Volume 1: Planning Statement

Longhedge Solar Farm

30/11/2022

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INTRODUCTION

BACKGROUND

1.1. This Planning Statement ("PS") has been prepared by Neo Environmental Limited, on behalf of Renewable Energy Systems (RES) Ltd ("the Applicant") in support of a planning application submitted to Rushcliffe Borough Council ("the Council") for a proposed 49.9MW solar farm development (the "Proposed Development") on lands between Hawksworth and Thoroton, circa 15.5km east of Nottingham, Nottinghamshire (the "Application Site"); the approximate centre point of which can be found at Grid Reference E476129, N343467.

1.2. Please see **Figure 2** of **Volume 2: Planning Application Drawings** for further detail on the Site Location.

The Applicant

1.3. Renewable Energy Systems (RES) Ltd have been at the forefront of the renewable energy industry for over 40 years and have delivered over 23GW of renewable energy projects across the globe.

1.4. RES Ltd, with assistance from Neo Environmental Limited, have developed a rigorous site selection process in order to ensure that only the best projects are developed, and such projects are able to be sensitively integrated into the wider landscape, encouraging the protection and enhancement of the environment.

Pre-Application Discussions

1.5. A request for pre-application advice was made by Neo Environmental Ltd on behalf of the Applicant to Rushcliffe Borough Council in January 2021. A formal pre-application response was provided on the 25th of March 2021 (ref: 21/00406/ADVICE). A copy of the written response is provided in **Appendix A.**

1.6. Addressing the principle of the Proposed Development; the LPA advises, "*In principle, the development of renewable and low carbon energy is acceptable in both national and local policy terms. In particular, paragraph 154 of the NPPF states that local planning authorities should (inter alia) "…approve the application if its impacts are (or can be made) acceptable" Policies in both Part 1 and Part 2 of the Local Plan express encouragement to the development of renewable energy, providing, of course that any other impacts can be made acceptable."*

1.7. Providing there are no unacceptable impacts, the LPA concluded that the principle of the Proposed Development can be supported.

1.8. The pre-application response identified the various technical and environmental considerations which any forthcoming planning submission would need to address, including design, landscape and visual amenity, nature conservation, heritage, highway safety, the impact on Public Rights of Way (PRoW) and drainage. A list of the assessments that the LPA expect to see to address these considerations was also provided (See **Appendix A** for further detail).

1.9. The comprehensive supporting information provided with this planning application (**Volume 2: Planning Application Drawings and Volume 3: Technical Appendices**) responds directly to the requirements set out by the LPA, as well as additional considerations.

EIA Screening

1.10. The Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 2017 require the submission of an Environmental Statement (ES) with applications for planning permission for "EIA development".

1.11. The 2017 Regulations differentiate two types of EIA development – Schedule 1 and Schedule 2. Schedule 1 development (and changes/extensions thereto) is by nature "EIA development" and therefore requires an Environmental Statement (ES). Schedule 2 development (and changes/extensions thereto) is only EIA development if – in the opinion of the LPA – it is likely to have significant effects on the environment by virtue of factors such as size, nature or location.

1.12. On that basis, an EIA Screening Request was submitted to Rushcliffe Borough Council by Neo Environmental Ltd on behalf of the Applicant on the 5th April 2022; it included detailed consideration of the Proposed Development's environmental effects.

1.13. The EIA Screening Opinion from the Local Planning Authority (LPA) (ref: 22/00638/SCREIA) dated 7th September 2022, outlined that although the scale of the development would exceed the applicable threshold and criteria set out in part 3 (a) of Schedule 2 in column 2 (0.5ha), it does not comprise EIA development when assessed against the criteria set out in Schedule 3, as it would not have the potential to have significant adverse effects on the environment within the meaning of the 2017 Regulations.

1.14. The EIA Screening Opinion also notes that the Application Site is not located within a sensitive area for the purposes of Environmental Assessment as set out in the Regulations and therefore, **an Environmental Statement is not required to be submitted**.

1.15. Please see **Appendix B** for a copy of the EIA Screening Opinion issued by the LPA.

Scope of Planning Statement and Associated Documents

1.16. The purpose of this statement is to outline the planning merit of the Proposed Development within a context of best practice guidance, legislation, national and local planning policy and should be read as part of the suite of reports that accompany the application. These include:

- Volume 1: Planning Reports
    - Planning Application Form
    - Planning Statement
    - Design and Access Statement
    - Statement of Community Involvement
- Volume 2: Planning Application Drawings
    - Figure 1: Site Location Plan (Drawing no. 04668-RES-LAY-DR-PT-001)
    - Figure 2: Site Location Map (Drawing no. 04668-RES-LAY-DR-PT-002)
    - Figure 3: Field Numbers (Drawing no. NEO00782/002I/B)
    - Figure 4: Indicative Infrastructure Layout A3 (Drawing no. 04668-RES-LAY-DR-PT-004)
    - Figure 5: Indicative Infrastructure Layout A1 (Drawing no. 04668-RES-LAY-DR-PT-005)
    - Figure 6: Access Track Detail (Drawing no. 04668-RES-ACC-DR-PT-001)
    - Figure 7: Temporary Construction Compound (Drawing no. 04668-RES-CTN-DR-PT-001)
    - Figure 8: Typical PV Module and Rack Detail (Drawing no. 04668-RES-SOL-DR-PT-001)
    - Figure 9: Typical Security Fence Detail (Drawing no. 04668-RES-SEC-DR-PT-001)
    - Figure 10: CCTV Detail (Drawing no. 04533-RES-SEC-DR-PT-002)
    - Figure 11: Typical Inverter Substation Detail (Drawing no. 04668-RES-SUB-DR-PT-002)
    - Figure 12A: Client / DNO Substation Detail Option 1 (Drawing no. 04668-RES-SUB-DR-PT-001)
    - Figure 12B: Client / DNO Substation Detail Option 2 (Drawing no. 04668-RES-SUB-DR-PT-003)
    - Figure 13: Typical Deer Fence (Drawing no. 04668-RES-SEC-DR-PT-003)

- Figure 14: Sheep Handling System Detail (Drawing no. 1000349)
- Figure 15: Indicative Track with Bridleway Crossing (Drawing no. NEO00782_027I_A Figure 15)

Volume 3: Technical Assessments

- TA 1: Landscape and Visual Assessment (LVA)
- TA 2: Ecological Assessment (EcA)
- TA 3: Cultural Heritage Impact Assessment (CHIA)
- TA 4: Flood Risk Assessment and Drainage Impact Assessment (FRA/DIA)
- TA 5: Construction Traffic Management Plan (CTMP)
- TA 6: Noise (Acoustic) Impact Assessment (NIA)
- TA 7: Glint and Glare Assessment
- TA 8: Outline Construction Environmental Management Plan (OCEMP)
- TA 9: Agricultural Land Classification (ALC)
- TA 10: Arboricultural Impact Assessment (AIA)

SITE AND SURROUNDING CONTEXT

1.17. The Application Site is located in a semi-rural setting on lands between the settlements of Hawksworth (0.1km west) and Thoroton (0.2km southeast), circa 15.5km east of Nottingham, Nottinghamshire. (See **Figure 1** of **Volume 2: Planning Application Drawings** for further detail).

1.18. Centred at approximate Grid Reference E476129, N343467, the Proposed Development Site comprises nine fields covering a total area of c. 94.24hectares (ha), although only 37.7ha of this area is required to accommodate the solar arrays themselves, with the remaining area being used for ancillary infrastructure and mitigation and enhancement measures. The Proposed Development Site covers low lying lightly undulating agricultural land with an elevation range of c. 20m to 25m AOD. Internal field boundaries comprise, hedgerows, tree lines and several linear strips of woodland shelter belt. External boundaries largely consist of mature to lower hedgerows with individual trees and some evident gaps. In terms of existing infrastructure; electricity pylons extend north-south through fields 5, 6 & 8, whilst electricity lines pass northwest to southwest through fields 4, 5, 6 & 9.

1.19. The Application Site will be accessed via the creation of a new entrance off the linear public highway Thoroton Road. The vegetation is set back from the road verge by a few metres and therefore visibility will not be an issue. Appropriate visibility splays are included within the CTMP.

1.20. The haul route will be from the A46 to the southwest of the Application Site. The vehicles will exit the A46, signposted A6097 (Mansfield), take the 4th exit at the roundabout onto Bridgford Street followed by the 1st exit at the next roundabout onto Fosse Way. Vehicles will travel along this road for approximately 1.5km to the next roundabout, where they will take the 2nd exit onto Tenman Lane. This road will be travelled on in an eastern direction for approximately 3.2km before taking a left hand turn onto Hawksworth Road and vehicles will travel along here for approximately 2km before taking a right hand turn onto Thoroton Road. Vehicles will travel in a southeast direction for approximately 0.9km before turning left into the Application Site.

1.21. There is one recreational route located within the Proposed Development Site (Bridleway 1 & 6 that pass through the northern fields), and several located close by (**See Figure 3 of Vol 2: Planning Drawings**). National Cycle Network (NCN) route 64 shares the minor road on the east side of the Proposed Development Site.

1.22. The Proposed Development Site is mostly contained within Flood Zone 1 (at little or no risk of fluvial or tidal / coastal flooding), however there are some areas of Flood Zone 2 and 3a which follow the watercourse/drains within the site and have been carefully considered during the design phase.

1.23. A more detailed description of the site and its surroundings is included in the Landscape and Visual Appraisal in **Technical Appendix 1: Volume 3.**

PLANNING HISTORY

1.24. This section of the Planning Statement provides a summary of the relevant planning history both within the Application Site and the immediate surrounding area. The Application Site has no previous planning history.

1.25. Table 1 shows the planning history relevant to the Application Site and the surrounding area.

Table 1: Planning History and relevant developments.

Name	Development	Planning Reference	Status	Direction from Proposed Development Site
Lodge Farm Longhedge Lane Orston Nottinghamshire	Solar Farm	13/01609/FUL	Permitted	2.0km southeast
Land South Of The Railway Line & East Of Station Road Elton Nottinghamshire	Solar Farm	14/01739/FUL	Permitted	2.98km south

THE PROPOSED DEVELOPMENT

1.26. This Planning Application seeks full planning permission for the development of a 49.9MW solar farm and all associated ancillary infrastructure.

1.27. The Proposed Development will consist of the construction of a 49.9MW solar farm. It will involve the construction of bi-facial ground mounted solar photovoltaic (PV) panels, new access tracks, underground cabling, perimeter fencing with CCTV cameras and access gates, 2x temporary construction compounds, substation and all ancillary grid infrastructure and associated works.

1.28. The solar panels and main infrastructure will occupy 9 agricultural fields. Please see **Figure 3 of Volume 2: Planning Application Drawings** for field numbers and **Figures 4 and 5 of Volume 2** for the infrastructure layout.

1.29. The Application Site will be accessed from a new site access point off Thoroton Road and will be designed in accordance with the Nottinghamshire Highway Design Guide to ensure that

the largest construction vehicles can enter and exit the site access point. To facilitate this, 13.3m of hedgerow will need to be removed.

1.30. The haulage route will be from the A46 to the southwest of the Application Site. The vehicles will exit the A46, signposted A6097 (Mansfield), take the 4th exit at the roundabout onto Bridgford Street followed by the 1st exit at the next roundabout onto Fosse Way. Vehicles will travel along this road for approximately 1.5km to the next roundabout, where they will take the 2nd exit onto Tenman Lane. This road will be travelled on in an eastern direction for approximately 3.2km before taking a left hand turn onto Hawksworth Road and vehicles will travel along here for approximately 2km before taking a right hand turn onto Thoroton Road. Vehicles will travel in a southeast direction for approximately 0.9km before turning left into the Application Site.

1.31. The Proposed Development can be summarised as follows:

- 5,746 module racks, 160,888 Modules, 45,968 pile driven poles = 367.74m2
- 1 x Substation Compound – Abnormal shape – Total Area: 4,656.421m2
- 2 x Spare Parts Containers (12.19m (L) x 2.44m (W)) = 59.48m2
- 28 x Inverters Substation (16.0m (L) x 6.0m (W)) = 2,688m2
- 14 x Inverter Substation Hardstandings (16.0m (L) x 16.0m (W)) = 3,584m2
- 7.499km of deer fencing with 2,499 posts at 3m spacing, c. 0.03m2 footprint each. Fence is 2.4m high with a 0.1m gap at the bottom. = 75.00m2
- CCTV posts are 3.5m in height and we have 98 = 54.88m2
- Road is average 4/5m wide and will involve an average of 300mm depth of soil removed. Local widening at turns for access reasons. Occasionally they will use a geosynthetic reinforcement or soil stability to reduce depth. Total length approximately 3.33km (14,985m2).
- Cable trenches are circa 1m deep and up to 1m wide. They are approximately 4,995m in length and therefore an area of 4,995m2.
- 2x Temporary Construction Compounds (50.00m (L) x 60.00m (W)) = 6,000m2

o Overall, the proposed footprint constitutes a relatively small percentage of the total area of the Application Site (94.24ha):

- 37,022.78m^2 for infrastructure (c. 3.93% of the Application Site area); and
- 442.74m^2 for piling (c. 0.05% of the Application Site area).

1.32. The total ground disturbance area resulting from the Proposed Development is therefore **37,465.52m²** or c. **3.98%** of the Application Site area.

1.33. The proposed design is based on informed assumptions of the most likely option for the solar panels and their positioning, however, as with all technology, solar PV is continually advancing and becoming more efficient and whilst various infrastructure components are described in this application, it is proposed that the most efficient infrastructural specifications available at the time of construction will be used. These may vary slightly from the indicative details described in this report, but this is not expected to result in a material departure from the details specified.

1.34. In devising the proposed design and layout, RES Ltd has employed specialist consultants to review their operational requirements and advise on any resulting environmental effects and/or necessary mitigation measures. On this basis, and as this Statement and the associated Technical Appendices will confirm, the proposed layout and design is considered to strike an optimum balance between energy production from renewable resources and all environmental and technical considerations.

DETAILED DEVELOPMENT DESCRIPTION

1.35. This Section provides a detailed breakdown and description of the design and layout details identified within the preceding section of this Planning Statement.

Module array and racking system

1.36. The panels will be mounted onto metal frames arranged in rows running east to west and fixed to pile driven galvanised steel posts. These will facilitate an angle between 10 and 30 degrees from the horizontal, with a proposed a maximum height of up to 2.8m to the top of panel frame on level ground, including approx. 0.6m of ground clearance (this figure may vary depending on the topography) to enable maintenance access below the PV modules.

1.37. Please refer to **Figure 8** which is included within **Volume 2: Planning Application Drawings** for further details.

Inverter Substation

1.38. The design includes 28 no. inverters, including transformer cabinets, within self-contained weatherproof units. The inverters will convert the Direct Current (DC) to Alternating Current (AC).

1.39. Please refer to **Figure 11** which is included within **Volume 2: Planning Application Drawings** for further details.

CCTV and infra-red lighting

1.40. The design includes a CCTV security system incorporating 98 no. cameras and infrared lighting supported on 3.5m high galvanised steel posts with anti-climb guard positioned at intervals around the perimeter fence line. These CCTV cameras will be inward facing towards the development.

1.41. Please refer to **Figure 10** which is included within **Volume 2: Planning Application Drawings** for further details.

Fencing

1.42. The design includes the provision of secure fencing running around the perimeter of the Proposed Development. The fence will consist of timber posts and deer fencing measuring to 2.4m in height with a 0.1m gap at the bottom. The fence will measure 7.424km in length, with 2,475 posts in total. The fence will be erected at the start of the construction programme, remaining in place for the duration of the operation until decommissioning of the Proposed Development.

1.43. Please refer to **Figure 13** which is included within **Volume 2: Planning Application Drawings** for further details.

1.44. There is also security fencing proposed around the substation made up of painted green palisade fencing.

1.45. Please refer to **Figure 9** in **Volume 2: Planning Application Drawings** for further details.

Temporary Construction Compounds

1.46. The design includes 2x temporary construction compounds which will be required during the construction phase of the Proposed Development. These measure at 50m(L) by 60m(W). The total area for 2x temporary construction compounds comprises 6,000m^2.

1.47. The compounds will contain the following:

- Temporary site facilities (Port-a-Cabin type) to be used for site office and welfare facilities, including welfare facilities with provision for sealed waste storage and removal;
- Container storage unit(s) for tools and equipment storage;
- Container storage unit(s) for components and materials;
- Refuelling compound for construction vehicles and machinery;
- Chemical toilets;
- Adequate parking area for cars, construction vehicles and machinery;
- Designated skips for construction waste; and
- Wheel washing facility.

1.48. Please refer to **Figure 7** which is included within **Volume 2: Planning Application Drawings** for further details.

Client / DNO Substation

1.49. The design includes 2 options for Client/Distribution Network Operator (DNO) substation. Please refer to **Figure 12a&b** which are included within **Volume 2: Planning Application Drawings** for further details.

Cabling

1.50. Cable works will be required to run from the PV Module array and CCTV to the inverter substations and client/DNO substation. These cable runs will also contain communications

cabling for the SCADA control and monitoring system which will consist of multicore copper or fibre optic cables. All on-site cabling will be located underground. Cable trenches will be excavated to 1m deep x 1m wide, running approximately 4,995m in length, during construction and backfilled to prevent any visibility.

Access Track and Hardstanding

1.51. The haulage route will be from the A46 to the southwest of the Application Site. The vehicles will exit the A46, signposted A6097 (Mansfield), take the 4th exit at the roundabout onto Bridgford Street followed by the 1st exit at the next roundabout onto Fosse Way. Vehicles will travel along this road for approximately 1.5km to the next roundabout, where they will take the 2nd exit onto Tenman Lane. This road will be travelled on in an eastern direction for approximately 3.2km before taking a left hand turn onto Hawksworth Road and vehicles will travel along here for approximately 2km before taking a right hand turn onto Thoroton Road. Vehicles will travel in a southeast direction for approximately 0.9km before turning left into the Application Site.

1.52. Additional and upgraded on-site access tracks will be constructed to allow access for the construction, operation, maintenance and decommissioning of the solar panels and associated infrastructure. The tracks will measure 4.5/5.5m wide with a 4/5m running width, however, this will increase at bends.

1.53. All new tracks will be unpaved and constructed from local stone. Geosynthetic reinforcement or soil stabilisation may be used to reduce the depth of track construction. The surface will be a compacted granular material (crushed rock) up to an approximate thickness of 0.3m, dependent on the ground conditions and ensuring adequate surface water run off rates.

1.54. Load bearing crane hardstanding areas are required during construction to support the cranes as they lift the inverter substations from the delivery vehicles. The site tracks can be used for this purpose, with some localised widening where required.

1.55. The access tracks will be left in situ after completion of the construction period, as they will provide:

- Access for the Proposed Development maintenance and repair works;
- Access for the landowner; and
- Access for decommissioning of the Proposed Development.

1.56. Once the Proposed Development is decommissioned, unless required by the landowner and agreed with the Council, all new surfaces will be removed.

1.57. Please refer to **Figure 6: Volume 2** for a typical access track section drawing.

CONSTRUCTION, OPERATION AND DECOMMISSIONING

1.58. This Section will provide a brief summary on the construction, operational and decommissioning process associated with the Proposed Development.

Construction

1.59. The construction of the Proposed Development will typically take in the region of c. 6 months.

1.60. A typical running order of the proposed works is as follows:

- Erection of perimeter fencing;
- Construction of access tracks, temporary site compounds and hardstanding;
- Delivery of components and materials;
- Installation of racks and panels;
- Cable works and grid connection;
- Removal of temporary construction compounds; and
- Reinstatement works and demobilisation from site.

1.61. Please note, however, that many of these tasks will take place concurrently in order to limit the construction phase as far as is reasonably possible.

1.62. During the anticipated six-month construction period, a total of 1106 Heavy Goods Vehicles (HGV) deliveries (equating to 2212 two-way movements) will be made to the Application Site. During the peak construction period there will be an approximate maximum of 20 daily HGV deliveries.

Operation

1.63. Solar PV developments collect and convert solar radiation directly into electricity. The panels will be cleaned periodically throughout the year to ensure optimal performance and, whilst the panels are most effective on clear days, energy will still be generated on cloudy days. The equipment will be remotely monitored to ensure the development is working as expected and routine maintenance visits will take place twice a year with approximately 10-15 Light Goods Vehicles (LGV) expected.

1.64. During operation, the Proposed Development Site will be in 'dual-use' as small livestock such as sheep may continue to graze the site beneath and between arrays, thereby retaining agricultural activity while introducing new economic activity to the area.

Decommissioning

1.65. The intention is that the site can be returned to its former state at the expiry of the Proposed Developments lifespan. All elements of the Proposed Development will be completely removed and either recycled or reused. It is expected that the decommissioning process should be similar to that of the construction phase and an allowance of 1 year is suggested to cater for any unforeseen delays that could be experienced.

1.66. The number of HGVs required for the decommissioning period will be slightly higher than the construction phase due to the materials not being as neatly packed as when shipped from factory conditions. Whilst the construction phase had a total of approximately 2,212 movements, the decommissioning phase will have a total of circa 2,654 movements (estimate includes a 10% increase on the construction stage). This increase is not considered to be significant. See **Technical Appendix 5: Construction Traffic Management Plan (CTMP) of Volume 3** for further details.

PLANNING POLICY CONTEXT

1.67. This Section of the Planning Statement will outline the key Planning Legislation, Policy and Guidance that are considered relevant to the Proposed Development. Those are:

- Rushcliffe Local Plan Part 1: Core Strategy[1];
- Rushcliffe Local Plan Part 2: Land and Planning Policies[2];
- Planning and Compulsory Purchase Act 2004[3];
- National Planning Policy Framework (NPPF, 2021)
- National Planning Practice Guidance (NPPG) (2014)[4]
- Climate Change Act 2008[5]
- Overarching National Policy Statement for Energy EN-1 (DECC, July 2011)[6]
- Clean Growth Strategy (2017)[7]
- Department for Business, Energy and Industrial Strategy (BEIS) Outcome Delivery Plan (2021)[8]
- The Sixth Carbon Budget: The UK's path to Net Zero (2020)[9]
- The Ten Point Plan for a Green Industrial Revolution (2020)[10]
- Energy White Paper (2020)[11]

[1] https://www.rushcliffe.gov.uk/media/1rushcliffe/media/documents/pdf/planningandbuilding/planningpolicy/corestrategyexamination/9%20Local%20Plan%20Part%201%20Rushcliffe%20Core%20Strategy.pdf
[2] https://www.rushcliffe.gov.uk/media/1rushcliffe/media/documents/pdf/planningandbuilding/planningpolicy/lapp/adoption/Rushcliffe%20LP%20Part%202_Adoption%20version.pdf
[3] https://www.legislation.gov.uk/ukpga/2004/5/contents
[4] https://www.gov.uk/government/collections/planning-practice-guidance
[5] https://www.legislation.gov.uk/ukpga/2008/27/contents
[6] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/47854/1938-overarching-nps-for-energy-en1.pdf
[7] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/700496/clean-growth-strategy-correction-april-2018.pdf
[8] https://www.gov.uk/government/publications/department-for-business-energy-and-industrial-strategy-outcome-delivery-plan/beis-outcome-delivery-plan-2021-to-2022
[9] https://www.theccc.org.uk/publication/sixth-carbon-budget/
[10] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/936567/10_POINT_PLAN_BOOKLET.pdf
[11] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/945899/201216_BEIS_EWP_Command_Paper_Accessible.pdf

- Industrial Decarbonisation Strategy (2021)[12]
- Net Zero Strategy (2021)[13]
- British Energy Security Strategy (2022)[14]

1.68. The aim of this section is to determine the land use implications of the Proposed Development, consider its compliance with the relevant planning legislation, policy and guidance and identify other material considerations to be taken into account during the determination process.

Rushcliffe Local Plan

1.69. Section 38(6) of the Planning and Compulsory Purchase Act 2004 requires that applications for planning permission must be determined in accordance with the development plan unless material considerations indicate otherwise.

1.70. For the purposes of this application, the Development Plan comprises the *Rushcliffe Local Plan Part 1: Core Strategy* and the *Local Plan Part 2: Land and Planning Policies*.

1.71. The *Rushcliffe Local Plan Part 1: Core Strategy* was adopted in December 2014 and is a long-term plan to regenerate the Borough by establishing the strategic approach to new development and identifying the main strategic allocations in the Borough. In support of the Core Strategy, the *Local Plan Part 2: Land and Planning Policies* (LPP) was adopted in October 2019 and identifies non-strategic allocations and designations and sets out more detailed policies for use in determining planning applications.

1.72. The following policies are considered to be of particular relevance to the proposals:

- Core Strategy Policy 1: Presumption in Favour of Sustainable Development
- Core Strategy Policy 2: Climate Change
- Core Strategy Policy 11: Historic Environment
- Core Strategy Policy 16: Green Infrastructure, Landscape, Parks and Open Spaces
- Core Strategy Policy 17: Biodiversity
- LPP Policy 16: Renewable Energy

[12] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/970229/Industrial_Decarbonisation_Strategy_March_2021.pdf
[13] https://www.gov.uk/government/publications/net-zero-strategy
[14] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1069973/british-energy-security-strategy-print-ready.pdf

- LPP Policy 17: Managing Flood Risk
- LPP Policy 18: Surface Water Management
- LPP Policy 28: Conserving and Enhancing Heritage Assets
- LPP Policy 29: Development affecting Archaeological Sites
- LPP Policy 34: Green Infrastructure and Open Space Assets
- LPP Policy 36: Designated Nature Conservation Sites
- LPP Policy 37: Trees and Woodland
- LPP Policy 38: Non-Designated Biodiversity Assets and the Wider Ecological Network.

Core Strategy Policy 1: Presumption in Favor of Sustainable Development

1.73. Policy 1 states "*When considering development proposals the Council will take a positive approach that reflects the presumption in favour of sustainable development contained in the National Planning Policy Framework. It will always work proactively with applicants jointly to find solutions which mean that proposals can be approved wherever possible, and to secure development that improves the economic, social and environmental conditions in the area.*"

Core Strategy Policy 2: Climate Change

1.74. Policy 2 stresses the importance of all proposals mitigating against and adapting to climate change, as well as complying with national and local targets on reducing carbon emissions and energy use. It goes on to state "*Development should demonstrate how carbon dioxide emissions have been minimised in accordance with the following energy hierarchy:*

a) Using less energy through energy efficient building design and construction, including thermal insulation, passive ventilation and cooling;

b) Utilising energy efficient supplies, including connection to available heat and power networks;

c) Maximising use of renewable and low carbon energy systems"

1.75. While this does not specifically reference solar farms, it does advocate the transition to a low carbon future.

1.76. Subsection 5 of Policy 2 notes "*The extension of existing or development of new decentralised, renewable and low-carbon energy schemes appropriate for Rushcliffe will be promoted and encouraged, including biomass power generation, combined heat and power, wind, solar and micro generation systems, where these are compatible with environmental, heritage, landscape and other planning considerations*."

1.77. The Proposed Development aligns with Core Strategy Policies 1 and 2 as it would play a key role in helping to secure radical reductions in greenhouse gas emissions, minimise vulnerability and provide resilience to the impacts of climate change. This is considered central to economic, social, and environmental dimensions of sustainable development.

1.78. Subsections 6 – 10 of Policy 2 relate to Flood Risk and Sustainable Drainage. It states, "*Development proposals that avoid areas of current and future flood risk and which do not increase the risk of flooding elsewhere and where possible reduce flood risk, adopting the precautionary principle to development, will be supported*." And "*All new development should incorporate measures to reduce surface water run-off, and the implementation of Sustainable Drainage Systems into all new development will be sought unless it can be demonstrated that such measures are not viable or technically feasible*".

1.79. The Application Site is not assessed to be at significant risk of flooding from groundwater or surface water flooding with the design of the Application Site carefully considered to mitigate against any potential risks. A FRA and DIA is submitted with this application and demonstrates that the Proposed Development will not increase flood risk away from the Application Site during the construction, operation and decommissioning phases. For further details see Technical Appendix 4: Flood Risk Assessment – Drainage Impact Assessment.

Core Strategy Policy 11: Historic Environment

1.80. Policy 11 states "*Proposals and initiatives will be supported where the historic environment and heritage assets and their settings are conserved and/or enhanced in line with their interest and significance. Planning decisions will have regard to the contribution heritage assets can make to the delivery of wider social, cultural, economic and environmental objectives.*"

1.81. A Cultural Heritage Impact Assessment (CHIA) has been undertaken as part of the planning application and can be found in Technical Appendix 3 of Volume 3. As no designated heritage assets lie inside the Application Site, no direct effects will occur on these resources. However, several non-designated cropmark sites within the Nottinghamshire HER lie inside this boundary, and the Application Site is considered to contain a high probability for sub-surface remains of potential significance. Mitigation will minimise any effects to a low to negligible significance, on the hitherto-unknown archaeology as a result of the Proposed Development.

Core Strategy Policy 16: Green Infrastructure, Landscape, Parks and Open Spaces

1.82. Policy 16 stresses the importance of green infrastructure and open space in the borough. It notes that developments will only be approved where "*existing and potential Green Infrastructure corridors and assets are protected and enhanced".*

1.83. It also notes "*where new development has an adverse impact on Green Infrastructure corridors or assets, alternative scheme designs that have no, or little impact should be considered before mitigation is provided (either on site or off site as appropriate). The need for and benefit of the development will be weighed against the harm caused*" and states that

development proposals should ensure that "*Landscape Character is protected, conserved or enhanced where appropriate in line with the recommendations of the Greater Nottingham Landscape Character Assessment*."

1.84. A Landscape and Visual Assessment (LVA) is included within this application and determines that there will be no notable effects on the wider Landscape Character Area, in line with the Greater Nottingham Landscape Character Assessment. For further information, see **Technical Appendix 1 of Volume 3.** Green infrastructure is enhanced and protected over the Application Site as far as is practicable, see the **Landscape and Ecology Management Plan (LEMP); Figure 1.14 of TA 1, Vol 3.**

Core Strategy Policy 17: Biodiversity

1.85. **Policy 17** has been put in place with the aim of achieving biodiversity net-gain over the Core Strategy period. The Council aim to do this by:

"a) protecting, restoring, expanding and enhancing existing areas of biodiversity interest, including areas and networks of priority habitats and species listed in the UK and Nottinghamshire Local Biodiversity Action Plans;

b) ensuring that fragmentation of the Green Infrastructure network is avoided wherever possible and improvements to the network benefit biodiversity, including at a landscape scale, through the incorporation of existing habitats and the creation of new habitats;

c) seeking to ensure new development provides new biodiversity features, and improves existing biodiversity features wherever appropriate;

d) supporting the need for the appropriate management and maintenance of existing and created habitats through the use of planning conditions, planning obligations and management agreements; and

e) ensuring that where harm to biodiversity is unavoidable, and it has been demonstrated that no alternative sites or scheme designs are suitable, development should as a minimum firstly mitigate and if not possible compensate at a level equivalent to the biodiversity value of the habitat lost.

1.86. The Policy also stipulates that "*Designated national and local sites of biological or geological importance for nature conservation will be protected in line with the established national hierarchy of designations and the designation of further protected sites will be pursued."* And "*Development on or affecting other, non-designated sites or wildlife corridors with biodiversity value will only be permitted where it can be demonstrated that there is an overriding need for the development and that adequate mitigation measures are put in place*."

1.87. There are no designated or non-designated sites within the Application Site, however there is one Sites of Special Scientific Interest (SSSIs) within 5km. The SSSI is assessed within the Ecological Assessment submitted as part of the planning application (see **Technical Appendix 2: Volume 3**) and it is determined that there will be no adverse effects on the integrity of the

SSSI as a result of the Proposed Development. A Biodiversity Management Plan (BMP), Net Gain Assessment (NGA), and Bird Hazard Management Plan (BHMP) have also been undertaken and can be found as Appendix 2.1, 2.2 and 2.3 of TA 2, respectively.

Land and Planning Policy 16: Renewable Energy

1.88. This policy claims "*Proposals for renewable energy schemes will be granted planning permission where they are acceptable in terms of:*

a) compliance with Green Belt policy:

b) landscape and visual effects;

c) ecology and biodiversity;

d) best and most versatile agricultural land;

e) the historic environment;

f) open space and other recreational uses;

g) amenity of nearby properties;

h) grid connection;

i) form and siting;

j) mitigation;

k) the decommissioning and reinstatement of land at the end of the operational life of the development;

l) cumulative impact with existing and proposed development;

m) emissions to ground, water courses and/or air;

n) odour;

o) vehicular access and traffic; and

p) proximity of generating plants to the renewable energy source"

1.89. The Proposed Development is considered to align with Policy 16 because:

- Visual effects as a result of the Proposed Development would be limited to the Application Site itself and isolated points on site boundaries, due to existing and proposed screening (see Technical Appendix 1 of Volume 3);
- There are no designated or non-designated ecology sites within the Application Site and no significant adverse effects on any sites are anticipated as a result of the Proposed

Development (see **Technical Appendix 2 of Volume 3**). The Proposed Development will result in a significant biodiversity net gain with 187.13% gain in habitat units and 24.68% gain in hedgerow units (see **Appendix 2.2 of TA 2, Vol 3**);

- The site is located on Grade 3a and Grade 3b land with the majority of the site classed as **Grade** 3b and considered not Best and Most Versatile (see **Technical Appendix 9 of Volume 3**);
- There will be no direct effects on features of archaeological interest as a result of the Proposed Development and there will be no significant effects on heritage assets in the surrounding landscape (see **Technical Appendix 3 of Volume 3**);
- Green infrastructure across the site is retained, protected and enhanced where practicable and Public Rights of Ways will remain open and fully functional during all stages of the Proposed Development, via the use of permissive bridleways for the duration of the Proposed Development.
- There are no significant impacts on the amenity (noise & glint and glare) of nearby properties once mitigation is taken into account;
- At the end of the 40-year operational period, the site can be returned to its current / former agricultural state as the Proposed Development is temporary; and
- There is not anticipated to be any cumulative impacts as a result of the Proposed Development (see **TA 1: Volume 3**).

1.90. The Application Site is considered to be well located for the Proposed Development for a number of reasons including but not limited to, being well screened by existing boundary hedgerows and woodland, being located outside of any environmental, archaeological or landscape designated sites, having good solar irradiation levels and being in proximity to viable grid connection point. Technical Assessments for a range of environmental disciplines have been undertaken which determine the potential for any impacts as a result of the Proposed Development; these can be found in **Volume 3.**

Land and Planning Policy 17: Managing Flood Risk

1.91. **Policy 17** claims "*Development proposals in areas of flood risk will only be considered when accompanied by a site-specific flood risk assessment. Proposals will be expected to include mitigation measures which protect the site and manage any residual flood risk, such as flood resistance/resilience measures and the provision of safe access and escape routes*."

1.92. The Application Site is not assessed to be at significant risk of flooding from groundwater or surface water flooding with the design of the Application Site carefully considered to mitigate against any potential risks. Results from EA modelling indicate that the Application Site is located entirely outside Flood Zone 3b, but lower ground levels of the Application Site are within Flood Zone 3a. A sequential approach to development has therefore been undertaken, with vulnerable infrastructure sited outside Flood Zone 3a.

1.93. A Flood Risk Assessment and Drainage Impact Assessment has been produced for the Application Site (See **Technical Appendix 4: Volume 3**) which demonstrates that the Proposed Development will **not increase flood risk** away from the Application Site during the construction, operation and decommissioning phases.

Land and Planning Policy 18: Surface Water Management

1.94. **Policy 18** states "*To increase the levels of water attenuation, storage and water quality, and where appropriate, development must, at an early stage in the design process, identify opportunities to incorporate a range of deliverable Sustainable Drainage Systems, appropriate to the size and type of development. The choice of drainage systems should comply with the drainage hierarchy*"

1.95. The Drainage Impact Assessment included in **Technical Appendix 4: Volume 3** details the various elements of Sustainable Drainage Systems incorporated into the design. Infiltration testing was undertaken on site and the soakage rates obtained determined that infiltration drainage would not be suitable across the site. As a result, it is proposed to construct a network of swales around the Application Site and a detention pond at the grid substation location. The idea is to capture any overland flow in the SuDS device prior to releasing into the natural surface water system. The design volume of the SuDS scheme will not only adequately mitigate the increase in flow rates as a result of the minor increase in impermeable area but provides significant improvement.

Land and Planning Policy 28: Conserving and Enhancing Heritage Assets

1.96. **Policy 28** states "*Proposals that affect heritage assets will be required to demonstrate an understanding of the significance of the assets and their settings, identify the impact of the development upon them and provide a clear justification for the development in order that a decision can be made as to whether the merits of the proposals for the site bring public benefits which decisively outweigh any harm arising from the proposals*."

Land and Planning Policy 29: Development affecting Archaeological Sites

1.97. **Policy 29** stipulates that "*Where development proposals affect sites of known or potential archaeological interest, an appropriate archaeological assessment and evaluation will be required to be submitted as part of the planning application. Planning permission will not be granted without adequate assessment of the nature, extent and significance of the remains present and the degree to which the proposed development is likely to affect them.*"

1.98. It goes on to say *"Where archaeological remains of significance are identified permission will only be granted where:*

a) The archaeological remains will be preserved in situ through careful design, layout and siting of the proposed development; or

b) When in-situ preservation is not justified or feasible, appropriate provision is made by the developer for excavation, recording and for the post-excavation analysis, publication, and archive deposition of any findings (to be undertaken by a suitably qualified party), provided that it can be clearly demonstrated that there are wider public benefits of the development proposal which outweigh harm to heritage assets of archaeological interest in line with NPPF requirements."

1.99. There are no designated heritage sites that lie inside the Proposed Development Site. As no designated heritage assets lie inside the Application Site, no direct effects will occur on these resources. However, several non-designated cropmark sites within the Nottinghamshire HER lie inside this boundary, and the Application Site is considered to contain a high probability for sub-surface remains of potential significance. Mitigation will minimise any effects to a low to negligible significance, on the hitherto-unknown archaeology as a result of the Proposed Development. A Cultural Heritage Impact Assessment (CHIA) has been undertaken for the Proposed Development and concludes that there will be no significant direct or indirect effects on archaeology and heritage assets, aligning with Policies 28 and 29. Further information can be found in **Technical Appendix 3 of Volume 3.**

Land and Planning Policy 34: Green Infrastructure and Open Space Assets

1.100. **Policy 34** states "*Where a proposal would result in the loss of Green Infrastructure which is needed or will be needed in the future, this loss should be replaced by equivalent or better provision in terms of its usefulness, attractiveness, quantity and quality in a suitable location. Replacement Green Infrastructure should, where possible, improve the performance of the network and widen its function*."

1.101. A detailed Landscape and Visual Appraisal (LVA) has been undertaken as part of the assessment of the Proposed Development (See **Technical Appendix 1 of Volume 3**). These documents, in addition to the Biodiversity Management Plan (BMP; see **Technical Appendix 2.1 of Volume 3**) and Landscape and Ecological Management Plan (LEMP; **Figure 1.12 of TA 1, Vol 3**) detail the minimal loss of Green Infrastructure across the site and describe the mitigation and enhancements put in place as part of the development design to improve the performance of the network and widen its function. This includes woodland, hedgerow and wildflower meadow planting, the introduction of new permissive bridleways and improvements to the current PRoW network.

LPP Policy 36: Designated Nature Conservation Sites

1.102. Policy 36 notes that "*Development likely to have an adverse effect on a Site of Special Scientific Interest (either directly or indirectly, or individually or in combination with other developments) will not normally be permitted.*" and *"Where an adverse effect on the site's notified features is likely, an exception should only be made where the benefits of the development's location, clearly outweigh both the impacts that it is likely to have on the features of the site that make it of special scientific interest and any broader impacts on the national network of Sites of Special Scientific Interest.*"

1.103. In terms of locally designated sites, the policy states "*Development likely to have a significant adverse effect on a site of local nature conservation value will not be permitted unless it can be clearly demonstrated that there are reasons for the proposal which outweigh the need to safeguard the essential nature conservation value of the site."*

1.104. The Application Site does not lie within any statutory designated environmental sites. Within 15km of the Application Site boundary there are no internationally designated sites. There is one Site of Special Scientific Interest ("SSSIs") within 5km of the Application Site, the Oriston Plaster Pits SSSI. No Local Nature Reserves ("LNRs") and National Nature Reserve ("NNR") are located within 5km of the Proposed Development boundary. An Extended UK Habitat Survey (including Habitat Condition for Net Gain Assessment) was undertaken at the site and an Ecological Assessment (EcA; Technical Appendix 2: Volume 3) was produced. The EcA concludes that with suitable mitigation and enhancement measures proposed, the Proposed Development will not significantly impact upon any ecological features, and is likely to lead to a positive effect on a number of protected or priority species during the operational phase.

LPP Policy 37: Trees and Woodland

1.105. Policy 37 states "*Adverse impacts on mature tree(s) must be avoided, mitigated or, if removal of the tree(s) is justified, it should be replaced. Any replacement must follow the principle of the 'right tree in the right place*". It then goes on to state that "*wherever tree planting would provide the most appropriate net-gains in biodiversity, the planting of additional locally native trees should be included in new developments. To ensure tree planting is resilient to climate change and diseases a wide range of species should be included on each site*"

1.106. A pre-development tree constraints survey was undertaken to inform the design of the Proposed Development, in line with *British Standard 5837:2012 Trees in relation to design, demolition and construction.* Subsequently, an Arboricultural Impact Assessment (See Technical Appendix 10: Volume 3) was undertaken to determine any potential impacts on trees or hedgerows as a result of the Proposed Development. This concludes, that provided all the recommendations made in this report are followed it is considered that the Proposed Development can be implemented, *with a subsequent negligible impact on retained trees.*

1.107. A Landscape and Ecology Management Plan (LEMP; Figure 1.12 of Technical Appendix 1: Volume 3) has been produced to minimise any potential negative effects arising from the Proposed Development, while increasing habitat diversity by way of mitigation planting, including native trees and hedgerows as well as species rich grasslands.

LPP Policy 38: Non-Designated Biodiversity Assets and the Wider Ecological Network.

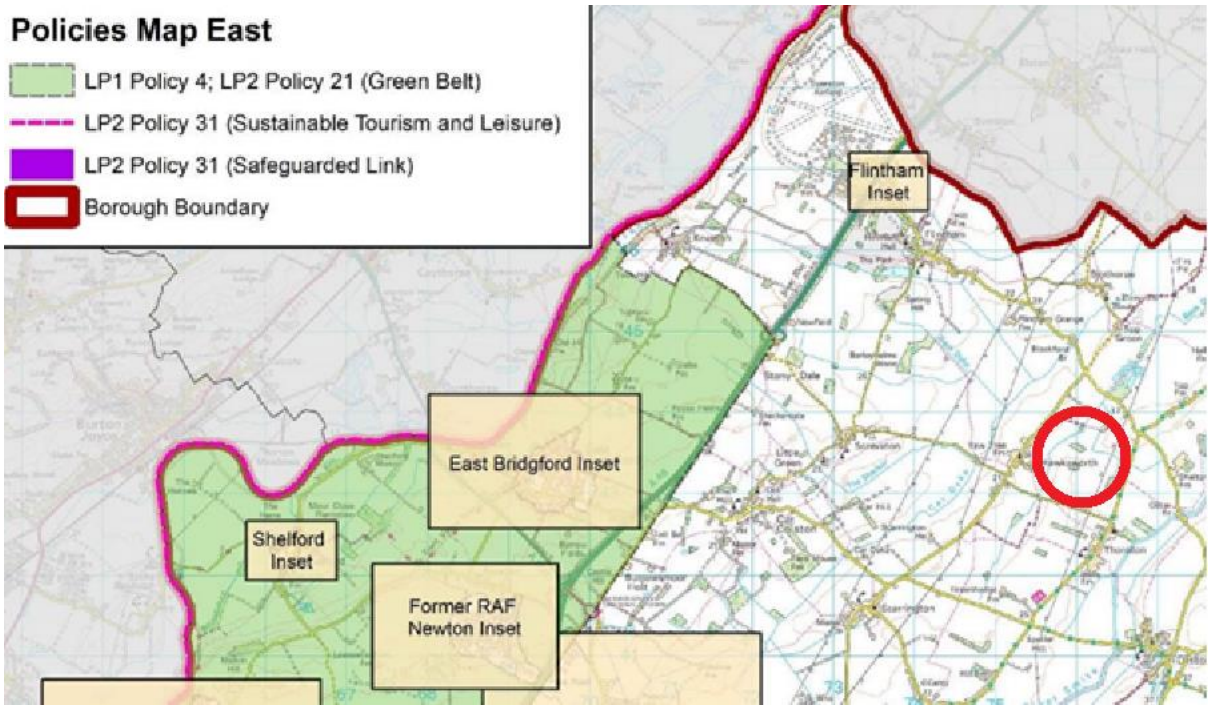
1.108. Policy 38 states "*Where appropriate, all developments will be expected to preserve, restore and re-create priority habitats and the protection and recovery of priority species in order to achieve net gains in biodiversity*".

1.109. A Net Gain Assessment has been undertaken and forms part of the Planning Application. This anticipates that the introduction of the Proposed Development will increase the Application Sites current capability for supporting wildlife through generation of renewable energy. A significant net gain in biodiversity (187.13% gain in habitat units and 24.68% gain in hedgerow units) is anticipated to be achieved. See Appendix 2.2 of TA2: Ecological Assessment (Vol 2) for further information.

Local Plan Policy Map

1.110. A review of Rushcliffe Borough Council's adopted policy maps show the Application Site is located outside of the Green Belt and is not included within any Neighbourhood Plan areas see Extract A below).

Extract A: Rushcliffe Borough Council Adopted Local Plan Map with approximate site location identified in red



Material Considerations

National Planning Policy Framework (2021)[15]

1.111. The National Planning Policy Framework (NPPF) is the current National Planning document in England and was first published on 27th March 2012, and subsequently updated on 24th July 2018, 19th February 2019 and 20th July 2021. This sets out the government's planning policies for England and how these are expected to be applied and is supported by government published Planning Practice Guidance (PPG).

1.112. In accordance with **Chapter 2, paragraphs 7 and 10**, there is a strong presumption in favour of sustainable development within the National Planning Policy Framework. In addition, **Paragraph 8c** of the NPPF notes that a key part of achieving sustainable development is *"mitigating and adapting to climate change, including moving to a low carbon economy".*

1.113. **Chapter 14** of the NPPF, '*Meeting the challenge of climate change, flooding and coastal change*', recognises that planning plays a key role in helping to shape places to secure radical reductions in greenhouse gas emissions, minimising vulnerability and providing resilience to the impacts of climate change, and supporting the delivery of renewable and low carbon energy and associated infrastructure. This is considered central to economic, social, and environmental dimensions of sustainable development.

1.114. The generation of this level of renewable energy therefore represents a substantial benefit which would be experienced if planning permission were to be granted. Further details of this are provided later in this document under '*Renewable Energy Statement'*.

1.115. Additionally, the Proposed Development will provide economic benefits to Rushcliffe and the wider Nottinghamshire area in the form of direct impacts relating to the use of local contractors where reasonably practical, the use of local materials where possible and indirect effects, where specialist contractors from outside of the local area are working on the construction / decommissioning of the Proposed Development, local businesses such as hotels, B&B's and restaurants will benefit.

1.116. With regards to low carbon and renewable energy, the NPPF states in **paragraph 152** that the planning system should help;

"…support the transition to a low carbon future in a changing climate, taking full account of flood risk and coastal change. It should help to: shape places in ways that contribute to radical reductions in greenhouse gas emissions, minimise vulnerability and improve resilience; encourage the reuse of existing resources, including the conversion of existing buildings; and support renewable and low carbon energy and associated infrastructure."

[15] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1005759/NPPF_July_2021.pdf

1.117. **Paragraph 158** states that applicants are not required to demonstrate the overall need for renewable or low carbon energy and that LPAs should recognise that even small-scale projects provide a valuable contribution to cutting greenhouse gas emissions. LPAs are directed to approve applications if impacts are (or can be made) acceptable.

1.118. The NPPF also contains policies on several environmental issues relating to sustainable development within **Chapters 15 and 16. Paragraphs 174 to 208** emphasise the importance of preservation and enhancement of the built and natural environment. They set out detailed requirements for the assessment of the impact on the landscape value, biodiversity and habitats, and the historic environment. These requirements have been considered in the relevant Technical Appendices (**Volume 3**) accompanying the Planning Application and have been addressed, to demonstrate compliance of the Proposed Development in the **Planning Assessment** section below.

National Planning Practice Guidance (NPPG)

1.119. The National Planning Practice Guidance (NPPG) was published in March 2014 and contains guidance on the planning system and should be read alongside the NPPF. The NPPG's are a material consideration in the consideration of planning applications.

1.120. With specific regard to solar farm development, the NPPG on Renewable and Low Carbon Energy provides the following points of consideration for the decision maker at Paragraph 013.

- *"Where a proposal involves greenfield land, whether (i) the proposed use of any agricultural land has been shown to be necessary and poorer quality land has been used in preference to higher quality land; and (ii) the proposal allows for continued agricultural use where applicable and/or encourages biodiversity improvements around arrays;*
- *That solar farms are normally temporary structures and planning conditions can be used to ensure that the installations are removed when no longer in use and the land is restored to its previous use;*
- *The proposal's visual impact, the effect on landscape of glint and glare and on neighbouring uses and aircraft safety;*
- *The extent to which there may be additional impacts if solar arrays follow the daily movement of the sun;*
- *The need for, and impact of, security measures such as lights and fencing;*
- *Great care should be taken to ensure heritage assets are conserved in a manner appropriate to their significance, including the impact of proposals on views important to their setting. As the significance of a heritage asset derives not only from its physical*

presence, but also from its setting, careful consideration should be given to the impact of large-scale solar farms on such assets. Depending on their scale, design and prominence, a large-scale solar farm within the setting of a heritage asset may cause substantial harm to the significance of the asset;

- *The potential to mitigate landscape and visual impacts through, for example, screening with native hedges; and*
- *The energy generating potential, which can vary for a number of reasons including, latitude and aspect."*

1.121. The Proposed Development is designed in such a way to avoid significant losses of agricultural land during the operational stage, with a 3.98% ground level footprint. This means that the Site can retain a dual use; agriculture in the form of low intensity sheep grazing on the remaining 96% and renewable energy generation.

1.122. The Application is also supported by an Agricultural Land Classification report (see Volume 3: Technical Appendix 9), which confirms the site comprises of grade 2 land (2%), subgrade 3a land (36%), subgrade 3b land (58%), and other land (4%).

1.123. The proposed solar arrays and associated equipment will be temporary structures which will be on the site for 40 years. Upon cessation, all equipment will be removed and the site will be fully restored to its current state.

1.124. This planning application is supported by a series of technical assessments which consider the above factors in detail. A summary of the technical assessments has been provided within the Planning Assessment section of this Planning Statement.

ENERGY LEGISLATION AND POLICY CONTEXT

International Energy Policy

1.125. International energy policy is based on the demand to battle climate change and reduce carbon dioxide (CO_2) emissions and, therefore, is relevant to renewable energy development. The United Nations Framework Convention on Climate Change (UNFCCC) implemented by the United Nations in May 1992, determined a long-term objective to lessen greenhouse gases in the atmosphere, with the purpose of preventing anthropogenic interference with the climatic system. Subsequently, the Kyoto Protocol was implemented in 1997. National governments who signed up to the Kyoto Protocol are committed to reducing their greenhouse gas emissions.

1.126. The Paris Agreement marks the latest step in the development of the UN regime on climate change. Its central objective is to boost global response to climate change, keep global temperature rise low and strengthen efforts to support this. The European Union signed the United Kingdom of Great Britain and Northern Ireland up to the Agreement on 22nd April 2016 and it came into force on the 18th\ of December 2016. In line with Article 4 of the Paris Agreement, a Nationally Determined Contribution (NDC)[16] was drawn up which commits the UK to reduce economy-wide greenhouse gas emissions by at least 68% by 2030, compared to 1990 levels.

1.127. European and national energy policy has been established from the Kyoto Protocol and Paris Agreement requirements and will continue to be framed by emerging guidance and scientific information.

1.128. In December 2019 the European Commission published a communication called The European Green Deal. It is described as resetting "*the Commission's commitment to tackling climate and environmental-related challenges that is this generation's defining task.*" It presented an initial roadmap of the key policies and measures needed to achieve a number of goals. The European Commission presented a proposal for a European Climate Law on 4th March 2020, which included a net zero by 2050 target.

UK Energy Policy

1.129. Since 1990, the UK has reduced emissions by 44% whilst increasing GDP by 78%, the fastest decarbonisation rate in the G7[17] and in June 2019, the UK became the first major economy to set a legally binding target to reach net zero greenhouse gas emissions by 2050, in recognition of the transformative change needed to tackle global climate change.

[16] The United Kingdom's Nationally Determined Contributions (publishing.service.gov.uk)
[17] BEIS Outcome Delivery Plan: 2021 to 2022 - GOV.UK (www.gov.uk)

1.130. In 1990, electricity generation accounted for 25 per cent of UK emissions. In 2018, it was only 15 per cent. 30 years ago, fossil fuels provided nearly 80 per cent of electricity supply. Today, the country gets over half of its power from low carbon technologies[18]. UK energy policy was one of and continues to be the main driver of this change.

Climate Change Act 2008

1.131. The Climate Change Act 2008 set in legislation the UK's approach to tackling and responding to climate change. It introduced the UK's long-term legally binding 2050 target to reduce greenhouse gas emissions by at least 80% relative to 1990 levels. In June 2019, the Government amended this headline target to a 100% reduction (compared to 1990 levels) by 2050 (otherwise known as net zero). Since 1990, the UK has cut greenhouse gas emissions by 40%.

Overarching National Policy Statement for Energy EN-1 (DECC, July 2011)

1.132. The overarching NPS for Energy (EN-1) was adopted in July 2011 and sets out the overall national energy policy for delivering major energy infrastructure. Part 1 advises that within the context of the planning system the NPS is likely to be a material consideration.

1.133. Part 2 of NPS EN-1 sets out the Central Government policy context for major energy infrastructure. It comprises the need to meet legally binding targets to cut greenhouse gas emissions; transition to a low carbon economy; decarbonise the power sector; reform the electricity market; secure energy supplies; replace outdated energy infrastructure; and widen objectives of sustainable development. In particular, in this section paragraph 2.2.16 identifies that approximately a quarter of the UK's generating capacity was due to close by 2018 and that new low-carbon generation is required which is reliable, secure and affordable. As a result, the Proposed Development is considered consistent with the aims of NPS EN-1.

1.134. It is worth noting that this document, along with NPS for Renewable Energy Infrastructure (EN-3) have recently undergone a period of consultation run by BEIS (between 6/09/21 and 29/11/21) with outcomes expected imminently.

The Clean Growth Strategy 2017

1.135. In October 2017, the UK Government published its Clean Growth Strategy (CGS) setting out ambitious policies and proposals, through to 2032 and beyond, to reduce emissions across the economy and promote clean growth.

1.136. The strategy outlines the ambition of delivering a: "*diverse electricity system that supplies our homes and businesses with secure, affordable and clean power*" and identifies one possible clean growth pathway (to 2032) that "*could see power emissions fall by 80 percent compared to today, to around 16 Mt*." It states that "*This could be achieved by:*

[18] Energy White Paper (publishing.service.gov.uk)

- *Growing low carbon sources such as renewables and nuclear to over 80 per cent of electricity generation and phasing out unabated coal power.*
- *Enabling a smarter, more flexible system, unlocking significant expansion of interconnection, electricity storage, and demand side response, the first steps of which are set out in the Smart Systems and Flexibility Plan..."*

1.137. The Proposed Development would contribute to delivering the electricity generation from clean sources and move to a low carbon economy as envisaged by the strategy. The expected number of homes powered and the CO2 offset as a result of the project are discussed later in this document under '*Renewable Energy Statement*'.

1.138. In November 2017 the UK published its modern Industrial Strategy, which includes a Clean Growth Grand Challenge. The Grand Challenge aims to put the UK at the forefront of industries of the future, by maximising the advantages for UK industry from the global shift to low carbon.

BEIS Outcome Delivery Plan: 2021 – 2022

1.139. The Outcome Delivery Plan sets out four priority outcomes, of which include tackling climate change. BEIS note within the report:

"Making sure the UK ends its contribution to global warming by 2050 is a core part of the Department's work. Following the publication of the Prime Minister's Ten Point Plan, the Energy White Paper and the Industrial Decarbonisation Strategy, we will work across government to drive the Green Industrial Revolution. Our ambitious domestic action plan will create growth and jobs in clean technologies, infrastructure and energy in the 4 nations of the UK. Through our upcoming Presidency of COP26 and our International Climate Finance we will also provide strong global leadership and set an example to accelerate international climate action."

The Sixth Carbon Budget: The UK's Path to Net Zero

1.140. The Climate Change Committee (CCC) published the Sixth Carbon Budget: The UK's Path to Net Zero[19] on 9th December 2020. The Sixth Carbon Budget sets out, for the first time, what actions the UK will need to take to achieve net zero emissions by 2050.

1.141. The CCC's recommended pathway, the Balanced Net Zero Pathway, aims to decarbonise electricity generation by 2035, with action thereafter focused on meeting new demands in a low-carbon way. The pathway requires a 78% reduction in UK territorial emissions by 2035, a 63% reduction from 2019.

[19] Sixth Carbon Budget - The path to Net Zero - Climate Change Committee (theccc.org.uk)

1.142. The key features of the scenario are an increasing demand for electricity, decreasing carbon intensity of generation, and a more flexible system. The Proposed Development aligns with the Sixth Carbon Budget by contributing to the decarbonisation of electricity generation.

1.143. The Proposed Solar Farm will have an export capacity of up to 49.9MW; a solar farm of this size will generate a significant amount of electricity from renewable sources and mean a substantial reduction of CO_2 emissions annually. For a more detailed analysis of this, refer to the '*Renewable Energy Statement*' below.

Energy Security Strategy

1.144. The energy security strategy[20] released in April 2022 calls for a major acceleration of new homegrown power generation for greater energy independence and security for the UK. Solar has a huge part to play in this required acceleration, with the strategy setting a target for a five-fold increase in solar deployment by 2035. The proposed development contributes to this target, being capable of generating 49.9MWs of clean green electricity to the grid, the equivalent of supplying the energy required to power c. 15,200 homes per year.

The Ten Point Plan for a Green Industrial Revolution

1.145. In November 2020, the Prime Minister announced his Ten Point Plan[21] for the UK to lead the world into a new Green Industrial Revolution. This innovative programme sets out ambitious policies and significant new public investment to support green job creation, accelerate our path to reaching net zero by 2050 and lay the foundations for building back greener. Spanning clean energy, buildings, transport, nature and innovative technologies, the Ten Point Plan will mobilise £12 billion of government investment to unlock 3 times as much private sector investment by 2030; level up regions across the UK; and support up to 250,000 highly skilled green jobs.

Energy White Paper: Powering our Net Zero Future and the Industrial Decarbonisation Strategy

1.146. The Energy White Paper[22] (EWP), published in December 2020, and the Industrial Decarbonisation Strategy[23], published in March 2021, set out complementary plans for the transformation of the UK's energy system and industries, including actions to fully decarbonise electricity generation by 2050. This will help to meet our ambitious Nationally

[20] https://www.gov.uk/government/news/major-acceleration-of-homegrown-power-in-britains-plan-for-greater-energy-independence

[21] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/936567/10_POINT_PLAN_BOOKLET.pdf

[22] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/945899/201216_BEIS_EWP_Command_Paper_Accessible.pdf

[23] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/970229/Industrial_Decarbonisation_Strategy_March_2021.pdf

Determined Contribution (NDC) to reduce the UK's emissions by at least 68% by 2030[24], compared to 1990 levels (the highest reduction target for a major economy to date), and meet our Sixth Carbon Budget to cut emissions by 78% by 2035.

1.147. This domestic ambition is matched internationally, through the Prime Minister's pledge in September 2019 to double the UK's International Climate Finance for developing countries to £11.6 billion for the 5-year period from 2021 to 2025, as part of our Paris Agreement commitments.

1.148. These commitments lay the steps to build back greener from the pandemic and reach net zero.

Net Zero Strategy: Build Back Greener

1.149. The Net Zero Strategy (NZS), was published in October 2021, setting out a delivery pathway showing indicative emissions reductions to meet the UK's sixth carbon budget (2033-2037).

1.150. It sets out the policies and proposals needed to meet the ambitious target of net zero by 2050, including an aim that the UK will be powered entirely by clean electricity by 2035.

1.151. The NZS also confirmed that solar and wind will be the backbone to achieving a secure, affordable and low carbon energy supply, which means that as part of the energy mix, large scale solar projects, have an important role to play.

Local Energy Policy

1.152. The Committee on Climate Change says that Local Authorities have a crucial role in contributing to emissions reductions and helping the UK meet its carbon budgets targets. Local Authorities are well placed to drive and influence emissions reductions in their wider areas through the services they deliver, their role as social landlords, trusted community leaders and major employers, and their regulatory and strategic functions.

1.153. Rushcliffe Borough Council produced a Climate Change Strategy in 2009 which was later updated in 2013[25]. The strategy states:

"As a Local Authorities we are working to reduce Rushcliffe's carbon footprint, by using planning and other policy levers to ensure that buildings and local infrastructure are energy efficient and resilient to increased risk of flooding, water stress and overheating. We will provide green spaces to keep Rushcliffe cool and to absorb heavy rain. We will ensure an effective emergency response after extreme weather events. We will also continue to look at our own estate and reduce the emissions from our operation."

[24] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1109429/uk-nationally-determined-contribution.pdf

[25] https://www.rushcliffe.gov.uk/media/1rushcliffe/media/documents/pdf/environmentandwaste/environment/climatechange/Climate_change_strategy_2013.pdf

1.154. Since the production of this document Rushcliffe Borough Council have made a commitment to work towards becoming carbon neutral by 2030 for its own operations. The Council is also committed to supporting local residents and businesses reduce their own carbon footprint. In 2020 they released their Council Carbon Management Plan[26] which details various actions to be taken towards their neutrality goal, with timescales and estimated CO_2 savings attached.

1.155. The LPA have recently updated their climate strategy for the next nine years (2021-2030)[27]. This is part of its plans to make Rushcliffe a carbon neutral borough by 2050 and to make the councils operational services carbon neutral by 2030.

1.156. Although the above is not directly relevant to the Proposed Development itself, it is clear that Rushcliffe Borough Council strongly advocate a transition to a low carbon future.

Summary

1.157. From the review above, it is evident international, national and local policy message on clean and secure energy is strong and unambiguous. There is a clear need to ensure long-term security of supply as non-renewable sources diminish, through the development of a diverse energy generation system, and renewable energy projects such as solar farms, to support international and nationally binding climate change targets.

1.158. As the cheapest form of electricity generation (alongside new onshore wind), solar farms are considered to be a key component of the future energy mix[28]. The deployment of renewable energy sources will need to increase significantly by 2030 to be on track to achieve net zero by 2050.

[26] https://www.rushcliffe.gov.uk/media/1rushcliffe/media/documents/pdf/environmentandwaste/environment/climatechange/Carbon%20Management%20Action%20Plan%202020%20Final.pdf

[27] https://www.rushcliffe.gov.uk/aboutus/aboutthecouncil/documentsstrategiesandpolicies/accessiblepoliciesandotherdocuments/climatechangestrategy20212030/

[28] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/911817/electricity-generation-cost-report-2020.pdf

PLANNING ASSESSMENT

1.159. This section of the Planning Statement will seek to evaluate the planning merit and potential impacts associated with the Proposed Development by looking at the key planning considerations on an individual basis below.

THE PRINCIPLE OF DEVELOPMENT

1.160. The UK is a member of the United Nations Framework Convention on Climate Change (UNFCCC). The UNFCCC is the key forum which oversees international action to tackle climate change. The UNFCCC led the development and adoption of The Paris Agreement in 2015. A total of 160 countries have pledged to cut their emissions as part of this process, although more action is needed in order to meet the Paris Agreement's aims of holding the increase in global average temperature rise to well below 2°C above pre-industrial levels and to pursue efforts to limit warming to 1.5°C.

1.161. Through the 2008 Climate Change Act, the UK was the first country to introduce long term, legally binding national legislation to tackle climate change. The Act provides the UK with a legal framework including a 2050 target for emissions reductions, five-yearly 'carbon budgets' (limits on emissions over a set time period which act as steppingstones towards the 2050 target), and the development of a climate change adaptation plan.

1.162. According to the Committee on Climate Change (CCC), while leaving the EU will change how UK carbon budgets are delivered, it does not change the need to cut greenhouse gas emissions, the level of carbon budgets (which are set in UK law), or the duty on the UK Government to act to tackle climate change.

1.163. A review of the UK's 2050 target (previously set at 80% reduction) by the Committee on Climate Change prompted the Government to set a target of zero net emissions by 2050, which was legislated for in 2019. In order to reach this milestone, the annual rate of emissions reduction must be 50% higher than the previous 2050 target – indicating the substantial step-up in action needed if the UK is to have a chance in meeting this ambitious, legally binding, target.

1.164. Reports have shown that in order to achieve net zero by 2050 the UK will need to quadruple its low carbon electricity generation. Solar energy has an important part to play in helping reach these targets, as well as providing a balanced energy mix, and it is estimated that 40GW[29] of solar will be needed by 2030 to stay on track with net zero ambitions, with 63% (or 25GW[30]) of this coming from large scale ground mounted solar farms.

[29] https://www.theccc.org.uk/wp-content/uploads/2019/05/CCC-Accelerated-Electrification-Vivid-Economics-Imperial-1.pdf

[30] https://solarenergyuk.org/resource/lighting-the-way-making-net-zero-a-reality-with-solar-energy/

1.165. At a national policy level, the NPPF recognises the need to meet the challenge of climate change as set out in Chapter 14 of the Framework. The NPPF recognises that radical reductions in greenhouse gas emissions are essential and looks to support renewable energy development where its impacts are, or can be made, acceptable. It is therefore clear that there is overwhelming support at a national level for this type of development, and a demonstrable need for the UK to continue to deliver renewable energy projects.

1.166. At a local level and as discussed above, the Rushcliffe Local Plan clearly provides support for renewable energy generation in appropriate locations. Policy 1 of the Core Strategy reflects the NPPF's stance on sustainable development, whilst Policy 2 references the challenges presented by climate change. Policy 16 of the Core Strategy offers specific support for the renewable energy sector, providing significant adverse impacts are addressed satisfactorily, and that any residual harm is outweighed by the wider benefits associated with the proposals.

1.167. Given the above, it is clear that subject to there being no significant adverse effects, and where any residual harm is outweighed by the benefits of the proposals, the principle of the Proposed Development is considered acceptable.

Need for Renewable Developments (Renewable Energy Statement)

1.168. This section of the Planning Statement addresses the benefits of renewable energy developments and the need for such facilities in respect of national policy and energy strategies.

1.169. The most notable benefit of the Proposed Development is the support it will provide towards the Central Government's commitments to reduce emissions of greenhouse gas emissions to combat the effects of climate change.

1.170. Since 1990, the UK has reduced emissions by 44% whilst increasing GDP by 78%, the fastest decarbonisation rate in the G7[31] and in June 2019, the UK became the first major economy to set a legally binding target to reach net zero greenhouse gas emissions by 2050, in recognition of the transformative change needed to tackle global climate change.

1.171. Although significant progress towards this goal has already been made, the UK have far to go. The CCC published the Sixth Carbon Budget: The UK's Path to Net Zero[32] on 9 December 2020 which sets out the actions needed to achieve net zero emissions. The CCC's recommended pathway, the *Balanced Net Zero Pathway* requires a 78% reduction in UK territorial emissions by 2035, a 63% reduction from 2019. Similarly, the International Energy Agency (IEA) recently released a roadmap to a global net-zero energy system by 2050[33] stating that advanced

[31] https://www.gov.uk/government/publications/department-for-business-energy-and-industrial-strategy-outcome-delivery-plan/beis-outcome-delivery-plan-2021-to-2022

[32] https://www.theccc.org.uk/comingup/advice-on-the-sixth-carbon-budget/#:~:text=The%20Sixth%20Carbon%20Budget%2C%20required%20under%20the%20Climate,to%20be%20set%20into%20law%20following%20that%20commitment. C:\Users\nicole\Downloads\The-Sixth-Carbon-Budget-The-UKs-path-to-Net-Zero.pdf

[33] https://www.iea.org/events/net-zero-by-2050-a-roadmap-for-the-global-energy-system

economies such as the UK should target net-zero electricity generation by 2035, with Canada and the USA having already implemented such targets. UK Prime Minister Boris Johnson has since stated that it would be possible to end gas-fired electricity generation in the UK by 2035[34]; this would mean the entirety of the nation's electricity generation mix would be produced by renewable energy and low carbon technology, primarily onshore and offshore wind and solar power.

1.172. The Proposed Development will have an export capacity of up to 49.9MW; a solar farm of this size will generate a significant amount of electricity from renewable sources, therefore offsetting the need for power generation from the combustion of fossil fuels including coal and oil. Consequently, during its operational lifespan (40 years), the Proposed Development has the potential to displace electricity generated from fossil fuels and consequently represents carbon savings.

1.173. The Proposed Development will mean a substantial reduction of approximately 25,000t[3] of CO_2 emissions annually. This is based on multiplying the Proposed Developments average annual yield[35], multiplied by the number of tonnes of carbon which fossil fuels would have produced to generate the same amount of electricity. This represents a significant contribution to the legally binding national and international requirement and associated targets to increase renewable energy generation and reduce CO_2 emissions.

1.174. The amount of CO_2 savings depends on which source of electricity generation the solar farm generating capacity is displacing at any given time. A renewable energy development would have a maximum potential to save carbon emissions when substituting coal fired generation. However, it is not appropriate to define the electricity source for which this renewable electricity project would substitute due to uncertainty in the future grid mix. As a result, the figure used for calculating the level of CO_2 offset as a result of the introduction of the Proposed Development, is the BEIS "*all non-renewable fuels*" emissions statistic of 432 tonnes of carbon dioxide per gigawatt hour (GWh) of electricity[36].

1.175. Scaling this up to the CO_2 displaced over the lifetime of the Proposed Development (40 years), circa 1,000,000t[3] of CO_2 will be displaced (see Table 2). This represents a significant contribution to the legally binding national and international requirement and associated targets to increase renewable energy generation and reduce CO_2 emissions.

[34] https://www.edie.net/news/11/UK-Government-eyeing-100--clean-energy-grid-by-2035--Boris-Johnson-confirms--/#:~:text=Speaking%20during%20a%20visit%20to%20a%20Network%20Rail,electricity%20generation%20will%20legally%20be%20required%20to%20cease.

[35] Average annual yield of 57GWh/year (taking into account degradation across the lifetime of the project)

[36] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/946968/sub-national-electricity-and-gas-consumption-summary-report-2019.pdf

Table 2: Estimated prevention of emissions in tonnes of CO_2.

Estimated Prevention of Emissions in CO_2 (tonnes)	
Annual	Solar Farm Lifetime (40 years)
25,000t[3]	1,000,000t[3]

1.176. Using the "all fossil fuels" emission statistic is current industry standard and is considered an accurate depiction of calculating CO_2 savings when introducing renewable energy schemes as the emphasis of introducing renewable technology is to replace fossil fuels and combat CO_2 levels and not to replace other renewables. It is considered that using the "coal" emission statistic would give the worst-case scenario comparator for calculating carbon savings.

1.177. Based on BEIS average domestic household consumption per year, 3,748kWh[37], the Proposed Development can meet the energy needs of approximately 15,200[38] homes. The generation of this level of renewable energy therefore represents a substantial benefit which would be experienced if planning permission were to be granted.

1.178. In addition, the operation of the Proposed Development could, based on the same assumptions, also displace other gases related to coal-fired electricity generation including those associated with acid rain such as sulphur dioxide (SO_2) and oxides of nitrogen (NO_X).

1.179. It should be noted that there are significant increases in output and efficiency yearly in solar panels; today's average commercial solar panel converts over 20% of the light energy hitting it to electricity, up from 12% just 10 years ago[39]. Furthermore, it is expected that panels will be even more efficient at the time of construction of the solar farm, if consented (earliest construction is early 2023).

1.180. A recent study published in Nature Energy by Dr Gunnar Luderer identified that *'building solar creates an insignificant carbon footprint compared with savings from avoiding fossil fuels.*[40] The study measures the full lifecycle greenhouse gas emissions of a range of sources of electricity out to 2050. The footprint of solar comes in at 6gCO2e/kWh. In contrast, coal CCS (109g), gas CCS (78g), hydro (97g) and bioenergy (98g) have relatively high emissions, compared to a global average target for a 2C world of 15gCO2e/kWh in 2050.

1.181. A review of policy within the **Planning Policy Context** and **Material Considerations** sections above indicates that there is a clear need to ensure security of supply through the development of a diverse energy generation system.

[37] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1043464/subnational_electricity_and_gas_consumption_summary_report_2020.pdf

[38] Based on average annual yield of 57GWh/3,748kWh per household.

[39] https://www.bbc.co.uk/news/business-51799503

[40] https://www.carbonbrief.org/solar-wind-nuclear-amazingly-low-carbon-footprints

Location of the Application Site

1.182. The chosen Application Site has been sensitively sited within the local landscape and is assessed as being a good location for a solar farm for a number of reasons, including but not limited to:

- The site is close to a viable grid connection;
- The fields across the site have good solar irradiation levels;
- It lies outside of any statutory environmental, archaeological and landscape designations;
- With the proposed Landscape and Ecological Management Plan (LEMP) and Biodiversity Management Plan (BMP), the site will be significantly enhanced for ecology; and
- Sheep grazing can occur during the development's lifespan, using a low intensity grazing regime which will allow agricultural activities to continue and therefore the site will have a dual use.

1.183. The need to foster and encourage economic development is given much weight in the NPPF. To provide electricity services, renewable energy developments require a technically and financially viable connection to the electricity network. The two key components in connection viability are capacity availability and distance from a suitable connection point.

1.184. Being located close to a viable grid connection point means the project is able to maximise existing grid infrastructure, minimise disruption to the local community and biodiversity and reduce energy losses and overall costs.

1.185. Obtaining available capacity on the grid network is a major challenge for developers across the UK currently. In this case the District Network Operator (DNO) has studied their local distribution network and the Applicant has secured 49.9MW (megawatts) of export capacity on the nearby 132kV rated overhead power line that located within the site boundary in Field 8, making the site both technically and financially feasible.

1.186. The Application Site does not lie within any statutory designated environmental sites. Within 15km of the Application Site boundary there are no internationally designated sites. However, there is one Site of Special Scientific Interest ("SSSIs") within 5km of the Application Site, the Oriston Plaster Pits SSSI. No Local Nature Reserves ("LNRs") and National Nature Reserve ("NNR") are located within 5km of the Proposed Development boundary.

1.187. Current activities within the Application Site include intensive arable farming, which will be ceased should the application be granted permission, allowing for the site to benefit from a reduction in the use of heavy machinery and pesticides. Additionally, light grazing will be introduced as the site forms a dual use in combination with energy production. As a result of this, there will be a significant biodiversity net gain. This is discussed further in the EcA (**TA 2, Vol 3**) and the Net Gain Assessment (**Appendix 2.2 of TA 2, Vol 3**).

1.188. There are no statutory landscape designations covering the site or its immediate surroundings. There are no Registered Parks and Gardens within the wider landscape to be considered.

1.189. Visual effects arising from the Proposed Development would be limited to the Application Site itself and isolated points on site boundaries. Furthermore, due to the local landform variations and other landscape elements that would screen views, including the mitigation planting proposed and by the exclusion of panels from the nearest section of the site to the settlement areas western and southern sections of Field 1, to the south of Fields 8 and 9 and the more elevated section of Fields 5 and 8. For further information, see **Technical Appendix 1 of Volume 3.**

1.190. There are no designated heritage sites that lie inside the Application Site and therefore no direct effects will occur on these resources. However, several non-designated cropmark sites within the Nottinghamshire HER lie inside this boundary, and the Application Site is considered to contain a high probability for sub-surface remains of potential significance. Mitigation will minimise any effects to a low to negligible significance, on the hitherto-unknown archaeology as a result of the Proposed Development. A Cultural Heritage Impact Assessment (CHIA) has been undertaken for the Proposed Development and concludes that there will be no significant direct or indirect effects on archaeology and heritage assets (see **Technical Appendix 3** of **Volume 3**).

1.191. Results from EA modelling indicate that the Application Site is located entirely outside Flood Zone 3b, but lower ground levels of the Application Site are within Flood Zone 3a. A sequential approach to development has therefore been undertaken, with vulnerable infrastructure sited outside Flood Zone 3a. The site also has limited potential for noise effects; for further information see **Technical Appendices 4 and 7 of Volume 3.**

Biodiversity and Amenity Benefits

1.192. The construction of the Proposed Development will occur over land which has been identified primarily as arable land, of low ecological value which offers limited potential to support wildlife. With the introduction of a solar farm, the land would be converted from arable to pasture, with light grazing proposed (i.e., the site will be dual use; production of renewable energy and agricultural activities). Grazed pastures provide nesting and feeding habitat for various species of birds and in addition to this, the land will no longer be sprayed with artificial pesticides and fertilisers, improving the quality of the land for local pollinators.

1.193. By implementing the proposed Landscape and Ecology Management Plan (**Figure 1.12 of Appendix 1A: Technical Appendix 1**), in addition to the Biodiversity Management Plan (**Appendix 2.1 of Technical Appendix 2: Volume 3**), there is anticipated to be a significant net-gain for biodiversity at the Application Site. The Net Gain Assessment (**Appendix 2.2 of Technical Appendix 2: Volume 3**) highlights a **187.13% gain** in area habitat units. A **24.68%** gain in hedgerow units is also predicted. This is again well in excess of 10%, showing that the Proposed Development is expected to lead to **significant biodiversity net gain**. This accords

with national planning policy, and with Core Policy 17 and LPP Policies 36 and 38 of the Rushcliffe Local Plan.

1.194. The additional planting associated with the Proposed Development will result in additional landscape benefits as compared to the existing site and a more sympathetic development once this mitigation planting has been fully established.

1.195. The Applicant recognises the value placed on the rural setting by the local communities and is proposing to enhance the local PRoW network by creating new permissive bridleways as part of the development. (**See Figure 1.12 of Technical Appendix 1: Volume 3**). This will increase the sites amenity value and aligns with Core Strategy Policy 16 which notes "*links to and between the Green Infrastructure network will be promoted to increase access, especially in areas of identified deficit, for recreational and non-motorised commuting purposes, and to allow for the migration of species".* The permissive bridleways will be complemented with features such as educational signage to maximise the educational and recreational value of the Proposed Development.

Improving drainage

1.196. It is proposed to construct a network of swales around the Application Site and a detention pond at the grid substation location. The idea is to capture any overland flow in the SuDS device prior to releasing into the natural surface water system. The design volume of the SuDS scheme will not only adequately mitigate the increase in flow rates as a result of the minor increase in impermeable area but provides significant improvement.

1.197. In total, proposed drainage strategy will provide a storage volume of approximately 242.5m3. This is significantly greater than the volume of additional runoff generated as a result of the impermeable buildings (158.0m3). It is therefore considered that this not only adequately mitigates the increase in flow rates as a result of the minor increase in impermeable area but provides significant improvement.

1.198. The SuDS features will be implemented during the construction phase of the Proposed Development and will be planted with vegetation to protect against soil erosion. They will be maintained throughout the lifespan of the Proposed Development, generally in accordance with the recommendations in the appropriate guidance.

Additional drainage measures to be implemented on-site include the following:

- Solar Panels: current grass cover is to be retained or reinstated adjacent to and under panels in order to maximise bio-retention;
- Access Tracks: access tracks are to be unpaved and constructed from local stone. Swales or similar shall be utilised to collect runoff from access tracks, where required, however these will be designed at the detailed design stage. Where swales are utilised,

check dams formed from gravels and other excavated material shall be placed in the swale at frequent intervals; and,

- Inverter Substations, etc: Filter strips will surround the concrete bases of the ancillary buildings to capture any runoff from the roofs. This will be discharged to a percolation area or into the sites drainage network where it is close enough. Should surface water accumulate around any of these locations then a simple soakaway can be constructed to allow water soak into the underlying subsoils.

1.199. Further information can be found in **Technical Appendix 4 of Volume 3.**

Landowner and Legacy Benefits

1.200. The Proposed Development will represent commercial diversification that would assist with the ongoing viability and stability of a rural business, as supported by both local and national policy. Given that solar power generation does not require a feedstock other than sunlight, the Proposed Development represents an opportunity to provide dual use of the site by harvesting the sun's rays to generate electricity and continued low intensity agricultural use through alternative means such as livestock grazing.

1.201. Where possible, the Proposed Development retains and enhances existing landscape features, particularly the hedgerow field boundaries and promotes the use of traditional field hedges and diversity of native hedgerow species. Additionally, the Proposed Development will leave a positive legacy in the form of improved biodiversity and landscape value thanks to additional planting and infilling of hedgerows at the construction phase, the ecological enhancement measures and the ongoing sensitive site management for the duration of the Proposed Development's lifespan, including through proposed species rich neutral grassland and introduction of bird crop of nectar rich wildflower mix. The mitigation proposals will result in some benefits to the local vegetation and ditch pattern. This ecological and landscape enhancement is a benefit to be afforded further weight in favour of granting planning permission.

1.202. Following decommissioning, the site can be returned to agricultural use, having been safeguarded over the Proposed Developments operational period, with the benefit of retaining the enhanced landscape and biodiversity value from the matured mitigation planting.

Socio-Economic Benefits

1.203. The Proposed Development will generate a range of direct economic benefits for Rushcliffe and wider Nottinghamshire both in terms of its construction and operation, generating jobs for installation, maintenance, and its eventual decommissioning and remediation.

1.204. The scheme represents a significant financial investment as a range of support services will be required including haulage, on-site welfare facilities, refuse and recycling facilities, transport and local accommodation for construction workers.

1.205. It estimated that there will be up to 50 construction workers on site during peak times of the construction period, which is expected to be 6 months. The Solar powered growth in the UK report, Cebr[41] gives an employment multiplier for large-scale solar PV investments of 2.33 – i.e., for every job supported on-site, 1.33 additional indirect/induced jobs are supported in the wider economy. Applying this multiplier to the 50 on-site jobs, the Proposed Development could support 66 additional temporary jobs in the wider economy.

1.206. In total, the Proposed Development could support around 116 temporary jobs, both direct jobs on-site and indirect roles in the wider economy, during the 6- month construction period. Many of these services will also be required during the site's decommissioning and restoration.

1.207. The Applicant has invited input from stakeholders and the local community on the priority projects and aims in their area, which the Proposed Development, if consented, may be able to support to deliver meaningful local benefits.

1.208. Rushcliffe Borough Council retains 100% of all the business rates due from Renewable Energy businesses (solar and wind Farms) to fund vital local services for all local residents. If consented, we estimate the Longhedge Solar Farm would deliver £164,000 in business rates annually, which works out at £6.5 million over the lifetime of the Proposed Development.

Summary

1.209. In favour of the Proposed Development, significant weight should be attributed to the need to provide additional energy from renewable sources given that the Central Government announced a climate emergency in May 2019 and have committed to the UK achieving net-zero greenhouse gas emissions by 2050. The Proposed Development will assist national and local efforts to achieve these legally binding renewable energy targets.

1.210. Significant weight should also be given to the wider environmental and amenity benefits associated with the proposals including enhancements to the PRoW network and the net beneficial gain for biodiversity by way of habitat creation and enhancement measures centred around new species-rich grassland, tree and scrub planting, hibernaculum and bird and bat boxes.

1.211. The need to foster and encourage economic development is also given much weight in the NPPF, especially in rural areas where this type of development is necessary. The NPPF and Local Development Plan sets much emphasis on the need to promote the development and

[41] Solar powered growth in the UK – the macroeconomic benefits for the UK of investment in solar PV: Cebr (report for the Solar Trade Association), September 2014.

expansion needs of rural businesses, in the interests of maintaining a healthy and vibrant economy and boosting prosperity.

1.212. Some weight should be given to the temporary and reversible nature of the Proposed Development which will not result in any long-term loss of green field land and upon decommissioning, the site will return to its former greenfield state and agricultural use.

SUMMARY OF TECHNICAL ASSESSMENTS

LANDSCAPE AND VISUAL IMPACT

1.213. This application is supported by a Landscape and Visual Assessment (LVA) which provides an assessment of the potential effects of the Proposed Development on the existing landscape and visual amenity of the Application Site and surrounding area. The LVA is based on a 5km radial study area and a 2km detailed study area. The LVA identifies the baseline against which the potential effects of the Proposed Development are assessed and concentrates on predicting the likely adverse effects during construction, operation and decommissioning phases. Although inter-related, landscape effects are assessed separately to the effects on views and visual amenity.

1.214. The Application Site is entirely located within the Landscape Character Assessment Unit (LCU) 25: South Nottinghamshire Farmlands: Aslockton Village Farmland. The host character type stretches from the Application Site and covers the detailed study area within 2km to the east and north, extending up to and beyond 3km to the west and 10km to the south. (see **Figure 1.1 of Technical Appendix 1: Volume 3).**

1.215. In terms of national designations, the LVA notes:

"There are no statutory landscape designations covering the site or its immediate surroundings within the detailed study area as illustrated in Figure 1.2: Appendix A. There are no Registered Parks and Gardens (RPGs) within 2km with the nearest at Flintham Hall at 2.2km to the northwest and beyond the principal zones of visibility. See below for a summary of other features of value and other relevant designations including cultural heritage designations."

Paragraph 4.24

1.216. In terms of roads and recreational routes, the LVA notes:

"There is one recreational route located within the Proposed Development Site (Bridleway 1 & 6 that pass through the northern fields), and several located close by (See Figure 3 of Vol 2: Planning Drawings). National Cycle Network (NCN) route 64 shares the minor road on the east side of the Proposed Development Site."

Paragraph 4.5

1.217. The Representative Viewpoint Baseline (Table 1.2, LVA, Technical Appendix 1) outlines 8 viewpoints that include roads and PRoW's. Minor Road at Thoroton (Viewpoint 1) and Main Road to the north side of Hawksworth (Viewpoint 4) are listed with high-medium sensitivity. Longhedge Lane at Portland Fishing lakes (Viewpoint 8) has medium-low sensitivity.

1.218. Five PRoW's (including Bridleway BW1 / BW6 at Viewpoint 7) have been identified in the baseline and assessed as having medium-high sensitivity.

1.219. In terms of residential dwellings, the LVA confirms:

Beyond Site boundaries there would be some isolated Moderate effects from Shelton Lane on the north side of Thoroton which will again just be in the short term (up to approximately 5 years). These would be isolated and limited or glimpsed views through a field access gate and would not notably interrupt the wider view from the majority of residential receptors within Thoroton."

Paragraph 6.78

1.220. In regard to 'Landscape Effects', the LVA confirms:

"The Proposed Development has been designed to fit within the confines of the nine fields of farmland, minimising any disturbance to notable existing mature landscape elements and features across the Application Site. The land use and landcover would change from arable farmland to one involving the opportunity for diversification in the form of dual use: renewable energy generation and sheep farming (agri-voltaic), that would be surrounded by an enhanced landscape structure with biodiversity improvements that are characteristic of the surrounding landscape setting. The construction of the Proposed Development would result in a Moderate adverse short-term effect upon the Application Site.

Overall, the Proposed Development would introduce a new renewable energy feature with a relatively low vertical height, into a relatively simple scaled landscape which has some localised containment within the wider LCA. This would result in localised Moderate to Minor adverse long-term effects within the immediate setting of the Application Site and the host LCA."

Paragraph 6.25-6.26

1.221. In terms of 'Visual Effects', the LVA confirms

"The detailed viewpoint assessment has indicated some Major - Moderate adverse effects during Construction and at Year 1 which would be mitigated after approximately year 5 (short term duration) and in the medium to long term on establishment of mitigation planting. These effects are also restricted to points within or on the Application Site boundaries. The assessment indicates a positive picture regarding the extent of effects upon visual receptors within the wider study area beyond the Application Site. Adverse effects would also be subject to the season with views more heavily filtered during summer months and in the short to medium term with mitigation planting designed to screen the Proposed Development and enhance the intervening view with characteristic wooded field boundary planting.

Elsewhere, there would also be short term Moderate effects at one further point at approximately 160m to the south which relates to an isolated view through a field access gate. These effects would reduce to no more than Moderate to Minor in the medium to long term

as the mitigation planting in the form of tree and shrub planting to provide a wooded edge matures and the management of the boundary vegetation around the Application Site is established to provide fuller vegetated screens. The combination of which would further screen, filter and soften views towards the Proposed Development."

Paragraph 6.79-6.80

Although the effect of mitigation planting is considered at year 11 and 10, it should be recognised that after approximately year 5 (short term duration), the growth of hedgerow and woodland planting should be sufficient to provide effective screening for most parts of any nearby infrastructure and consequently, most of the effects predicted during year 1, are likely to become not significant at around this time.

Paragraph 2.16

1.222. With regard to Cumulative Impacts, the LVA confirms:

"No developments requiring cumulative assessment were identified in this"

Paragraph 6.88

1.223. In relation to mitigation, the LVA states:

"The potential residual effects would occur once the proposed landscape mitigation boundary planting has become established by year 10. By this time, mitigation planting along site boundaries would have matured with hedgerows reaching approximately 3-4m and trees reaching up to 8-10m which, along with the existing field hedgerows reaching up to 5-6m, would help to contain the Proposed Development from any potential sensitive close-range views.

At other points the mitigation and enhancement areas within the northern section of Field 5 and southern sections of Field 1 would have matured to 8-10m to help filter views from key sensitive locations to the north and west. This would soften the edges of the Proposed Development and provide enhanced areas of landscape and visual amenity with characteristic wooded field boundaries and wildflower meadow planting, helping to integrate it into the local landscape."

Paragraph 7.2-7.3

1.224. The LVA conclusion reiterates that the Proposed Development:

"The Proposed Development would introduce a new medium-scale but vertically low renewable energy feature, combined with the opportunity for dual use in the form of sheep farming, into the rural, landscape between Thoroton and Hawksworth. However, the overall design of the Proposed Development has been very carefully considered within the confines of the nine fields to ensure the effects upon the landscape and visual receptors are limited. This

has included several site reductions and setbacks to remove more visible land from points around the two settlements.

Direct landscape effects would include adding a renewable energy generation land use to the the prevailing arable land use. This would diversify the land to agri-voltaic use. The solar PV panel layout has been designed to retain existing vegetation within the Application Site as far as possible and no notable tree or hedgerow sections would be removed. The overall field scale that is characteristic of the Application Site and the surrounding landscape would remain unchanged and views to surrounding features would be retained from most locations or otherwise more local views improved with a range of new mitigation features."

Paragraph 7.5-7.6

ECOLOGY AND BIODIVERSITY ENHANCEMENTS

1.225. This application is supported by an Ecological Assessment (EcA) to assess the potential impacts on ecology from the Proposed Development (**Technical Appendix 2 of Volume 3**).

1.226. The Application Site does not lie within any statutory designated environmental sites. Within 15km of the Application Site boundary there are no internationally designated sites. There is one Site of Special Scientific Interest ("SSSIs") within 5km of the Application Site, the Oriston Plaster Pits SSSI. Considering that the qualifying species of the Oriston Plaster Pits SSSI are non-mobile terrestrial species, no connectivity exists, therefore this SSSI will not be considered any further in this assessment. No Local Nature Reserves ("LNRs") and National Nature Reserve ("NNR") are located within 5km of the Proposed Development boundary.

1.227. Following close inspection of the Local Wildlife Site (LWS) map provided by Nottingham City Council (see **Appendix 2A – Figure 2.5**), three non-statutory designated environmental sites are present within 2km of the Application Site. These are the Barleyholme Wood LWS, Orston House Pasture LWS and River Smite LWS. There is limited potential for indirect hydrological connectivity between the site and River Smite LWS, the EcA notes:

"There is no direct hydrological connectivity between the Application Site and the River Smite LWS. Indirect hydrological connectivity in the form of surface waters is a possibility. However, given the distance from Application Site to the River Smite LWS, there is little likelihood of any significant effects occurring."

Paragraph 7.19

1.228. The EcA states (Paragraph 7.20) that there will be no significant adverse effects on any non-statutory designated sites as a result of the Proposed Development.

1.229. The site is considered to be of low intrinsic ecological value in terms of habitats. The primary habitat interest within the Ecological Study Area (ESA) derives from the presence of hedgerows and nearby broadleaved woodland. The Proposed Development retains existing

hedgerow and woodland habitats and adds significant ecological value, from additional tree and hedgerow planting.

1.230. Suitable potential habitat within and adjacent to the Application Site for badger, otter, bats, harvest mouse, hedgehog, brown hare, amphibians, otter, roe deer, amphibians, breeding and wintering birds and invertebrates. A species scoping survey was carried out to identify the presence of protected species, or the potential of the Application Site to support protected species and the results of the surveys have informed the EcA.

1.231. The EcA states:

"The construction of the Proposed Development will occur over land which has been identified primarily as arable land and improved agricultural grassland. These habitats are generally of low ecological value and currently offer limited potential to support wildlife in this area of England.

The access track and the footprint of the proposed development within the Application Site will cross the following habitats: cereal cropland (c1c), modified grassland (g4), line of trees (w1g6) and hedgerow (priority habitat (h2a)). There will be an overall loss of 2.28ha of cereal cropland, 0.0376ha modified grassland, 9.53m of line of trees and 18.75m of hedgerow (priority habitat). None of the hedges are expected to be classified as 'Important' under the Hedgerows Regulations 1997. However, to avoid damage where possible, existing gaps will be used to site new infrastructure.

The relatively minor extent of habitat loss in a local context where these habitats are frequent is not considered to be significant in terms of the Application Site's intrinsic habitat interest.

As part of the design proposals (rather than as ecological mitigation), as a form of habitat enhancement and as a form of compensation for hedgerow loss, new native woodland shall be planted (approximately 1.08ha) and species-rich hedgerow shall be created (approximately 2.551km); see Appendix 2.1 – BMP. However, in the absence of mitigation, the hedgerow breaks will still constitute loss of small amounts of a Priority habitat. This will lead to effects of low to negligible spatial and medium-term temporal magnitude, i.e., negligible to minor and not significant effects. These magnitudes have been assigned because the loss of hedgerow length will be much less than 10% and, although the new areas of native woodland will provide biodiversity benefits in the long term, it will be a number of years until they attain the equivalent value of the existing hedges.

The main habitat loss will occur under the Proposed Development footprint in regard to structures such as access tracks, cable trenches and hardstanding for buildings, battery containers, associated power conversion units and transformers.

With the implementation of the BMP (Appendix 2.1), where new habitats will be created using native species appropriate to the Application Site, biodiversity value will increase. This is in line with Core Strategy Policy no. 17 of the Rushcliffe Local Plan.

It is therefore considered that the loss of habitat from the Proposed Development will not be significant."

Paragraphs 7.21 – 7.27

1.232. Enhancement measures include the creation of new species-rich grassland, hedgerows, scrub and trees, and the creation of habitat interest features for protected species. The EcA states:

"With the implementation of the Proposed Development's design measures, best practice measures implemented during the construction phase, and the habitat management outlined, there will be positive effects on habitats.

With the correct management in place during the 40-year lifespan of the Proposed Development, the potential of the Application Site to support wildlife is likely to be increased. The supporting BMP (see Appendix 2.1) outlines the management proposals to enhance the Application Site's ecological value, therefore increasing its potential to support local wildlife. With the implementation of these proposed enhancement measures, there will be a net gain for biodiversity of 187.13% area-based habitat gain and 24.68% hedgerow unit gain (see Appendix 2.2), in line with policies in the County Rushcliffe Plan."

Paragraph 7.29 – Paragraph 7.30

1.233. In terms of residual effects, the EcA notes:

"With the implementation of pre-commencement surveys and the proposed mitigation measures, it is considered that there will be no significant adverse effects upon protected or notable species during the construction phase. The BMP propose a number of habitat creation and enhancement measures centred around new native woodland, species-rich hedgerow and species-rich grassland, herptile hibernacula and bird and bat boxes. With the implementation of these, the potential of the Application Site to support local wildlife will increase and the Proposed Development will lead to a significant positive effect on a number of protected species during the operational phase."

Paragraph 7.91

1.234. It concludes:

"It is considered that the short-term disturbance resulting from the Proposed Development will not be significant if the recommended mitigation is undertaken. With the implementation of pre-commencement surveys and the proposed mitigation measures, it is considered that there will be no significant adverse effects upon protected or notable species during the construction phase. The BMP propose a number of habitat creation and enhancement measures centred around new native woodland, species-rich neutral grassland, species-rich hedgerow, hibernacula, and bird, mammal and invertebrate houses/boxes. With the implementation of these, the potential of the site to support local wildlife will increase. The Proposed Development is likely to lead to a positive effect on a number of protected or Priority species during the operational phase.

The Proposed Development conserves and enhances biodiversity, minimising impacts, providing 187.13% area-based habitat gain and 24.68% hedgerow unit gain (see Appendix 2.2: Net Gain Assessment) and strengthening existing and retained green infrastructure. This accords with national planning policy, and with Rushcliffe Local Plan Policies 16, 17 and 38 and Local Plan Part 2 Appendix E."

Paragraph 9.6 – Paragraph 9.7

CULTURAL HERITAGE AND ARCHAEOLOGY

1.235. The application is accompanied by a Cultural Heritage Impact Assessment (CHIA) evaluating the potential direct and indirect effects of the Proposed Development upon cultural heritage assets and archaeological remains. A search of high-grade heritage assets such as World Heritage Sites, Scheduled Monuments, Parks and Gardens of Special Historic Interest, Historic Battlefields and Heritage Coasts has been carried out within a 5km study zone of the Proposed Development, while Listed Buildings and Conservation Areas have been assessed within a 2km study zone. Non-designated archaeology and heritage sites within the local Historic Environment Record have also been assessed within a 1km study zone.

1.236. A walkover survey was conducted at the Application Site on the 24th and 25th January 2022. The primary aim of the survey was to identify any potential archaeological or historical features within the Application Site that are not recorded. The land and fields within the Application Site were documented photographically along with any possible features identified. The results of this survey also considered available information on the known designated and non-designated sites within and close to the Application Site. Possible views and intervisibility with surrounding heritage assets were therefore also considered during the visit.

1.237. The observations of the walkover survey are summarised below:

- *Fields 1 & 2 - There are no non-designated assets recorded within this area, and no archaeological remains were observed with the exception of moderate sherds of post-medieval to modern pottery. This was principally comprised of white slip wares and coarse earthen wares and consistent with a midden scatter.*

- *Fields 3 & 4 - The Nottinghamshire HER lists a non-designated heritage asset within this area [L1738] consisting of a purported pit-alignment and trackway identified via aerial photography. These were mainly concentrated to the south and centre of the site (Plate 7). No discernible remains pertaining to this asset were observable, but this does not preclude the possibility that remains survive below the surface. No other archaeological finds, features or deposits were recorded.*

- *Field 5 - Occasional post-medieval to modern pottery was observed on the surface, as well as CBM fragments. There were no non-designated assets recorded in this area by the Nottinghamshire HER, although aerial photography suggesting occupational activity is held for the adjacent field [6] to the south; however no features were observed during the inspection (Plate 10).*

- *Field 6 - The Nottinghamshire HER holds records of three non-designated assets within the area of Field 4, consisting of an Iron Age pottery scatter [L1503] and features relating to a probable enclosure complex [L10764/L1502]. The latter were recorded by aerial photography of cropmarks. These features could not be ascertained during the inspection, but this does not preclude their existence below the surface. Consistent with other fields in the PDA, only post-medieval and later pottery sherds were observed during the inspection.*

- *Field 7 - The ground was turned over but did not have a growing crop on the surface. Immediately opposite, off Cliffhill Lane, a double linear feature had been recorded via aerial photography [L1505], which partially intrudes into the south-east of the field. This could not be observed during the inspection, but sub-surface remains may survive in this part of the field (Plates 14 and 15).*

- *Field 8 - No significant archaeological finds, features or deposits were observed during the site inspection in this area (Plates 16 and 17).*

- *Field 9 - Situated immediately to the east of Field 6, this area formed a narrow rectangular field aligned approximately north to south along Cliffhill Lane. Hedgerows separated this area from Field 5 to the north, and Field 9 to the south; the latter also divided by a stream. The thin strip of woodland noted above was to the west, separating this area from Field 6.*

1.238. Summary of the walkover survey:

"No archaeological features were noted on the surface during the site inspection. Pottery on the surface of the plough soil was post-medieval to modern in date.

The results presented suggest that views to or from the Site and designated assets within the Study Area are effectively screened by the topography and hedgerow/tree lined field boundaries and areas of woodland. Additionally, the majority of the assets are contained within village cores where they are surrounded by other buildings. The possible exception is the upper floors of Hawksworth Manor, from which at least some part of the development may be perceived, although the grounds themselves have extensive floral screening."

1.239. In regard to direct effects, the CHIA states the following:

"There are no designated heritage assets located within or adjacent to the Application Site that could be physically impacted by the Proposed Development (see Figure 3.1: Appendix 3A). As such, no direct effects will occur on designated assets.

A total of seven non-designated entries within the Nottinghamshire HER, representing five separate sites, lie inside this boundary. These sites include two distinct areas denoting cropmarks of archaeological potential (see Figure 3.2: Appendix 3A), specifically comprising an enclosure complex (NB15 & NB88) and group of pits, trackway and other features (NB32 & NB92). As the development design includes these two defined areas, they are at risk of direct impacts from the construction of the proposed solar farm. The two HER sites lying outside these defined areas include findspots for Iron Age pottery sherds (NB16) and flint scatter (NB17) and are not considered to have any distinct surviving remains that could be impacted.

The site walkover survey did not identify the presence of any standing remains within the two HER areas, indicating that their known extents contain entirely sub-surface features, some of which are discernible on the geophysical survey data (Appendix 3D). Similarly, the geophysical data suggests that some of the associated feature may extend beyond their current HER notations, such as the trackway visible on historic mapping, which appears to connect to further anomalies to the northeast of the HER area. As the HER features have not yet been tested through a programme of trenching, the magnitude of direct effects upon the HER areas cannot be ascertained. However, direct impacts upon these defined areas are nonetheless inevitable and may potentially result in high/major direct effects in the absence of any mitigation measures."

Paragraph 3.75 – Paragraph 3.77

1.240. In terms of archaeological potential, the CHIA notes:

"Due to the presence of several HER sites within the Application Site, in particular denoting cropmarks likely to represent archaeological features, much of the land is expected to possess a relatively high archaeological potential. In particular its potential for prehistoric settlement remains is reinforced by a number of prehistoric records both within and near to the Application Site. Similarly, the presence of several nearby findspots for Romano-British pottery and its general proximity to the Fosse Way Roman Road indicates some potential for remains from the Romano-British period.

In addition to the above, a number of churches, moats, dovecotes, deserted medieval settlements, motte castles and various other structures and remains are recorded within the surrounding landscape. These records represent the medieval fabric of the region and particularly the villages in the areas surrounding the Application Site (Thoroton, Hawksworth, Sibthorpe and Orston). The location of the Application Site between medieval villages suggests that land was likely farmed at this time and may have some limited potential for remains from this period. Similarly, no post-medieval features are recorded inside the Application Site, but the land is assumed to have been in relatively consistent agricultural usage during this period and may have some limited potential for post-medieval remains.

While the geophysical survey undertaken at the Application Site (Appendix 3D) has identified the presence of numerous anomalies likely to be of archaeological interest, it is also noted that alluvium deposits within its fields may have the potential to mask sub-surface features at certain locations. As such, the potential for archaeological features may possibly extend beyond what is visible on the geophysical survey data.

As mentioned previously, anomalies from the geophysical survey have not yet been tested through a programme of trenching and so the magnitude of direct effects upon possible features cannot be ascertained. Nonetheless, the Proposed Development is considered likely to result in high/major direct effects to sub-surface archaeological remains within the Application Site in the absence of any mitigation measures. The predicted likelihood of such impacts can also be informed by considering the ground disturbance of the construction methods that will be used, as below"

Paragraph 3.78 – Paragraph 3.81

1.241. The summary of indirect effects states:

"There were six Scheduled Monuments identified within the 5km study zone that lie inside the calculated ZTV of the Proposed Development. Indirect effects upon the 'medieval village including monastic college, chapel, moat, fishponds, dovecote and open field system 200m south of Manor Farm' (NA02) are anticipated to be Low, while indirect effects upon the other monuments (NA01, NA03, NA05 & NA07 – 08) are anticipated to be Negligible.

There was one Historic Garden and Designed Landscape identified within the 5km study zone that lies inside the calculated ZTV of the Proposed Development. Indirect effects upon Flintham Hall (NA09) are anticipated to be Negligible.

There was one Historic Battlefield identified within the 5km study zone that lies inside the calculated ZTV of the Proposed Development. Indirect effects upon the Battle of Stoke (Field) 1487 (NA10) are anticipated to be Negligible.

There were 28 Listed Buildings (including three grade I, two grade II and 23 grade II) identified within the 2km study zone that lie inside the calculated ZTV of the Proposed Development. Indirect effects upon the Church of St Helena (NA18) are anticipated to be Moderate to low, while indirect effects upon Hawksworth Manor/Place (NA11/NA12) and the Pigeoncote and Church of St Peter (NA30 & NA31) are anticipated to be Low. In addition, indirect effects upon listed buildings NA13 – 17 and NA19 – 21 are anticipated to be Low to negligible, while indirect effects upon listed buildings NA22 – 29 and NA32 – 38 are anticipated to be Negligible.*

There were three Conservation Areas identified within the 2km study zone that lie inside the calculated ZTV of the Proposed Development. Indirect effects upon Hawksworth and Thoroton Conservation Areas (NA45 & NA46) are anticipated to be Low, while indirect effects upon Orston Conservation Area (NA47) are anticipated to be Negligible.

There were no World Heritage Sites or Heritage Coasts identified in their respective study zones. As such, these resources are not considered to be at risk of significant indirect effects.

Cumulative visual impacts have been assessed as part of Technical Appendix 1: Landscape Visual Assessment (LVA). As the LVA concluded that no notable cumulative landscape or visual effects will occur as a result of the Proposed Development, no cumulative visual impacts are expected to occur on any of the surrounding heritage assets previously identified."

Paragraph 3.145 – Paragraph 3.151

1.242. Finally, the summary of the CHIA states

"This Cultural Heritage Impact Assessment (CHIA) has been prepared by Neo Environmental Limited, on behalf of Renewable Energy Systems (RES) Ltd in support of a planning application submitted to Rushcliffe Borough Council for a proposed 49.9MW solar farm development on lands between Hawksworth and Thoroton. As no designated heritage assets lie inside the Application Site, no direct effects will occur on these resources. However, several non-designated cropmark sites within the Nottinghamshire HER lie inside this boundary, represented by two distinct areas of archaeological potential (see ***Figure 3.2: Appendix 3A****). These comprise an enclosure complex (NB15 & NB88) and group of pits, trackway and other features (NB32 & NB92). Following the mitigation strategy outlined above, methods will be in place for the evaluation and preservation of these features, either in-situ through the use of non-intrusive construction methods and exclusion zones at their locations, or by record. Residual effects upon these HER sites are therefore anticipated to be* ***Low to negligible on the assumption that an appropriate programme of archaeological mitigation is implemented****.*

The Application Site is considered to contain a high probability for sub-surface remains of potential significance, particularly in relation to the prehistoric and medieval periods. An appropriate programme of archaeological works, to include test trenching designed to target anomalies of archaeological interest and otherwise 'blank' areas, is recommended in order to investigate the anomalies as well as the possibility of further features being present, which may have been obscured from the magnetometry survey by alluvium deposits. Following the implementation of an appropriate archaeological programme of works, measures will be in place for the further evaluation of the specific archaeological potential of the Application Site, as well as the full recording and preservation of any sub-surface remains of significance that are identified during this or any further work as necessary, in accordance with the instruction of qualified archaeologists and the archaeological advisors of NCC. In addition, the use of non-intrusive construction methods at locations to be specified by qualified archaeologists following the results of the test trenching will help to minimise the potential direct impacts upon sub-surface remains at both the construction and decommissioning stages. As such, residual direct effects upon hitherto-unknown archaeology as a result of the Proposed Development are anticipated to be ***Low to negligible, on the assumption that the above measures are implemented****.*

Indirect effects upon the surrounding heritage assets have been assessed as ***Moderate to low*** *for the Grade I listed Church of St Helena (NA18), while overall ranging between* ***Low and Negligible*** *for all other heritage assets within the calculated ZTV of the Proposed Development. Therefore,* ***no specific mitigation is considered to be required for the reduction of any visual***

impacts, but vegetative planting included as part of proposal will help ensure that visual impacts upon heritage assets will be kept minimal throughout the operational phase of the development.

Paragraph 3.165 – Paragraph 3.167

1.243. On the basis of the findings of the CHIA, it is considered that the Proposed Development complies with the relevant national policies outlined above and the relevant policies outlined in Rushcliffe Borough Council's adopted Local Plan, Parts 1 and 2. This includes **Policy 11 (part 1): Historic Environment** and **Policies 28 and 29 of part 2: Conserving and Enhancing Heritage Assets and Development affecting Archaeological Sites**, respectively.

1.244. It is important to reiterate that the impacts assessed do not constitute "substantial harm" to the heritage value of the conservation area and its setting,

Flood Risk and Drainage

1.245. A Flood Risk and Drainage Impact Assessment (see **Technical Appendix 4 of Volume 3).** have been produced as part of the planning application. Results from Environment Agency (EA) modelling indicate that the Application Site is located entirely outside Flood Zone 3b, but lower ground levels of the Application Site are within Flood Zone 3a. A sequential approach to development has therefore been undertaken, with vulnerable infrastructure sited outside Flood Zone 3a.

1.246. In addition to fluvial and coastal flood risk, the EA also provide surface water flood maps which indicate multiple areas of surface water flooding within the Application Site. In relation to this, the FRA notes:

*"The EA 1 in 100-year Surface Water Flood Risk Map is shown in **Figure 4.7: Appendix 4A**. The map indicates that surface water runoff is largely contained within the field drains running through the Application Site. Some low-lying parcels of land containing raised panels flood to peak depths of approximately 300-600mm; however, all vulnerable infrastructure is free from surface water flooding and the panels will be raised above the ponding.*

Post-development, overland flow routes will not be altered by the construction of the development as it is not proposed to significantly vary ground levels.

Paragraph 4.83 – Paragraph 4.84

1.247. It has been demonstrated that the Proposed Developments impact on surface water runoff is minimal due to the small amount of impermeable infrastructure (0.83% of the overall Application Site) proposed for the Application Site. However, drainage in the form of SuDS has been proposed so the post developed site discharges surface water at the greenfield runoff rate (QBar) (1.8l/s). Drainage schemes for the Grid Substation and the wider solar farm have been designed separately and described in the DIA as follows:

Proposed Drainage Strategy (Solar Farm)

It is proposed to construct a network of swales around the Application Site on land which has the highest gradient, see Appendix 4F. The idea is to capture any overland flow in the SuDS device, prior to releasing into the natural surface water system.

The proposed swales will have an overall length of approximately 775m, with a base width of 0.5m, a 0.25m design depth and a 0.15m freeboard and a maximum side slope of 1 in 3. It will provide a total storage volume of approximately 242.2m3.

This proposed drainage strategy will provide a storage volume of approximately 242.2m3. This is significantly greater than the volume of additional runoff generated as a result of the impermeable buildings (158.0m3). It is therefore considered that this not only adequately mitigates the increase in flow rates as a result of the minor increase in impermeable area but provides significant improvement.

Proposed Drainage Strategy (Grid Substation)

It is proposed that surface run-off will be collected and conveyed by the provision of a swale which leads to a detention pond, see **Appendix 4F**. *A notional freeboard level of 150mm shall be incorporated into the detailed design for the 1 in 100-year storm event plus 40% climate change with the final design being submitted to the council prior to the construction period. Calculations are included in* **Appendix 4C** *and the design volume of the attenuation device will be between 56m^3 and 223m^3. The discharge point will be into the existing site field drainage system to the east of the detention pond.*

The SuDS features will be implemented during the construction phase of the Proposed Development and will be planted with vegetation to protect against soil erosion. They will be maintained throughout the lifespan of the Proposed Development, generally in accordance with the recommendations in the appropriate guidance.

Additional drainage measures to be implemented on-site include the following:

- *Solar Panels: current grass cover is to be retained or reinstated adjacent to and under panels in order to maximise bio-retention;*
- *Access Tracks: access tracks are to be unpaved and constructed from local stone. Swales or similar shall be utilised to collect runoff from access tracks, where required, however these will be designed at the detailed design stage. Where swales are utilised, check dams formed from gravels and other excavated material shall be placed in the swale at frequent intervals; and,*
- *Inverter Substations, Spare Parts Containers, etc: Filter strips will surround the concrete bases of the ancillary buildings to capture any runoff from the roofs. This will be discharged to a percolation area or into the sites drainage network where it is close enough. Should surface water accumulate around any of these locations then a simple soakaway can be constructed to allow water soak into the underlying subsoils.*

1.248. On the basis of the findings of the Flood Risk and Drainage Impact Assessment, it is considered that the Proposed Development complies with the relevant national policies and the relevant policies in Rushcliffe Borough Council's adopted Local Plan Part 2 including Policy 17: Managing Flood Risk and Policy 18: Surface Water Management.

1.249. The summary of the FRA states:

"This FRA and DIA demonstrates that the Proposed Development will ***not increase flood risk*** *away from the Application Site during the construction, operation and decommissioning phases. The Proposed Development is therefore considered to be acceptable in planning policy terms."*

ACCESS, TRAFFIC AND TRANSPORT

1.250. The Construction Traffic Management Plan (CTMP) (see Technical Appendix 5 of Volume 3) provides a framework for managing the movement of traffic to and from the Application Site, and to minimise the impact on the local road network during the construction period of the Proposed Development.

1.251. A pre-application request was submitted to Rushcliffe Council and feedback was received from the Highways Authority on the 10th of March 2021. The feedback was general and included the following:

"The submission includes very little information with regard access arrangements and anticipated vehicle numbers. A Construction Traffic Management Plan will need to be provided with any formal submission to further assess matters of access, vehicle movements etc.

It is stated within the supporting information that there are four potential options surrounding the site which are already existing farm entrances, although no further details are provided. Suitable access arrangements will need to be confirmed in terms of visibility and access geometry/construction. Further details on vehicle access design requirements can be found in the Nottinghamshire Highway Design Guide.

A Public Bridleway cuts across the site to the north, and the applicant should contact the Public Rights of Way team at an early stage to discuss any potential implications. Further information with regard to Public Rights of Way can be obtained by contacting countryside.access@nottscc.gov.uk".

1.252. The Public Rights of Way (PRoW) team also provided feedback which mainly focused on buffers for existing bridleways which have been considered in the design of the project. The CTMP also considered impacts on users of the PRoW during the construction stage.

1.253. Please refer to **Volume 2: Figure 15** for details on treatment of locations were internal site access tracks crosses bridleway.

1.254. The haulage route will be from the A46 to the southwest of the Application Site. The vehicles will exit the A46, signposted A6097 (Mansfield), take the 4th exit at the roundabout onto Bridgford Street followed by the 1st exit at the next roundabout onto Fosse Way. Vehicles will travel along this road for approximately 1.5km to the next roundabout, where they will take the 2nd exit onto Tenman Lane. This road will be travelled on in an eastern direction for approximately 3.2km before taking a left hand turn onto Hawksworth Road and vehicles will travel along here for approximately 2km before taking a right hand turn onto Thoroton Road. Vehicles will travel in a southeast direction for approximately 0.9km before turning left into the Application Site.

1.255. The speed limit on Thoroton Road is 60mph. The CTMP notes:

"It was observed that vehicles are highly likely to travel at speeds close to the statutory speed limit due to the road alignment being straight and having good forward visibility. This section of road (near the site entrance point) does not contain centre markings, public lighting, or a defined carriageway edge. This road is approximately 3.7m wide, with passing places located at intervals and the carriageway appears to be in a good condition.

The new access point off Thoroton Road is designed in accordance with the Nottinghamshire Highway Design Guide and swept path analysis showing the largest construction vehicle entering and exiting the site entrance point shows that the design is suitable, see ***Figure 5.2: Appendix 5A.*** *As per the drawing, to facilitate the new access point, 13.3m of hedgerow will need to be removed.*

It was noted during the site visit that it was likely that vehicles would be travelling up to the roads speed limit and therefore the full 210m x 2.4m visibility splay for a 60mph road is required. The visibility splay of 210m x 2.4m will be achievable without the need for any remedial works, see ***Figure 5.3: Appendix 5A****."*

Paragraph 5.40-5.42

1.256. Construction of the Proposed Development is anticipated to occur over a six-month period. During this period, there will be a combination of HGVs (for the component and material deliveries) and cars/vans (for construction staff) on site. HGV movements are expected to be the most intense during the first few weeks of construction, reducing in numbers towards the final weeks. Car/van movements for construction staff are expected to be constant throughout. It is anticipated that peak construction periods will result in maximum of 25-30 car/van movements per day at peak construction period, and construction staff vehicle sharing will be encouraged to reduce vehicular movements.

1.257. All traffic movements will be carried out between the hours of 07.00 to 19.00 on Monday to Friday and 08.00 to 16.00 on Saturdays. Outside of these times works are limited to a) commissioning and testing and b) Works required in an emergency where there is the potential of harm or damage to personnel, plant, equipment, or the environment, provided

the developer retrospectively notifies the Council of such works within 24 hours of their occurrence. Deliveries, where possible, will be scheduled to avoid peak times where relevant, e.g. avoiding rush hours and after school drop off and pick up times.

1.258. The CTMP states:

"In total, the construction of the solar farm is expected to give rise to 1,106 HGV deliveries over the six-month construction period. A daily maximum of approximately 20 HGV deliveries (40 HGV movements) is anticipated."

Paragraph 5.64

1.259. There are several Bridleways and PRoWs located close to the Proposed Development Site, including one Bridleway route (BW1 connecting to BW6) passing through the northern fields. These will all remain open during the construction period and into the operational phase. Where there are Bridleway crossings, the construction area will be signed to alert construction vehicle drivers not to cross without a banksman available and priority will be given to any users which are currently using the Bridleways. There will also be a dedicated Community Liaison Officer to engage with local residents, throughout the construction and operational phases.

1.260. To control, prevent and minimise dirt on the access route and emissions of dust and other airborne contaminants during the construction works, mitigation measures including wheel washing, dampening down site roads, speed limitations, avoidance of dust generating works in windy periods and covering of soil stockpiles is to be implemented.

1.261. The operational phase of the solar farm is anticipated to have negligible trip generation potential with approximately 10-15 Light Goods Vehicles (LGVs) expected every year for scheduled maintenance checks, with additional visits required to attend to remedial issues when necessary. The operational access point will use the same entrance to the site as during the construction period.

1.262. The findings of the CTMP and the measures proposed align with the relevant national policies outlined above and those within Rushcliffe Borough Councils Local Plan (Part 2) including Policy 1: Development Requirements and Policy 16: Renewable Energy.

1.263. On the basis of the findings of the FRA and the drainage strategy proposed for the solar farm, it is considered that the Proposed Development complies with the relevant national policies outlined above and the relevant policies outlined in Rushcliffe Borough Council's adopted Local Plan Part 2 including Policy 17: Managing Flood Risk and Policy 18: Surface Water Management.

ACOUSTICS

1.264. A Noise (Acoustic) Impact Assessment (NIA) was undertaken in order to identify and describe any likely significant noise effects on keys receptors during the operational phase of the Proposed Development. For further detail, see **Technical Appendix 7 of Volume 3.**

1.265. The main sources of sound within the Proposed Development are the 28 inverters and transformers located at the solar substations along with the grid transformers at the grid substation. The inverters and transformers are assumed to operating at all times. This is likely to over-estimate the sound levels at night as the inverters would only operate during daytime periods when the solar farm is generating power.

1.266. An assessment in accordance with BS 4142: 2014 would typically be undertaken in order to determine the acoustic impact of the proposed development. This approach is consistent with the guidance provided in the National Policy Statements published by DECC for this type of development. BS 4142: 2014 lends itself well to an assessment in accordance with NPPF, NPSE and NPPG as it allows the level of impact to be ascertained.

1.267. Whilst BS 4142: 2014 would normally be used, it states that absolute levels might be more relevant than the margin above background in circumstances where the background sound levels are low. This is likely to be the case at this site as agreed with Rushcliffe Borough Council Environmental Health Department.

1.268. The NIA concludes:

"The results show that relevant limits would be met during both day and night-time periods."

Section 5.0 NIA

1.269. The NIA demonstrates compliance with national policy including the NPPF, NPPG and Noise Policy Statement for England and local policy including Policy 16: Renewable Energy of Rushcliffe Borough Councils Local Plan (Part 2) which states that "*proposals for renewable energy schemes will be granted planning permission where they are acceptable in terms of… g) amenity of nearby properties".*

Glint and Glare

1.270. A glint and glare assessment was undertaken in order to assess the potential impacts on ground-based receptors such as roads, rail and residential dwellings as well as aviation assets. For further detail, see **Technical Appendix 6 of Volume 3.**

1.271. Solar panels are designed to absorb as much light as possible and not to reflect it. However, glint can be produced as a reflection of the sun from the surface of the solar PV panel. This can also be described as a momentary flash and may be an issue due to visual impact and viewer distraction on ground-based receptors and on aviation.

1.272. Glare is significantly less intense in comparison to glint and can be described as a continuous source of bright light, relative to diffused lighting. This is not a direct reflection of the sun, but a reflection of the sky around the sun.

1.273. The assessment states:

"*In terms of reflectance, photovoltaic solar panels are not highly reflective surfaces. They are designed to absorb sunlight and not to reflect it. Nonetheless, photovoltaic panels have a flat polished surface, which omits 'specular' reflectance rather than a 'diffuse' reflectance, which would occur from a rough surface. Several studies have shown that photovoltaic panels (as opposed to Concentrated Solar Power) have similar reflectance characteristics to water, which is much lower than glass, steel, snow and white concrete by comparison*"

Paragraph 6.23

1.274. Geometric analysis was conducted at 75 individual residential receptors and 41 road receptors, as well as two runway approach paths and an air traffic control tower at RAF Syerston, and four runway approach paths and an air traffic control tower at Nottingham City Airport.

1.275. The assessment concludes that:

- *Solar reflections are possible at 72 of the 75 residential receptors assessed within the 1km study area. The initial bald-earth scenario identified potential impacts as* ***High*** *at 61 receptors,* ***Medium*** *at two receptors,* ***Low*** *at nine receptors and* ***None*** *at the remaining three receptors. Upon reviewing the actual visibility of the receptor, glint and glare impacts remain* ***High*** *at seven receptors and reduce to* ***Low*** *at one receptor and* ***None*** *at all remaining receptors. Once mitigation measures were considered all impacts reduce to* ***None*** *at all residential receptors.*

- *Solar reflections are possible at 40 of the 41 road receptors assessed within the 1km study area. The initial bald-earth scenario identified potential impacts as* ***High*** *at 40 receptors and* ***None*** *at the remaining receptor. Upon reviewing the actual visibility of the receptor, glint and glare impacts remain* ***High*** *at eight receptors and reduce to* ***None*** *at all remaining receptors. Once mitigation measures were considered all impacts reduce to* ***None*** *at all road receptors.*

- ***No impact*** *on train drivers or railway infrastructure is predicted.*

- *Green glare is predicted to impact upon the Runway 06 approach path at RAF Syerston and the Runway 03 and 09 approach paths at Nottingham City Airport. According to Federal Aviation Authority (FAA) guidance, green glare is an* ***acceptable impact*** *when pilots are approaching runways/helipads. Green glare is predicted to impact upon the air traffic control tower (ATCT) at Nottingham City Airport. According to FAA guidance, green glare is a* ***not acceptable impact*** *upon an ATCT. Upon review of the ground elevation between the Proposed Development and the ATCT, the impact reduces to* ***None****. Therefore, the impact upon aviation assets is* ***not significant****.*

1.276. Mitigation is required to ensure the **High** impact views from Residential Receptors 9 – 12 and 73 - 75, as well as Road Receptors 15 – 17, 21, 28 and 39 – 41 into the Proposed Development are screened. This includes native hedgerows to be planted/infilled and maintained to a

height of 3 – 4m along a southern section of the western boundary of Field 1, northern boundaries of Fields 2 and 4, eastern boundaries of Fields 5, 7 and 9, southern boundaries of Fields 8 and 9 and a northern section of the western boundary of Field 8 as proposed in the Landscape and Ecology Management Plan.

1.277. The effects of glint and glare and their impact on local receptors has been analysed in detail and the impact on all receptors is predicted to be **Not significant** once mitigation measures have been put in place.

Paragraph 6.4-6.7

1.278. The Glint and Glare Assessment demonstrates compliance with local policy including **Policy 16**: **Renewable Energy** of Rushcliffe Borough Council's Local Plan (Part 2) which states that "*proposals for renewable energy schemes will be granted planning permission where they are acceptable in terms of….. g) amenity of nearby properties".*

BEST AND MOST VERSATILE LAND

1.279. An Agricultural Land Classification (ALC) assessment (See Technical Appendix 9: Volume 3), has demonstrated that the majority of the site (58%) comprises land classified as Grade 3b agricultural quality and therefore not considered to be Best and Most Versatile land.

1.280. The Proposed Development aligns with Policies 1 and 16 of the Rushcliffe Local Plan (Part 2). Policy 1: Development Requirements notes "development should have regard to the best and most versatile agricultural classification of the land, with a preference for the use of lower quality over higher quality agricultural land. Development should also aim to minimise soil disturbance as far as possible".

1.281. Paragraph 175 of the National Planning Policy Framework (NPPF) states:

"Where significant development of agricultural land is demonstrated to be necessary, areas of poorer quality land should be preferred to those of a higher quality"

1.282. The Proposed Development will not result in the long-term loss of land and upon cessation of the production of renewable energy, the land will be restored to its former use. The ground level footprint of the Proposed Development is 3.95%, with the highest ground disturbance occurring from the proposed access tracks, temporary construction compounds and cable trenches. A lower area of ground disturbance will occur from excavations required for infrastructure such as the ancillary buildings. The cumulative 'pin-prick' ground disturbance occurring from the piling for the panels themselves will be less than 0.05% of the Application Site area.

1.283. The single greatest threat to food security in the UK comes not from the temporary diversification of agricultural land to dual agri-voltaic use in the form of a solar farm and sheep grazing, rather from the effects of climate change on the production of food stuffs due to

extreme weather conditions such as increased droughts and flooding. From recent reports, it can be seen how this year's drought is affecting harvests of staple crops including potatoes, carrots and onions[42].

1.284. The application site has been selected due to its proximity to a viable grid connection. The UK's aging electricity infrastructure is one of the largest restrictions to all renewable energy developments across the country, and therefore projects must be sited on land where there is sufficient capacity on the electricity network.

1.285. The Proposed Development is specifically designed to be dual purpose, enabling continued agricultural use, in the form of sheep grazing on species-rich neutral grassland, and renewable generation. It should be noted that the project is fully reversible and does not result in any long-term loss of agricultural land. The site can be reinstated back to its current state following the operational period. Furthermore, where a solar farm is installed on land which has been previously farmed, it enables the ground underneath to recover, while providing income for the farming business. This means solar farms help to regenerate soil quality, and so are helping to ensure the continued availability of high-quality agricultural acreage for future generations.

1.286. Agricultural land covers 56% to 70% of UK land. Solar farms in the UK currently have a combined capacity of around 14GW which makes up just under 0.1% of land in the UK. By comparison, the total land used by the UK's golf courses is 0.5% and airports is 0.2%. The UK Energy Security Strategy[43] published in April 22 commits to look to increase the UK's current 14GW of solar capacity by up to 5 times by 2035. If the government meets its target of increasing solar capacity fivefold, ground-mounted solar would cover a total of around just 0.3% of the UK's land surface which is still less than the total land used by the UK's golf courses.

1.287. Whilst the proposed development would use some areas of Best of Most Versatile land, it is considered that the environmental and ecological benefits of the proposed development outweigh this temporary change.

1.288. The Proposed Development clearly aligns with the NPPG on Renewable and Low Carbon Energy[44] given that the Application Site is predominately Grade 3b agricultural quality and the design layout includes solar PV panels on poorer quality land. Furthermore, during operation the Proposed Development has been designed to retain agriculture usage. Traditional arable farming can continue in Field 5 and an area south of Field 1, retaining the day-to-day activities, and seasonal changes associated with it. The remainder of the Application Site has been designed for the dual use of energy production and sheep grazing. Following decommissioning, the Application Site will be restored to its former agricultural use.

[42] https://www.gov.uk/guidance/national-planning-policy-framework

[43]https://www.gov.uk/government/publications/british-energy-security-strategy/british-energy-security-strategy

[44] https://www.gov.uk/guidance/renewable-and-low-carbon-energy

DESIGN

1.289. The Applicant, with assistance from Neo Environmental Limited have developed a rigorous site selection process in order to ensure that only the best projects are developed, and such projects are able to be sensitively integrated into the wider landscape, encouraging the protection and enhancement of the environment.

1.290. The layout of the Proposed Development has been designed to make the most efficient use of the Application Site, whilst respecting nearby residential properties and existing features such as hedgerows and trees as far as is practically possible.

1.291. Measurements have been incorporated into the siting and design of the Application Site to reduce the potential impacts and to improve the layout of the Proposal, including a reduction in the maximum height of the modules from 3.5m to 2.8m. Throughout the design iteration process, the Application Site has reduced in size from c.144ha in October 2021 to the current site area of 94.24ha (September 2022). These changes were following feedback from the community and stakeholders, as well as the results of site surveys and assessments. For example, the local community came forward with a preference for the eastern field to be removed, this aligned with the results of a geophysical survey which showed high potential for archaeological remains, therefore this field was removed. Other reductions were the removal of the fields to the south of Thoroton Road, and the field immediately north of the village of Thoroton itself to maintain a compact and well-screened site minimising potential residential receptors. A large set-back was also allowed around the village of Hawksworth to minimise potential visibility. PV solar panels were also removed in the north eastern section of field 5 to preserve southernly views towards the church spire of St Helena's in Thoroton and to give additional set-back distance from the Bridleway route running across the north of the site.

1.292. Where possible, The Proposed Development has been designed to enable agriculture usage to continue. For example, Traditional arable farming can continue in a large section of Field 5 and an area south of Field 1, allowing the day to day activities, and seasonal changes associated with it. The remainder of the Application Site has been designed for the dual use of energy production and sheep grazing. The provision of a sheep handling facility in the southwestern corner of field 6, has been included in the design in a location that will facilitate the management of the flock as detailed in **Figure 14 of Volume 2: Planning Application Drawings.** Following decommissioning, the Application Site will be restored to its former agricultural use.

1.293. The design also includes significant PRoW enhancements, by the inclusion of two permissive bridleways, that meet existing bridleways 1&6, that traverses on an east to west axis, across fields 5&4, dissecting fields 1&2. This significantly improves recreational benefits to a wide range of Public Rights of Way users whilst also improving road safety for all users as they can avoid using the road network. See **Figure 3 of Volume 2: Planning Application Drawings.**

1.294. Following consultation with Rushcliffe Borough Council and the Highways Authority in March 2021, the location of new access off Thoroton Road and the haulage route were chosen to minimise the impact of construction traffic on the environment and local communities. See **Technical Appendix 5: CTMP of Volume 3** for further details.

1.295. The design also incorporates ecological enhancement, providing greater biodiversity opportunities for the Application Site and the surrounding area. The design includes buffers around existing habitats, for example 5m around all existing hedgerows; 8m from field drains; and 10m around woodland to reduce any potential negative impacts on local wildlife. 10cm gaps have been designed into the bottom of the security fencing which spans the perimeter of the Application Site (**Figure 13: Vol 2**) to ensure connectivity for mammals. The design includes woodland and hedgerow planting and ecological enhancement measures which will result in significant biodiversity net gain with 187.13% gain in habitat units and 24.68% gain in hedgerow units. See **Technical Appendix 2: EcA of Volume 3** for further details.

CRIME AND DISORDER STATEMENT

1.296. During the construction period, two temporary secure compounds will be used for storage and offloading, and it is proposed that there will be a security presence on the site during the construction phase.

1.297. For security and safety purposes, the Proposed Development will be closed to the general public. The design of the site includes two particular security features:

- Perimeter fencing: two forms of fencing are included in the design – wire strung 'deer' fencing (**Figure 13: Volume 2**), and palisade fencing (**Figure 9: Volume 2**). The deer fencing will be erected around the perimeter of the site while the palisade fencing will be erected around the substation for security purposes.
- Pole-mounted CCTV system (**Figure 10: Vol 2**)

1.298. The fence installed around the perimeter of the solar farm will be erected at the start of the construction programme and will remain for the duration of the operation until decommissioning of the solar farm.

1.299. As the Proposed Development will be unmanned other than for scheduled maintenance visits, there will be 98 no. inward facing CCTV cameras with infrared lighting located at intervals around the perimeter of the deer fence monitoring the site. These will be operating 24 hours a day. Additionally, there will be signage located on the gates / fences of the development warning the public of high voltage equipment and that the site is protected by video surveillance.

1.300. Access to the Application Site during construction hours will be controlled by personnel located at the entrance of the development. All visitors will sign in and out with security.

1.301. The Bridleway Route (BW 1 & 6) that crosses the northern fields of the Application Site will remain open during the construction period and into the operational phase. Where there are Bridleway crossings, the construction area will be signed to alert construction vehicle drivers not to cross without a banksman available and priority will be given to any users which are currently using the Bridleways. More details can be found in the CTMP (Technical Appendix 5 of Volume 3).

1.302. Please refer to Volume 2: Figure 15 for details on treatment of locations were internal site access tracks crosses bridleway.

CONCLUSION

1.303. In devising the Proposed Development, a number of rigorous technical environmental assessments have been undertaken to ensure compliance with all relevant planning and associated legislation, with appropriate mitigations and enhancements having been proposed. In all cases, the assessments have concluded that the Proposed Development will not result in any unacceptable impacts, with any limited harm that may occur being well outweighed by the many benefits associated with the scale of renewable energy that will be provided. These benefits include:

- An expected generation of 49.9MW of renewable energy which could generate enough electricity to power circa 15,200 homes per year for the local distribution network;
- A significant saving of CO_2 per year compared to equivalent fossil fuel generation (25,000t[3]);
- Delivering significant biodiversity net gain with 187.13% gain in habitat units and 24.68% gain in hedgerow units;
- Assisting national and local efforts to achieve legally binding renewable energy targets;
- Providing local economic benefits both in terms of business rates and in the generation of jobs during the construction, operation and decommissioning phases;
- Long-term environmental benefits in the form of improved biodiversity and landscape value thanks to additional planting and infilling of hedgerows at the construction phase and the ecological enhancement measures and the ongoing sensitive site management for the duration of the Proposed Development's lifespan; and
- Community benefits in the form of PRoW enhancements, along with the Applicant's commitment to ongoing discussions with community.

1.304. The above planning assessment has demonstrated that:

- The Proposed Development is compliant with the Rushcliffe Local Development Plan, and national planning policy and guidance.
- The development and operation of the solar farm would give rise to a wide range of environmental and economic benefits which amount to a very substantial weight in favour of planning permission being granted; and
- The impacts associated with the Proposed Development at this location are limited.

1.305. In consideration of the above, the Proposed Development has been shown to achieve the main objectives of sustainable development (environmental, social and economic) without causing undue detriment to any of these matters.

1.306. There is significant support for the principle of renewable energy developments and presumption in favour of sustainable development throughout the NPPF. Paragraph 148 is clear that the planning system should support transition to a low carbon future, specifically renewable and low carbon energy and associated infrastructure. Granting planning permission for the proposed solar farm would comply with these requirements and demonstrate support for such schemes.

1.307. The NPPF also directs that planning applications for renewable development should be approved if impacts are (or can be made) acceptable. As outlined above, the assessments of environmental effects have been shown to be limited and would also accord with the provisions of national policy and the NPPG where these specifically refer to environmental effects. The Proposed Development is deemed to have struck an acceptable balance between renewable energy production and all relevant planning and environmental considerations and, on this basis, we contend that planning permission should be granted.

APPENDICES

Appendix A: Pre-application Response

Appendix B: EIA Screening Direction

When telephoning, please ask for: **Deirbhile Blair**
Telephone no: **0115 914 8342**
Email: **dblair@rushcliffe.gov.uk**

Our Reference: 21/00406/ADVICE
Your Reference:
Date: 25th March 2021

Rushcliffe Borough Council

Email: customerservices @rushcliffe.gov.uk

Telephone: 0115 981 9911

www.rushcliffe.gov.uk

Nicole Beckett
Via email: nicole@neo-environmental.co.uk

Dear Nicole

Re: Proposed development of ground mounted solar farm.

I refer to the above enquiry for a solar farm on lands between Hawksworth and Thoroton, Nottinghamshire.

Site Constraints

The proposed development would be located within the open countryside. A Public Bridleway cuts across the site to the north. The land to the north is in Flood Zones 2 and 3. There is an area of small woodland to the north. Hawksworth Manor and adjoining Pigeoncote are Grade II Listed and are located directly to the west of the application site. The church of St Helena in Thoroton is Grade 1 listed and a number of other buildings in the village are also Listed buildings. The site is also in the vicinity of Conservation Areas of Hawksworth and Thoroton and parts of the site are acknowledged to have potential archaeological interest.

It has not been demonstrated clearly as to what grade of agricultural land the application site falls within.

There is no relevant planning history associated with this application site.

Planning policy

National Planning Policy Framework
- Chapter 14 Meeting the challenge of climate change, flooding and coastal change.

Rushcliffe Local Plan Part 1
- Policy 1 – Presumption in favour of sustainable development
- Policy 2 – Climate Change

Rushcliffe Local Plan Part 2
- Policy 1 – Development Requirements
- Policy 16 – Renewable Energy
- Policy 22 – Development within the Countryside

National Planning Policy Guidance
- Renewable and Low Carbon Energy

Principle of Development

In principle, the development of renewable and low carbon energy is acceptable in both national and local policy terms. In particular, paragraph 154 of the NPPF states that local planning authorities should (inter alia)

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"…approve the application if its impacts are (or can be made) acceptable"

Policies in both Part 1 and Part 2 of the Local Plan express encouragement to the development of renewable energy, providing, of course that any other impacts can be made acceptable.

Other Considerations

It has not been clearly demonstrated as to what grade of land the application site lies within. In this instance, consideration must be given to part 12 of LPP2 Policy 1 which states that;

"development should have regard to the best and most versatile agricultural classification of the land, with a preference for the use of lower quality over higher quality agricultural land. Development should also aim to minimise soil disturbance as far as possible."

In addition, guidance is contained within the NPPG regarding large scale solar farms which states that where a proposal involves greenfield land it should be demonstrated;

(i) the proposed use of any agricultural land has been shown to be necessary and poorer quality land has been used in preference to higher quality land; and;
(ii) the proposal allows for continued agricultural use where applicable and/or encourages biodiversity improvements around arrays.

In this case, given the nature of the development, which requires reasonably low levels of ground disturbance/footings, it is likely that the benefits conferred by a development of renewable energy may outweigh any potential harm to/loss of agricultural land, however a supporting statement would need to be submitted addressing the points above. The quality of the land within each parcel may influence which fields are utilised for the solar farm.

It is noted that there are four potential access options surrounding the site which are existing farm entrances, however no further information has been provided. The comments from the Highways Authority have been noted and they have recommended that any application would need to be accompanied by a Transport Statement detailing the junction arrangements and vehicle generation. It would have to be demonstrated that the indicative access points were acceptable in terms of visibility, geometry and construction.

The proposal is not considered to be Schedule 1 development under the Environmental Impact Assessment Regulations 2017 The development is considered to be Schedule 2 development as it would comprise an industrial installation for the production of electricity on a site of 68.7 hectares which exceeds the threshold contained within Schedule 2 Section 3(a). In this instance, it will be necessary for the Borough Council to screen the application and it is recommended that a screening opinion request is submitted prior to any application being submittedhttps://www.legislation.gov.uk/uksi/2017/571/schedule/2/made

As advised by the Landscape Officer, any application would need to be accompanied by a comprehensive Landscape and Visual Impact Assessment (LVIA). Views from surrounding routes, roads, settlements, public rights of way and the listed convent will be key, as too will views from higher ground. An appropriate native landscape strategy should also be submitted in support of any application. Consideration should also be

given to the cumulative visual impacts associated with existing solar farm installations within the vicinity of the site.

Any application must also be supported by the results of Ecological Assessment carried out by a suitably qualified and experienced ecologist, particularly given the proximity of the site to Local Wildlife Sites. Similarly, a report setting out the measures to achieve biodiversity net gain should also be submitted.

Given the close proximity of the solar panels to main roads, it is considered that the orientation and angle of the panels should be given careful consideration in order to limit/prevent issues of glint and glare for oncoming traffic.

It is noted that Thoroton Bridleway no.6 and Hawksworth Bridleway no.1 are both within the application site and will be affected by the proposed solar farm development. The Rights of Way Team at the County Council have provided comments to which criteria should be adhered to when submitting a formal planning application. Their comments are attached.

You may also wish to consider submitting a construction management plan setting out measures to limit noise, dust and vibration during construction, the hours of operation / deliveries, and any lighting details.

With regards to Flood Risk, to the north, the application site is within Flood Zones 2 and 3. In this instance, a flood risk assessment would be required. Given that part of the application site is located within zones 2 and 3 the Borough Council will need to have information to allow consideration of the sequential test as well as an exception test.

The solar panels should be placed where there is the least impact in terms of; the setting of the listed building; views from public vantage points, best and most versatile agricultural land and ecology.

Consideration of impact on heritage assets will be required including Conservation Areas, Listed Buildings and potential archaeological interest.

Conclusion

In principle, the development of renewable energy is supported by policy and, subject to the other material considerations outlined above being made acceptable, it is likely the proposal could be supported at officer level.

Submission Documents

Should you decide to submit a planning application I would recommend that the following documents are provided;

- Site location plan with application site (including access) outlined in red and the remaining land in the applicants' ownership in blue
- Topographical survey
- Block plan with critical dimensions to boundaries marked on
- Plans and elevations including information on equipment and necessary infrastructure and boundary treatments
- Supporting planning and sustainability statement
- Statement regarding use of agricultural land
- Transport Statement
- Landscape and Visual Impact Assessment (including consideration of glint and glare)

- Heritage statement
- Flood Risk Assessment including information relating to sequential and exception test
- Landscape Strategy
- Preliminary Ecological Survey
- Biodiversity Net Gain Statement
- Noise assessment
- Construction Management Plan
- The appropriate application fee

You will appreciate this list may not be exhaustive but is given as a guide based on the information submitted to date.

Statement of Community involvement. Bearing in mind the scale of the development proposed and in accordance with our adopted Statement of Community Involvement you are strongly advised to undertake consultation with the local community including Parish Councils and local residents prior to any planning application being submitted.

Whilst the principle of such development may be in accordance with local and national planning policies it will be necessary for careful consideration to be given to the application and all the supporting technical information assessed by the relevant consultees. In these circumstances I am sure that you will appreciate that I can give no guarantee that such a proposal will receive a favourable recommendation at Officer level. You will also appreciate that the advice contained in this letter is offered without prejudice to any decision the Borough Council may reach on a planning application for the proposed development. On receipt of an application, the comments of other bodies will be sought, and these may raise further issues not anticipated at this stage. Therefore, the outcome of the application cannot be guaranteed. Furthermore, this advice may not be relied upon if an application is not made within one year or there are significant changes in policy.

However, please do not hesitate to contact me on the above telephone number should you wish to discuss this matter further.

Kind Regards

Principal Area Planning Officer

When telephoning, please ask for : Craig Miles
Telephone No: 0115 914 8560
Our Reference: 22/00638/SCREIA
Date: 7th September 2022

Huw Townsley
Neo-Environmental
(Via Email)

Rushcliffe Borough Council

Email:
customerservices
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Telephone:
0115 981 9911

www.rushcliffe.gov.uk

Dear Sir/Madam,

Reference:	22/00638/SCREIA
Development:	Environmental Impact Assessment Screening Request for the construction of a solar farm with a potential capacity of 49.9 Megawatts (MW)
Location:	Land at Shelton Road, Thoroton, Nottinghamshire

Town and County Planning (Environmental Impact Assessment) Regulations 2017 (as amended) (the "EIA Regulations") - Request for Screening Opinion

I am writing in response to your Screening Request seeks to determine if the proposals are EIA Development having regard to Regulation 6(2) of the Environmental Impact Assessment) Regulations 2017 (as amended).

The proposals relate to the formation of bi-facial ground mounted solar photovoltaic (PV) panels, new access tracks, battery storage, underground cabling, perimeter fencing with CCTV cameras and access gates, a temporary construction compound, substation and all ancillary grid infrastructure and associated works.

It is considered that the information submitted with the request for a screening opinion complies with Part 2 (Screening) – section 6(2) of the Regulations and that as such the Borough Council has sufficient information to allow it to adopt a screening opinion.

The proposed site is located in a semi-rural setting on lands between the small settlements of Hawksworth (0.1km west) and Thoroton (0.3km southeast), some 15km to the east of Nottingham. It comprises of several agricultural fields covering a total area of c.118 hectares. The site lies on gently undulating lands, ranging between 20m to 25m AOD. Internal field boundaries comprise hedgerows, tree lines and linear strips of woodland shelter belt. External boundaries largely consist of mature to lower hedgerows with individual trees and some evident gaps, providing good enclosure and limiting visibility for local settlements and receptors.

The majority of the site is identified as being within Flood Zone 1 (at little or no risk of fluvial or tidal / coastal flooding), however parts of the site that generally follow the watercourse / field drains within the site are identified as being within Flood Zone 2 and 3 (having a greater risk of flooding).

In terms of public access and public views of the site, there are several recreational routes located within and close to the Proposed Development Site including a bridleway passing through the northern fields, a Bridleway and footpath in closest proximity to the east, in addition to the PRoW to the south and southwest between Hawksworth and

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Thoroton. A National Cycle Network (NCN) route 64 also shares the minor road on the east side of the site.

The site does not form the best and most versatile' agricultural land. Likewise, the site is not located within or is adjacent to an Air Quality Management Area (AQMA).

The proposed solar farm does not lie within any statutory environmental designated sites, and within 15km there are no internationally designated sites.

There is one Site of Special Scientific Interest (SSSI) within 5km, forming Orston Plaster Pits SSSI. It is stated that an Extended UK Habitat and Phase 1 Habitat surveys with protected species scoping took would be undertaken prior to any submission that would include suitable mitigation and enhancement measures to ensure that the proposals would not significantly impact upon any ecological features.

There are no designated or non-designated heritage assets recorded within the boundary of the site, therefore it is considered that no direct effects will occur on known designated assets.

In terms of archaeology, the submission noted that 12 non-designated Historic Environment Records (HER) sites were identified within the site boundary and that the proposed development may have a direct effect. It is stated that a geophysical (magnetometry) survey would be undertaken in order to identify their extents and potential. Mitigation measures would be implemented following the results of this survey in order to ensure the preservation of these features, either in-situ or by record, so that impacts upon these features would not be significant. The above mentioned HER sites consist of cropmark features and findspots which highlight the high archaeological potential of most of the site, particularly in relation to the prehistoric periods, and moderate potential for remains from the Romano-British and Anglo-Saxon periods in the area.

It is stated that a Cultural Heritage Impact Assessment would be carried out in order to assess potential direct impacts resulting from the proposals (prior to submission), including the potential impacts upon unknown sub-surface archaeology. It is noted form the submission that the actual footprint of solar farms typically results in a surface area of circa 5% of the site and therefore significant impacts upon unknown archaeological remains within the site are limited.

In terms of the visual and landscape impacts, the site is located within the Trent and Belvoir Vales National Landscape Character Area (NCA) 48. At a local level, the Greater Nottingham Landscape Character Assessment (2009) provides classification of Landscape Character Types (LCTs), and the site is identified as being within South Nottinghamshire Farmlands: Aslockton Village Farmland. The Melton and Rushcliffe Landscape Sensitivity Study: Wind Energy Development also divides the Borough's landscape into 14 Landscape Character Assessment Units (LCUs). While the latter sensitivity study does not account for solar developments it provides some recent context such as key sensitive features and views.

The proposed development primarily relates to the development of solar panels mounted on frames not exceeding 3.5m high. Given the relative gentle slopes of the site combined with existing hedgerows enclosing the site together with the mixed wooded elements around it, would mean that the visual and landscaping effects of the proposals are likely to be localised and within the defined South Nottinghamshire Farmlands: Aslockton Village Farmland character area – primarily the appearance and character of the large-scale arable fields between Thoroton and Hawksworth.

The perception of the development would be limited from most key points surrounding the two villages where the landscape contributes to the key setting of the villages. It is accepted that the potential visibility would be limited to a small number of local receptors including the nearest residential receptors, road users, walkers and cyclists and that, the

extent of these views could be reduced by appropriate setbacks from settlement edges and the nearest residential properties and further by screening provided by existing trees and hedgerows present within the intervening landscape alongside the mitigation measures (as stated in the submission). It is therefore considered that the anticipated landscape and visual affected would not be so significant to define the proposals as EIA development, considering a Landscape and Visual Impact Assessment (LVIA) and landscaping plan would need to be provided as part of the submission to consider and mitigate any potential harm. The cumulative impact would also be considered as part LVIA, but given the nature of the development, the wider impact of the proposed development would be limited.

It is not therefore considered that the proposed development constitutes Schedule 1 development as defined in the Regulations. Instead, the development falls within the Schedule 2 list of developments under Category 3 – Energy Industry, part a) Industrial installations for the production of electricity, steam and hot water. The scale of the development exceeds that set out in Column 2 and therefore the proposal requires screening, and the Borough Council must therefore take into account the criteria in Schedule 3 of the 2017 Regulations.

Schedule 3 – Selection Criteria for Screening Schedule 2 Development set outs the criteria against which developments should be assessed to establish whether the proposal is likely to have significant effects on the environmental, having regard to; • Characteristics of development • Location of development • Characteristics of potential impacts, *et al*.

Given that the site is not located within a sensitive area for the purposes of Environmental Assessment as set out in the Regulations, that the potential environmental affects would be limited, that they can be considered as part of further assessments (as stated in the submitted information), and further mitigation could be provided, it is considered that proposals do not constitute EIA development.

A separate checklist as recommended by the National Planning Practice Guidance on Environmental Impact Assessments has been completed which arrives at the same conclusion.

This screening opinion relates only to EIA Regulations and does not imply that a favourable recommendation or decision would be forthcoming. This screening opinion is based purely on the information supplied by yourself as assessed against the Regulations current at the date of this response. Should there be any material change in relevant circumstances before an application is submitted, or you become aware that any information is incorrect, it is advised that you write to us again to allow the details to be re-checked as the planning authority is able, in exceptional cases, to request an EIA at a later stage should it subsequently become evident that such a proposal does require such an accompanying submission.

Yours faithfully,

Planning Operations Manager (Interim)