



Great North Road Solar and Biodiversity Park

Project EN010162

Relevant Representation of JPAG

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This representation has been produced in response to the consultation on a Nationally Strategic Infrastructure Project and the conclusions it reaches are based upon the consultation material published, due diligence investigations of public records and the information provided to the company by the client and/or their representatives. The author of this representation is Anthony Northcote, Executive Director of TOWN-PLANNING.CO.UK. He holds a Higher National Certificate in Land Administration (Planning) with Distinction; Diploma with Distinction in Town Planning; Post-Graduate Diploma with Distinction in Urban and Regional Planning together with a Master of Arts Degree in Urban and Regional Planning. He was elected to the Royal Town Planning Institute in 1996 and now has over 35 years planning experience within the public and private sectors involving a full range of planning issues. In addition, he is also a Member of the Institute of Leadership; a Member of the Chartered Institute of Management; a Member of the United Kingdom Environmental Law Association; and a Fellow of the Geological Society.

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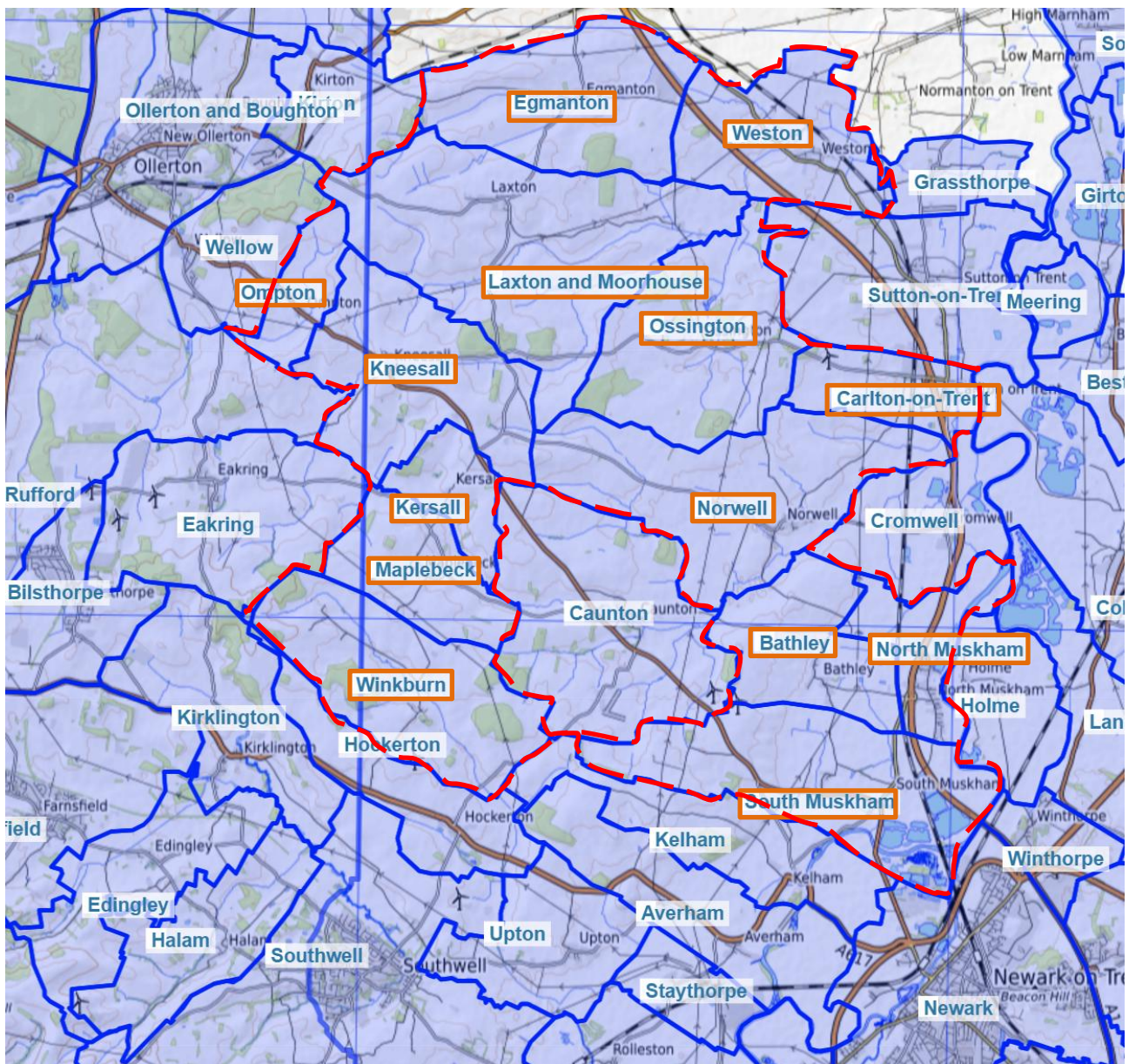
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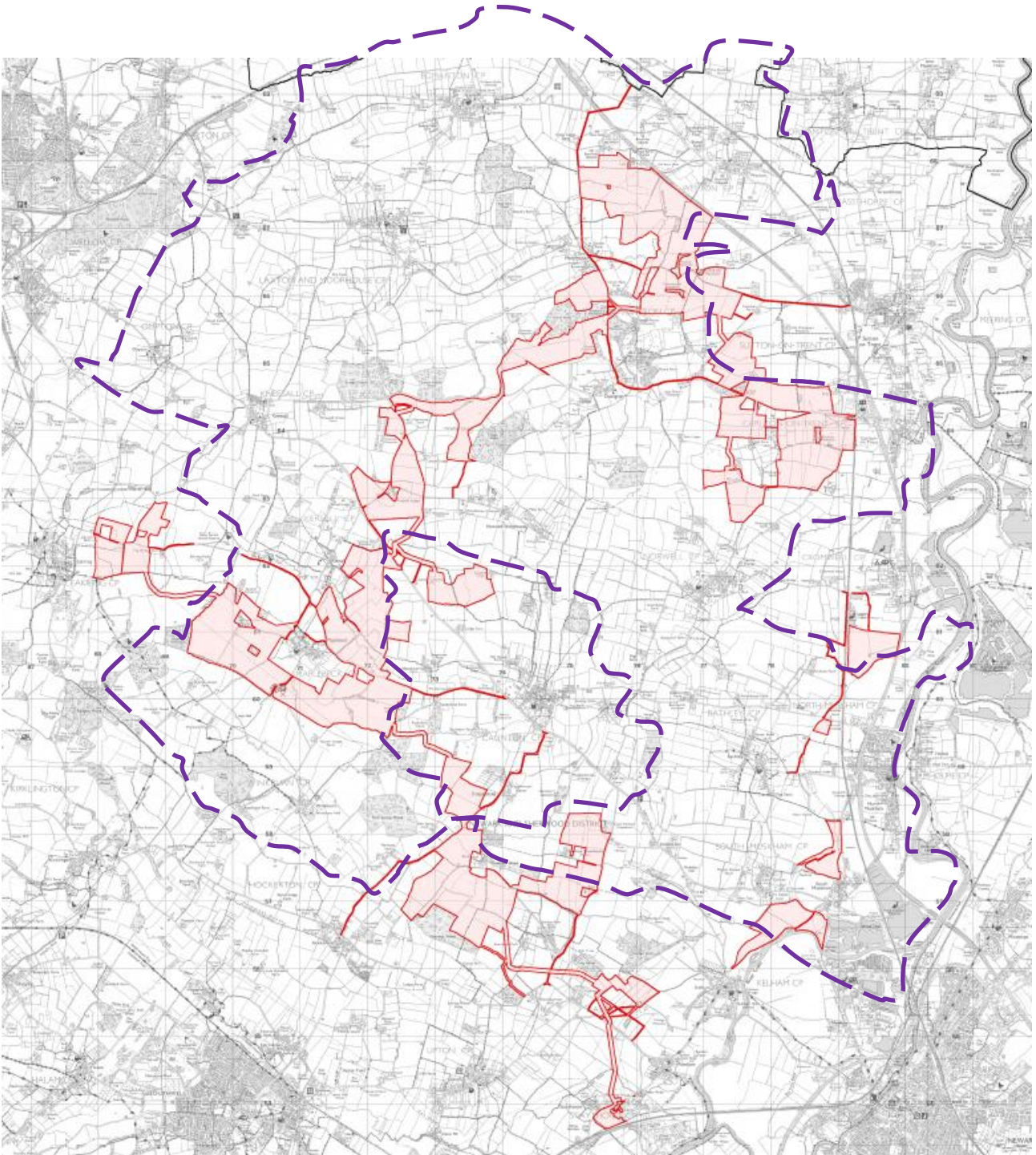
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JPAG

1. JPAG (Joint Parishes Action Group) is an alliance of Parish Councils and Parish Meetings who have come together to respond to the Great North Road Solar and Biodiversity Park, including through the production of this representation in objection to the Great North Road Solar and Biodiversity Park.
2. JPAG is chaired by Councillor Ian Harrison of North Muskham Parish Council and includes representatives from 12 Parish Councils and Parish Meetings who collectively cover a majority of the Parishes covered by the Great North Road Solar and Biodiversity Park.



 Area Covered by JPAG Parishes - Name Highlighted in Box 



Area Covered by JPAG Parishes Overlaid on Site Location Plan

3. JPAG formally covers 14 Parishes in Newark & Sherwood and involves the following bodies:

- Bathley Parish Council
- Carlton on Trent Parish Council
- Egmanton Parish Meeting
- Kneesall, Kersall & Ompyton Parish Council (3 Parishes)
- Laxton & Moorhouse Parish Council

- Maplebeck Parish Meeting
 - North Muskham Parish Council
 - Norwell & Norwell Woodhouse Parish Council
 - Ossington Parish Meeting
 - South Muskham & Little Carlton Parish Council
 - Weston Parish Council
 - Winkburn Parish Meeting
4. In addition, although not formally members, JPAG has worked in collaboration with Averham, Kelham & Staythorpe Parish Council (*who cover Averham, Averham Park, Kelham & Staythorpe*) and Upton Parish Council. JPAG has also collaborated with the Norwell Solar Farm Steering Group (whose primary focus is the Foxholes Solar Farm application). JPAG is also liaising with Say No To One Earth Solar Farm, the community group on NSIP project EN010159. JPAG has also engaged with Barnby in The Willows Parish Council who are concerned about the newly announced 100MW solar/BESS scheme just to the east of Newark.
5. In this relevant representation, JPAG is focussing on a handful of key strategic issues that relate to more than a single Parish. JPAG notes that individual Parish Councils and Parish Meetings are also making detailed comments on the more localised issues.

Responses by Others

6. JPAG is aware that detailed submissions are being made by the individual Parish Councils and Parish Meetings. Across these various representations the aim is provide a series of complementary responses and avoid unnecessary duplication of volunteer effort and public resources.
7. In addition, JPAG is aware that Newark & Sherwood District Council¹ is intending to focus its efforts on responding to:
- a) Landscape Character and Visual Impact
 - b) Public Rights of Way (user amenity)

¹ The Newark and Sherwood Planning Committee on the 6th June 2024 had a report updating them on progress on the NSIP Solar Proposals in the District, i.e. Great North Road Solar and the One Earth Solar - <https://democracy.newark-sherwooddc.gov.uk/documents/s19989/FINAL%20Solar%20NSIP%20Report%20Final.pdf>. A further update report to the Planning Committee on the 5th December 2024 provided a factual update but did not alter the list of topics that the District Council intended to cover. A further update report to the Planning Committee on 13th February 2025 reiterated that they were seeking specialist advice from external advisors on topics to include Landscape and Visual and Agricultural Land Classification

- c) Cultural, Built and Buried Heritage (Conservation and Archaeology)
 - d) Noise
 - e) Ecology and Biodiversity
 - f) Agricultural Land Classification and Impact
8. The District Council also identified that they intended to instruct consultants to provide expert assistance where needed, e.g., Landscape Character and Visual Impacts. Delegated authority was given to the Director for Planning & Growth (who may delegate to authorised officers), in consultation with the Chair and Vice-Chair of Planning Committee to respond to any consultation on NSIP proposals.
9. Again, in formulating its representation, JPAG has had cognisance of the topics on which Newark & Sherwood District Council had indicated that it intends to focus its comments and as such JPAG has sought to avoid unnecessary duplication of effort.
10. The County Council has not published any summary as to what topics they may be considering responding on. Previous discussions on GNR with Cllr Bruce Laughton who represents much of the area on the County Council has indicated that the County Council will probably focus on their statutory roles in relation to:
- a) Flood Risk and Drainage
 - b) Impact on Rights of Way
 - c) Traffic, Transport and Highway Safety

Project Name and Timescale

11. The applicant (Elements Green Trent Ltd) has chosen to change the project name to Great North Road Solar and Biodiversity Park. This is purely a branding and marketing strategy and in no way changes the basic element that the project is a Solar Farm which is within the definition of being a Nationally Strategic Infrastructure Project (NSIP), thereby requiring a Development Consent Order (DCO). A Biodiversity Park is not within the statutory definition² of being an NSIP project.

² The Planning Act 2008 (as amended) creates a separate consenting route for major infrastructure projects in the fields of energy, transport, water, wastewater, and waste – termed Nationally Significant Infrastructure Projects (NSIPs). To qualify as an NSIP, a proposed project must meet certain thresholds defined in Part 3 of the Planning Act (the Secretary of State may add to/amend these thresholds by Order). Provision is also made under section 35 of the Planning Act for the Secretary of State to issue a direction, the effect of which is to bring other projects into the remit of the NSIP consenting process.

12. For ease in this representation, we refer to the proposal as GNR. This project is defined as a Nationally Strategic Infrastructure Project (NSIP) under the Planning Act 2008 (as amended). As such it doesn't need to obtain planning permission but instead needs to obtain a Development Consent Order (DCO).
13. Solar farms are generally described as temporary land uses, however, an operational lifetime of 40 years for this project (or 60 years in the case of other projects such as One Earth Solar) is a generational lifetime. As a comparison Staythorpe A Power Station (Coal) was operational for 33 years from 1950 to 1983 and Staythorpe B Power Station (Coal) was operational for 31 years from 1962 to 1994. Cottam Power Station (Coal) was operational for 51 years from 1968 to 2019 and West Burton A Power Station (Coal) was operational for 47 years from 1966 to 2013. On average the coal fired power stations in this section of the River Trent valley were operational for 40.5 years. A power station would not be described as a temporary land use but would be considered to be permanent development. In the same way a solar farm and BESS should be considered to be permanent development in the context of the average lifespan of power generation plants.

Community Benefits

NG+

14. The applicant on the GNR scheme has put forward a potential community benefit fund known as NG+ that would be available in the event that the DCO was granted by the Secretary of State (who make a final decision on NSIPs, following a recommendation from the Examining Authority). However, JPAG members are aware that there is no legal requirement for community benefit to be offered, nor is there a mechanism by which it can be secured through the planning process.
15. JPAG notes the s51 advice issued by the Planning Inspectorate which stated: *“The Inspectorate reminded the Applicant, in relation to the advice from previous meeting in relation to flood alleviation, to make sure it is clear in the ES and associated documents what is and isn't relied upon as mitigation for adverse effects, and which is a wider benefit outside of the DCO. Where the NG plus works are proposed to take place outside of the DCO, the Inspectorate noted that the ES should outline the approach to assessing whether there is cumulative effects if there are multiple schemes going on in the same area. The Applicant noted this and that they were aware of the guidance on cumulative effects.”*

16. It is noted that Newark & Sherwood District Council has clearly advised³ that the community benefit fund cannot be afforded weight as a material planning consideration by the decision maker. The suggested NG+ scheme is therefore offered on a voluntary basis and there is no means by which financial community benefit can be guaranteed. This is a point that is subject to ongoing debate at government level with a recent Parliamentary debate⁴ on this matter.
17. On the issue of community benefit it is considered that the Phase Two (Statutory) consultation undertaken by the applicant has not complied with the s51 advice issued by the Planning Inspectorate. The consultation materials⁵ and the layout of the consultation events has in no way made it sufficiently clear that the financial community benefit through NG+ cannot be guaranteed or secured through the DCO process. The same is applicable to the suggested EG Education and ED Academy initiatives. Consultation boards such as that on the Rooftop PV Grant Scheme in fact appear to have been intended to mislead attendees that this is an integral part of the project.
18. The same is the case for the consultation board on flood prevention schemes where NG+ funding for Sustainable Drainage (SuDs) again appears to mislead attendees that these are part of the overall project. Similar references to NG+ initiatives were also contained on other consultation boards.
19. The NG+ map identifying some 39 initiatives superimposed on a map showing the NSIP project area is considered to be particularly misleading and incorrectly appears to suggest that these initiatives are part of the overall NSIP scheme. Other aspects such as UK sourcing as set out in the consultation boards again cannot be secured through the DCO process. Overall, this calls into question the adequacy of consultation which we return to shortly.
20. The applicant has also been explicit from the start that they will not construct and operate the solar farm but will instead sell the project on to an unspecified third party. This approach has been followed in other NSIP solar projects that have been granted nearby in Lincolnshire. This intention calls into question any of the suggestions made by NG+, EG Education and ED Academy initiatives.

³ Report to the Newark & Sherwood Planning Committee on the 5th December 2024 - <https://democracy.newark-sherwooddc.gov.uk/documents/s21278/FINAL%20Planning%20Report%20NSIPs%20Update.pdf>

⁴ <https://researchbriefings.files.parliament.uk/documents/CDP-2024-0127/CDP-2024-0127.pdf>

⁵ Documents APP-308 and APP-309 in particular the exhibition boards, feedback form, consultation booklet and webinar slides

Pre-Existing Flood Alleviation

21. The applicant has also suggested in various public meetings that certain works such as flood alleviation schemes could be provided by them to address existing issues. However, as such works would not directly relate to the NSIP scheme itself, then such works cannot be secured through the DCO, and they would need separate planning permission.
22. It is noted that the applicant does acknowledge this fact in the technical documents and did on the flood risk consultation board refer to planning applications. Albeit in the context of the consultation the public are unlikely to have appreciated the subtlety of the terminology used. Particularly given the use of the NG+ map showing these as some of the 39 initiatives superimposed on a map showing the NSIP project area which suggests a direct connection.
23. These potential flood alleviation schemes for pre-existing issues fund cannot be afforded weight as a material planning consideration by the decision maker. These potential schemes require a separate planning permission which may or may not be granted. Even if GNR were to be permitted, the presence of such a consent could not predetermine the decision-maker on the suggested pre-existing flood alleviation schemes.
24. They are being offered on a voluntary basis and there is no means by which these suggested pre-existing flood alleviation schemes can be guaranteed or secured through the DCO process.

Case Law

25. The issue of in whether a community benefit scheme which sat alongside a planning application should be considered in the planning process was considered in the Supreme Court in the case of R v Resilient Energy Severndale Ltd and Forest of Dean District Council [2017]. In that case Lord Swales stated:
“The benefits were not proposed as a means of pursuing any proper planning purpose, but for the ulterior purpose of providing general benefits to the community. Moreover, they did not fairly and reasonably relate to the development for which permission was sought.”
26. As the purported community benefits do not form part of the DCO application and cannot be secured through the DCO process these should be afforded no weight in the consideration of this application.

Adequacy of Consultation

27. Chapter 2 of Part 5 of the Planning Act 2008⁶ sets out statutory requirements for applicants to engage in pre-application consultation with local communities, local authorities⁷, statutory consultees and those who would be directly affected by the project⁸. In broad terms s42 of the Planning Act 2008 sets out the duty to consult, with s47 of the Planning Act 2008 setting out the duty to consult local communities and s48 of the Planning Act 2008 setting out the duty to publicise.
28. We understand that at the time of submission (acceptance) it is for the Planning Inspectorate to decide whether adequate pre-application consultation in line with the legislation has been undertaken. There is no ability at the acceptance stage for bodies such as JPAG to raise concerns relating to the adequacy of consultation. This can only be done as part of the relevant representation stage during the pre-examination phase.
29. As indicated above in relation to the manner in which the consultation has been portrayed in relation to community benefits, there is genuine concern about the adequacy of consultation. The applicant has failed to clearly differentiate between what is within the scope of the DCO and what is not. In this respect, the applicant has failed to follow the s51 advice issued by the Planning Inspectorate.
30. The sheer size of the GNR scheme and the consequential sheer volume of supporting material is directly related to the issue of adequacy of consultation. As the Preliminary Environmental Information Report (PEIR) acknowledged, the Development extends across an area of 18,119.9ha. At the Phase 2 consultation stage some 2,899.7ha was encompassed within the Order Limits.
31. The applicant did not have due regard to the volume of supporting material in determining the statutory Phase 2 consultation period for this proposal. Factors such as the time of year and weather can have a detrimental impact on public engagement and the ability of certain groups of society from engaging with the consultation. The statutory consultation was

⁶ <https://www.legislation.gov.uk/ukpga/2008/29/part/5/chapter/2>

⁷ In our case Newark & Sherwood District Council and Nottinghamshire County Council, but not Parish Councils as they are not in the statutory definition of a local authority for this purpose. Although a Parish Council is a statutory consultee at the pre-application stage under the provisions of Schedule 1 of the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (as amended)

⁸ i.e. parties who own land that they may need to compulsorily acquire

undertaken in the depth of winter in January and February, which was a less than an ideal time of year to achieve public attendance at consultation events for example.

32. The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009⁹ also sets out various matters relating to statutory consultation¹⁰.
33. Parish Councils only tend to meet on a monthly basis, they have limited resources and as such their Clerks do not have large amounts of time available to read, digest and advise their Councils on consultation documents received. The statutory consultation period only included 30 working days which has been challenging for Parish Councils to commission professional assistance. Whilst it is noted that in sections 42 and 45 of the Planning Act 2008 there is a minimum period of 28 days for that statutory consultation, a statutory minimum doesn't equate to that being adequate. Exceeding the statutory minimum period does not equate to consultation being adequate either.
34. Timing of consultation has practical implications, for example many Parish, Village or Community Magazines/Newsletters have lead-in times of several weeks and are typically not published in January because of the Christmas and New Year period. As such the choice of the statutory consultation across the months of January and February was unhelpful to allow Parish Councils and Parish Meetings to publicise the proposal locally.
35. JPAG notes that the guidance¹¹ (Reference ID 02-004-20240430) describes the pre-application process as:
“The NSIP consenting process is intended to be front-loaded. The pre-application stage is therefore critical and should be used to ensure project proposals are prepared in line with applicable National Policy Statements (NPS) designated under Part 2 of the Planning Act. Relevant legislation and policies should also be taken into consideration where applicable to the proposed project. The pre-application stage should allow the likely effects of a

⁹ <https://www.legislation.gov.uk/ukxi/2009/2264/contents/made> - Note this is the original set of Regulations which has been amended by subsequent Regulations

¹⁰ Statutory consultees include bodies such as the NCC Highway Authority, Highways England, Natural England, HSE, Historic England, Police Authority, Historic England, Internal Drainage Board and Statutory Undertakers (i.e. utility companies). Section 47 of the Planning Act sets out the applicant's statutory duty to consult local communities. Government guidance advises that *“in addition, applicants will want to consider the issues that may need to be addressed ahead of submission and may also wish to seek the views of other people who are not statutory consultees, but who may be significantly affected by the project.”* This might include for example local organisations such as the Nottinghamshire wildlife Trust

¹¹ <https://www.gov.uk/guidance/planning-act-2008-pre-application-stage-for-nationally-significant-infrastructure-projects>

project to be fully consulted upon, with the design of the project evolving up to the point of application submission.

The overriding objective of this guidance is to encourage a pre-application process which is effective and proportionate to the nature of the proposed project. This must ensure that the legal requirements of the Planning Act and the EIA Regulations 2017 are met, particularly involving consultation stages and the early consideration of alternatives. At the same time, pre-application processes should not be unnecessarily time-consuming and burdensome for the applicant, consultees and communities affected by the proposal.”

36. The guidance (Reference ID 002-019-20240430) goes on to advise:

“Effective pre-application consultation is key to developing well-prepared applications that are understood by the public. Consultation on development proposals allows consultees and local communities to influence how infrastructure that meets a national need can be accommodated in their area, and enables applicants to more effectively shape proposals.”

37. The guidance (Reference ID 02-020-20240430) continues to clearly advise:

*“The pre-application consultation undertaken should be proportionate to the scale and nature of the project and its effects. A ‘one-size-fits-all’ approach is not appropriate...
...Larger, more complex applications are likely to warrant going beyond the statutory 28-day minimum timescales for consultation laid down in the Planning Act to ensure enough time for consultees to understand project proposals and formulate a response.
The timing and duration of consultation will be likely to vary from project to project, depending on size and complexity, and the range and scale of the effects. Applicants should therefore set consultation deadlines that are realistic and proportionate to the proposed project.”*

38. Early engagement with parish and town councils is specifically advised by the guidance (Reference ID 02-022-20240430) to help applicants to ensure they find the best approach to engage the relevant communities in the most effective and proportionate way. It is therefore disappointing that the applicant did not seek to engage with the Parish Councils over the timing and duration of the statutory consultation period.

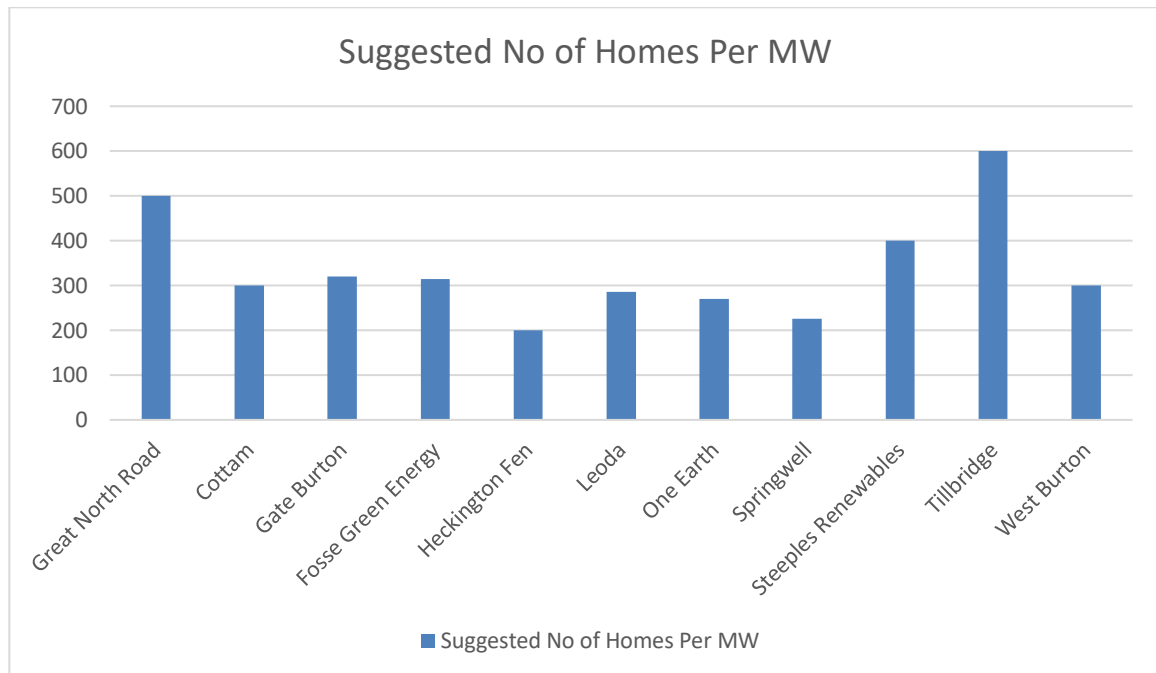
39. There is no statutory maximum period for pre-application consultation, and a substantially longer period should have been used for this project given the scale and nature of the project. The consultation undertaken is not considered to have been adequate.

Inaccuracies, Inconsistencies and Anomalies in Documents

Electricity Generation and Carbon Avoidance

40. JPAG noted the technical calculations undertaken by Norwell & Norwell Woodhouse Parish Council at the Phase 2 statutory consultation stage in relation to the overestimation of the potential electricity generation and the consequential number of properties that could be provided with electricity. Together with the overestimation of the carbon avoidance in the calculations. JPAG share the concern that these anomalies seek to significantly overstate the perceived benefits arising from the project which are misleading and again impact on the adequacy of consultation.
41. Both the figures for the number of properties that could be provided with electricity and the estimation of carbon avoidance have been used in the statutory notices published under s47 of the Planning Act 2008 (SoCC) and s48 of the Planning Act 2008 (Pre-Application). They have also been heavily utilised as headlines in the consultation material used by the applicant at the consultation events with the local community.
42. JPAG are not experts in the field of greenhouse gas emissions (GHG), but notes that the GHG Protocol classifies a company's emissions into 3 scopes:
- Scope 1 emissions are the direct emissions from owned or controlled sources.
 - Scope 2 emissions are the indirect emissions from the generation of purchased energy.
 - Scope 3 emissions are all indirect emissions, not included in Scope 2, that occur in the value chain of the reporting company.
43. The scheme is predicated on a headline figure of producing electricity for 400,000 homes from 800MW. This estimation seems to be significantly out of step with other local NSIP projects, with one exception of Tillbridge that is also out-of-step with other projects. The local NSIP projects can be summarised as follows:
- Cottam (EN010133) - 180,000 homes from 600MW [Decided - Approved]
 - Gate Burton (EN010131) - 160,000 homes from 500MW [Decided - Approved]
 - Fosse Green Energy (EN010154) - 110,000 homes from 350MW [Pre Examination]
 - Heckington Fen (EN010123) - 100,000 homes from 500MW [Decided - Approved]
 - Leoda (EN0110016) - 143,000 homes from 500MW [Pre Application]

- One Earth (EN010159) - 200,000 homes from 740MW [Examination]
- Springwell (EN010149) - 180,000 homes from 800MW [Examination]
- Steeples Renewables (EN010163) - 180,000 homes from 450MW [Pre Examination]
- Tillbridge (EN010142) - 300,000 homes from 500MW [Recommendation]
- West Burton (EN010132) - 144,000 homes from 480MW [Decided - Approved]



44. The figures suggest that Great North Road will have the potential to power double the number of homes as One Earth which is the closest NSIP scheme; yet the generation is 800MW versus 740MW. The mean figure of the 11 NSIP schemes is 338 homes per MW, the median figure is 300 homes per MW. At the median figure of 300 homes per MW, GNR would only power 266,667 homes, only two-thirds of the stated number. Such a substantial difference in the suggested benefits may have materially affected the consultation process.

45. The number of properties that can be powered also depends on whether or not properties use mains gas. Newark and Sherwood is a district where 25.4% of properties do not have mains gas. As such those properties use more electricity. The applicant uses the average household electricity consumption figure of 2,700 kWh per annum. However, the Department for Energy Security & Net Zero¹² indicates that for standard electricity 3,400

¹² <https://assets.publishing.service.gov.uk/media/67e3eae39c9de963bc39b482/consumption-level-review-march-2025-methodology.pdf>

kWh per annum is the latest mean consumption level and for homes with Economy 7 electricity 4,800 kWh per annum is the latest mean consumption level.

46. The calculations also use a capacity factor of 16%, although the applicant acknowledges that 10% is the reasonable worst-case assumption. The Department for Energy Security & Net Zero¹³ through the Feed-in tariff load factor analysis for 2023-24 indicates: *“Median load factors for solar photovoltaic (PV) decreased to 9.4 per cent in 2023/24. This is the lowest recorded median in the time series. Average sun hours in 2023/24 were down on the previous year and were at their lowest since 2017/18.”* A similar figure of 9,5% is contained in the DESNZ¹⁴ Energy Trends: UK renewables, Renewable electricity capacity and generation (ET 6.1 - quarterly).
47. The assumptions on the number of homes that could be powered therefore does not appear to be based on cogent or substantive evidence. The headline benefits cited by the project therefore appear to be misleading and JPAG is concerned that such claims may have unduly influenced the consultation response.
48. Calculations suggest a substantial carbon avoidance from the BESS element of the scheme; it remains unclear how this is calculated because the BESS will not in itself produce electricity. If it stores electricity produced from renewable sources, then that carbon avoidance will have already been accounted for in its initial production and care is needed to avoid double counting. If the BESS stores electricity from that produced from non-renewable sources, then JPAG would query whether the scope 3 emissions of that non-renewable electricity from fossil fuels has been fully accounted for.
49. The applicant claims that the BESS would fully replace the necessity to produce electricity from gas sources and bases the carbon avoidance calculations on this basis. However, gas is not the only source for meeting the peak demand; nuclear, interconnectors and some flexible assets reserve such as pumped hydro also meet this role. In the future Staythorpe gas fired power station proposes a carbon capture and storage plant which would mean that it would then become a low carbon form of generation.
50. The project links to the Staythorpe grid connection and consequentially to the Staythorpe Power Station. That is a gas power station and as such the consideration of scope 3

¹³ https://assets.publishing.service.gov.uk/media/6762ec1cbe7b2c675de307d5/Feed-in_Tariff_load_factor_analysis_2023-24.pdf

¹⁴ <https://www.gov.uk/government/statistics/energy-trends-section-6-renewables>

emissions being considered as indirect environmental effects that must be included in an EIA, as prescribed in the Supreme Court case of *R (on the application of Finch on behalf of the Weald Action Group) v Surrey County Council* [2024].

Omission in the Environmental Statement

51. Public concern relating to Battery malfunction should be assessed and be scoped into the ES under the heading of Public Health. In *West Midlands Probation Committee v Secretary of State for the Environment and Walsall Metropolitan Borough Council* [1998] the court held that fear or apprehension could be a material consideration. In this case, it was found that the occupation of a probation hostel had led to incidents which had given rise to public concern, apprehension or fear of crime.
52. In *Newport County Borough Council v Secretary of State for Wales* [1998], it was held that the decision-maker might take into account genuine concerns over public safety, even when not supported by technical evidence. The genuinely held fear and apprehension that the BESS elements cannot be safely operated so close to residential dwellings must be taken into account as a material planning consideration and be weighed in the balance of factors against the DCO application.
53. The Secretary of State in reaching a decision on appeal APP/A0665/W/18/3207952 in Ellesmere Port on the 7 June 2022 concluded that stress and anxiety and their impact on well-being can be a relevant material planning consideration.
54. The Inspector Brian Cook BA (Hons) DipTP MRTPI in his report identified that stress and anxiety are recognised as factors affecting an individual's mental health. He suggested that this could be distilled to three questions. First, why has the appeal proposal given rise to stress in the local community, second, is it justified and, third, would there be an actual rather than a perceived health and well-being impact?
55. In this case the GNR proposal has given rise to stress in the local community arising from concern over the massive industrial scale of the proposal; the inclusion of BESS aspects; the lack of information and incorrect information contained in the Phase Two statutory consultation documents; the incidents that have taken place involving BESS; the suggested impact of vibration and noise; likely damage resulting from HGVs; inevitable pedestrian and vehicular conflict including in areas where past conflict has resulted in fatalities; the circular enveloping nature of the Order Limits; and the likelihood of increased surface

water run-off from slopes in excess of 6% into river catchments that have a recent severe impact of flooding homes and businesses.

Clarification Required

56. Clarity about the Staythorpe BESS that has now been incorporated into the Order Limits is required. It is accepted that has been granted planning permission on appeal, but is not shown as part of the GNR project yet it is included in the Order Limits boundary and as Elements Green now own the company that obtained the planning permission it will inevitably form part of the overall GNR project.

Legal Framework and Planning Considerations from National Policy Statements

57. The legal framework for the NSIP process is set out in the Planning Act 2008 (as amended). In addition to the Planning Act 2008, other legislation relating to the procedures are set out in various bits of secondary legislation, which currently include:

- The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (as amended)
- The Infrastructure Planning (Compulsory Acquisition) Regulations 2010 (as amended)
- The Infrastructure Planning (Examination Procedure) Rules 2010 (as amended)
- The Infrastructure Planning (Decisions) Regulations 2010 (as amended)
- The Infrastructure Planning (Fees) Regulations 2010 (as amended)
- The Infrastructure Planning (Changes to, and Revocation of, Development Consent Orders) Regulations 2011 (as amended)
- The Infrastructure Planning (Business or Commercial Projects) Regulations 2013
- The Infrastructure Planning (Interested Parties and Miscellaneous Prescribed Provisions) Regulations 2015 (as amended)

58. In addition, there are other provisions relating to Environmental Impact Assessment and Habitats Regulations that apply:

- The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (as amended)
- The Conservation of Habitats and Species Regulations 2017 (as amended)

59. National Policy Statements are produced by government. They give reasons for the policy set out in the statement and must include an explanation of how the policy takes account of government policy relating to the mitigation of, and adaptation to, climate change.

60. They comprise the government’s objectives for the development of nationally significant infrastructure in a particular sector and state, including:
- how this will contribute to sustainable development
 - how these objectives have been integrated with other government policies
 - how actual and projected capacity and demand have been taken into account
 - consideration of relevant issues in relation to safety or technology
 - circumstances where it would be particularly important to address the adverse impacts of development
 - specific locations, where appropriate, in order to provide a clear framework for investment and planning decisions
 - They also include any other policies or circumstances that ministers consider should be taken into account in decisions on infrastructure development.
61. National Policy Statements have undergone a process of public consultation and parliamentary scrutiny before being designated (published). They provide the framework within which Examining Authorities make their recommendations to the Secretary of State.
62. In considering how to respond, JPAG acknowledges that National Policy Statements provide the framework within which Examining Authorities make their recommendations to the Secretary of State. There are 12 designated National Policy Statements (NPS), setting out government policy on different types of national infrastructure development, those which are relevant to a Solar Energy NSIP:
- Overarching NPS for energy (EN-1)
 - NPS for renewable energy infrastructure (EN-3)
 - *[NPS for electricity networks infrastructure (EN-5) if it includes grid infrastructure]*
63. Section 104 of the Planning Act 2008¹⁵ sets out what the Secretary of State must have regard to in making his or her decision where a relevant NPS is designated. This includes any matter that the Secretary of State thinks is important and relevant to the Secretary of State’s decision. It also sets out that whether the adverse impact of the proposed development would outweigh its benefits is a relevant consideration.

¹⁵ <https://www.legislation.gov.uk/ukpga/2008/29/section/104>

64. Under NPS EN-1 the relevant matters that are relevant to the consideration of the proposed development are:

- 2 Government policy on energy and energy infrastructure development _____
 - 2.1 Introduction _____
 - 2.2 Net zero by 2050 _____
 - 2.3 Meeting net zero _____
 - 2.4 Decarbonising the power sector _____
 - 2.5 Security of energy supplies _____
 - 2.6 Sustainable development _____
- 3 The need for new nationally significant energy infrastructure projects _____
- 4 Assessment Principles _____
 - 4.1 General Policies and Considerations _____
 - 4.2 Environmental Principles _____
 - 4.3 Health _____
 - 4.4 Marine Considerations _____
 - 4.5 Environmental and Biodiversity Net Gain _____
 - 4.6 Criteria for “Good Design” for Energy Infrastructure _____
 - 4.7 Consideration of Combined Heat and Power (CHP) _____
 - 4.8 Carbon Capture and Storage (CCS) _____
 - 4.9 Climate Change Adaptation _____
 - 4.10 Network Connection _____
 - 4.11 Pollution Control and Other Environmental Regulatory Regimes _____
 - 4.12 Safety _____
 - 4.13 Hazardous Substances _____
 - 4.14 Common Law Nuisance and Statutory Nuisance _____
 - 4.15 Security Considerations _____
- 5 Generic Impacts _____
 - 5.1 Introduction _____
 - 5.2 Air Quality and Emissions _____
 - 5.3 Greenhouse Gas Emissions _____
 - 5.4 Biodiversity and Geological Conservation _____
 - 5.5 Civil and Military Aviation and Defence Interests _____
 - 5.6 Coastal Change _____
 - 5.7 Dust, Odour, Artificial Light, Smoke, Steam, and Insect Infestation _____

- 5.8 Flood Risk _____
- 5.9 Historic Environment _____
- 5.10 Landscape and Visual _____
- 5.11 Land Use, Including Open Space, Green Infrastructure, and Green Belt _____
- 5.12 Noise and Vibration _____
- 5.13 Socio-Economic Impacts _____
- 5.14 Traffic and Transport _____
- 5.15 Resource and Waste Management _____
- 5.16 Water Quality and Resources _____

65. Under NPS EN-3 the additional relevant matters that are relevant to the consideration of the proposed development are:

- 1.7 Appraisal of Sustainability and Habitats Regulation Assessment _____
- 2.1 General Assessment and Technology Specific Information _____
- 2.2 Relationship with English and Welsh renewables policies _____
- 2.3 Factors influencing site selection and design _____
- 2.4 Climate change adaptation and resilience _____
- 2.5 Consideration of good design for energy infrastructure _____
- 2.6 Flexibility in the project details _____

And in relation to Solar Photovoltaic Proposals specifically:

- Irradiance and site topography
- Network connection
- Proximity of a site to dwellings
- Agriculture land classification and land type
- Accessibility
- Public rights of ways
- Security and lighting
- Capacity of a site
- Site layout design, and appearance
- Project lifetime
- Decommissioning
- Flexibility in the project details
- Biodiversity, ecological, geological conservation and water management impacts
- Landscape, visual and residential amenity impacts
- Glint and glare
- Cultural Heritage
- Construction impacts including traffic and transport noise and vibration

Planning Considerations from Written Ministerial Statement

66. JPAG has also had due regard to the Written Ministerial Statement¹⁶ (WMS) that sets out the following matters as relevant planning considerations for Solar Energy proposals:

- Food Security
- Protecting the Best and Most Versatile Agricultural Land
- Cumulative Impacts

Environmental Impact Assessment Scoping Considerations

67. JPAG is aware that on the 19th December 2023 an EIA Scoping Opinion was adopted by the Planning Inspectorate (on behalf of the Secretary of State) pursuant to Regulation 10 of The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017.

| | |
|-----------|---|
| 3. | ENVIRONMENTAL ASPECT COMMENTS |
| 3.1 | Landscape and Visual |
| 3.2 | Ecology, Ornithology and Biodiversity |
| 3.3 | Hydrology, Hydrogeology, Flood Risk and Ground Conditions |
| 3.4 | Cultural Heritage and Archaeology |
| 3.5 | Noise (and vibration) |
| 3.6 | Socioeconomics, Tourism, Recreation and Land Use |
| 3.7 | Traffic and Access..... |
| 3.8 | Climate Change..... |
| 3.9 | Glint and Glare..... |
| 3.10 | Human Health..... |
| 3.11 | Telecommunications, Television Reception and Utilities..... |
| 3.12 | Waste..... |
| 3.13 | Air Quality..... |
| 3.14 | Major Accidents and Disasters |
| 3.15 | Inter relationships |

68. The scoping opinion above sets out the content that the Environmental Statement that must accompany the application will need to address.

Guidance and Advice

69. The This National Infrastructure Planning Guidance Portal¹⁷ has been introduced as part of the government’s recent reforms to the NSIP system.

¹⁶ Solar and protecting our Food Security and Best and Most Versatile (BMV) Land (15 May 2024)

¹⁷ <https://www.gov.uk/government/collections/national-infrastructure-planning-guidance-portal>

70. The National Infrastructure Planning Guidance Portal is coordinated by the Ministry of Housing, Communities and Local Government (MHCLG)¹⁸ as a central source for all users who wish to find guidance on all aspects of the NSIP system from pre-application through to post-consent changes, and a range of related matters.
71. There is guidance on the Portal relating to each stage in the process. The National Infrastructure Planning Guidance is non-statutory except where it applies to the pre-application stage and to cost recovery by certain public authorities. In these instances, guidance is statutory pursuant to:
- section 50 of the Planning Act 2008 and prospective applicants must have regard to it; and
 - section 54A of the Planning Act 2008 and prescribed public authorities must have regard to it.
72. The extent to which an applicant has had regard to section 50 guidance will be taken into account by the Planning Inspectorate when deciding whether to accept an application for examination.
73. The guidance is a comprehensive guide to the operation of the NSIP consenting process under the Planning Act 2008 but should always be read alongside the relevant legislation.

The Development Plan and Supplementary Planning Documents

74. The adopted Development Plan and Supplementary Planning Documents which are relevant to the determination of this application are:
- Newark and Sherwood Amended Core Strategy
 - Newark and Sherwood Allocations & Development Management DPD
 - Nottinghamshire Minerals Local Plan
 - Nottinghamshire Waste Local Plan
 - Newark & Sherwood Landscape Character Assessment SPD
 - Newark & Sherwood Solar Energy SPD
75. The Newark and Sherwood Amended Allocations & Development Management DPD is currently at examination and given its advanced stage can be afforded weight in the determination of the DCO application.

¹⁸ The Planning Inspectorate is an Executive Agency of MHCLG

Material Planning Considerations

76. Other relevant national material planning considerations include:

- National Planning Policy Framework
- Planning Practice Guidance
- National Flood Risk Assessment (NaFRA)

77. The Court of Appeal judgment in *Mead Realisations Ltd v Secretary of State for Housing, Communities and Local Government [2025]* confirmed that there was no legal principle that prevents national policy in the NPPF being amended, or altered, by the PPG. The Court explained that the legal status of the NPPF and the PPG is essentially the same; no legal distinction exists between them. Both are statements of national policy issued by the Secretary of State exercising his general power to do so as minister with overall responsibility for the planning system.

78. They have somewhat different purposes: the NPPF “*is a comprehensive framework of national planning policy, in which the Government sets out its general policies for planning decision-taking and plan preparation*”, whereas the PPG “*is national guidance for planning practice, which can reinforce that framework*” [paragraph 34 of judgement]. It is not right, however, to describe the PPG as being, in a legal sense, wholly subservient or subordinate to the NPPF in a hierarchy of national planning policy. Policies in the NPPF and guidance in the PPG may be used as an aid to interpretation of each other. The publication of the PPG does not need to be contemporaneous with the NPPF in order to explain its intention. Together the NPPF and PPG “*form a mature body of planning policy and guidance*” [paragraph 34 of judgement].

79. Other local relevant material planning considerations include:

- The Rights of Way Management Plan for Nottinghamshire
- Eakring Conservation Area Character Appraisal¹⁹
- Laxton Conservation Area Character Appraisal
- Newark & Sherwood Non-Designated Heritage Assets: Criteria
- The Nottinghamshire local biodiversity action plan
- Newark & Sherwood Strategic Flood Risk Assessment

¹⁹ Note - There are no published Conservation Area Character Appraisals for the Maplebeck Conservation Area; Cauntun Conservation Area; Kersall Conservation Area; or Kelham Conservation Area

Scale of Development

80. The scale of GNR is disproportionate to host communities. The Development is a doughnut that extends across an area of 18,119.9ha²⁰, of which 1,765ha, is encompassed within the Order Limits. The majority of the land within the Order Limits is currently used for arable crops or is otherwise down to pasture.
81. The GNR project includes land within or immediately abuts a total of 22 Parishes, namely: Averham, Bathley, Carlton on Trent, Caunton, Cromwell, Eakring, Egmanon, Hockerton, Kelham, Kersall, Kneesall, Laxton & Moorhouse, Maplebeck, North Muskham, Norwell & Norwell Woodhouse, Ossington, South Muskham & Little Carlton, Staythorpe, Sutton on Trent, Upton, Weston, and Winkburn.
82. In the context of Newark & Sherwood District which has a total of 84 Parishes, GNR impacts on more than a quarter of the Parishes in the entire District. By contrast, the One Earth Solar Farm, which is the nearest other DCO solar project is within or immediately abuts 10 Parishes.
83. The circular nature of the GNR scheme encircles entire communities across the area of 18,119.8ha that the Development extends across. GNR is in the form of a doughnut. As such the impact of GNR extends across a much greater area than a solar farm such which is more concentrated. This impact is particularly increased by other solar farms and BESS projects, existing and proposed²¹ that effectively fill in some of the gaps within the GNR circle. Other proposed NSIP projects²² also form part of the doughnut, as do existing and proposed quarries²³.
84. In terms of an explanation of the scale of GNR we have undertaken analysis as follows:

GNR Development Extends Across

²⁰ Figure stated by the Applicant in the Preliminary Environmental Information Report (PEIR)

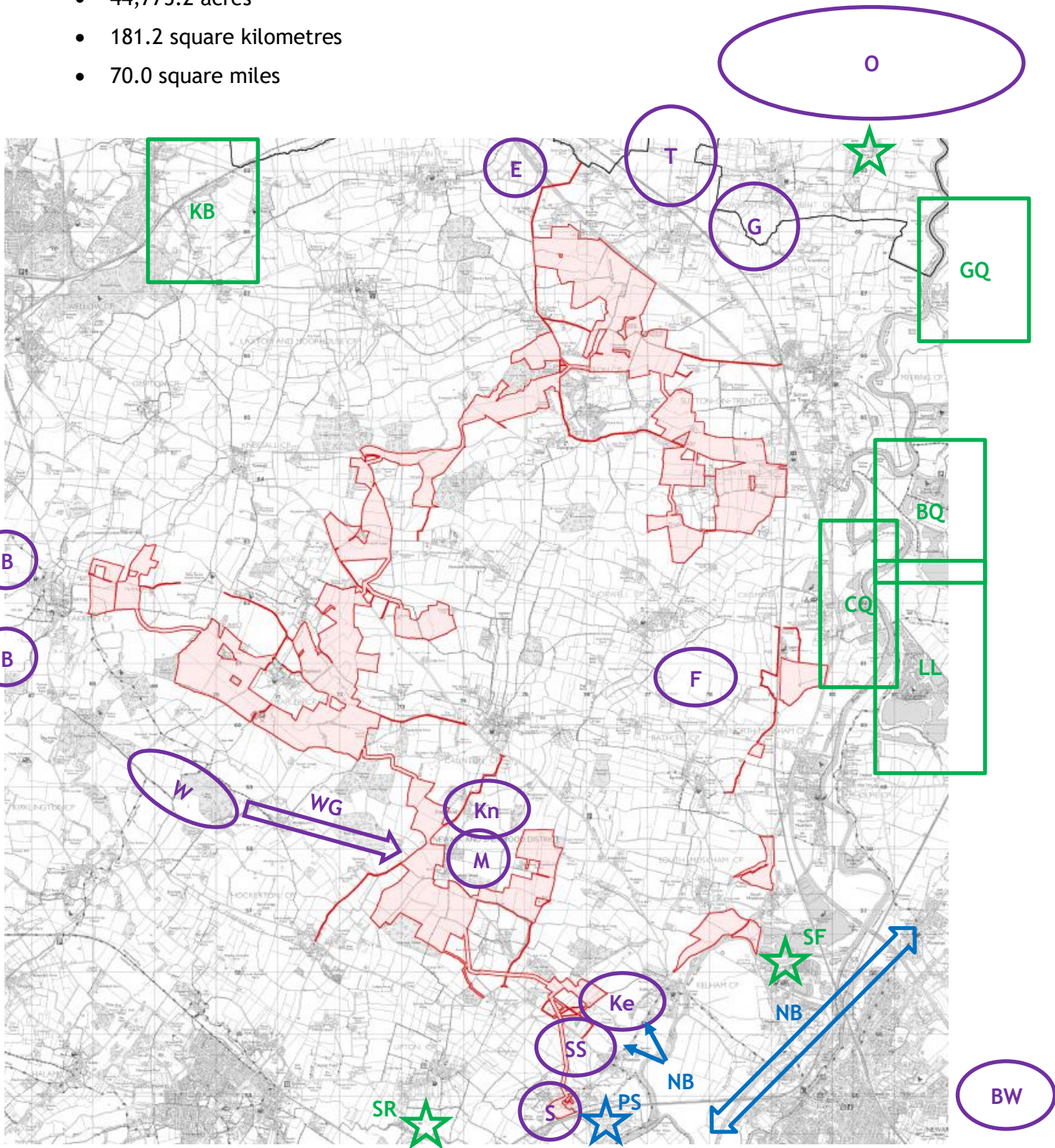
²¹ Includes Bilsthorpe x 3 (Existing), Egmanon (Existing), Tuxford Road (Under Construction - Enso), Grassthorpe Beck (Proposed by Enso), Foxholes (Awaiting determination - SSE), Kelham (Public Inquiry Pending), SSE Staythorpe BESS (Approved), Staythorpe BESS (Under Construction in Order Limits by EDF), Muskham (Approved – SSE), Knapthorpe (Approved - SSE) and Winkburn (Under Construction – Sonnedix). Together with One Earth (at Examination) and Barnby in the Willows (initial proposals)

²² Newark Bypass (including the compensatory flood storage at Averham/Kelham) (Decision Stage) and Staythorpe Power Station Carbon Capture and Storage (Proposed)

²³ Kirton Quarry and Brickworks, Cromwell Quarry, Langford Lowfields Quarry and Besthorpe Quarry, together with Girton Quarry (all currently exist, and all have permitted or Local Plan allocated extensions)

85. The Great North Road Solar Project²⁴ development extends across an area as follows:

- 18,119.9 hectares
- 44,775.2 acres
- 181.2 square kilometres
- 70.0 square miles



Extract From Site Location with Nearby Projects Highlighted

²⁴ Data specified in the PEIR

Solar/BESS

Kn = Knapthorpe M = Muskham W - Winkburn F = Foxholes
E = Egmanton Ke = Kelham B = Bilsthorpe T = Tuxford Road
S = Staythorpe BESS (EDF) SS = Staythorpe BESS (SSE) G = Grassthorpe Beck
O = One Earth BW = Barnby in the Willows

Grid Connections and Other Power Generation

WG = Winkburn PS = Staythorpe Power Station & Proposed Carbon Capture/400kV GSP
H = JG Pears Plant inc. Power Plant/400kV Grid Supply Point

Other NSIP Projects, Quarries and Major Sites

NB = Newark Bypass KB = Kirton Brickworks CQ = Cromwell Quarry
BQ = Besthorpe Quarry GQ = Girton Quarry LL = Langford Lowfields Quarry
SR = Southwell Racecourse SF = Newark Sugar Factory

GNR Order Limits

86. The area to be covered by the Great North Road Solar Project²⁵ is as follows:

- 1,765 hectares
- 4,361.4 acres
- 17.65 square kilometres
- 6.8 square miles

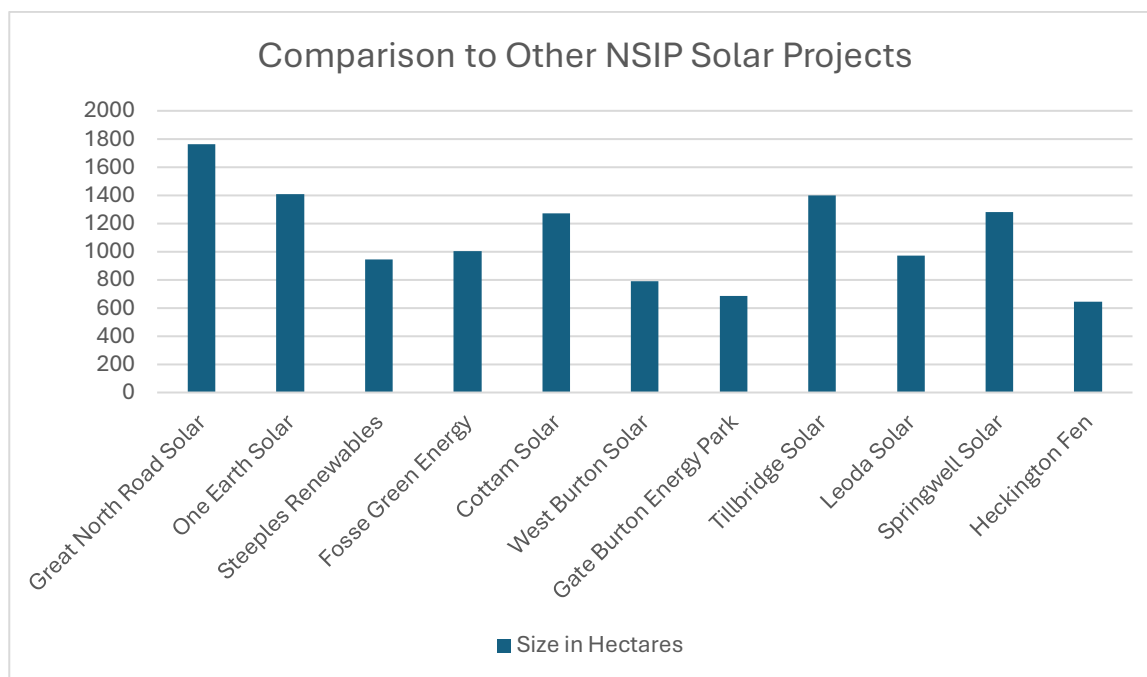
Comparison to Other NSIP Solar Projects

87. Other NSIP Solar Projects²⁶ include:

- One Earth Solar (Newark & Sherwood/Bassetlaw/West Lindsey) - 1,409 hectares
- Steeples Renewables (Bassetlaw) - 944 hectares
- Fosse Green Energy (North Kesteven) - 1,003 hectares
- Cottam Solar (West Lindsey/Bassetlaw) - 1,270 hectares
- West Burton Solar (West Lindsey/Bassetlaw) - 788 hectares
- Gate Burton Energy Park Solar (West Lindsey/Bassetlaw) - 684 hectares
- Tillbridge Solar (West Lindsey/Bassetlaw) - 1,400 hectares
- Leoda Solar (North Kesteven) - 971 hectares
- Springwell Solar (North Kesteven) - 1,280 hectares
- Heckington Fen (North Kesteven) - 645 hectares

²⁵ Document APP-039 6.1.1 Environmental Statement Volume 1 – Non-Technical Summary - Part 1 of 4 - Rev 1

²⁶ Areas are taken from the various project websites (accessed July 2024 or February 2025 or September 2025)



88. In terms of a comparison of Other NSIP Solar Projects to Great North Road Solar:

- One Earth Solar at 1,409 hectares is 79.8% the size of Great North Road
- Steeples Renewables at 944 hectares is 53.5% the size of Great North Road
- Fosse Green Energy at 1,003 hectares is 56.8% the size of Great North Road
- Cottam Solar at 1,270 hectares is 71.9% the size of Great North Road
- West Burton Solar at 788 hectares is 44.6% the size of Great North Road
- Gate Burton Energy Park Solar at 684 hectares is 38.8% the size of Great North Road
- Tillbridge Solar at 1,400 hectares is 79.3% the size of Great North Road
- Leoda Solar at 971 hectares is 55.0% the size of Great North Road
- Springwell Solar at 1,280 hectares is 72.5% the size of Great North Road
- Heckington Fen at 645 hectares is 36.5% the size of Great North Road

Comparison to Other Major Sites That May Be Familiar to Local Residents

89. Other Major Sites That May Be Familiar to Local Residents Include:

- East Midlands Airport²⁷ - 349 hectares
- Rutland Water²⁸ - 1,699 hectares
- British Steel Scunthorpe²⁹ - 809 hectares
- Holme Pierrepont Country Park & National Watersports Centre³⁰ - 109 hectares

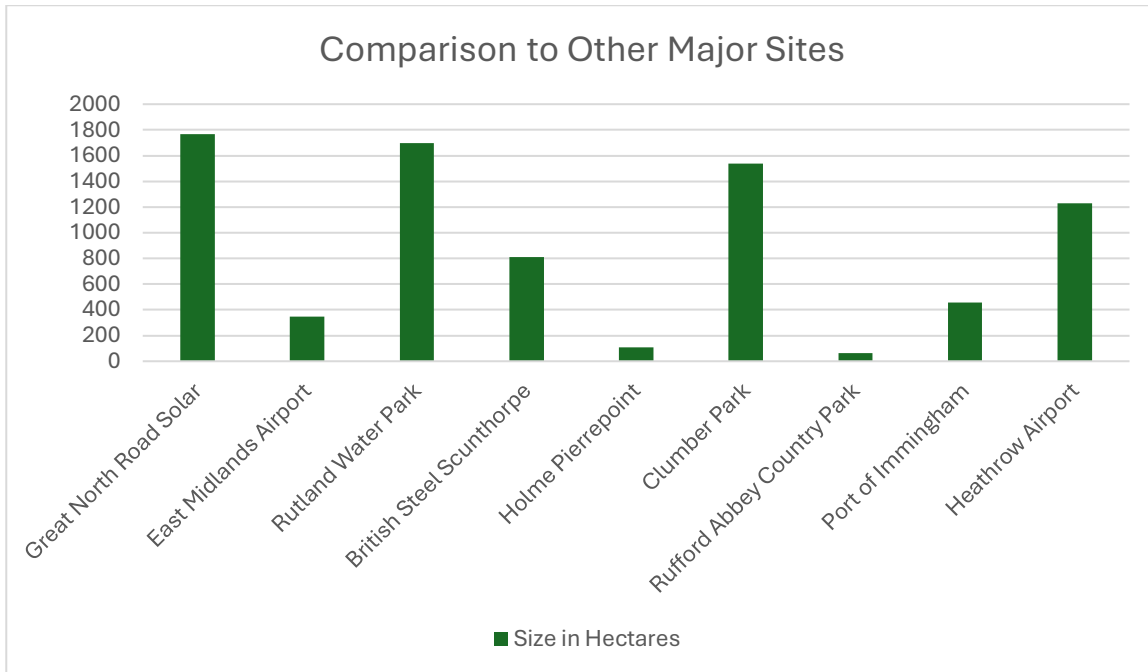
²⁷ Data published by East Midlands Airport 3.49 square kilometres

²⁸ Data from Anglian Water 4,200 acres, this includes the surrounding countryside in the Rutland Water Park

²⁹ Data from British Steel 2,000 acres

³⁰ Data from Holme Pierrepont Country Park 270 acres

- Clumber Park³¹ - 1,537 hectares
- Rufford Abbey Country Park³² - 61 hectares
- Port of Immingham³³ - 458 hectares
- Heathrow Airport³⁴ - 1,227 hectares



90. In terms of a comparison of Other Major Sites That May Be Familiar to Local Residents:

- Great North Road Solar is 5.06 times the size of East Midlands Airport
- Great North Road Solar is 1.04 times the size of Rutland Water
- Great North Road Solar is 2.18 times the size of British Steel Scunthorpe
- Great North Road Solar is 16.19 times the size of Holme Pierrepont Country Park & National Watersports Centre
- Great North Road Solar is 1.15 times the size of Clumber Park
- Great North Road Solar is 28.93 times the size of Rufford Abbey Country Park
- Great North Road Solar is 3.85 times the size of Port of Immingham
- Great North Road Solar is 1.38 times the size of Heathrow Airport

Comparison to Other Large Sites in Newark & Sherwood

³¹ Data from National Trust 3,800 acres

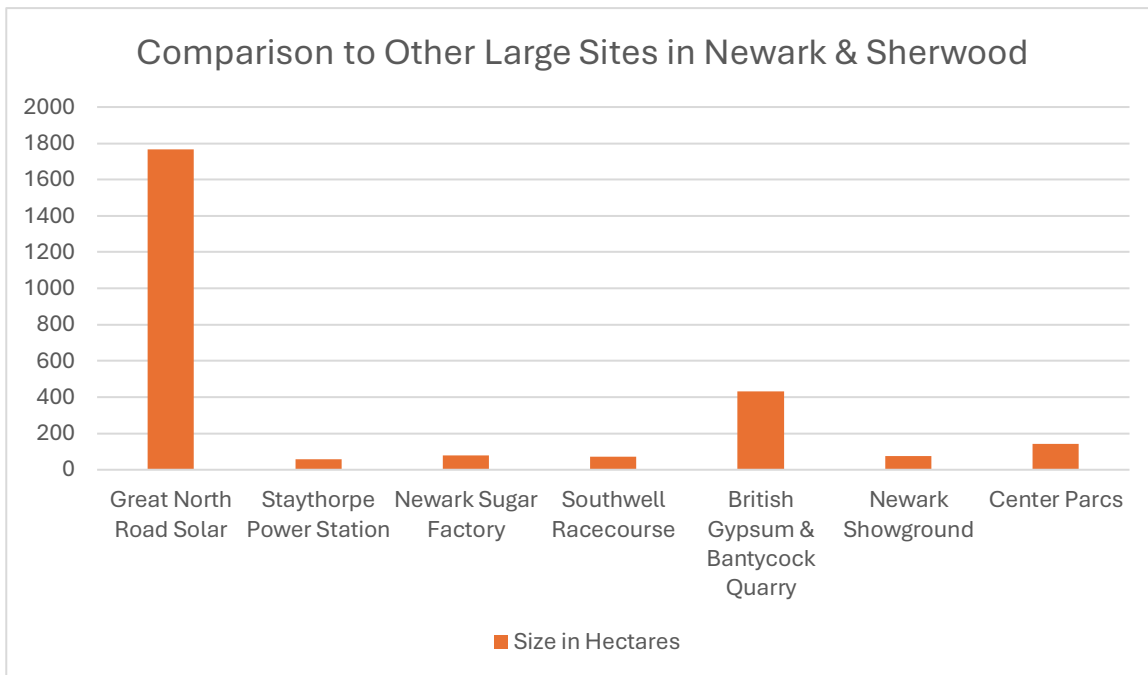
³² Data from NCC 150 acres

³³ Data from Associated British Ports 1,133 acres

³⁴ Data from Heathrow.com

91. Other Large Sites in Newark & Sherwood³⁵ include:

- Staythorpe Power Station - 57 hectares
- Newark Sugar Factory - 78 hectares
- Southwell Racecourse - 71 hectares
- British Gypsum & Bantycok Quarry - 432 hectares
- Newark Showground - 77 hectares
- Center Parcs - 142 hectares



92. In comparison to Other Large Sites in Newark & Sherwood to Great North Road Solar:

- Great North Road Solar is 30.96 times the size of Staythorpe Power Station
- Great North Road Solar is 22.63 times the size of Newark Sugar Factory
- Great North Road Solar is 24.86 times the size of Southwell Racecourse
- Great North Road Solar is 4.09 times the size of British Gypsum & Bantycok Quarry
- Great North Road Solar is 22.92 times the size of Newark Showground
- Great North Road Solar is 12.43 times the size of Center Parcs

Comparison to Built-up Areas in Newark & Sherwood

93. The built-up area of the main settlements³⁶ in Newark & Sherwood are:

³⁵ Measured on Nottinghamshire Insight Mapping

³⁶ The settlements with the status of a Town with the addition of Balderton and Fernwood into the Newark Urban Area as the Newark & Sherwood Amended Core strategy defines the Newark Urban Area as including them

The town of Southwell³⁷ is:

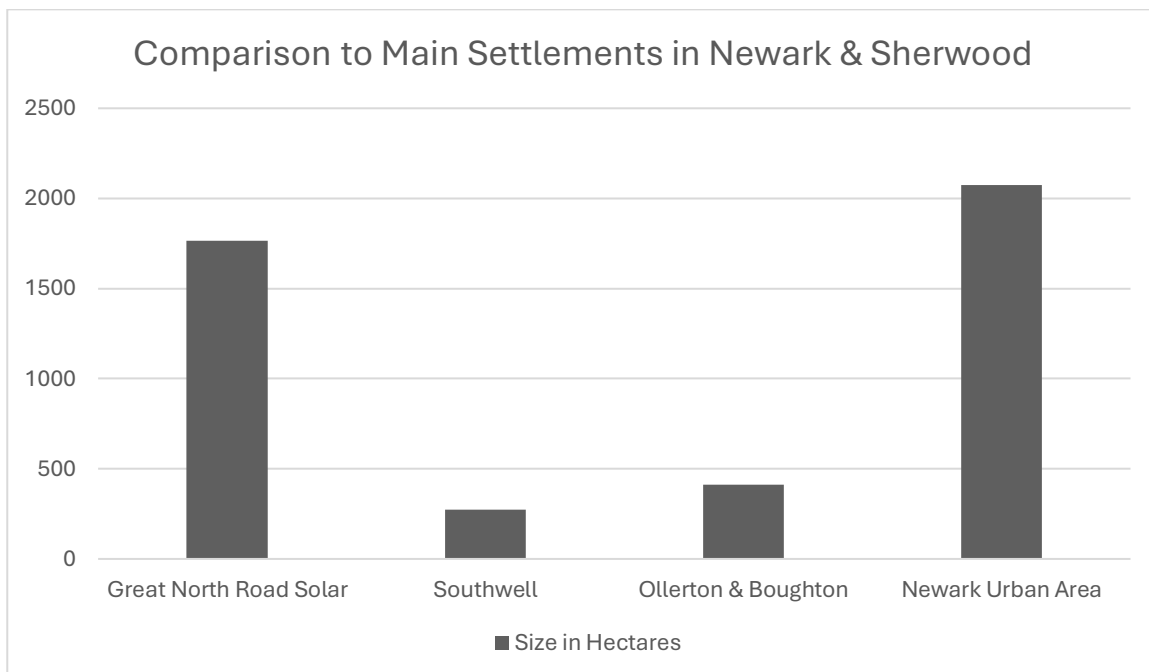
- 274 hectares
- 677 acres
- 2.74 square kilometres
- 1.06 square miles

The town of Ollerton & Boughton (including Boughton Industrial Estate)³⁸ is:

- 413 hectares
- 1,020 acres
- 4.13 square kilometres
- 1.59 square miles

The Newark Urban Area (includes Newark, Balderton & Fernwood and the Planned Urban Extensions of Land South of Newark, Land East of Newark & Land Around Fernwood)³⁹ is:

- 2,073 hectares
- 5,122 acres
- 20.73 square kilometres
- 8.00 square miles



³⁷ Measured on Nottinghamshire Insight Mapping

³⁸ Measured on Nottinghamshire Insight Mapping

³⁹ Measured on Nottinghamshire Insight Mapping

94. By way of comparison to the Main Settlements in Newark & Sherwood:

- Great North Road Solar is 6.44 times the size of the built-up area of the Town of Southwell
- Great North Road Solar is 4.27 times the size of the built-up area of the Town of Ollerton & Boughton (including Boughton Industrial Estate)
- Great North Road Solar is 85% the size of the built-up area of the Newark Urban Area (which includes Newark, Balderton & Fernwood and the Planned Urban Extensions of Land South of Newark, Land East of Newark & Land Around Fernwood)

Zones of Influence

95. The circular nature of the GNR project represents an unusual and potentially unique set of circumstances where impacts can be felt on local communities in all directions. As such JPAG considers the traditional approach of identifying zones of influence in the Environmental Statement for the consideration of potential impacts fails to fully consider the encircling effect of the development.
96. In addition to the overall encircling effect that occurs across the entire GNR project, localised severe encircling impacts arise on individual communities. These communities completely surrounded include Staythorpe, Averham Park and Maplebeck. Other communities within the circle including Norwell, Norwell Woodhouse, Ossington, Caunton, Bathley, Kersall and Moorhouse will not be able to leave their villages without going through the GNR.
97. The nature of the River Trent and the limited crossing points means that settlements like Averham and Kelham will not be able to effectively leave their villages without going through the GNR.
98. As such, in the Environmental Statement we consider that the zones of influence used for assessing impacts should include all of the 18,119.8 hectares over which the Development extends across, with the buffer then applying to the outer edge of the circle formed by the Order Limits. It is acknowledged that this would increase the area to be investigated for the various topics. However, the applicant has chosen to extend the Development over such a massive area; therefore, the burden and cost of undertaking adequate investigations is of their own making.

Site Selection Methodology

99. The site selection methodology in the PEIR listed the factors considered in site selection as:

- Within a 15 km radius of the Staythorpe substation;
- Area south and east of the A1 and River Trent were also excluded due to the multiple environmental factors affecting the road and river corridor and the additional costs of crossing the Trent;
- Physical and developer considerations (buildings, woodlands, roads, railways, watercourses, existing power lines and steep slopes);
- Landscape and visual considerations (local landscape designations (the potential Sherwood Forest Regional Park), proximity to buildings, and local plan allocations for other uses);
- Heritage considerations (listed buildings, scheduled monuments, conservation areas, historic parks and gardens, battlefields and local heritage designations (the historic landscape at Laxton, and Sherwood Forest Heritage Area));
- Land use considerations (parks and recreation areas, local plan allocated development sites; local plan safeguarded areas; Agricultural Land Classification (ALC) Grade 1 land; and Green Belt, minerals safeguarded areas; ALC Grade 2 land; proximity to a Public Right of Way; open access land (including commons)); and
- Hydrology, ecology and geology considerations (Sites of Special Scientific Interest (SSSIs), SACs, National Nature Reserves (NNRs), ancient woodland, Local Nature Reserves (LNRs), flood zones 2 and 3, local wildlife sites, irreplaceable habitats (as identified within the Priority Habitat Inventory) and Local Geological Sites.

100. The Design Approach Document⁴⁰ now lists different criteria for the site selection and early design as:

- Identifying land that is physically and technically suitable for the Development;
- Avoiding development within designated landscapes, heritage assets and ecology designations and maintaining separation from these;
- Maintaining separation from settlements and homes;
- Avoiding development within Green Belt, Local Plan allocations and minimising use of land identified as being of the best agricultural quality;
- Limiting development within areas identified as having a higher risk of flooding, and

⁴⁰ APP-319, APP-320, APP-321 & APP-322 Design Approach Document Parts 1 to 4

- Working with willing landowners to avoid the need for compulsory purchase.

101. The Environmental Statement⁴¹ goes on to say: *“Alternative technologies, for generating 800 MW (AC) and connecting this at the existing Staythorpe substation, have been considered and discounted. A nuclear power station could not be developed and operational by c. 2029, as the Development could be. The local area is not suitable for wind generation of this scale. To generate this capacity with wind turbines would require c. 400 turbines of height c. 120 m, or 130 turbines of height c. 200 m, and there is insufficient landscape capacity and space between residential properties to accommodate these whilst meeting relevant guidelines and standards. A solar park that was smaller in area would have a smaller electrical energy generating capacity and has not been considered as an alternative. A solar park with lower energy generating capacity would not deliver the same energy benefits as the Development or maximise the use of the available grid infrastructure and capacity at the National Grid Staythorpe substation.”*

102. No cogent or substantive evidence is provided to support the contention that alternative technologies have actually been considered as alternatives. The River Trent valley is considered suitable by the Government for some form of nuclear electricity generation. West Burton in North Nottinghamshire has been selected as the home of the ambitious STEP fusion energy programme led by the UK Atomic Energy Authority. Very recently as a precursor to the State Visit of the President of the United States in September 2025, Cottam in North Nottinghamshire has been announced as the location for a US-UK⁴² Small Modular Reactor nuclear power station.

103. The applicant has not undertaken any analysis as to the feasibility as an alternative for example of Small Modular Reactors, a form of nuclear power. A Rolls-Royce SMR power station as an example could have the capacity to generate 470MW of low carbon energy⁴³. Neither has there been any consideration of further expansion of generation at Staythorpe Power Station using carbon capture and storage technology.

⁴¹ APP-039 6.1.1 Environmental Statement Volume 1 – Non-Technical Summary - Part 1 of 4 - Rev 1

⁴² A partnership of Holtec International, EDF UK and Tritax, see <https://www.edfenergy.com/media-centre/holtec-international-edf-uk-and-tritax-announce-plans-develop-cottam-site-data-centres-and>

⁴³ Source Rolls Royce SMR website - <https://www.rolls-royce.com/innovation/small-modular-reactors.aspx#section-smr-build>

104. As such there appears to have been no consideration of reasonable alternatives to the potential generation of electricity. There has been no consideration of options of splitting the development into smaller projects; neither has there been any consideration of a project that generates a lower level of electricity output. The entire project has been driven simply by the agreement of 800MW of grid connection and land which landowners have put forward.
105. There has also been no explanation as to other land that has been considered and has been discounted as being unacceptable with the full reasoning given for discounting such land. The only explanation the PEIR put forward previously was that in order to minimise visibility from settlements, this influenced the omission of north-facing valley sides to the south of Kneesall; slopes facing towards the northwest edge of Norwell Woodhouse, and fields close to Bathley. However, no such consideration seems to have been considered regarding visibility from Staythorpe and Averham of the BESS and substation for example.
106. Whether the project could be operational by 2029 is not supported by evidence. The applicant has indicated that they do not wish to build and operate the project themselves but instead propose to sell the scheme to an operator. The Order Limits overlaps the existing permitted 360MW/720MWh Staythorpe Battery Energy Storage System (BESS), now under early-stage construction. EDF has signed a long-term arrangement with Elements Green to support delivery of the project and EDF will operate the BESS⁴⁴. It is noted that the BESS is not expected to be operational until 2027.
107. The permitted⁴⁵ SSE Staythorpe BESS according to the NESO TWR Report⁴⁶ requires four elements of enabling works at the Staythorpe 400kV connection. These works are not expected to be completed until 29/09/2028. At the time of the planning application SSE said that the BESS would be operational by Q3 2024. Therefore, that BESS scheme appears now to have been delayed by some four years.
108. The Staythorpe BESS scheme under construction by the applicant and Mitie (to be operated by EDF) within the Order Limits was also indicated in the consultation process to be

⁴⁴ <https://www.edfenergy.com/media-centre/edf-and-elements-green-agree-long-term-deal-support-360mw-staythorpe-battery-project>

⁴⁵ 23/00317/FULM permitted on 14 May 2025

⁴⁶ National Energy System Operator Transmission Works Report (dated 5 September 2025)
<https://www.neso.energy/document/109126/download>

operational by Q2 or Q3 2025. Now EDF have indicated that the BESS will not become operational until 2027. A delay of some 2 years from what was anticipated.

109. It is understood that Staythorpe Grid Supply Point (GSP) has two Super Grid Transformers (SGTs), each rated at 240 MVA. The group demand is approaching this rating and is projected to exceed it in the near future. At this point there will be an N-1 constraint at Staythorpe GSP (loss of one of the SGTs). In terms of reinforcement the proposed solution is to install an additional SGT at Staythorpe.
110. “N-1” is an informal electricity network term used to describe foreseeable operating conditions in which a single circuit is temporarily removed from operation. This is usually as a result of a planned outage to temporarily take a circuit out of service for maintenance purposes, or it may arise as a result of a system fault. The “N” in N-1 is an abbreviation for normal, as in normal operating conditions.
111. The enduring solution to the problem is to install a new third SGT at Staythorpe. National Grid Electricity Distribution suggests that the completion of the additional SGT at Staythorpe could be installed and operational by the end of October 2030. It is unclear however, if a third SGT has funding and all of the relevant consents. Neither is there clarity as to what impact the lack of the third SGT may have on GNR in terms of deliverability and the timing of becoming operational.
112. The Order Limits are located within National Character Area 48 Trent and Belvoir Vales, and the majority of the Order Limits fall within the local Mid Nottinghamshire Farmlands - Village Farmlands with Ancient Woodlands Landscape Character Type. The Environmental Statement⁴⁷ in section 7.5.3 states: *“The area within and immediately surrounding the Order Limits is rural in character although proximity to Newark-on-Trent, major transport infrastructure including the A1 road and East Coast Main Line (ECML) railway, and Staythorpe Power Station and associated transmission infrastructure all exert a more urbanising influence over areas to the immediate east and south.”* The applicant had also made similar such derogatory statements at Parish meetings that they have been to.

⁴⁷ APP-050 6.2.7 Environmental Statement Volume 2 – Chapters Chapter 7 – Landscape and Visual Impact Assessment
- Rev 1

113. The Environmental Statement and associated Landscape and Visual Impact Assessment take an incorrect starting point to the character of the area by describing existing infrastructure as having an urbanising influence. The A1 and ECML form a broadly similar alignment up the western side of the River Trent valley. The A1 lies to the east of the Order Limits and the ECML largely lies to the east of the Order Limits except for a stretch south of Cromwell. As such these two strategic transport routes do not impact on the majority of the 18,199.7ha of land over which the development is located.
114. Staythorpe Power Station is actually sited on a modest site, some 3.23% the size of GNR. It has been occupied by at least one power station since 1950 when Staythorpe A was commissioned following authorisation in 1946. Staythorpe A closed in 1983. Staythorpe B was commissioned in 1962 and closed in 1994. The current Staythorpe C was commissioned in 2010 and produces enough power for around 2.8 million homes⁴⁸. The site has a history of power generation of almost 80 years since the original approval in 1946. Staythorpe C is substantially lower in height than the previous two coal fired power stations and its location adjacent to the south-east corner of the Order Limits means that it does not impact on the majority of the 18,199.7ha of land over which the development is located.
115. The Order Limits area is crossed by four overhead power lines, at the Staythorpe National Grid Connection Point a number of other overhead lines connect going off to the south and south-east away from the Order Limits. These overhead lines are prominent but are not an urbanising influence in the way the applicant suggests.
116. Even if the applicant's contention that existing infrastructure has an urbanising influence was accepted that is not justification to add such large-scale infrastructure that would have an industrialisation impact on the landscape. Indeed, to the contrary, there is stronger justification to conserve the unspoilt aspects of the landscape. To apply the logic advanced by the applicant, in the Hope Valley in the Peak District National Park just because the large Hope Cement Works exists, that as an urbanising feature would be justification to put a massive solar farm next to it. In that example the contention is non-sensical as it is in our case.
117. GNR is proposed in the Mid-Nottinghamshire Farmlands and Trent Washlands Regional Character Areas. Most of the Landscape Character Areas are in Good or Moderate Condition and have actions related to the principle of conserve in the Newark & Sherwood

⁴⁸ Source RWE

Landscape Character SPD. For the Mid-Notts Farmland the SPD says: *“The power generating industry warrants separate consideration due to its enormous impact on the landscape of the region. There are two functioning coal-fired power stations located in the neighbouring Trent Washlands, Cottam, and West Burton to the east. The power stations and associated web of high voltage power lines, of which 4 cross this character area, constitute the most dominant and visually intrusive landscape features within and out-with the Mid-Nottinghamshire Farmlands.”*

118. The SPD on Trent Washlands says: *“The two functioning coal-fired power stations located in the Trent Washlands, Cottam, and West Burton are both within Bassetlaw District. Although located outside of the district the power stations, cooling towers and associated web of high voltage power lines constitute the most dominant and visually intrusive landscape features within the Trent Valley River valley corridor. The Staythorpe combined cycle gas turbine station (CCGT) opened in May 2011 on the site of a former energy site. It produces enough electricity to power around 2.8 million homes.”* It should be noted that the cooling towers of the redundant Cottam coal fired power station were recently demolished.
119. The PEIR identified that: *“Mid-Nottinghamshire Farmlands / Village Farmlands with Ancient Woodlands - Taking account of the Large, Medium and Small-scale changes to character across the south, centre and east of the LCT - a Wide extent - impacts on the LCT would be of Large/medium magnitude and effects would be Major/moderate, Adverse and significant.”*
120. The PEIR went on to acknowledge that: *“Trent Washlands / Village Farmlands - Large to Medium scale changes for an Intermediate extent of the LCT between Kelham and Cromwell as result of the combination of solar areas within and adjacent to the LCT, along with improvements in condition to create the proposed ecological enhancement areas within the LCT. On balance, these effects would be Adverse. Large scale changes within a Limited extent of the LCT east of the railway line near Carlton-on-Trent; and □ Negligible changes to character elsewhere within the LCT. Considered together these impacts would be of Large/medium magnitude and effects would be Major/moderate, Adverse and significant.”*

121. The ES Non-Technical Summary⁴⁹ in section 7.5 concludes: *“Significant, adverse effects would arise during construction and early operation on the one landscape character type (LCT) which would host most of the Development. This results from the physical presence of the Development within it and the locally characteristic rural views of villages, separated by gently undulating arable fields bordered by hedges, changing to include close views of solar panels and the substations and BESS.”*

122. The ES continues: *“The significantly affected landscape character type - Mid-Nottinghamshire Farmlands / Village Farmlands with Ancient Woodlands LCT is a larger scale, flatter arable landscapes with hedges and woodlands characteristically dividing the fields. Ancient woodland is also a characteristic component which would not be affected by the Development. Effects on other landscape character types would not be significant.”*

123. The Design Approach Document⁵⁰ indicates that design has been informed from the earliest stages by environmental considerations. Site selection and early design have taken account of community, technical and environmental factors including:

- Identifying land that is physically and technically suitable for the Development;
- Avoiding development within designated landscapes, heritage assets and ecology designations and maintaining separation from these;
- Maintaining separation from settlements and homes;
- Avoiding development within Green Belt, Local Plan allocations and minimising use of land identified as being of the best agricultural quality;
- Limiting development within areas identified as having a higher risk of flooding, and
- Working with willing landowners to avoid the need for compulsory purchase.

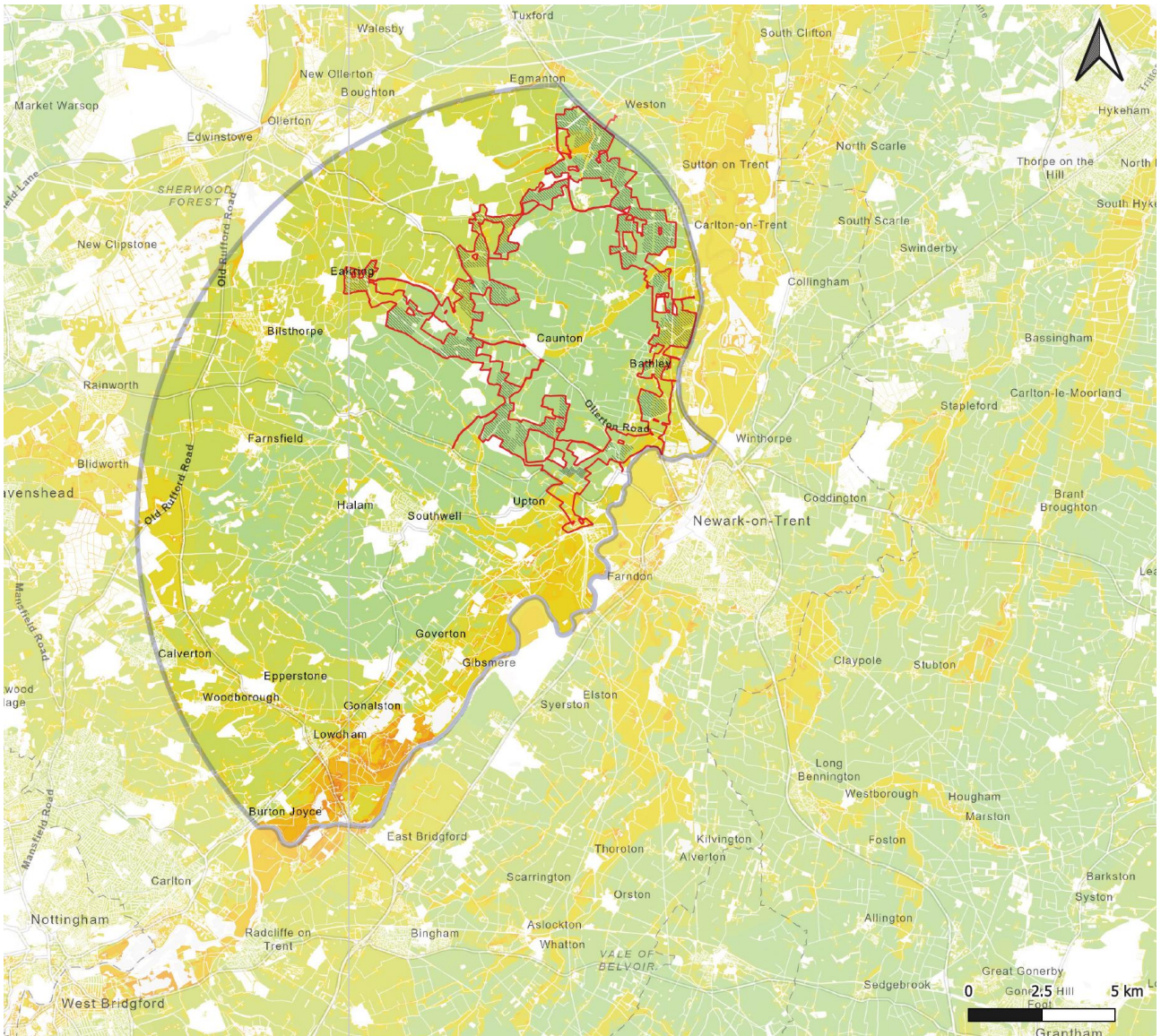
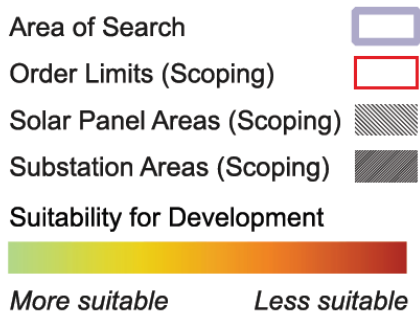
124. There is an inconsistency however as these factors do not reflect those in the site selection and consideration of alternatives set out earlier. Site selection has been too heavily driven by landowners, rather than being the most appropriate and suitable land chosen through a robust site selection methodology.

125. The site selection area is shown to have been:

⁴⁹ APP-039 6.1.1 Environmental Statement Volume 1 – Non-Technical Summary - Part 1 of 4 - Rev 1

⁵⁰ APP-319 5.6 Design Approach Document - Part 1 of 4 - Rev 1

Figure 1: Site Selection Outcomes

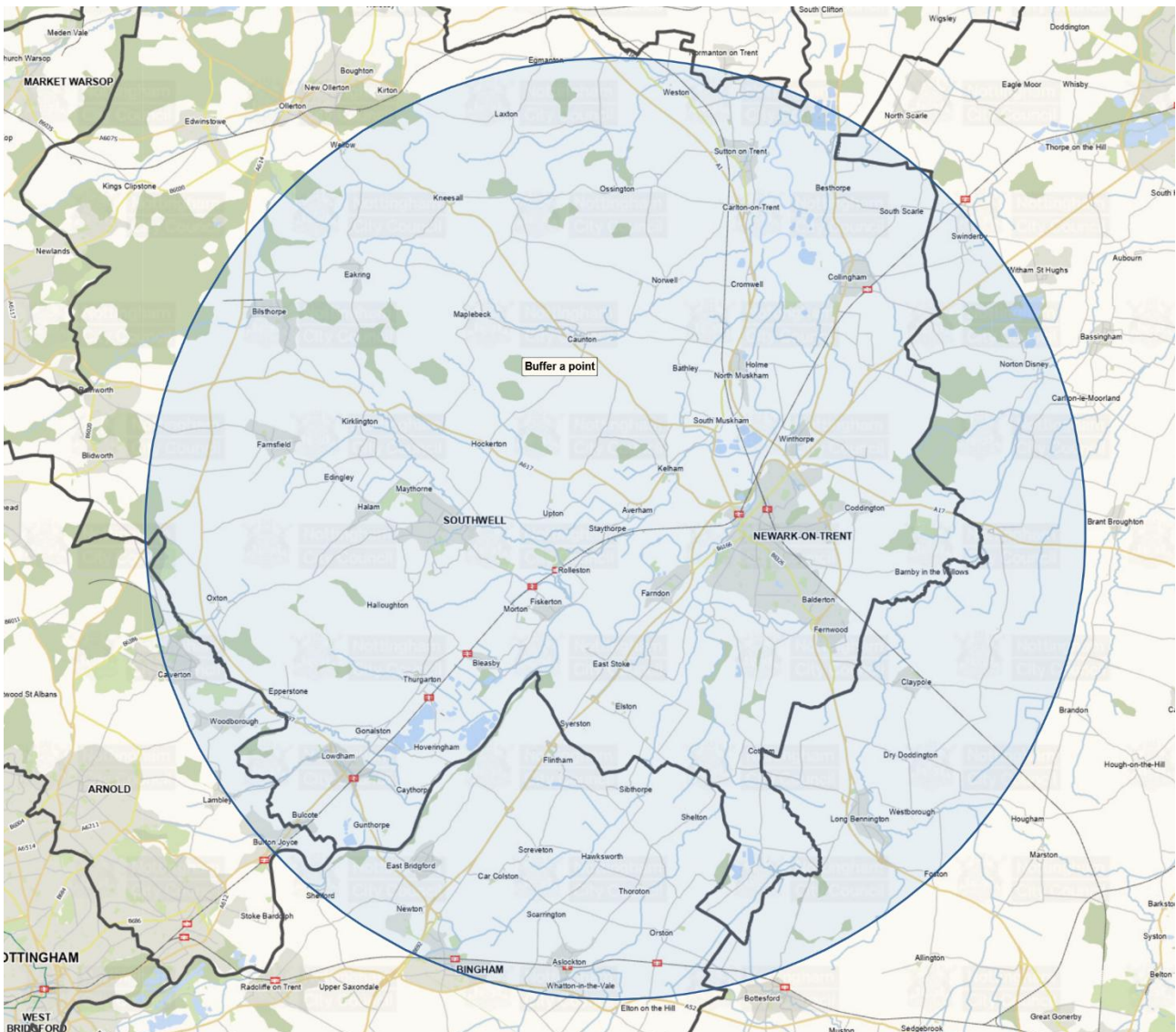


Extract From Design Approach Document © Elements Green Trent Ltd

126. The Design Approach Document and PEIR site selection and consideration of alternatives indicated an area of search based on a 15km radius of Staythorpe substation, but the area of search has actually been cut short by the River Trent and the A1. Unfortunately, the individual topic-based suitability maps in the Design Approach Document don't have the

Order Limits overlaid to allow a proper interpretation to be made. For the overall map, the Order Limits remain using those used for the early scoping stage, rather than the Order Limits in the DCO now proposed.

127. There is no explanation as to the rationale of a 15km radius when other NSIP solar projects have longer connection distances to other substations at Cottam and West Burton. There is no cogent or substantive reasoning given as to why the River Trent and A1 have been used as artificial cut offs for the area of search. Other schemes such as Cottam, West Burton, Tillbridge and One Earth cross the River Trent, and no explanation is given as to why is the A1 a barrier to this scheme when other major roads aren't barriers to other schemes.



Actual Extent of 15km Buffer Around Staythorpe Substation

128. The Design Approach Document refers to excluding land to the south and east of the railway lines based on potential difficulties with cable connections across the railway. However, that statement seems illogical and irrational when Staythorpe Power Station is actually located on the opposite side of the railway line to its grid connection. These factors do not therefore appear to be operational constraints that should rightly constrain an area of search. Whilst crossing roads, rivers and railway lines might be more costly and technically challenging, it is not considered to be appropriate to use such features to artificially limit an area of search.
129. When we get to Section 4 of the Design Approach Document⁵¹, the text purports to refer to the Environmental Statement Order Limits in terms of size, for example in paragraph 4.1.1. However, the maps on pages 24, 27 and 31 still very confusingly show the Order Limits and layout from a previous stage. This is highly confusing and misleading.
130. JPAG does acknowledge the removal of much of the land within the Order Limits between the PEIR and the ES which is at risk of flooding. It is noted that in paragraph 8.2 of the Design Approach Document⁵², the applicant states that this is due to the updated flood datasets issued post PEIR. However, although the National Flood Risk Assessment (NaFRA) has been produced, the Trent Tidal Model has not been updated, so the same information was available prior to the PEIR. This land should never have been proposed in the first place. It is noted however that the Design Approach Document still only indicates flood zones 2 and 3 as ‘best avoided’ rather than ‘not suitable for development’.
131. It is also noted that there have been further reductions in area arising from removal of north facing fields, as well as refinement of the cable corridors.
132. Further anomalies also arise with no clear justification. For example, in terms of Agricultural Land Classification (ALC), ALC Grade 1 only identified as ‘best avoided’, with ALC Grade 2 only identified as ‘not preferred’ with nothing listed for ALC Grade 3a. This doesn’t reflect the fact that Grades 1, 2 and 3a all collectively comprise the best and most versatile land. The Design Approach Document appears to have been written in retrospect to try and justify the proposal already devised.

⁵¹ APP-319 5.6 Design Approach Document - Part 1 of 4 - Rev 1

⁵² APP-322 5.6 Design Approach Document - Part 4 of 4 - Rev 1

133. As is outlined in the National Policy Statement, the starting position for solar PV developers in taking forward Nationally Significant Infrastructure Projects is that applicants should seek to minimise impacts on the best and most versatile agricultural land (BMV), defined as land in grades 1, 2 and 3a of the Agricultural Land Classification and preferably use land in areas of poorer quality.
134. The Written Ministerial Statement clarified that: *“This means that due weight needs to be given to the proposed use of Best and Most Versatile land when considering whether planning consent should be granted for solar developments. For all applicants the highest quality agricultural land is least appropriate for solar development and as the land grade increases, there is a greater onus on developers to show that the use of higher quality land is necessary. Applicants for Nationally Significant Infrastructure Projects should avoid the use of Best and Most Versatile agricultural land where possible.”*
135. The land within the Order Limits is mostly level or gently undulating agricultural land, and mostly in arable use. Some root crops are grown in the southern part of the site including some sugar beet, but most land use is cereals with arable break crops. There are a number of farms involved within the Order Limits.
136. West of the River Trent almost all the land falls into the moderate or high likelihood of BMV. East of the River Trent the pattern is more mixed. The ES in table 17.5⁵³ identifies that 149 ha (8.5% of the Order Limits is Grade 2 ALC, with 944 ha (53.5% being Grade 3a ALC), 596 ha (33.8% is Grade 3b ALC, with the remaining 75 ha (4.2% being roads, woodlands etc.). The Agricultural Land Classification Figure 17.1 in the ES⁵⁴ shows significant areas of solar PV proposed for Grade 2 agricultural land, notably around Weston, Sutton on Trent and Carlton on Trent in the North-East quadrant; near Kersall in the North-Est Quadrant; and near Maplebeck in the South-West quadrant. Large parts of Grade 3a ALC are also impacted by Solar PV in the same general areas. It is unclear as to how the site selection process has had proper regard to avoiding BMV land as the National Policy Statement and the WMS requires.
137. Consideration as to what the ALC is on alternative land not chosen should be given in line with the findings in the court case of *Lullington Solar Park Ltd v Secretary of State for Levelling Up, Housing and Communities & Anor [2024]*.

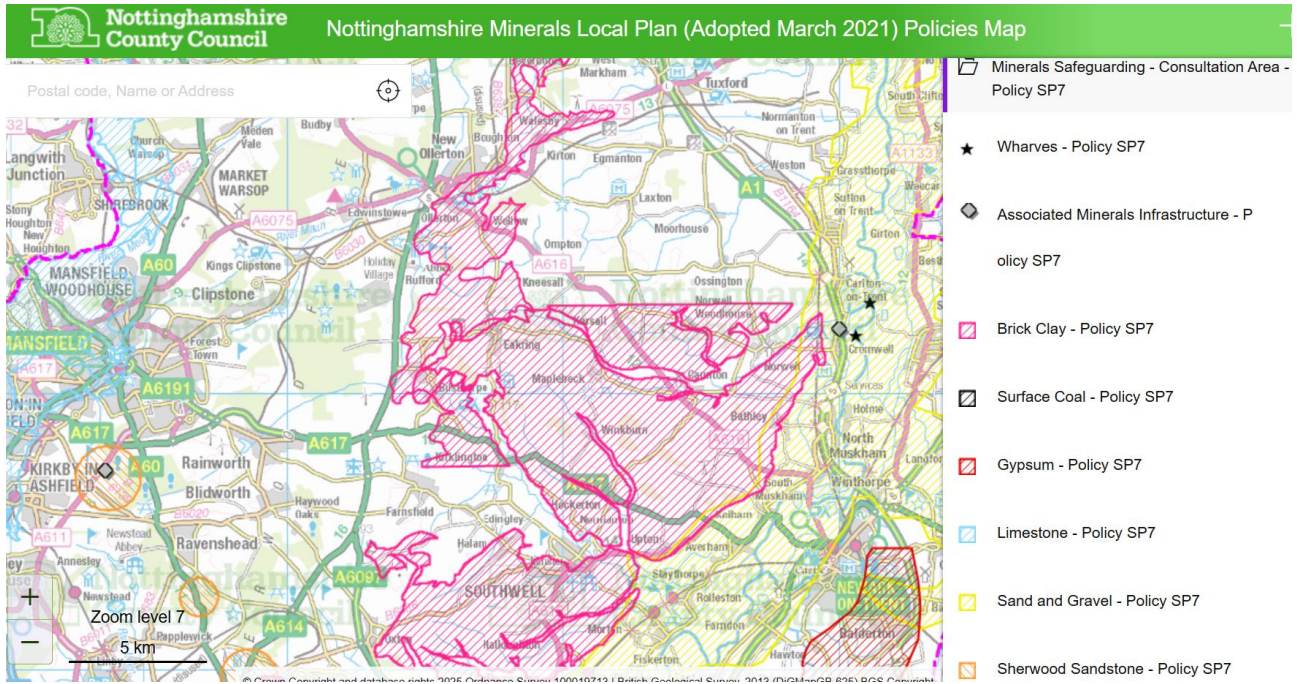
⁵³ APP-060 6.2.17 Environmental Statement Volume 2 – Chapters Chapter 17 – Agricultural Land - Rev 1

⁵⁴ APP-179 6.3.17.1 Environmental Statement Figure 17.1 Agricultural Land Classification

138. There is no requirement for a solar farm to be a specific size in terms of output or area. The choice of output being 800MW is an arbitrary figure chosen by the applicant, presumably for economic reasons. Consequently, at the very least the option of reducing the size of the GNR proposal to exclude all land impacting on the BMV agricultural land should have been considered as a reasonable alternative. Perhaps as two alternatives one excluding all land in Grade 2 and another excluding all land in Grades 2 and 3a; although the JPAG notes that national policy does not treat Grades 1, 2 and 3a differently, so they should not really be treated differently in site selection. There is no evidence to demonstrate that such an option or options has/have been duly considered.
139. In the PEIR, the applicant has stated that a full Residential Amenity Assessment has not been provided but that will follow in due course, after consultation. As such the consideration of significant adverse effects on the wider local population are, including some individual houses that are likely to be impacted by a major or major moderate adverse effect played no part in the original site selection process.
140. We have further inconsistency in the site selection criteria. In the Design Approach Document, mineral safeguarded areas are listed as ‘not preferred’ but they don’t appear to have influenced the shading shown on Figure 5: Land Use Considerations. Mineral extraction, particularly in terms of sand and gravel is a significant feature of land use in Nottinghamshire, including around Mansfield, the River Trent valley and the River Idle valley. Clay extraction is a significant feature in the Kirton area.
141. Technical Appendix A10.9 - Mineral Resource Assessment⁵⁵ does include a plan (Figure A10.9.1) that shows the Order Limits on the Nottinghamshire Minerals Local Plan - Minerals Safeguarding Map. Significant parts of the Order Limits lie either within the Sand and Gravel Mineral Safeguarding Area or the Brick Clay Mineral Safeguarding Area. Both of these minerals are nationally important and are fundamental to economic growth, infrastructure and housing growth. An extract from the Nottinghamshire Minerals Local Plan Policies Map⁵⁶ is set out below:

⁵⁵ APP-238 6.4.10.9 Environmental Statement Volume 4 – Technical Appendices Technical Appendix A10.9 – Mineral Resource Assessment - Rev 1

⁵⁶ <https://spectrum.nottsc.gov.uk/connect/analyst/mobile/#/main?mapcfg=%2FMinerals%20Local%20Plan>



Extract from the Nottinghamshire Minerals Local Plan Policies Map

142. Both sand & gravel and clay are nationally important mineral resources and make an important contribution to the construction industry, including the provision of homes, employment and infrastructure. The amendments to the project have reduced the impact on the sand and gravel resource which is welcomed. However, the cumulative impact with the existing, permitted and allocated quarries has not been considered. The three quarries of Cromwell, Langford Lowfields and Besthorpe form a very large cluster of mineral extraction activity that covers an area of approximately 6km by 3km, an area of over 800 hectares that straddles the River Trent between North Muskham and Sutton on Trent. Girton quarry covers a further 100 hectares a short distance further north in the River Trent valley.

143. In previous call-for-sites exercises proposed sites for mineral extraction have been put forward for sand and gravel north-east of Kelham (known as Great North Road (North) by Tarmac) and east of Averham and adjacent to the Power Station (known as Great North Road (South) by Tarmac). It was also proposed in the Minerals Local Plan previously to allocate Averham Flash quarry which would have involved the land included in the Order Limits south-west of Kelham and north of Averham. This allocation was removed from the Minerals Local Plan in 2016 following public consultation and political lobbying. As such the proposed solar farm and BESS will result in the sterilisation of mineral resources that have been considered previously viable for mineral extraction. It also has the potential to

have cumulative impacts with other mineral sites that have been put forward for consideration.

144. Although JPAG does not advocate support for any additional mineral extraction in the Averham or Kelham area it is understood that mineral extraction can only occur where the mineral resources are located. Whilst the applicant continues to cite that the Solar Farm is a temporary development, as we have explained a 40-year life in the context of energy generation locally, is the same lifespan as a permanent power station. Areas for mitigation and enhancement once established are unlikely to be removed at the time of decommissioning. This will result in the permanent sterilisation of sand and gravel mineral resources and has the potential to reduce the areas that may be available in the future for consideration for mineral extraction. This may increase the pressure in the future for the Council to need to reconsider sites put forward previously at Great North Road (North) and Great North Road (South) which would further concentrate industrial activity in the area adjacent to Staythorpe, Averham and Kelham.

145. It should be noted that Figure A10.9.1 in the Technical Appendix⁵⁷ doesn't show the permitted southern and northern extensions of Cromwell Quarry.

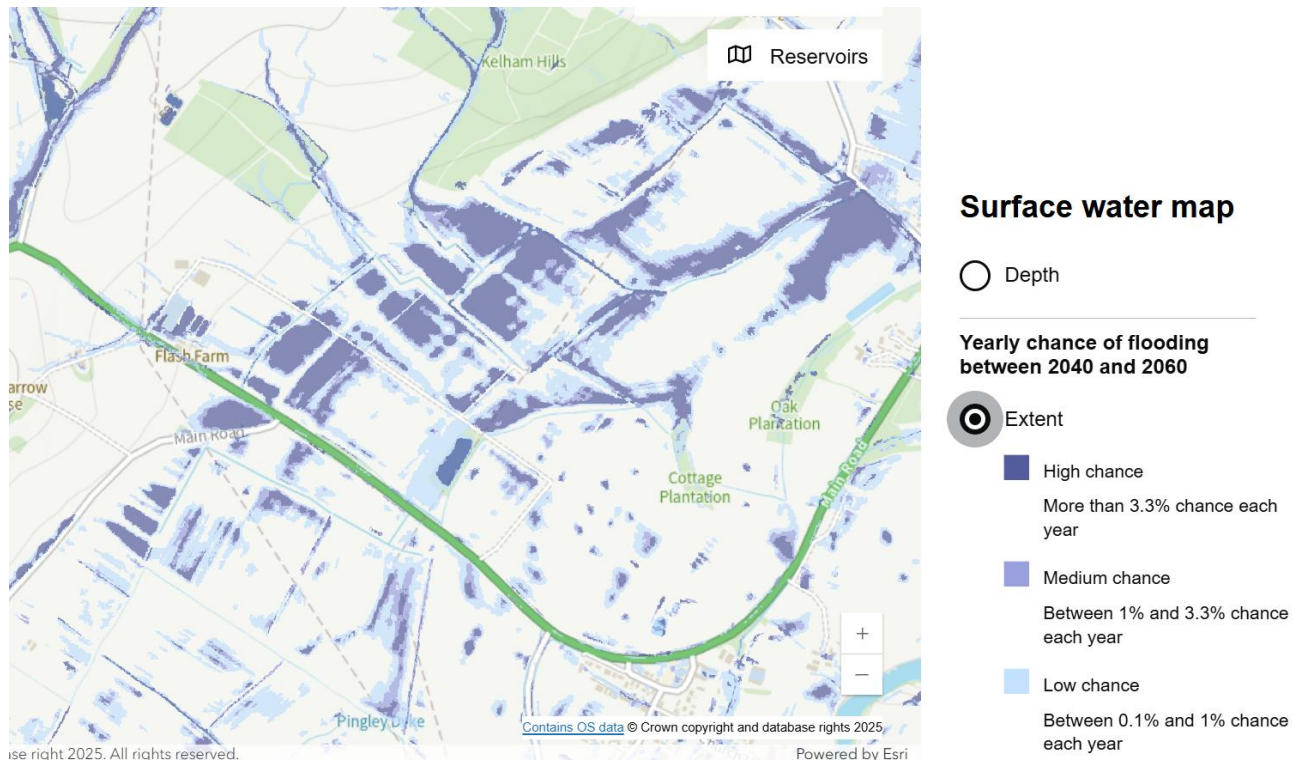
146. It is noted that the revisions to the layout have been positive from the perspective of flooding. Although areas of mitigation/enhancement are still located within flood zones 2 and 3, as are some areas of cable trenches. The submitted FRA⁵⁸ accepts that the National Grid Substation lies within the flood zones as does the Staythorpe BESS which is already consented. Whilst it is accepted that any connection to the Staythorpe Grid Connection Point would necessitate additional infrastructure in the area of flood risk. Nevertheless, there has been no sequential test undertaken of connecting to the grid at an alternative location. Other grid connections in the area such as at High Marnham for example are not at risk of flooding.

147. It is concerning that section A9.1.2.2.2 of the FRA seems to make an incorrect assumption regarding Moorhouse Beck. It suggests that observing wrack marks suggests that it has a capacity to convey substantial flows without becoming bankful. In fact, Moorhouse Beck has been subject to recent flooding events including resulting in the flooding of homes.

⁵⁷ APP-238 6.4.10.9 Environmental Statement Volume 4 – Technical Appendices Technical Appendix A10.9 – Mineral Resource Assessment - Rev 1

⁵⁸ APP-228 6.4.9.1 Environmental Statement Volume 4 – Technical Appendices Technical Appendix A9.1 – Flood Risk Assessment - Rev 1

148. In relation to Pluvial (Surface Water) Flooding this needs to be considered equally to fluvial flooding. It is pertinent to understand that local flood events have in recent years occurred both as a result of fluvial and pluvial flooding events. The FRA acknowledges that some of the solar PV to the west of Carlton on Trent is in an area at high risk of surface water flooding (1 in 30 annual likelihood of flooding) as well as at medium risk of surface water flooding (1 in 100 annual likelihood of flooding). This is deeply concerning given that Carlton on Trent has experienced recent significant flood events resulting from surface water run-off that has come across the fields where the solar PV is proposed. There is considered to be no justification for including Solar PV panels in areas at medium or high risk of surface water flooding. As the applicant has acknowledged the need to remove Solar PV from areas at risk of fluvial flooding; then applying the same principles; Solar PV should be removed from areas at medium or high risk of pluvial flooding.
149. The FRA also acknowledges that the Work programme 5a, the BESS south of Kelham Hills is concentrated in an area at high risk of surface water flooding (1 in 30 annual likelihood of flooding) as well as at medium risk of surface water flooding (1 in 100 annual likelihood of flooding). In the period 2040 and 2060 the area at high risk is shown to increase. The Environment Agency data suggests that a depth of up to 30cm can be expected.
150. This is inconsistent with the NPPF which seeks to direct development away from areas at medium or high risk of flooding from all sources. There are already two permitted BESS schemes permitted close to Staythorpe Grid Connection Point. The Kelham Solar/BESS project which will be determined at a public inquiry shortly would if permitted add to the BESS capacity.
151. It is not considered that there is any justification for siting the BESS in an area at risk of pluvial flooding. It is not operationally co-located with the Grid Connection Point but is instead a couple of miles away. There has not been any sequential assessment of locating this elsewhere in the UK near to a different Grid Connection Point, nor any consideration of whether a BESS scheme is necessary. The FRA merely tries to justify the siting of the BESS element on the basis that the BESS containers will be on concrete corner pads. However, this ignores the need to first demonstrate the sequential and exception tests.



Extract from Flood Map

152. It is deeply concerning that the BESS is proposed to be sited in an area at high risk of pluvial flooding. As the applicant has acknowledged the need to remove Solar PV from areas at risk of fluvial flooding; then applying the same principles; the BESS should be removed from areas at medium or high risk of pluvial flooding.
153. In terms of the sequential test the FRA in section A9.1.2.6.1 glibly says that utility scale solar farms can only be located where they can connect to the National Grid. However, there is no consideration as to whether the BESS is needed to connect to Staythorpe Grid Connection Point.
154. According to Cornwall Insight⁵⁹: *“The Government’s Clean Power 2030 Action Plan (CP 2030) sets out the target capacity ranges for specific technologies. Phase 1 sets out the target capacity range for 2030, which says the required BESS capacity will be 27GW, split over distribution and transmission levels. While Phase 2 provides a 10-year view out to 2035, with an upper capacity of 29GW, but this uplift is seen exclusively at the distribution level.*

⁵⁹ <https://www.cornwall-insight.com/press-and-media/press-release/battery-storage-connection-queue-double-the-grids-requirement-for-2030/>

In contrast to the slow increase in connections capacity, build out of BESS capacity is expected to be rapid and significant. Specifically, the connections queue for BESS out to 2030 is 61GW, more than double the respective target capacity range, while the queue out to 2035 is 129GW, more than quadruple what is sought by then.”

155. On this basis, the need for the BESS is questioned, a lack of need undermines the justification that the applicant is seeking to place on the sequential test being met.
156. The FRA sequential test has not demonstrated that it is not possible to locate the development on land identified as having a lower risk of flooding, not including land in Flood Zones 2 and 3 or at medium or high risk of pluvial flooding. The NPPF in referring to ‘essential infrastructure’ which includes solar farms doesn’t exempt it from needing to pass the sequential test and exception test. National policy in EN1 requires the sequential test to be passed.
157. The aim of planning policy on development and flood risk are to ensure that flood risk from all sources of flooding is taken into account at all stages in the planning process to avoid inappropriate development in areas at risk of flooding, and to steer new development to areas with the lowest risk of flooding.
158. EN1 in paragraph 5.8.7 is clear that where new energy infrastructure is, exceptionally, necessary in flood risk areas for example where there are no reasonably available sites in areas at lower risk then it must be flood resilient. However, such resilience measures such as increasing the height of equipment then have other impacts that need to be considered. National policy is also explicit that the exception test is only appropriate to be considered where the sequential test has firstly been passed.
159. There is no requirement for a solar farm to be a specific size in terms of output, so at the very least the option of reducing the size of the GNR proposal to exclude all land at risk of flooding should have been considered as a reasonable alternative. There is no evidence to demonstrate that such an option has been so considered.
160. Surface water flooding is a very important issue for the host communities, many of the villages within the GNR area have been impacted by surface water flooding over recent years. There are legitimate concerns regarding whether leaving fields grassed and unploughed for 40 years will lead to increased and/or faster surface water run-off.

Farmers who farmland in the area have expressed numerous concerns that surface water run-off from grassed fields would be greater than for arable fields.

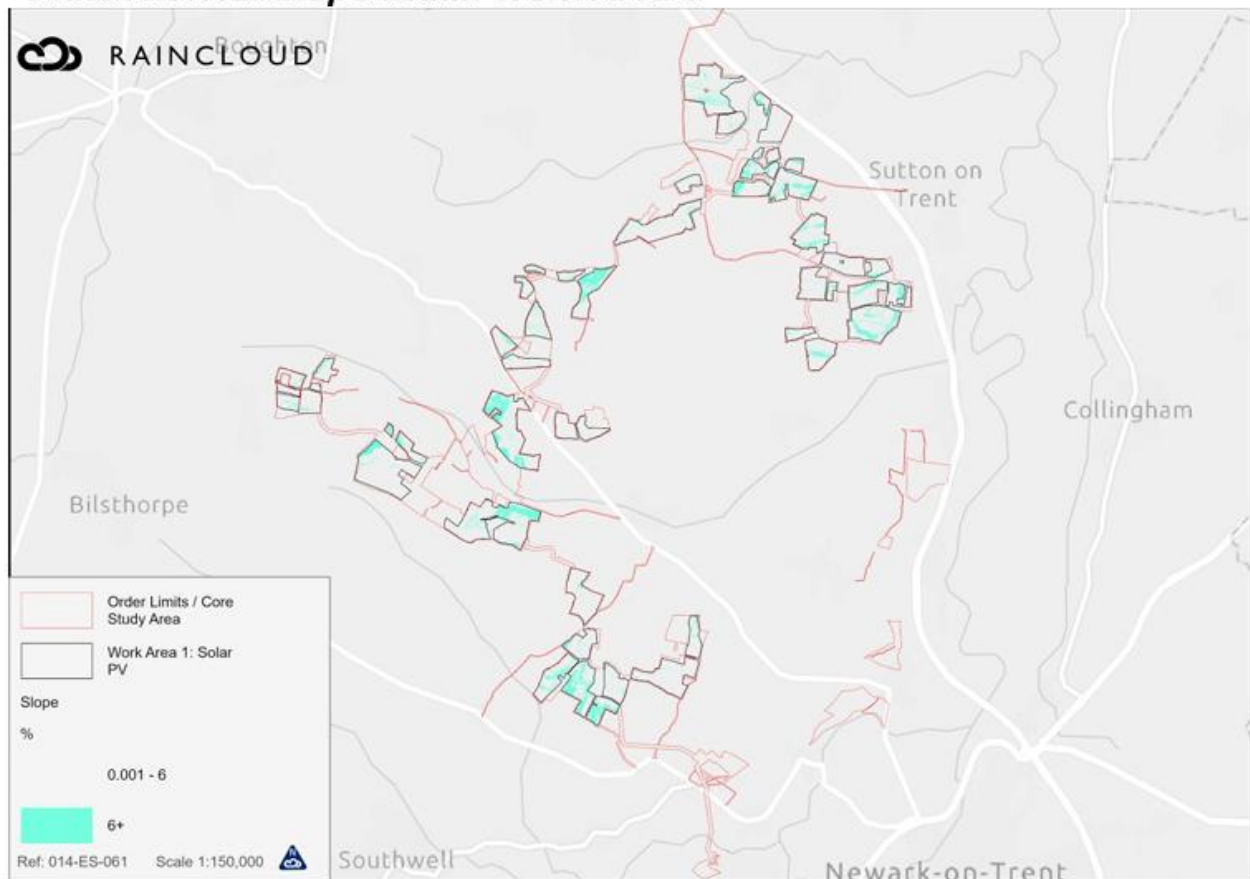
161. What is known for certain that in recent years flash flooding from surface water has seen surface water run-off from fields flooding highways including the A1⁶⁰. There have also been circumstances where surface water run-off appears to have flowed across fields rather than following the drain and dyke networks resulting in settlements flooding such as Carlton on Trent. The watercourses through the area, including The Beck have seen very significant recent flooding events, including in Maplebeck and Caunton. This is rightly an area which is of significant concern to many local residents.
162. The applicant was asked at a Parish Council meeting to seek to explain the apparent coincidence between flooding of the A1 adjacent to the Egmonton Solar Farm and potential surface water run-off from that solar farm. It was noted by residents that the A1 flooding has only occurred since the solar farm was built. The applicant has to the best of our knowledge did not provide an answer to this query.
163. It is noted that the ES in section A9.1.3.2.1 referred to it being reported in Schwyter & Vaughan that the amount of soil erosion is directly related to the amount of surface water run-off, which depends on the water infiltration rate and the percentage of the slope. The steeper the slope and the less rapid the water infiltration rate, the more rapid the water run-off rate for a given soil.
164. The ES notes that most soils will generate rapid or very rapid surface water run-off with slopes between 6 to 12%, regardless of soil type.
165. The ES identifies that 80% of Work Area 1: Solar PV is on slopes of less than 6%. It says that in Work Area 1: Solar PV is mostly shallow sloping with steeper slopes confined to the banks of drainage ditches and isolated areas, as shown in Plate A9.1.42.
166. It is rather worrying that the PEIR identifies that the slopes that are greater than a 6% slope, where surface water run-off is more likely to occur, appear to fall in the natural catchment of The Beck, particularly around Maplebeck. The Beck led to serious surface

⁶⁰ Nottinghamshire County Council as the Lead Local Flood Authority has to report on flooding incidents under Section 19 of the Flood and Water Management Act (2010); it undertook reports from October 2023 in relation to flooding in Carlton on Trent, Caunton, Egmonton, Maplebeck and Sutton on Trent. Previous reports were done in Carlton on Trent in 2012, Egmonton in November 2019 and Sutton on Trent in 2018

water flooding in Maplebeck and Caunton as well as further downstream in Norwell and Carlton on Trent recently and as such this could lead to future problems.

167. Hydraulic modelling should be undertaken specifically to assess this impact. It is noted that other concentrations of slopes would appear to be in catchment of Moorhouse Beck which could again increase surface water run-off into that watercourse causing problems in Moorhouse and downstream in Weston and Grassthorpe.

Plate A9.1.42: Slope within Work Area 1



Extract from ES Flood Risk Assessment © Elements Green Trent Ltd

168. There are further areas where surface water run-off from slopes could lead to roads such as the road between Ossington and Kneesall. There is also a concentration of slopes to the north of Cheveral Wood which could harm ecology and an ancient woodland.

Cumulative Impact and Concentration

169. There are two different ways in which cumulative impact and concentration should be viewed. Firstly, there is the assessment of cumulative impacts required in the

Environmental Statement, thereby assessing the cumulative effects on aspects such as traffic generation, noise, vibration etc. Secondly there is the issue of policy derived cumulative impact and concentration or clustering that the WMS⁶¹ requires decision-makers to have regard to.

170. With regard to the second of these aspects there is a strong historical inter-relationship between the existing and former power station sites along the River Trent valley; namely Staythorpe, High Marnham, Cottam, and West Burton. These all lie in North Nottinghamshire in the Districts of Newark & Sherwood and Bassetlaw and form a 30km long line of major grid connections. These grid connections are the focus for a concentration and clustering of a large number of approved and proposed solar farm projects, BESS projects together with other energy and infrastructure proposals. This can be seen to an extent on Figure A2.1.1 Cumulative applications in the ES Cumulative Assessment⁶².
171. The River Trent valley is also home to major land uses such as quarrying, existing and proposed that has a substantial land take.
172. Major infrastructure projects will normally be of a size, scale and nature that they will constitute Environmental Impact Assessment (EIA) development described within the terms of the EIA Regulations 2017. An applicant cannot begin to carry out statutory consultation under section 42 of the Planning Act until they have taken the necessary steps under Regulation 8 of the EIA Regulations 2017 to establish whether an EIA is required.
173. Part 6 of the Levelling-up and Regeneration Act 2023 contains provisions to replace the current Strategic Environmental Assessment (SEA) and EIA requirements with a new regime of Environmental Outcome Reports (EOR). Until the EOR regulations are in place to commence this new regime, the existing arrangements for environmental assessment remain in place.
174. Where the proposed development is determined to be EIA development, an applicant will need to submit an Environmental Statement along with their application.

⁶¹ Solar and protecting our Food Security and Best and Most Versatile (BMV) Land Statement made on 15 May 2024

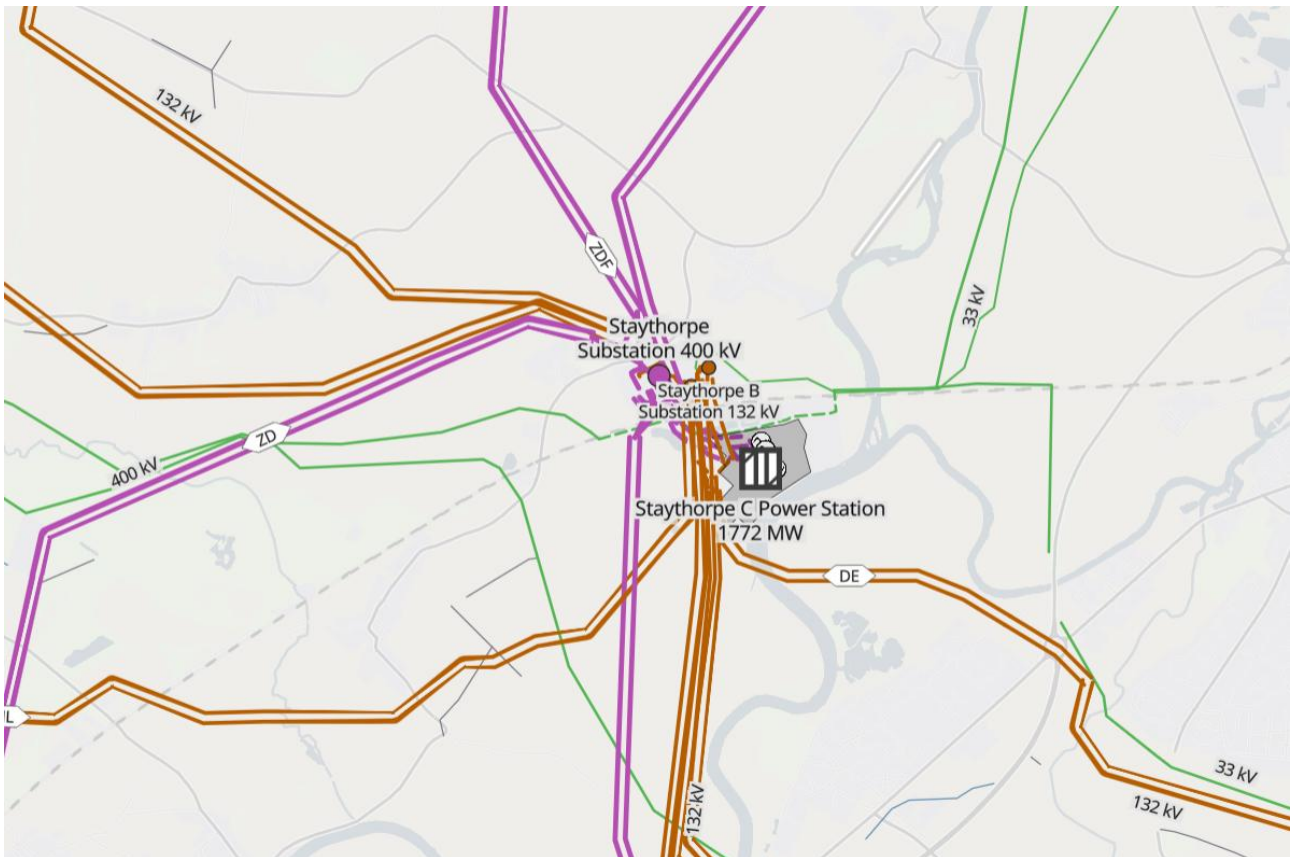
⁶² APP-191 6.4.2.1 Environmental Statement Volume 4 – Technical Appendices Technical Appendix A2.1 – Cumulative Assessment Stages 1 and 2 - Rev 1

175. Regulation 14 of the EIA Regulations 2017 requires that an Environmental Statement includes a description of the reasonable alternatives studied by the applicant, and an indication of the main reasons for the option chosen, including a comparison of the effects of the development on the environment (Schedule 4 of the EIA Regulations 2017). Inadequate consideration of alternatives has been used as a vehicle for legal challenge. Alternatives can range from matters such as micro-siting (where the development is located within the site) and alternative access points, to the size and scale of development, technological and design options. The Government advises applicants to fully document all optioneering exercises and decision-making on alternatives from the inception of their projects in their application, and reference this appropriately in their Environmental Statement.

176. Regulations 11 to 13 of the EIA Regulations 2017 set out the pre-application publicity and consultation requirements for the EIA process pursuant to sections 47 and 48 of the Planning Act. Where there are obligations upon the Secretary of State, these are carried out by the Planning Inspectorate:

- Regulation 11 of the EIA Regulations 2017 requires the Secretary of State to notify the prescribed consultation bodies of their duty to consult with the applicant and make any information relevant to the preparation of the Environmental Statement available to the applicant (if requested to do so by the applicant). It also requires the Secretary of State to provide the applicant with a list of those notified consultation bodies;
- Regulation 12 of the EIA Regulations 2017 requires that the applicant's SoCC must state whether the project constitutes EIA development and, if it does, how the applicant intends to publicise and consult on preliminary environmental information (PEI); and
- Regulation 13 of the EIA Regulations 2017 requires that publicity of project proposals under section 48 of the Planning Act must also encompass the requirements of the EIA process and at the time of publishing the proposed application, applicants must notify all the notified consultation bodies.
- Applicants need to give consultation bodies sufficient information about the characteristics of the proposed NSIP in order to enable them to respond in an effective and timely way about the likely environmental effects and avoid unnecessary delay.

Applicants should discuss providing digital material where possible with relevant statutory consultees.



Open Infrastructure Map Showing Concentration of 11 High Voltage Overhead Lines (400kV & 132kV) at Staythorpe Together with 3 Medium Voltage Overhead Lines (33kV)

177. The cumulative assessment in the ES Technical Appendix A2.⁶³ does not fully consider cumulative impacts across all headings. Fundamentally it doesn't consider existing energy infrastructure or energy generation such as Staythorpe Power Station, Staythorpe Substation or the Overhead Lines. The ES Technical Appendix A2.1 explicitly scopes out Staythorpe Power Station from consideration in stages 3 and 4 of the cumulative assessment. The Power Station is visible over a large geographic area, including much of the southern and eastern parts of the GNR proposal. The GNR is inextricably directly linked to the existing and planned energy network and energy generation infrastructure. There is a particular concentration and clustering of schemes adjacent⁶⁴ to the Power Station and Grid Connection Point which the GNR proposal will add to significantly.

⁶³ APP-191 6.4.2.1 Environmental Statement Volume 4 – Technical Appendices Technical Appendix A2.1 – Cumulative Assessment Stages 1 and 2 - Rev 1

⁶⁴ Including the SSE Staythorpe BESS (Approved), Staythorpe BESS (Under Construction in Order Limits by EDF), Kelham Solar/BESS (Public Inquiry Pending). Together with Newark Bypass (including the compensatory flood storage

178. The ES also does not address the issue of concentration and clustering as the WMS⁶⁵ requires. Nowhere in the ES is a plan shown that illustrates the sites being considered in the cumulative assessment against the Order Limits.
179. The cumulative assessment at the PEIR stage scoped out NSIP proposals a bit further away such as Fosse Green and scoped out DCO proposals at early stage such as Steeples Renewables. This was considered to be inappropriate due to the need to consider the impact of concentration and clustering as the WMS requires. It is noted that the ES now scopes in the DCO proposals in relation to impacts on Agricultural Land and Soils. Although this does not include the Leoda Solar Farm (EN0110016) near Leadenham to the east of Newark which is not shown on Figure A2.1.1b of the Technical Appendix⁶⁶. Steeples Renewables is also not shown on Figure A2.1.1d.
180. The list in places in the Technical Appendix only uses application numbers with no location address or settlement listed making the list unhelpful to use. In addition, the map that shows the location of the other assessed projects for cumulative assessment should show a lot more schemes, this is important to allow the inter-relationship to be understood. In a number of cases the boundaries of these other schemes about the Order Limits. In some cases, the colours used on Figure A2.1.1a⁶⁷ in particular means that important schemes such as the Kelham Solar/BESS and SSE Staythorpe BESS, together with Kanapthorpe Solar and Staythorpe CCS are difficult to differentiate against the map background.
181. A larger scale plan that shows the concentration in the Staythorpe, Averham and Kelham area is considered to be necessary. This should include the alignment of the 11 High Voltage Overhead Lines (400kV & 132kV) at Staythorpe, together with 3 Medium Voltage Overhead Lines (33kV).
182. Figure A2.1.1a does not include the proposed Barnby in the Willows Solar proposal which is a new 100MW proposed scheme; neither does it show the Grassthorpe Beck Solar. It is accepted that both of these proposals are relatively recent additions, but they need to be

at Averham/Kelham) (Decision Stage) and Staythorpe Power Station Carbon Capture and Storage (Proposed). The existing Power Station, Grid Connection and Overhead Lines

⁶⁵ Solar and protecting our Food Security and Best and Most Versatile (BMV) Land Statement made on 15 May 2024

⁶⁶ APP-191 6.4.2.1 Environmental Statement Volume 4 – Technical Appendices Technical Appendix A2.1 – Cumulative Assessment Stages 1 and 2 - Rev 1

⁶⁷ APP-191 6.4.2.1 Environmental Statement Volume 4 – Technical Appendices Technical Appendix A2.1 – Cumulative Assessment Stages 1 and 2 - Rev 1

considered in the cumulative assessment. Figure A2.1.1a also doesn't show the full extent of the quarries, namely Kirton Quarry and brickworks; Cromwell Quarry (including the northern and southern extensions; as well as the permitted/allocated extents of Langford Lowfields, Besthorpe and Girton quarries.

183. It is also noted that Figure A2.1.1a does not identify the existing solar farms at Egmanton and Bilsthorpe (x3). Neither does it show the wind farm at Bilsthorpe which together with the three solar farms forms a concentration of energy generation around the site of the former Bilsthorpe colliery.

Socio-Economic Impacts

184. The impact of the project on tenant farmers should be considered separately to the impact on the landowner owned/run farming enterprises. Although Figure 17.7⁶⁸ shows details of the 25 landowners, it doesn't indicate which of these areas are farmed by the owners and which are farmed by tenants. Some information is in a Technical Appendix⁶⁹ but this is not in an easily identifiable format, nor is it summarised; in addition, it is incomplete. Tables 17.15 and 17.16 in the ES⁷⁰ sets out a summary of impacts, although this is based on the impact on the landowners; for example, suggesting that they will benefit from the security of income may apply to the landowner but not to any tenant farmer. The ES also glibly dismisses impact on contractors who farm some of the land.

185. There has been no assessment of the viability of their remaining landholdings to operate as a profitable farming enterprise. Information is incomplete for 4 of the 25 farm businesses. Of the remain 21 farm businesses, 8 of these will lose more than a fifth (20%) of their land which will be a substantial difference. As the ES acknowledges the farming businesses are all either exclusively or mostly arable farms, with the exception of Farm Business R which is a dairy farm. The proposal will therefore mostly result in the loss of arable farmland.

186. The upstream and downstream impact on agricultural supply chains and those who purchase the arable goods to be lost should also be assessed. The long-term impact on the loss of a generation of active farming and the interrelationship this may have on the assumption that farming could resume post development should be considered.

⁶⁸ APP-185 6.3.17.7 Environmental Statement Figure 17.7 Agricultural Land Classification Landowner Plan Overview

⁶⁹ APP-294 6.4.17.3 Environmental Statement Volume 4 – Technical Appendices Technical Appendix A17.3 – Farm Reports - Rev 1

⁷⁰ APP-060 6.2.17 Environmental Statement Volume 2 – Chapters Chapter 17 – Agricultural Land - Rev 1

187. The suggestion that there is no requirement to use the land for food production and agricultural activity can continue through the keeping of sheep is disingenuous. The proposal is resulting in the loss of BMV agricultural land, both Grade 2 and Grade 3a land, using BMV land for sheep farming which can be done on low quality farmland is a waste of productive land.

188. Data available from the CPRE in Table 1 below shows that, which the data we have available, there is an estimated 2,272,782 ha of BMV (Grade 1, 2 and 3a) land across England. This is largely concentrated across the East Midlands, East of England, South West and Yorkshire and the Humber regions.

Table 1

The hectares of Grade 1 and 2 land according to the 'Provisional' dataset and the hectares of Grade 3a according to the 'Post 1988' dataset in England. Data: Provisional ALC 1:250,000 dataset; Post 1988 ALC Site Data.

| Region | Grade 1 | Grade 2 | Grade 3a (Identified) | BMV Total (Grades 1, 2 and identified 3a) |
|--------------------------|----------------|------------------|-----------------------|---|
| East Midlands | 105,864 | 398,622 | 5,654 | 510,140 |
| East of England | 104,133 | 506,487 | 8,169 | 618,789 |
| London | 4,128 | 7,895 | 77 | 12,100 |
| North East | | 16,497 | 2,760 | 19,257 |
| North West | 29,134 | 79,143 | 4,812 | 113,089 |
| South East | 47,361 | 173,095 | 13,395 | 233,851 |
| South West | 37,318 | 220,045 | 17,033 | 274,396 |
| West Midlands | 13,584 | 186,845 | 7,847 | 208,276 |
| Yorkshire and the Humber | 13,064 | 260,449 | 9,371 | 282,884 |
| Total | 354,586 | 1,849,078 | 69,118 | 2,272,782 |

Building on our food security July 2022 - CPRE⁷¹

189. Further data available from the CPRE in Figures 2 and 3 shows that the loss of BMV since 2010 has rocketed. Three regions (East Midlands, East of England and the South East) are those which have experienced the highest absolute losses of BMV agricultural land from development projects between 2010 and 2022.

⁷¹ <https://www.cpre.org.uk/wp-content/uploads/2022/07/Building-on-our-food-security.pdf>

Figure 2

Shows the number of hectares of BMV land lost to development since 2010. Hectares lost of Grade 1 and 2 land are based on the 'Provisional' dataset and hectares lost in Grade 3a are based on available detailed survey information in the 'Post 1988' dataset. Data: Provisional ALC 1:250,000 dataset; Post 1988 ALC Site Data; Glenigan. See Table A1 for figures.

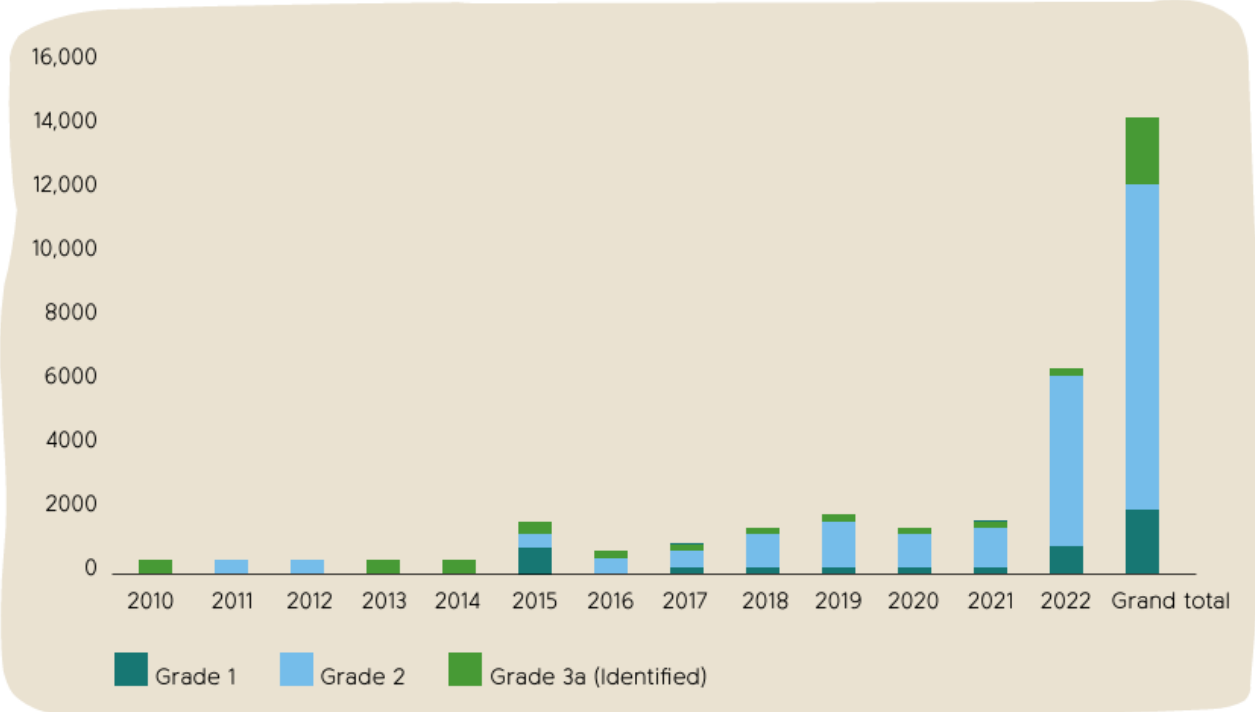
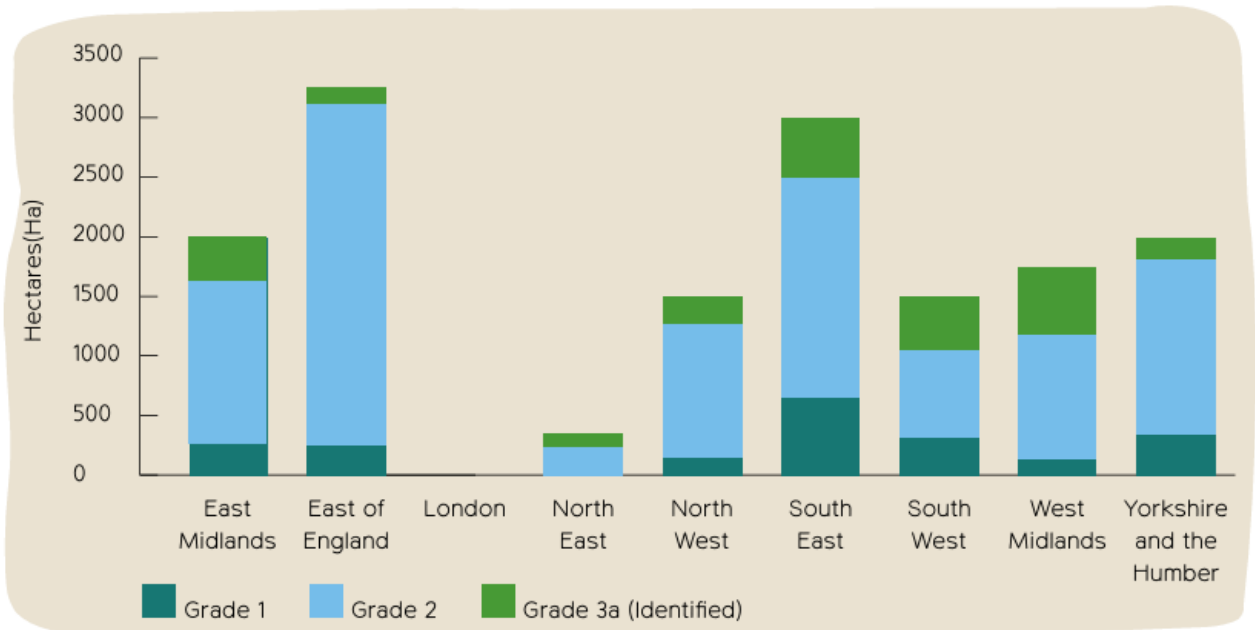


Figure 3

The hectares of Grade 1, 2 land according to the 'Provisional' dataset and the hectares of Grade 3a according to the 'Post 1988' dataset in England, which have been developed since 2010, by region. Data: Provisional ALC 1:250,000 dataset/ Post 1988 ALC Site Data/ Glenigan. See Table A2 for breakdown of figures.



190. It is important to recognise that BMV land is not only under threat from development but also from flood risk. The regional profile of flood risk shows that 75% and 95%, respectively, of the East Midlands and East of England Grade 1 land is at the highest risk of flooding, i.e. in flood zone 3⁷². This means the BMV land that is not at risk of flooding is an even greater valuable resource that should be protected.
191. Natural England have also produced a report on Review of Agricultural Land Take to Development⁷³. This report concluded that using the Natural England Likelihood of BMV agricultural land dataset, analysis indicates that of the gross agricultural land loss, 31% was in areas with a high likelihood of being BMV, 26% in areas with a medium likelihood, 23% with a low likelihood, and 19% in areas identified as non-agricultural. With the East (18,196 ha), South East (17,955 ha), South West (17,346 ha) and East Midlands (15,321 ha) seeing the most loss. During the period 2013 to 2022 some 1% of agricultural land was lost to development which is equal to approximately 1,000 averaged sized UK agricultural holdings.
192. The DCO application should explain how the health and welfare of livestock can be ensured over such a huge area. It is noted that the applicant has undertaken publicity⁷⁴ claiming that 9,000 sheep including lambs will graze the land, that figure did not match the 5,488 sheep quoted in the PEIR.
193. The claim that agricultural use of the land will continue to occur ignores the basic aspect that land currently used for arable will become used for grazing. That is a fundamental change in land use that cumulatively has implications for food security. Defra statistics⁷⁵ show that in 2022 Nottinghamshire had 310 sheep flocks totalling 47,677 sheep so the project would increase sheep numbers by 11.5%. Sheep grazing is not a common agricultural use for higher quality land that currently sustains arable production.
194. The average East Midlands Farm size in 2023 according to Defra was 103ha, the third largest of the England regions. So, a loss of 2,900 ha would equate to the equivalent loss of 17.4 average farms.

⁷² <https://www.cpre.org.uk/wp-content/uploads/2022/07/Building-on-our-food-security.pdf>

⁷³ <https://publications.naturalengland.org.uk/file/6024211964100608>

⁷⁴ <https://www.nottinghampost.com/news/local-news/almost-10000-sheep-set-make-9814873>

⁷⁵ <https://www.gov.uk/government/statistics/agricultural-facts-england-regional-profiles/agricultural-facts-east-midland-region>

195. Across the East Midlands, Defra statistics show that arable was 70% of farmed area, with permanent pasture being 21% of farmed area. Defra statistics also show that 33% of farmed area is rented in the East Midlands, highlighting the important role played by tenant farmers. The statistics also show that 70% of farms are cereal or cropping with only 14% of farms grazing livestock. As such moving such a large amount of land to grazing in an area dominated by arable fails to recognise the role that farmland in this area should perform. There are large amounts of low-quality agricultural land such as upland across England where sheep grazing can be the most appropriate use of the land.
196. In addition, the Defra statistics which refer to the Defra, Farm Business Survey, identify that average farm income in the East Midlands for cereals was £153,000, for general cropping was £180,100, but for grazing livestock it was only £20,300. Accordingly, there is a 7.5-fold difference in income for an average arable farm to an average grazing livestock farm. As such the proposal is substantially lowering the agricultural economic potential of the land to sustain agricultural incomes, with the knock-on effect on the wider economy of lower spending power.
197. Whilst it may well be that the sheep farmers may be paid an additional amount by the applicant in lieu of needing to cut the grass; the data however shows how little income can be sustained by a sheep grazing farm. As such the suggestion that sheep grazing would be a suitable replacement for arable seems illogical.
198. It is considered to be inappropriate for the ES to look to consider socioeconomic effects in terms of potential economic benefits across the whole of Newark & Sherwood and Mansfield, when all other impacts are not considered to extend that far. This appears to be trying to overstate the perceived economic benefits whilst underplaying the harm in relation to other matters.
199. In planning terms, the GNR area is mostly within the Newark Sub Area with lesser parts in the Sherwood Sub Area and the Southwell Sub Area defined in the Newark & Sherwood Amended Core Strategy. None of the GNR area is the Mansfield Fringe Sub Area. Notwithstanding the definition of Travel to Work Areas for economic purposes, the settlements within the GNR area do not have strong interrelationships with Mansfield. In any event the eastern part of the GNR area is in the Lincoln Travel to Work Area and the GNR area immediately abuts the Nottingham Travel to Work Area and the Worksop &

Retford Travel to Work Area. The ES is not taking a consistent approach towards use of Travel to Work Areas.

200. Limiting the impact on tourism to a 5km distance from the Order limits during the operation is considered to be inappropriate because accommodation these days tends to be used as a base from where visitors go out to explore a wide geographical area, particularly in rural areas.
201. The applicant Elements Green Trent Ltd is a loss-making company, its latest published accounts up to 31 December 2023 show it made a loss of (£1,170,430) and its records show it having just 2 employees. The parent company is now Elements Green Midco Ltd, a new company only established in June 2025. It in turn is owned by Elements Green Ltd only has 41 group employees.

Other Planning Considerations

202. Individual Parishes have been encouraged to comment on traffic issues. The proposed construction traffic access routes through much of the area are unsuitable because they overly rely upon narrow single-track roads and dissect communities by passing through them.
203. For example, the routes chosen will be a barrier to people moving from one part of the village to another in Moorhouse, Ossington, Cromwell, North Muskham, South Muskham, Weston and Carlton on Trent (not counting A roads). Many of these villages either have no designated footways and/or have in the past experienced fatal accidents with HGV and pedestrian conflict, notably at Carlton on Trent at the junction of the Great North Road and the A1 overbridge. Some junctions proposed to be used, such as Ossington Lane junction with Great North Road in Sutton on Trent has substandard visibility splays that have previously resulted in serious accidents.
204. Concerns regarding the proposed use of narrow roads with no pavements which are used by walkers, horse riders and cyclists, increasing collision risk, and fear and intimidation are legitimately held by local residents.
205. In addition, a number of the routes chosen either flood regularly such as the A617 between Kelham and Newark and Trent Lane between Kelham and South Muskham. Also, Kelham Lane at Little Carlton is closed during times of flooding as part of the diversion provisions

put in place when the A617 is closed. The traffic routings have been put together without any apparent local knowledge or understanding of the road network.

206. Individual Parishes have been encouraged to comment on issues of noise, vibration and traffic movements on sensitive receptors including dwellings, schools etc. In addition, they have been encouraged to highlight the socioeconomic impact on tourism/accommodation businesses and hospitality venues.

207. Parishes are also best placed to comment on where there will be a significant adverse visual amenity impact on residents and the visual impact on the rural landscape. They also hold local knowledge on ecology including ground nesting birds such as lapwings and skylarks; and are best placed to provide comments on the specific impacts to heritage assets. They also hold invaluable local knowledge on land that has been previously used as a local leisure resource, such as Ossington airfield; as well as providing detailed comments on the impacts on public rights of way.

Conclusion

208. The JPAG does not support the proposal for the above reasons. It is anticipated that JPAG will continue to operate as an alliance and will participate in the examination process to advance the position of itself and the constituent Parish Councils and Parish Meetings.

Appendix 1

Cumulative Impact of Development

Land Use Statistics

Agricultural Land Use (at 1 June 2024 - released September 2024⁷⁶)

- The utilised agricultural area (UAA) is 8.7 million hectares in 2024, a 1.0% decrease since 2023 and accounts for 67% of the total area of England.
- The total croppable area accounts for just over half (57%) of UAA whilst permanent grassland accounts for an additional 38%.

Crops

- The total area of arable crops saw a 6.4% decrease between 2023 and 2024, falling to 3.5 million hectares. This was primarily due to flooding and difficult weather conditions which resulted in failed crops and a partial switch to spring plantings.
- The area of uncropped arable land increased by 107% to 581 thousand hectares. Of this area, 276 thousand hectares were left as bare fallow, and the remaining 305 thousand hectares were used for environmental benefit.
- The area of wheat decreased by 11% to 1.4 million hectares, whilst barley increased by 6.2% to 849 thousand hectares.
- The area of oilseed crops decreased by 26% to 274 thousand hectares in 2024. Oilseed rape accounts for 91% of this area and fell by 27% to 250 thousand hectares in 2024.
- Potatoes increased by 1.2%, rising to 83 thousand hectares in 2024.
- The area of horticultural crops covers 113 thousand hectares of land, a decrease of 3.2% compared to 2023.

Land ownership

- The area of agricultural land owned in England decreased by 1.0% to 6.1 million hectares in 2024. Land rented in for a year or more remained at 2.9 million hectares.

Land Use Statistics: England 2022 (Published 27 October 2022⁷⁷)

These are the latest land use statistics that have been published.

England as at April 2022:

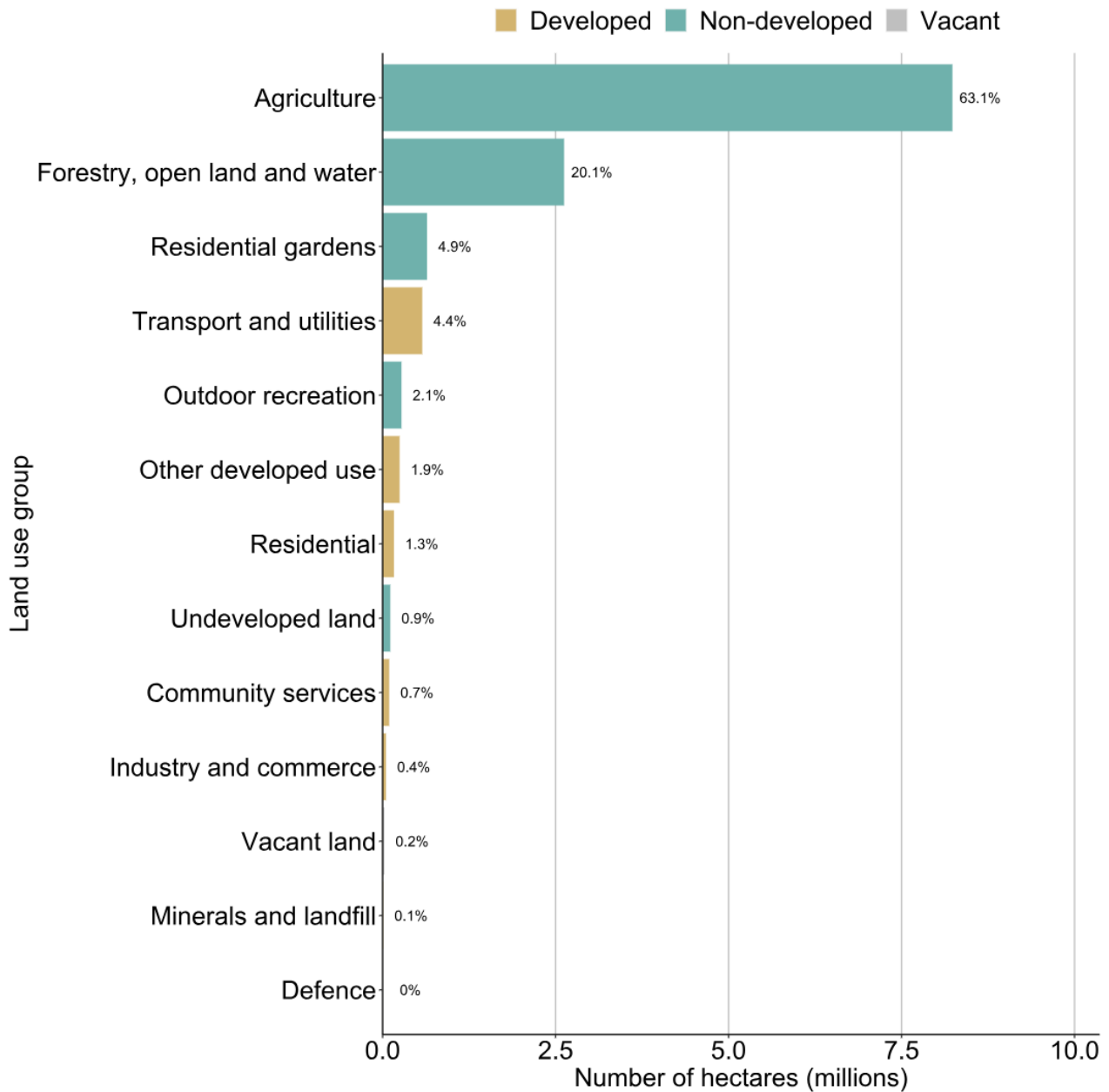
- 8.7% of land in England is of developed use, with 91.1% of non-developed use and the remaining 0.2% being vacant.

⁷⁶ <https://www.gov.uk/government/statistics/agricultural-land-use-in-england/agricultural-land-use-in-england-at-1-june-2024>

⁷⁷ <https://www.gov.uk/government/statistics/land-use-in-england-2022>

- The top 3 land use groups were ‘Agriculture’ (63.1%), ‘Forestry, open land and water’ (20.1%), and ‘Residential gardens’ (4.9%).

Figure 1: Land use by land use group, England 2022

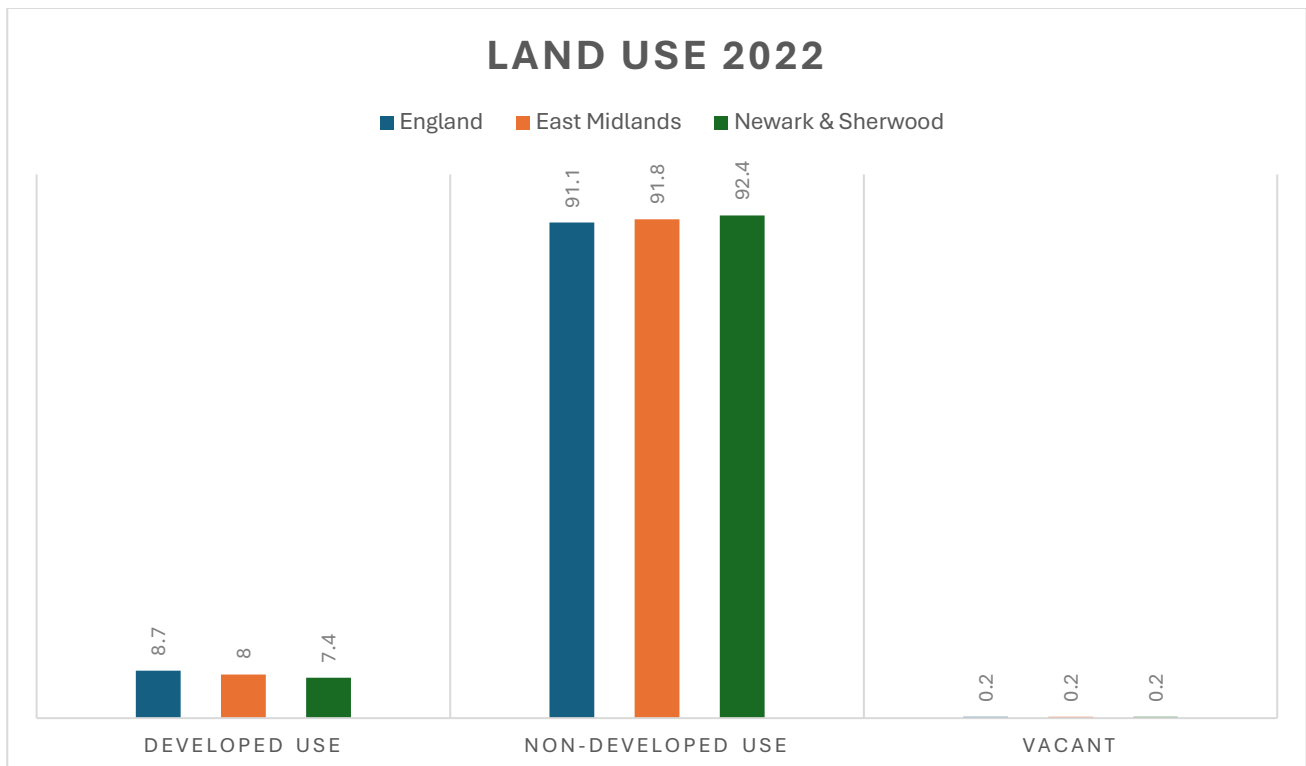


The East Midlands Region as at April 2022:

- 8.0% of land in the East Midlands is of developed use, with 91.8% of non-developed use and the remaining 0.2% being vacant.
- The top 3 land use groups were ‘Agriculture’ (73.5%), ‘Forestry, open land and water’ (11.8%), and ‘Residential gardens’ (4.1%).

Newark and Sherwood Land Use in 2022

| | | |
|---------------------------|---------------|-----------------|
| Developed Use | 7.4% | 4,815Ha |
| Community Service | 0.4% | 229Ha |
| Defence | 0.0% | 0Ha |
| Industry and Commerce | 0.2% | 134Ha |
| Minerals and Landfill | 0.2% | 112Ha |
| Residential | 0.7% | 456Ha |
| Transport and Utilities | 4.0% | 2,618Ha |
| Unknown Developed Use | 1.9% | 1,265Ha |
| Non-Developed | 92.4% | 60,203Ha |
| Agriculture | 73.2% | 47,679Ha |
| Forest, Open Land & Water | 14.0% | 9,122Ha |
| Outdoor Recreation | 1.1% | 724Ha |
| Residential Gardens | 3.5% | 2,264Ha |
| Undeveloped Land | 0.6% | 413Ha |
| Vacant | 0.2% | 116Ha |
| Grand Total | 100.0% | 65,134Ha |



Great North Road Solar (1,765Ha) on its own would amount to 2.71% of all land in Newark & Sherwood; 2.93% of all non-developed land in Newark & Sherwood; and 3.70% of agricultural land in Newark & Sherwood.

It would increase the amount of land already occupied by Transport and Utilities from 4.02% (2,618Ha) to 6.73% (4,383Ha).

It would occupy 65% the amount of land in Newark & Sherwood occupied by all the residential dwellings and their residential gardens combined which cover 4.18% (2,720Ha).

It is equivalent to 36.7% of the amount of land in developed use already in Newark & Sherwood.

It would increase the amount of land in developed use in Newark & Sherwood from 7.39% (4,815Ha) to 10.10% (6,580Ha)

Middle Super Output Area Land Use in 2022

Newark & Sherwood 003 (Muskham, Sutton on Trent & Walesby)



| | |
|--------------------------------------|-----------------|
| Developed Use | 772Ha |
| <i>Community Service</i> | <i>21Ha</i> |
| <i>Defence</i> | <i>0Ha</i> |
| <i>Industry and Commerce</i> | <i>19Ha</i> |
| <i>Minerals and Landfill</i> | <i>18Ha</i> |
| <i>Residential</i> | <i>42Ha</i> |
| <i>Transport and Utilities</i> | <i>464Ha</i> |
| <i>Unknown Developed Use</i> | <i>208Ha</i> |
| Non-Developed | 15,105Ha |
| <i>Agriculture</i> | <i>13,439Ha</i> |
| <i>Forest, Open Land & Water</i> | <i>1,254Ha</i> |
| <i>Outdoor Recreation</i> | <i>24Ha</i> |
| <i>Residential Gardens</i> | <i>318Ha</i> |
| <i>Undeveloped Land</i> | <i>72Ha</i> |
| Vacant | 2Ha |
| Grand Total | 15,879Ha |

This is the Middle Super Output Area (MSOA) that corresponds the most closely to the geographical extent of the Great North Road Solar project.

Great North Road Solar (1,765Ha) on its own would amount to 11.12% of all land in the MSOA; 11.68% of all non-developed land in the MSOA; and 13.13% of agricultural land in the MSOA.

It would increase the amount of land already occupied by Transport and Utilities in the MSOA by around a five-fold margin from 2.92% (464Ha) to 14.04% (2,229Ha).

It would occupy some five times the amount of land in the MSOA than all the residential dwellings and their residential gardens combined which cover just 2.27% (360Ha).

It is 2.29 times the amount of land in developed use already in the MSOA.

It would increase the amount of land in developed use in the MSOA from 4.86% (772Ha) to 15.98% (2,537Ha).

List of Cumulative Projects

Newark and Sherwood (Entire District) (4,051MW) (8,733Ha)

(Note Newark and Sherwood covers 65,134 Ha)

*(Note schemes partly in Newark & Sherwood and partly in Bassetlaw and Lincolnshire marked * are listed under N&S)*

Existing and Operational Energy (2,014MW) (417Ha)

1. Egmanton Solar (14MW) (25Ha)
2. Hawton and The Grange Solar (50MW & 5MW) (99Ha)
3. Bilsthorpe Business Park Solar (5MW) (11Ha)
4. Crifton Lodge Farm, Bilsthorpe Solar (5MW) (12Ha)
5. Eakring, Deerdale Lane Solar (12MW) (26Ha)
6. Rufford Stud Farm, Bilsthorpe Solar (3MW) (8Ha)
7. Netherfield Lane, Perlethorpe-cum-Budby Solar (20MW) (38Ha)
8. Staythorpe Power Station (57Ha) (21/01678/S36ELE - increase to 1,850MW permitted)
9. Staythorpe National Grid Substation (10Ha)
10. National Grid Electricity Training Centre & Pylons (40Ha)
11. Stonish Hill, Bilsthorpe Wind Farm (10MW) (30Ha)
12. Lindhurst Wind Farm, Rainworth (15MW) (45Ha)
13. Edwinstowe Solar (5MW) (11Ha)
14. Balderton Biomass (20MW) (5Ha)

Existing and Operational Other Infrastructure (0MW) (1,791Ha)

15. Lowdham Grange Prison (15Ha)
16. Southwell Racecourse (71Ha)
17. Newark Sugar Factory (78Ha)
18. British Gypsum and Bantycok Quarry (432Ha)
19. Newark Showground (77Ha)
20. Rufford Colliery Site⁷⁸ (34Ha)
21. Center Parcs (142Ha)
22. Nottingham Trent University, Brackenhurst (22Ha)
23. Kirton Brickworks (157Ha)

⁷⁸ This brownfield site remains undeveloped following demolition of the colliery

24. Girton Quarry (104Ha)
25. Cromwell Quarry/Langford Lowfields Quarry/Besthorpe Quarry (659Ha)

Major Local Plan Allocations & Major Developments (0MW) (934Ha)

26. NAP2A - Land South of Newark Urban Extension (540Ha)
27. NAP 2B Land East of Newark Urban Extension (100Ha)
28. NAP 2C Land around Fernwood Urban Extension (245Ha)
29. NUA/E/1 - Newark Urban Area - Employment Site 2 (12Ha)
30. Tritax Park, Sleaford Road, Coddington (37Ha)

Schemes Under Construction (50MW) (75Ha)

31. Lockwell Hill (a.k.a Crifton Lodge), Bilsthorpe Solar (50MW) (75Ha)

NSIP Proposals and Electricity Act Proposals (1,540MW) (3,576Ha)

32. One Earth Solar * (740MW) (1,600Ha)
33. Great North Road Solar (800MW) (1,765Ha)
34. A46 Newark Bypass (211Ha)
35. Staythorpe Power Station Carbon Capture and Storage (no additional land)

Schemes with Planning Permission (187MW) (398Ha)

36. Winkburn Solar Grid Connection (10Ha)
37. Winkburn Solar (34MW) (66Ha)
38. Weston, Tuxford Road Solar
39. Inkersall Grange, Bilsthorpe Solar (50MW) (80Ha)
40. Halloughton Road, Southwell Solar (50MW) (107Ha)
41. Carlton on Trent Solar⁷⁹
42. Staythorpe BESS (11Ha)
43. Winkburn BESS (1Ha)

Schemes Proposed (410MW) (655Ha)

44. Kelham Solar & BESS (50MW) (71Ha)
45. Foxholes Farm, Norwell Solar (50MW) (76Ha)
46. Muskham Wood, Caunton Solar (50MW) (69Ha)
47. Knapthorpe Solar (50MW) (77Ha)
48. Weston, Grassthorpe Lane (a.k.a Tuxford Road) (50MW) (52Ha)

⁷⁹ The area of this scheme is now included as part of the Great North Road Solar proposal

49. South Scarle (5MW) (13Ha)
50. Rufford Colliery (5MW) (16Ha)
51. National Grid Training Centre New Pylons (no additional land)
52. Averham BESS (26Ha)
53. Staythorpe Grid Connection (2Ha)
54. Staythorpe BESS Grid Connection (5Ha)
55. Grassthorpe Beck (53Ha) (50MW)
56. Barnby in the Willows (195Ha) (100MW)

Commentary

Existing and Operational Energy sites together with schemes under construction in Newark & Sherwood amounts to 2,064MW and covers 0.76% (492Ha) of all land in Newark & Sherwood.

Existing and Operation Energy and Infrastructure sites together with all schemes with planning permission or proposed would if they were all permitted and built would almost double the energy output amount to 4,201MW and would cover 12.05% (7,846Ha) of Newark & Sherwood⁸⁰.

Bassetlaw (South Eastern Part - east of A60 and A1(M) and South of A631) (2,705MW) (3,141Ha)

(Note this part of Bassetlaw covers approximately 43,615Ha)

*(Note schemes partly in Bassetlaw and partly in Newark & Sherwood and Lincolnshire marked * are listed under N&S)*

(Note the NSIP schemes which cross the Nottinghamshire and Lincolnshire boundary marked ^ that connect to the Bassetlaw River Trent Power Station Electricity Substations (High Marnham, Cottam & West Burton) are listed under West Lindsey)

(Note the North Humber to High Marnham Power Line is partly in Bassetlaw and partly in Doncaster and beyond marked # is listed under Bassetlaw)

Existing and Operational Energy (1,922MW) (687Ha)

57. Westwood Farm, Tuxford Solar (5MW) (11Ha)
58. Tiln Lane, Retford Solar (10MW) (23Ha)

⁸⁰ These figures include all of the One Earth Solar project which does lie partly in the Neighbouring areas of Bassetlaw and West Lindsey

59. Little Morton, Babworth Solar (14MW) (31Ha)
60. Walkers Wood, Ranby Solar (27MW) (58Ha)
61. Walmoor Farm, Whitehouses, Retford Solar (5MW) (7Ha)
62. Hazel Gap, near Budby Solar (16MW) (50Ha)
63. Barnby Moor Solar (5MW & 4MW) (10Ha)
64. West End Farm, Tresswell Solar (17MW) (16Ha)
65. West Burton A Power Station⁸¹ (212Ha)
66. West Burton B Gas Power Station (1,332MW) (20Ha)
67. West Burton National Grid Substation (4Ha)
68. Cottam Development Centre Gas Power Station (445MW) (27Ha)
69. Cottam Coal Power Station (188Ha)
70. Cottam National Grid Substation⁸² (13Ha)
71. J G Pears Combined Heat & Power Plant (42MW) (10Ha)
72. High Marnham National Grid Substation (7Ha)

Major Local Plan Allocations & Major Developments (0MW) (307Ha)

73. Cottam Priority Regeneration Area (120Ha⁸³)
74. EM008a - Former Bevercotes Colliery (80Ha)
75. HS13 - Ordsall South, Retford Urban Extension (107Ha)

Existing and Operational Other Infrastructure (0MW) (446Ha)

76. Rampton High Security Hospital (40Ha)
77. Gamston Airport (174Ha)
78. Bevercotes Colliery Site⁸⁴ (31Ha)
79. High Marnham Power Station Site⁸⁵ (63Ha)
80. Ranby Prison (26Ha)
81. Sturton le Steeple Quarry (112Ha)

Schemes Under Construction

None

⁸¹ West Burton A Power Station is no longer operational having closed in 2023 and is scheduled to be demolished over the next few years

⁸² Cottam Coal Power Station is no longer operational having closed in 2019 and is currently undergoing demolition

⁸³ Cottam Priority Regeneration Area Allocation is 348Ha, the figures for the three existing entries in 66 to 68 have been discounted to avoid double counting of area, leaving a residual 120Ha to be counted under this heading

⁸⁴ This brownfield site remains undeveloped following demolition of the colliery

⁸⁵ This brownfield site remains undeveloped following demolition of the former Power Station

NSIP Proposals (400MW) (958Ha)

82. High Marnham Grid Substation (14Ha)
83. Steeples Renewables Solar (400MW) (944Ha)
84. North Humber to High Marnham Overhead Line # (90km in length⁸⁶)
85. West Burton Nuclear STEP (?MW) (no additional land take would replace West Burton Power Station A)

Schemes with Planning Permission (143MW) (310Ha)

86. Bumble Bee, Saundby Solar (50MW) (155Ha)
87. High Marnham Solar (43MW) (58Ha)
88. Sturton le Steeple Solar (50MW) (97Ha)
89. West Burton BESS (no additional land take would go within existing West Burton Power Station site)
90. Cottam BESS (no additional land take would go within existing Cottam Power Station site)

Schemes Proposed (240MW) (433Ha)

91. Normanton Larches Solar (A614) (40MW) (88Ha)
92. Beckingham Solar (50MW) (84Ha)
93. Bole Solar (50MW) (71Ha)
94. Ranby, Five Lane Ends, Retford Solar (50MW) (90Ha)
95. Sutton cum Lound Solar (25MW) (49Ha)
96. Headon Solar (15MW) (31Ha)
97. South Leverton Solar (5MW) (10Ha)
98. Laneham Solar (5MW) (10Ha)
99. West Burton C BESS (no additional land take would go within existing West Burton Power Station site)
100. High Marnham BESS (no additional land take would go within former High Marnham Power Station site which has already been counted above)

Commentary

Existing and Operational Energy sites together with schemes under construction in this part of Bassetlaw amounts to 1,922MW and covers 1.58% (687Ha) of all land in this part of Bassetlaw⁸⁷.

⁸⁶ No area in hectares is counted because at present only a broad corridor is suggested rather than an area for the Order Limits

⁸⁷ These figures do not include any of the One Earth Solar project which does lie partly in Bassetlaw but has been counted in the figures for the Neighbouring area of Newark & Sherwood

Existing and Operation Energy and Infrastructure sites together with all schemes with planning permission or proposed would if they were all permitted and built would increase the energy output amount by around 40% to 2,705MW, and would cover 7.20% (3,141Ha) of this part of Bassetlaw.

North Kesteven (Western Part - West of A607) (976MW) (2,169Ha)

(note this part of North Kesteven covers approximately 21,680Ha)

Existing and Operational Energy (16MW) (6Ha)

101. Lincolnshire Energy from Waste Plant, North Hykeham (16MW)

Existing and Operational Other Infrastructure (0MW) (13Ha)

102. Morton Hall Immigration Removal Centre (13Ha)

Major Local Plan Allocations & Major Developments⁸⁸ (0MW) (138Ha)

103. E1 - Teal Park Strategic Employment Site (36Ha)

104. E3 - St Modwen Park, Witham St Hughs Strategic Employment Site (22Ha)

105. NK/WAD/004a - Land south of Station Road, Waddington (11Ha)

106. NK/WSH/002 - Land to the north of Witham St. Hughs (Phase 3) (69Ha)

Schemes Under Construction

None

NSIP Proposals (950MW) (1,974Ha)

107. Fosse Green Energy Solar and Grid Connection Corridors (350MW) (1,003Ha)

108. Leoda Solar Farm (500 to 600MW) (971Ha)

Schemes with Planning Permission

None

Schemes Proposed (10MW) (38Ha)

109. Hanley Farm, Beckingham Solar (5MW) (12Ha)

110. Whisby Road North Hykeham Solar (5MW) (26Ha)

⁸⁸ We have not included any of the Lincoln Urban Extensions as although some of these are in this part of North Kesteven, they relate more to Lincoln which has been left out of our study area

Commentary

Existing and Operational Energy sites together with schemes under construction in this part of North Kesteven amounts to 16MW and covers 0.02% (6Ha) of all land in this part of North Kesteven.

Existing and Operation Energy and Infrastructure sites together with all schemes with planning permission or proposed would if they were all permitted and built would increase the energy output amount some 61 times to 976MW, and would cover 10.00% (2,169Ha) of this part of North Kesteven.

West Lindsey (South-Eastern Part - South of A631 and West of A15) (2,154MW) (4,689Ha)

(Note this part of West Lindsey covers approximately 25,380Ha)

(Note the NSIP schemes which cross the Nottinghamshire and Lincolnshire boundary marked ^ that connect to the Bassetlaw River Trent Power Station Electricity Substations (High Marnham, Cottam & West Burton) are listed under West Lindsey)

(Note the online planning system for West Lindsey has no search capability by development type or keywords so the information for this area may be incomplete)

Existing and Operational (24MW) (19Ha)

111. Stow Park Solar (24MW) (19Ha) (North of A1500)

Schemes Under Construction

None

Major Local Plan Allocations & Major Developments⁸⁹ (0MW) (480Ha)

112. RAF Scampton Opportunity Area (480Ha)

NSIP Proposals (2,080MW) (4,142Ha)

113. Cottam Solar ^ (600MW) (1,270Ha)

114. West Burton Solar ^ (480MW) (788Ha)

115. Gate Burton Energy Park Solar ^ (500MW) (684Ha)

116. Tillbridge Solar ^ (500MW) (1,400Ha)

⁸⁹ We have not included any of the Lincoln Urban Extensions as although some of these are in this part of North Kesteven, they relate more to Lincoln which has been left out of our study area

Schemes with Planning Permission

None

Schemes Proposed (50MW) (48Ha)

117. Stow Park Solar (South of A1500) (50MW) (48Ha)

Commentary

Existing and Operational Energy sites together with schemes under construction in this part of West Lindsey amounts to 24MW and covers 0.07% (19Ha) of all land in this part of West Lindsey⁹⁰.

Existing and Operation Energy and Infrastructure sites together with all schemes with planning permission or proposed would if they were all permitted and built would increase the energy output amount by around 90 times to 2,154MW, and would cover 18.48% (4,689Ha) of this part of West Lindsey.

⁹⁰ These figures do not include any of the One Earth Solar project which does lie partly in West Lindsey but has been counted in the figures for the Neighbouring area of Newark & Sherwood