Peak Workforce (Month 22):**
 - 4 delivery trips/day
 - 346 workforce trips/day
 - Total: 350 two-way trips/day

Key Junctions Assessed

1. A1(M) Blyth Interchange – National Highways responsibility

- **Month 7: 49 PCUs/hour**
- **Month 22: 118 PCUs/hour (worst-case scenario)**
- **Mitigation: Scheduling outside peak hours can reduce impact.**

2. Bawtry Signal Controlled Junction (A638/A631)

- **2025 base DM + DS Forecast: Month 22 129 PCU**
 - **AM Peak: +7% overall traffic increase but +18% A638 S**
 - **PM Peak: +7% traffic increase but largest impact arm +29% A631**
- **Similar for 2029 future year DM & DS**
- **Mitigation: No further junction capacity assessment needed due to temporary nature and OCTMP measures.**
- **Plate 8.6 85% change in flow AM A638 to site, 91% from site - Is this because baseline flows are low?**

3. A631 / Station Road / Bar Road Roundabout

- **2025 base DM & DS Forecast & 2029 future year DM & DS**
 - **AM Peak: +10% traffic increase**
 - **PM Peak: +9–10% traffic increase**
- **Largest impact: +43% on A620 Bar Road arm**
- **Plate 8.9 152% A631 to A620 AM & PM return 108%**
- **Mitigation: Temporary but significant impacts manageable with OCTMP strategies.**

Appendix 6 - Steeples Renewables Project Sturton Le Steeple

– NCC Highways comments for Local Impact Report

Construction Traffic Management Plan

Please refer to comments made in red

1. Project Overview

- **Applicant:** Steeple Solar Farm Limited
- **Prepared by:** Pegasus Group
- **Location:** Sturton le Steeple, Nottinghamshire
- **Type:** Solar PV scheme (>50MW), classified as a Nationally Significant Infrastructure Project (NSIP)
- **Construction Period:** 24 months (2027–2029), six days/week

2. Site Context

- Two land parcels: **Western** (near North Leverton, North Wheatley) and **Eastern** (near Fenton)
- Agricultural land with existing infrastructure
- Local authorities involved: **Bassetlaw District Council, Nottinghamshire County Council, Doncaster Council, and National Highways**

3. Construction Traffic Routing

- Agreed route: **A1(M) Blyth Interchange → A614 → A638 → A631 → A620 → Gainsborough Road**
- Separate access points for Eastern and Western parcels
- **Restricted routing** enforced to avoid villages (e.g., Sturton le Steeple, North Leverton, Fenton)

4. Site Access & Haul Routes

- **20 site access points** with visibility splays and swept path analysis
- **Primary Compounds:** A (Eastern), B (Western)
- **Secondary Compounds:** 3 total
- **15 internal haul routes** to minimize local road use
- Emergency and operational access points included
- **Streetworks Permits**

NCC, operate and manage the local road network including any temporary construction works. The Traffic Management Act (2004) established the Council's regulatory duty to manage this network, and Part 3 of the Act allows for a Council to operate a permit scheme via a legal Order to deliver this duty.

Alterations to the access points and the highway are required to be submitted and approved by NCC Streetworks team prior to the construction. Permits are required to be in accordance with *The Nottinghamshire County Council Permit Scheme Order 2020*. Costs and timescales for the permit application are available on NCC website.

Further information is available from NCC website:

www.nottinghamshire.gov.uk/transport/licences-permits/streetworks-permit-schemeconsultation or through email: streetworks@viaem.co.uk.

- **RSA for Access 2 needs to be included in the list**

5. Construction Vehicle Movements

- **Daily average:** ~21 deliveries, ~68 workers (one-way trips)
- **Peak month:** 4,332 vehicle trips (Month 7)
- **Delivery types:** PV modules, piles, transformers, cable drums, sand, gravel, fencing, gates, welfare units etc
- **Vehicle types:** Articulated lorries, tipper trucks, concrete mixers, low loaders & AIL's
- **Para 5.29 about 14-seater mini- buses** reducing workforce trips Month 7 92 workers 7 buses?? **How will this be organised – is this realistic that all local & external non-local workers will use minibuses? See Construction Worker Travel Plan below**

6. Mitigation Measures – This includes detailed list of aspect to consider supplied from PME 20-02-25

- **Traffic management:** Call-ahead system, off-site holding areas, wheel washing, signage
- **Monitoring:** Daily logs, disciplinary procedures, marshals
- **Condition surveys:** Pre-, during, and post-construction – **no mention of organising remedials if damage – excessive wear & tear – over-riding on the public highway is experienced from the construction activities?**
- **Environmental controls:** Dust suppression, noise limits, fencing

7. Public Rights of Way (PRoW) –Multiple PRoWs intersect haul routes

- **Mitigation:** Signage, 10mph speed limit, refuge areas, banksmen

- **Surveys:** CCTV-based NMU activity monitoring post-DCO submission
- **Restoration:** Pre- and post-construction condition surveys

8. Construction Worker Travel Plan (CWTP)

- **Goals:** Reduce single-occupancy trips, promote sustainable transport
- **Measures:** Minibuses, car sharing, staggered shifts, restricted routing
- **Management:** Travel Plan Coordinator (TPC) appointed
- **Monitoring:** Quarterly surveys and updates

9. Abnormal Indivisible Loads (AIL)

- Estimated 5–10 AILs (e.g., transformers)
- **Coordination:** National Highways, Doncaster Council, NCC, Police
- **System:** ESDAL used for route planning and notifications

10. Cable Routing

- Underground cable to West Burton Substation
- Internal cable corridor within site boundaries
- **Construction rate:** ~200m/day by two teams
- **Traffic impact:** Minimal, mostly internal movements

11. Summary & Conclusion

- The OCTMP provides a **robust, evidence-based strategy** to manage construction traffic, minimize disruption, and ensure safety.
- **Stakeholder coordination, site monitoring, and adaptive mitigation** are central to the plan.
- A **Decommissioning Traffic Management Plan** will be developed post-construction.

No mention of contingency provision allowing the Local Planning Authority (LPA) and Highway Authority (HA) to request the applicant reviews the routing strategy and implements measures to use other permitted alternative routes, should problems arise. Or how liaison about programme, TTRO, street works, partial or full closures and temporary activities in the highway between main contractor and NCC's Highway Services Partner VIA EM Ltd streetworks@viaem.co.uk

The OCTMP addendum July 2025 is the essentially the same as the OCTMP April 2025 but with more detail about impacts and mitigation for minor PRow highway Section 7 Public Right of Way Management Plan.