Request for Pre-application Advice on a Proposed 49.9MW Solar Farm

Land at Willoughby-on-the-Wolds & Wysall

On behalf of Exagen Group Limited

Date: 23/03/2022 | Pegasus Ref: P21-2532 & P21-2533

Author: Jack Ellis

Document Management.

Version	Date	Author	Checked/ Approved by:	Reason for revision
Rev A	23.03	JE	GR	
Rev B	29.03	JE	GR	Final comments

Contents.

Appendices contents.

1. Introduction

1.1. This planning statement accompanies a request for pre-application advice submitted by Pegasus Group on behalf of Exagen Group Ltd. Pre-application advice is sought for the provision of a renewable energy scheme comprising ground mounted photovoltaics with associated battery storage and associated infrastructure at land at Willoughby-on-the-Wolds and Wysall, Nottingham.

1.2. The site location plan is provided at Appendix 1. The site location plan shows the total site area available to Exagen Group Ltd to deliver the renewable energy scheme. The applicant is presenting the total land available to them to accommodate the proposed development to seek advice from the Council and assist the identification of the most appropriate and acceptable location for the development.

1.3. The total site area is split into two separate study areas, 'Willoughby 1' located north and north west of the village of Willoughby-on-the-Wolds, and 'Willoughby 2' located to the west and north west of the village of Wysall. The two sites are separated by approximately 1.5km, and for the purposes of this pre-application enquiry have been assessed separately.

1.4. The total site area is comprised of 6 parcels of irregularly shaped interconnected fields, which are principally in agricultural use, extending to approximately 180ha across the two separate study areas (Willoughby 1 & Willoughby 2).

1.5. This statement has been prepared to aid the Council's consideration of this pre-application request and sets out the development proposal in more detail. The request is supported by:

- Pre-application Planning Statement (this statement);
- Willoughby 1 - Pre-application Landscape and Visual Statement;
- Willoughby 1 - Pre-application Heritage Statement;
- Willoughby 1 – Preliminary Ecological Appraisal;
- Willoughby 2 - Pre-application Landscape and Visual Statement;
- Willoughby 2 - Pre-application Heritage Statement
- Willoughby 2 – Preliminary Ecological Appraisal
- Site Location Plan

1.6. of a series of interconnected fields which are principally in arable agricultural use, extending to approximately 49.5 hectares across two parcels (and eastern parcel and western parcel).

APPENDIX 1 – SITE LOCATION PLAN

1.7. The remainder of this Statement is structured as follows:

- **Section 2:** Need for Development

- *This section provides the headliners guiding the critical need for the development*

- **Section 3:** The Site and Surrounding Area

  - *This section contains a description of the site and its environs*

- **Section 4:** The Development Proposal

  - *Section four contains a description of the proposal and the development parameters that would form part of any planning application*

- **Section 5:** Planning Policy Context

  - *The planning policy context for the site includes both national policy guidance and the statutory development plan. Brief explanations of the key policies pertaining to the development proposal is contained within this section*

- **Section 6:** Principle of Development

  - *The sixth section discusses the issues surrounding the principle of development which are considered to be important to the Council's high-level assessment of the pre-application submission. Key considerations are addressed and explained in the context of the relevant planning policy outlined on the previous section.*

- **Section 7:** Conclusion

  - *This provides the concluding comments in relation to the pre-application proposal.*

Advice Sought

1.8. For this pre-application request, the applicant respectfully requests the Council's advice on:

- The acceptability and appropriateness of the individual field enclosures contained within the total site area for accommodating a large-scale renewable energy scheme and whether Council have an informed preference on the specific field enclosures to accommodate the built form of the development.

- Considerations on the potential cumulative impacts of a new large scale renewable energy scheme on the site given the proximity of the site location to existing renewable energy development and proposals within the surrounding area.

1.9. In addition to the above points, please provide advice over the following matters:

- Confirmation that the principle of development is/or can me made acceptable;

- Validation requirements for the submission of a detailed planning application;

- The Council's expectations towards community consultation;

- Local Planning Authority's advice with regards to mitigation and enhancement measures for biodiversity and screening;
- The Council's advice on highways and access;
- Options for entering into a Planning Performance Agreement; and
- Advice of statutory consultees and any technical matters to be addressed as part of the planning application submission.

1.10. The applicant also welcomes a joined-up and collaborative meeting with the Local Planning Authority (LPA) to discuss the proposal in details and identify any preferences regarding the siting of the proposed development within the total site boundary before the LPA issues their formal pre-application advice.

1.11. It is envisaged that any subsequent formal planning application submission would be supported by the additional documentation below. Please clarify if such a submission would be adequate to satisfy the local validation requirements for a detailed planning application:

- Planning Statement & Very Special Circumstances
- Design and Access Statement
- Planning Application Drawings
- Flood Risk Assessment and Drainage Strategy
- Heritage Assessment
- Arboricultural Assessment
- Construction Traffic Management Plan
- Phase 1 Ecological Survey
- Landscape and Visual Impact Assessment and Green Belt Assessment
- Landscape and Ecological Management Plan
- Agricultural Land Classification Survey Report
- Consultation Report

Statutory Requirements

1.12. Given the potential land take of the development, a request for an Environmental Impact Assessment Screening Opinion would be made at the appropriate time.

2. Need for Development

2.1. There is a plethora of Government legislation, guidance and policy which support the transition to a low carbon future and the continued roll out of renewables and low carbon energy and associated infrastructure. The UK is part of an international effort to combat climate change. The UK is a party to the United Nations Framework Convention on Climate Change (UNFCCC) and as such has signed up to international climate change obligations, such as the Kyoto Protocol and the Paris Agreement.

2.2. As part of its contributions to international efforts, the UK also has domestic legislation and policies in place to reduce greenhouse gas emissions. The Climate Change Act 2008 established long term statutory targets for the UK to achieve an 80% reduction in greenhouse gases by 2050 against a 1990 baseline.

2.3. To support a prosperous and rural economy, the diversification of agricultural and other land-based businesses is strongly supported by the Government. With the risk of shortfalls resulting from the loss of future subsidies, many farmers are looking to diversify to improve income and provide stability for the agricultural sector. Currently over 60% of farms now employ some form of diversification (according to the 2015/16 Farm Business Survey (FBS)) with diversification ventures ranging from simple building lets, farm shops and installing solar panels for the generation of green energy. The diversification of agricultural land to provide renewable energy generation such as solar is a widely accepted form of agricultural diversification and is acknowledged to provide significant financial stability to existing farmsteads and rural businesses.

2.4. Furthermore, there is an explicit need for the deployment of solar farms and other renewable energy generation, which is driven by a plethora of government legislation at both a local and national level in the UK.

2.5. An Energy Policy Statement is provided at Appendix 2 of this report and should be read in conjunction with this Planning Statement. The statement provides a summary of the context of both local and national energy legislation and policies that set out the commitments the local and national government has made towards tackling climate change and demonstrates how the rapid deployment of renewable energy technologies across the UK, and solar technologies in particular, is key to achieving these targets.

APPENDIX 2 – ENERGY POLICY STATEMENT

2.6. In June 2019, the Government raised the UK's commitments in tackling climate change by legislating a net-zero gas emissions target for the economy by 2050. Decarbonising the power sector is integral to achieving this target and requires major investment into renewable technologies, such as solar power and battery energy storage, which are supported by planning policy at both local and national levels.

2.7. On 12 June 2019, as a direct response to the Climate Change Emergency Declaration, the Prime Minister announced that the UK will achieve net zero in carbon emission by 2050 and The Secretary of State for Business, Energy and Industrial Strategy, MP Greg Clark, tabled the draft affirmative statutory instrument to implement the changes, the Draft Climate Change Act 2008 (2050 target Amendment) Order 2019. The amendment in the Order changes the minimum percentage by which the net UK carbon account for the year 2050 must be lower

than the 1990 baseline and is increased from 80% to 100%. The legislation was signed into law in late June 2019, following approval by the House of Commons and the House of Lords.

2.8. At a local level, Rushcliffe Borough Council voted to declare a climate emergency in March 2019 and set out that the Council would target becoming a carbon neutral organisation by 2030.

2.9. The National Infrastructure Commission (NIC), official advisor to the Government on Infrastructure, has published a report (Net-Zero Opportunities for the Power Sector, March 2020) setting out the key infrastructure requirements needed to meet the UK's 2050 net-zero target, including the amount of renewable energy development that would need to be deployed.

2.10. The NIC recommends that in meeting these targets, the UK's energy mix needs to be made up of around 90% renewables. At page 18 of the report, it is recommended that across all scenarios, significant levels of solar, onshore wind and offshore wind will need to be deployed with between 129 – 237 GW (gigawatts) of renewable energy capacity in operation by 2050. To achieve this, the report recommends the following split:

- 56-121 GW of solar;
- 18-27 GW of onshore wind; and
- 54-86 GW of offshore wind.

2.11. To achieve the above targets would require a significant increase in installed capacity across the UK, including over nine times the current installed capacity of solar technologies in the UK, which as of September 2021 is around 13.6GW according to the Department for Business, Energy & Industrial Strategy (BEIS)[1].

2.12. When considering the above figures and applying them to the number of local authorities across the UK, this would mean that there is an additional 107.4 GW of solar capacity required across the 382 local authorities across England, Scotland, Wales and Northern Ireland required to meet the NIC's upper figure for solar.

2.13. It is therefore reasonable to surmise that every local planning authority, where appropriate developable land allows, should be delivering a significant amount of renewable energy capacity, considering a mixture of landscapes and terrain.

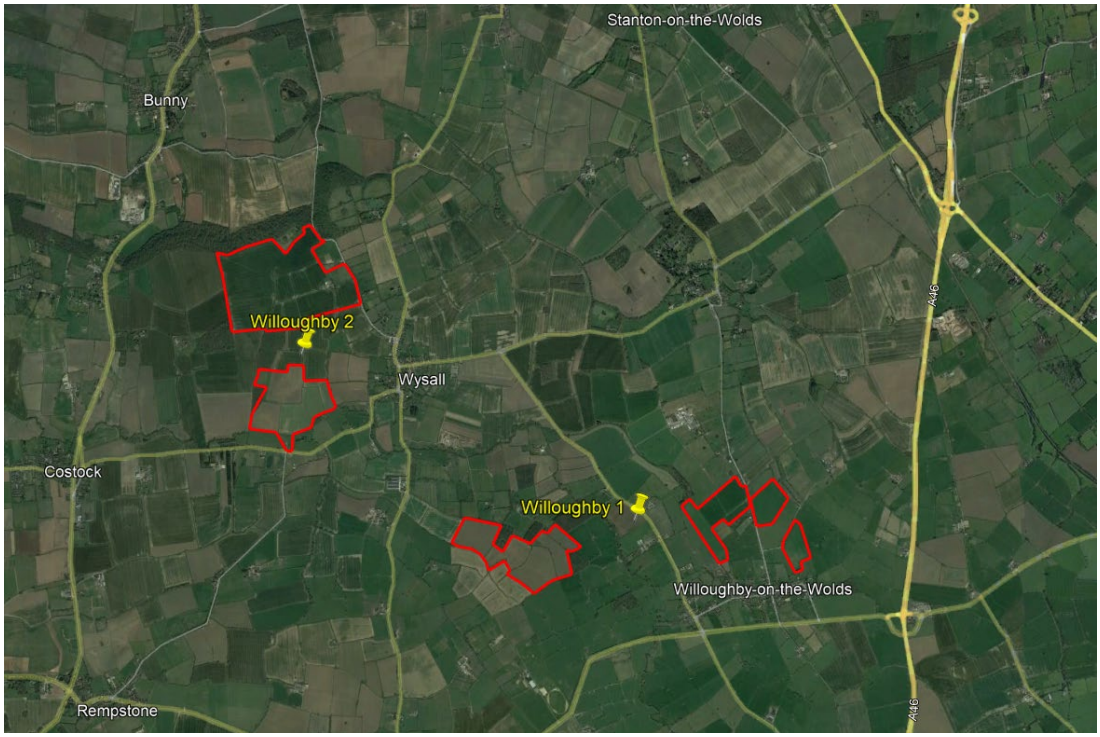
2.14. To meet the targets addressed above, the UK is currently undergoing a rapid transformation in the way in which energy is generated with large scale, centralised fossil fuel and older nuclear power stations being phased out and smaller scale, decentralised renewable energy generation taking their place.

2.15. Whilst renewable energy output is increasing across the UK, the overall demand for electricity is also increasing through the ongoing electrification of transport and heat sectors and an increasing uptake of plug-in hybrid and electric vehicles.

[1] https://www.gov.uk/government/statistics/solar-photovoltaics-deployment

3. The Site and Surroundings

3.1. The total site area is comprised of 6 parcels of irregularly shaped interconnected fields measuring approximately 180ha in area. For the purpose of this pre-app, the 6 parcels have been categorised into two separate areas, 'Willoughby 1' located north and north west of the village of Willoughby-on-the-Wolds, and 'Willoughby 2' located to the west and north west of the village of Wysall. The two study areas have been assessed separately and are discussed in greater detail below.



Study Area Plan

Willoughby 1

3.2. Willoughby 1 is comprised of 4 separate parcels of land located in close proximity to each other, and broadly speaking, located to the north west and north of Willoughby-on-the-Wolds. The parcels occupy a series of gentle undulations separated and drained by Kingston Brook and Fairham Brook, and their tributaries.

3.3. The western parcel includes 5 medium to large scale field enclosures and lies between Willoughby-on-the-Wolds and the settlement of Wysall, which is located further to the north west. Field boundaries are marked by mature and well developed hedgerows, and blocks of woodland: Woollerton's Plantation, Jubilee Plantation, Thorpe Plantation, and Triangle Plantation. Boundary hedgerows are relatively high and approximately 2m and over, with infrequent hedgerow trees. One of the perimeter hedgerows, extending west from Triangle Plantation is characterised by frequent trees. Windyridge Road lies to the west and leads north to Wysall, and south to Wymeswold. West Thorpe road lies to the east and leads south to Willoughby-on-the-Wolds.

3.4. The remaining part Willoughby 1 is comprised of three parcels of land, concentrated along Widmerpool Lane and Mill Lane, north of Willoughby-on-the-Wolds. One of them, the central parcel, lies west of Widmerpool Lane and consists of 4 small to medium field enclosures. The fields are rectangular with the western most field relatively long and narrow. Its alignment reflects the presence of a local watercourse.

3.5. The two eastern parcels both consist of a single field each, with one of them adjacent to Widmerpool Lane, and located opposite the above described central parcel. The second eastern parcel is adjacent to Mill Lane and extends to the edge of Willoughby-on-the-Wolds. Boundaries are delineated by hedgerows, which appear to be in good condition, but are often relatively low, between 1.2m to 2m in height, with seldom growing hedgerow trees.

3.6. Generally speaking, the landscape around Willoughby-on-the-Wolds is undulating and there are occasional long range views, but the localised variations in levels foreshorten views, which are further interrupted by vegetation. In certain views, the presence of blocks of woodland and hedgerow trees create a perception of a well wooded landscape. There are no elevated hills or pronounced changes in levels immediately around the site and views are generally interrupted or enclosed by woodlands and higher ground that encloses the site. Ratcliffe on Soar power station is visible in certain views looking north west, but is a distant feature often screened by woodland blocks. The Six Hill Wind Farm located approximately 1.5km away to the south east of Willoughby-on-the-Wolds, frequently appears in views, often simultaneously with the village.

3.7. Medium to small scale pastoral fields separate the individual parcels of the site and characterise the landscape around the village. Large to medium arable fields are also present in the local landscape, and indeed in the immediate vicinity of the site.

3.8. Topographically the Willoughby 1 study area forms part of the elevated Nottinghamshire Wolds, which in this part is dissected by various watercourses, and slopes from south to north. The eastern most parcel is the most elevated part of the Willoughby 1 study area and sits at approximately 100m AOD contours. The central and western parcels straddle the 90m and 80m AOD contour line. In the context of the site, it is worth noting that Willoughby-on-the-Wolds sits slightly higher between 90m to 105m AOD with the landform continuing to rise further south and south east.

Residential Receptors

3.9. Due to the undulating landform across and around the Willoughby 1 study area, and the presence of woodlands, views towards and into the interior of the site are limited. Views from around the eastern most parcel and from within the western most parcel are more distant, but mitigation opportunities do exist to limit reciprocal views.

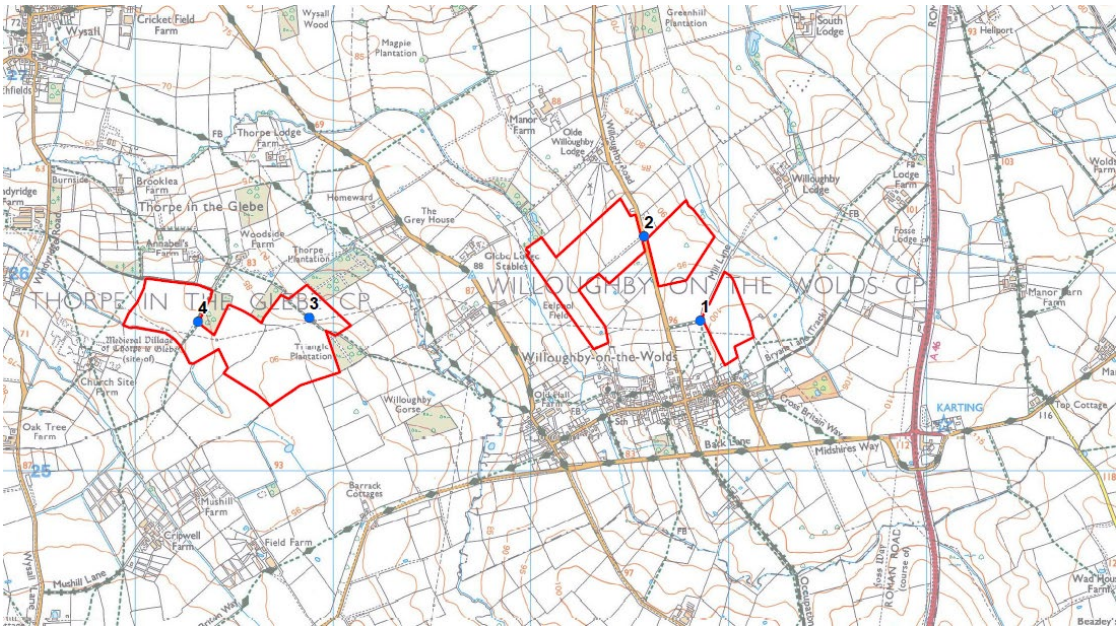
3.10. There are a number of properties that adjoin the site or lie in very close proximity to it:

- Dwellings along Wysall Lane / Wymeswold Road to the west,
- Church Site Farm to the west of western parcel, accessed off Wysall Lane/ Windyridge Road,
- Annabell's Farm and Woodside Farm to the north of the western parcel,

- Mushill Farm, Cripwell Farm, and Field Farm to the south of the western parcel, and accessed from Wysall Lane/ Windyridge Road and Back Lane,
- Cheese House, Olde Willoughby Lodge, Hunters Lodge and Manor Farm to the north of the central parcel, and accessed from Willoughby Road,
- Willoughby Lodge to the north east of the two eastern parcels, and
- Residential dwellings along the northern settlement edge of Willoughby-on-the-Wolds.

Public Rights of Way (PRoWs)

3.11. In terms of public access, there are a number of Public Rights of Way that traverse the surrounding landscape. This is particularly relevant in terms of the two eastern parcels and western parcel where PRoWs are located in very close proximity, abut or indeed cross the site.



OS Map Extract

3.12. There are no Open Access Land areas, commons, country parks or accessible woodlands in the local area. Public access is limited to highways and PRoWs.

Hydrology

3.13. According to the UK Government's Flood Risk Map, the majority of the Willoughby 1 study area is located within Flood Zone 1, an area at least risk of flooding, as shown in the figure below. However, small portions of the eastern and central parcels are identified to fall within Flood Zone 3, which aligns with the Kingston Brook which is a tributary of the Soar River.

EA Flood Risk Map Extract

3.14. A Flood Risk Assessment will be required to accompany any application. Given the fact that the majority of the site is located within Flood Zone 1, the area least at risk of flooding, this is assessed as low risk.

Landscape Designations

3.15. According to the Council's Local Plan Policies Map no sections of land within the Willoughby 1 study area or the immediate surrounding area form part of any landscape designation.

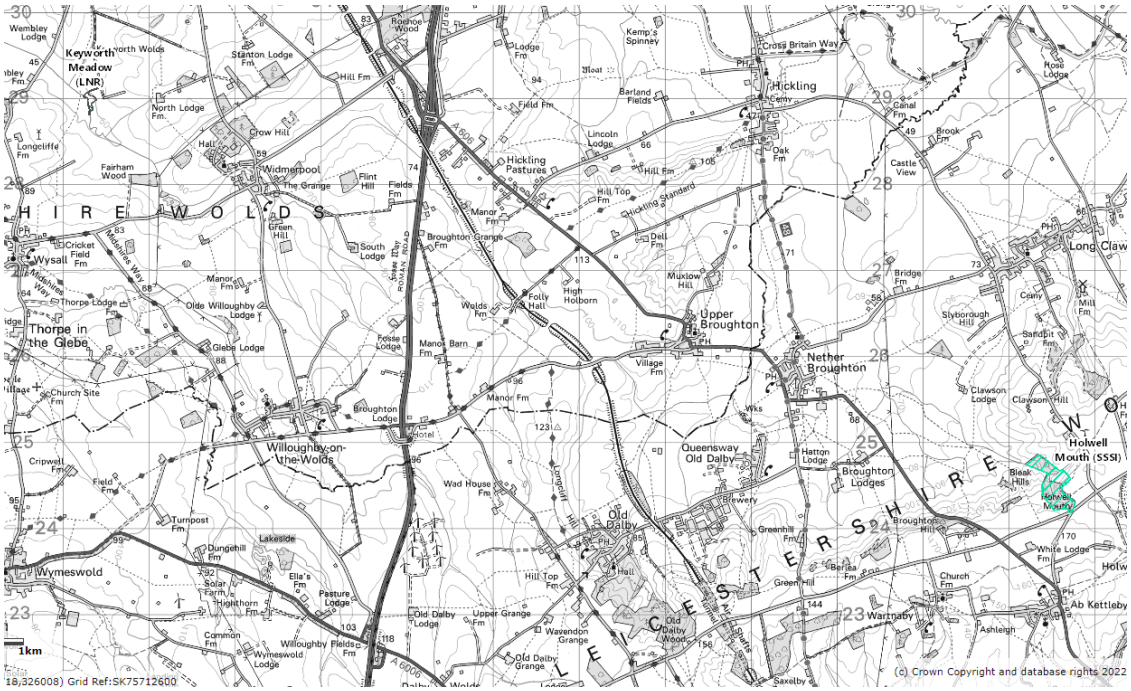
3.16. The site is located outside of the Green Belt.

3.17. This pre-application enquiry is supported by a pre-application Landscape and Visual Assessment (LVA) of the Willoughby 1 study area which reviews the relevant planning policies pertinent to the proposed development, reviews and evaluates the baseline condition of the study area and its surrounding landscape and considers opportunities for mitigation measures and whether such measures would be appropriate to the local landscape character. The findings of the pre-app LVA are discussed in greater detail later in this statement. The LVA will be used to inform the final layout design and scope of works for a subsequent detailed Landscape and Visual Impact Assessment (LVIA) which will be submitted in support of any forthcoming full planning application. It is anticipated that as part of the final proposals, field boundaries will be enhanced, where required, to ensure both ecological benefits to wildlife and effective screening.

Environmental Designations

3.18. There are no international statutory designated sites identified to within a 5km radius of the Willoughby 1 study area. Furthermore, there are no national statutory designated sites within 2km of the Willoughby 1 study area.

3.19. With regards to non-statutory environmental sites, 14 Sites of Importance for Nature Conservation (SINCs) lie within 2km of the Survey Areas. Woodside Farm Grassland SINC is within 50m of the eastern parcel of the Willoughby 1 study area, and ranges from unimproved to semi-improved grassland grazed by sheep. Thorpe in the Glebe Meadow and Thorpe in the Glebe Plantation Grassland are also both within 50m of the Willoughby 1 study area, and comprise species-rich unimproved grasslands.



Statutory Environmental Designations

Heritage Assets

3.20. No designated heritage assets are located within the boundaries of the Willoughby 1 study area.

3.21. Thorpe in the Glebe medieval settlement, including church site and open field system Scheduled Monument has been identified located in the field immediately west of the western parcel (1017743).

3.22. The Grade I Listed Church of St Mary and All Saints lies c. 210m south of the central parcel in the village of Willoughby on the Wolds (1242526). A further five Grade II Listed Buildings are located within the settlement at Willoughby on the Wolds, focussed on Main Street.

3.23. The Grade II Listed Church Site Farmhouse lies c. 280m west of the western parcel (1242421) and is surrounded by the aforementioned Thorpe in the Glebe medieval settlement Scheduled Monument.

3.24. The Grade II Listed Annabells Farm lies c. 145m north of the western parcel (1376504) and is associated with a Grade II Listed Tomb c. 20m north-east of the asset (1376505).

3.25. The Grade II Listed Thorpe Lodge Farm lies c. 680m north of the western parcel (1242417).

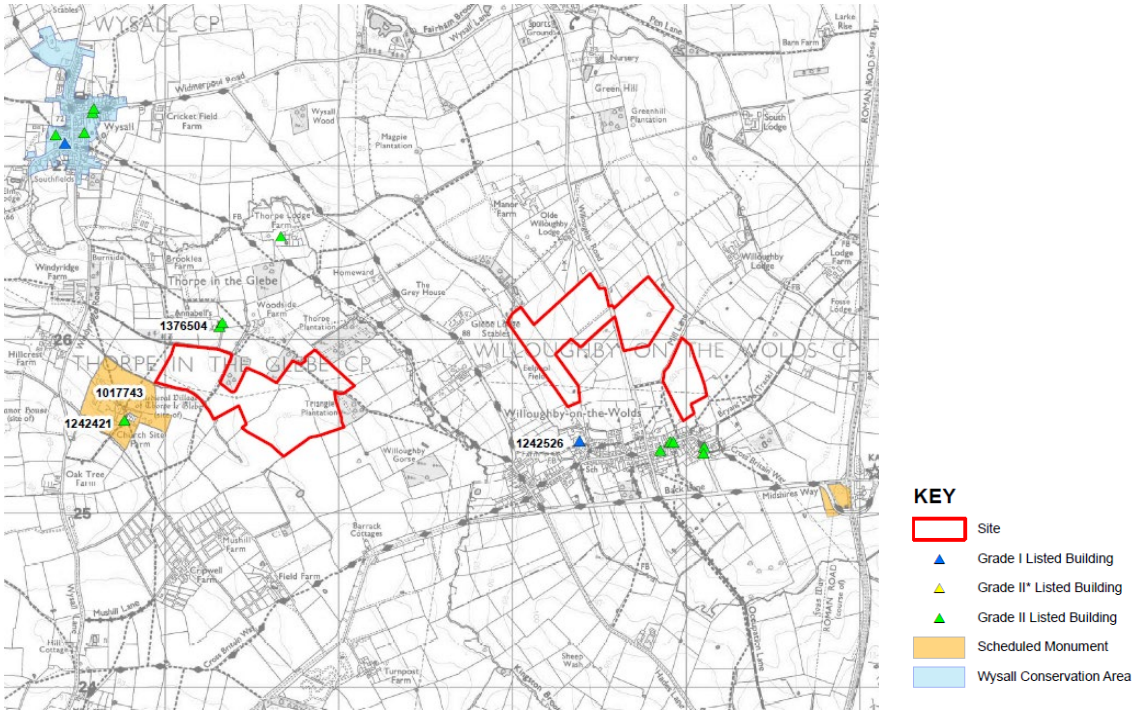
3.26. The Scheduled Monument Saxon cemetery south-west of Broughton Lodge lies c. 945m south-east of the eastern site (1003668).

3.27. There are no World Heritage Sites situated within the parcel of land or its surrounds.

3.28. Wysall Conservation Area is situated approximately 1.2km to the northwest of the western parcel.

3.29. This pre-application enquiry is supported by a pre-application heritage assessment of the Willoughby 1 study area to inform pre-application discussions regarding the proposed solar farm development and provides information with regards to the significance of the historic environment and archaeological resource to fulfil the requirement given in paragraph 194 of the NPPF.

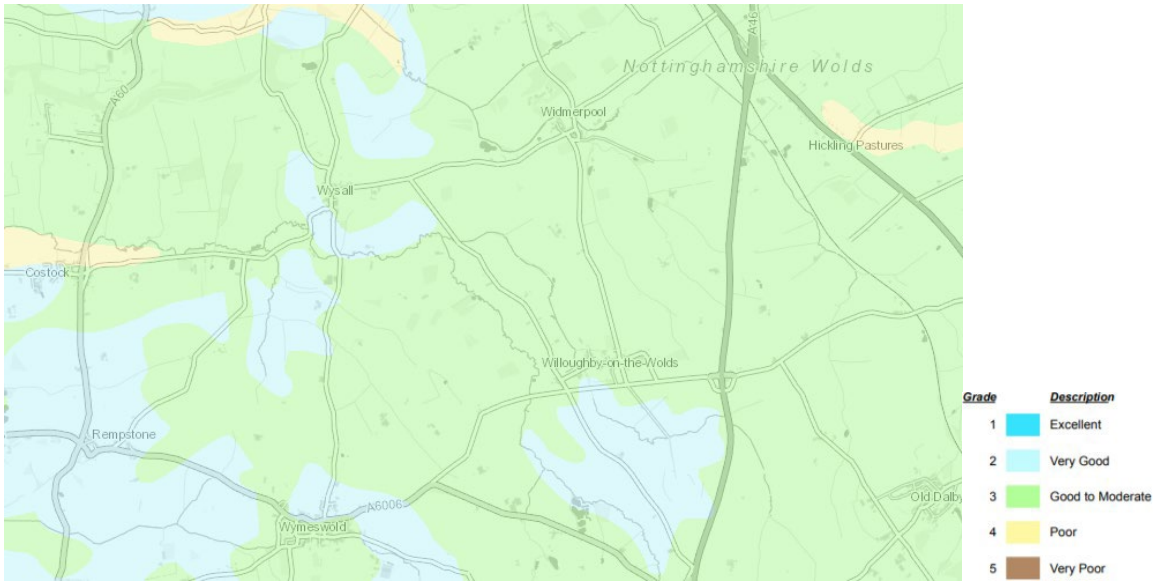
3.30. The findings of the pre-application heritage statement will be used to inform the final landscape mitigation proposals and layout design for the proposal. Any future full planning application will also be supported by a full detailed heritage statement which fully assess the acceptability of the scheme in relation to impacts to the historic environment and archaeological resource, including any impacts to significance through changes to setting.



Designated Heritage Assets

Agricultural Land Classification

3.31. With regards agricultural land classification (ALC), the below extract taken from Natural England Provisional Agricultural Land Classification Maps shows the site as Grade 3 (good to moderate) land. As per Annex 2 of the NPPF (2021), this means that the site may be deemed 'best and most versatile land'.



3.32. Given that Natural England's online mapping is at a broad level, the applicant has commissioned a detailed Agricultural Land Classification Report for the survey area which is submitted in support of this pre-application enquiry. The result of the assessment identifies the Willoughby 1 study area to be made up of Grade 3b and Grade 4 agricultural land.

Planning History

3.33. A search of Rushcliffe Borough Council's online planning records identifies the following history for the Willoughby 1 study area:

- **15/03083/SCREIA** - Field At Grid Reference 463730 326140 Widmerpool Lane Willoughby On The Wolds Nottinghamshire | Request for EIA screening opinion in respect of erection of solar PV farm of 5Mw amd 8.5 ha | Screened as Non-EIA January 2016
    - This Screening Opinion relates to a screening request for a small scale Solar PV development on the northern of the two eastern parcels of the site. Beyond the issued screening opinion no advise was issued.
- **14/01663/OHLUG** - OS Field 7666 Widmerpool Lane Willoughby On The Wolds Nottinghamshire | Replace 2.5km of 33kv overhead line supported on wooden poles | No Objection August 2014

3.34. In addition to the above, the following planning history within immediate proximity to the Willoughby 1 study area has been identified as relevant to the proposed development:

- **14/02436/SCREIA** - Church Site Farm Wymeswold Road Thorpe In The Glebe Nottinghamshire NG12 5QX | Request for an EIA screening opinion for a proposed PV farm development | Screened as Non-EIA December 2014
    - This Screening Opinion relates directly south of the western parcel. Whilst deemed to not comprise EIA development, the design and conservation officer did establish significant concerns regarding the ability of the applicant to justify the degree of harm which would almost certainly arise to the

settings of the listed farmhouse and the scheduled ancient monument at Thorpe in the Glebe as a result of the proposed development.

Willoughby 2

3.35. The Willoughby 2 study area is comprised 2 separate parcels of land located in very close proximity to each other. Wysall is the closest settlement and lies, broadly speaking, to the east of the site. The northern parcel includes 9 medium to large scale field enclosures with Bradmore Road forming, in parts, its eastern boundary.

3.36. A linear woodland, known as Old Wood, forms the northern edge to this parcel and cloaks a pronounced change in levels, marked by Bunny Hill, Rough Hill and Windmill Hill. The contours steeply slope to the north and indicate change from the elevated and undulating Nottinghamshire Wolds to the vale landscape associated with the River Trent, which lies further north.

3.37. The southern parcel includes 4 small to medium field enclosures and can be accessed from Wysall Road / Costock Road, which abuts it to the south. Wysall Road leads north east towards the settlement of Wysall. The village is separated from the Willoughby 2 study area by various pastoral and arable fields with the settlement edge largely enclosed by mature hedgerow and tree vegetation.

3.38. Arable fields separate the two parcels of the site and characterise the landscape to the west of it, with a number of woodland blocks compartmentalising the area. Rough Plantation, Wysall Rough Plantation, Long Rough Plantation, and Intake Wood abut the site.

3.39. The site's perimeter, in addition to the aforementioned highways, follows existing field boundaries delineated by hedgerows, blocks of woodland and tree belts. Boundary hedgerows associated with the site are generally well maintained and approximately 1.5m to 2m in height, albeit there are sections, which are higher. The southern parcel of the site is characterised by lower hedgerows, estimated to be approximately 1m to 1.5m in height.

3.40. Topographically the site forms part of the elevated Nottinghamshire Wolds and its convoluted outline terminates abruptly as a steep slope before descending into the broad valley of the River Trent. The north western corner of the site, which abuts Old Wood, sits at approximately 88m AOD. The landform rises further west and culminates at Bunny Hill, reaching approximately 92m AOD. This rising landform, coupled with Old Wood, encloses the site and its immediate landscape to the north. The higher ground continues further west towards Rough Hill and Sharpley Hill, which collectively segregate the site and landscape immediately around it. The site's landform also rises towards Bradmore Road and Wysall, which further collectively enclose the site to the east and separate it from the landscape further east and south east. Due to this undulating landform and presence of well managed and relatively tall hedgerows and blocks of woodland, which are characteristic of this landscape, reciprocal views towards and into the interior of the site are limited or are relatively distant and interrupted by tree canopies.

Residential Receptors

3.41. There are a number of properties that adjoin the site or lie in very close proximity to it:

- The Elms along Bradmore Road,

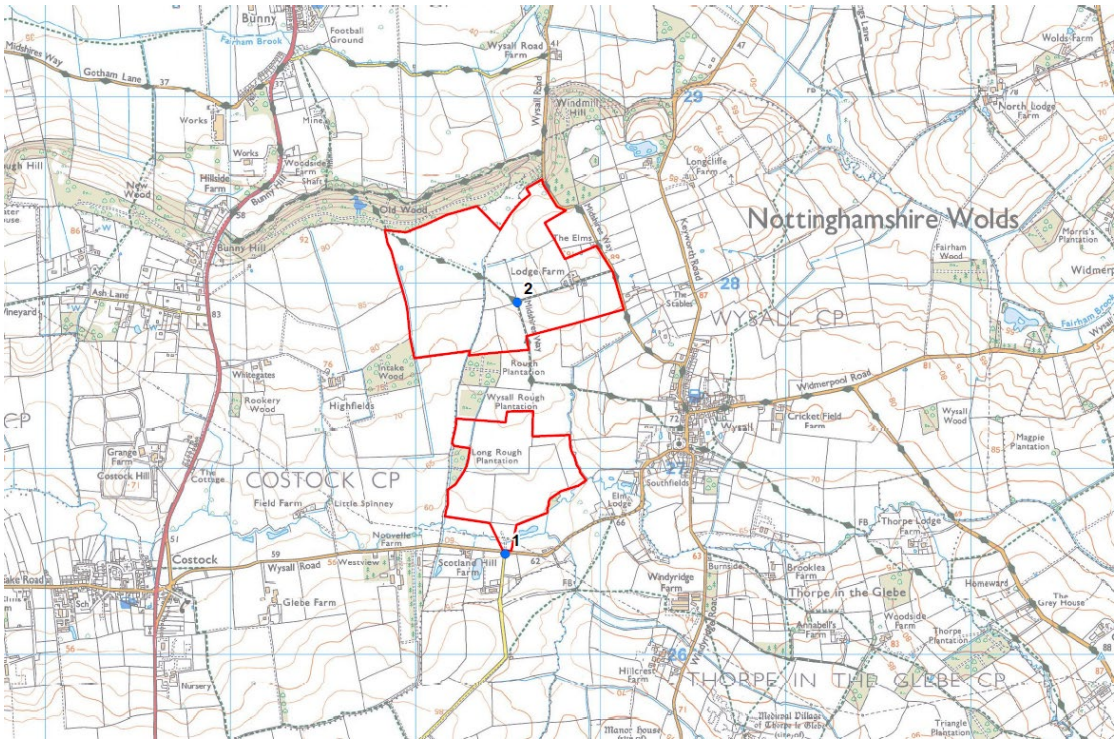
- Lodge Farm and Filed View accessible from Bradmore Road,
- Lorne House, along Bradmore Road,
- Elm Lodge along Wysall Road / Costock Road,
- Scotland Hill Farm along Wysall Road / Costock Road.

3.42. The village of Wysall and Costock lie both in close proximity to the Willoughby 2 study area, however, intervening vegetation prevents any direct or unrestricted views between these settlements and the site parcels.

Public Rights of Way (PRoWs)

3.43. In terms of public access, there are a number of Public Rights of Way (PRoWs) that traverse the surrounding landscape with two PRoWs, crossing the site. This includes a promoted long distance route, the Midshires Way, that leads from Wysall towards Bunny Hill, and also follows Bradmore Road along the site's western edge.

3.44. There are no Open Access Land areas, commons, country parks or accessible woodlands in the local area. Public access is limited to highways and PRoWs.

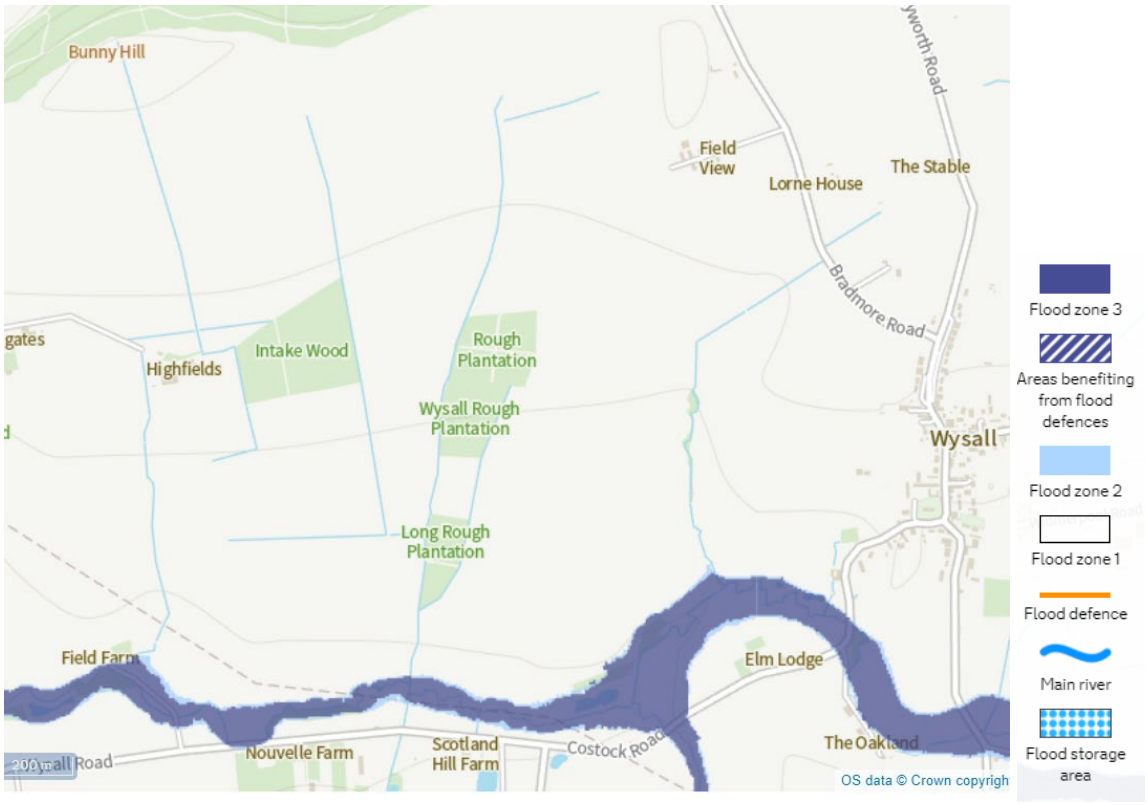


OS Map Extracts

Hydrology

3.45. According to the UK Government's Flood Map the Willoughby 2 study area is predominantly located within Flood Zone 1, however, there is a small section of land identified within Flood Zone 3. As depicted in the map below the area recognised within Flood Zone 3 follows the

southern boundary adjacent to Wysall Road and delineates a small stream/ tributary of the River Soar which passes to the south of the southern parcel.



EA Flood Risk Map Extract

3.46. A Flood Risk Assessment will be required to accompany any application. Given the fact that the majority of the site is located within Flood Zone 1, the area least at risk of flooding, this is assessed as low risk.

Landscape Designations

3.47. Similarly to the Willoughby 1 study area, no sections of the Willoughby 2 study area or surroundings form part of any landscape designations.

3.48. The site is located outside of the Green Belt.

3.49. Similarly to the Willoughby 1 study area, a Landscape and Visual Assessment (LVA) of the Willoughby 2 study area has been prepared and is submitted in support of this pre-application enquiry. The findings of the pre-app LVA are discussed in greater detail later in this statement.

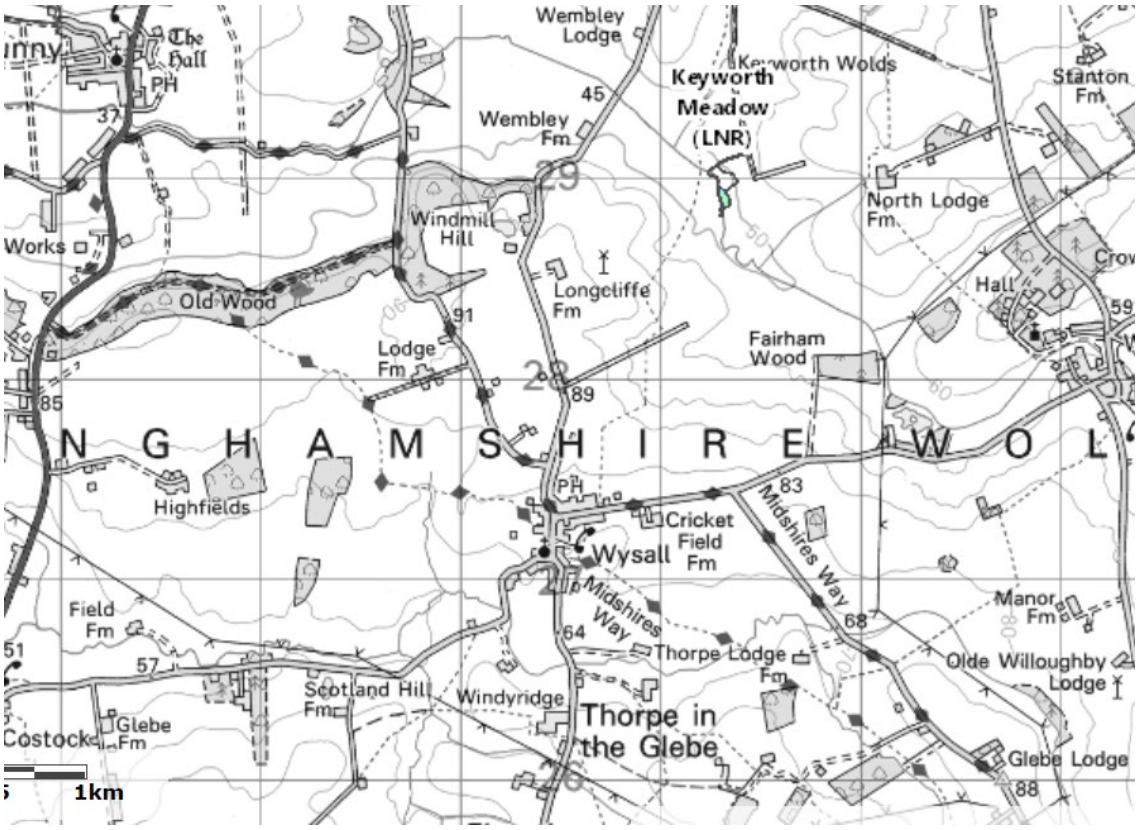
Environmental Designations

3.50. There are no internationally designated environmental sites within a 5km radius of the Willoughby 2 study area. Furthermore, there are no nationally designated sites within 2km of the study area.

3.51. Keyworth Meadow Local Nature Reserve (LNR) forms the closets nationally designated site to the Willoughby 2 study area which lies 1.6km to the north-east. The LNR comprises 1ha of flower-rich grassland, with additional wetland flora associated with the bordering brook. Ponds at the site support great crested newts.

3.52. 8 Sites of Importance for Nature Conservation (SINCs) are identified to lie within 2km of the Willoughby 2 study area.

3.53. Bunny Old Wood SINC is the closest non-statutory site, immediately adjacent to the northern boundary of Willoughby 2. This is an ancient broadleaved woodland, dominated by ash, with pedunculate oak and wych elm, a dense understorey and ground flora including sanicle, wood-sedge and bluebell. The wood is of importance to butterflies, including white-letter hairstreak.



Statutory Environmental Designations

Heritage Assets

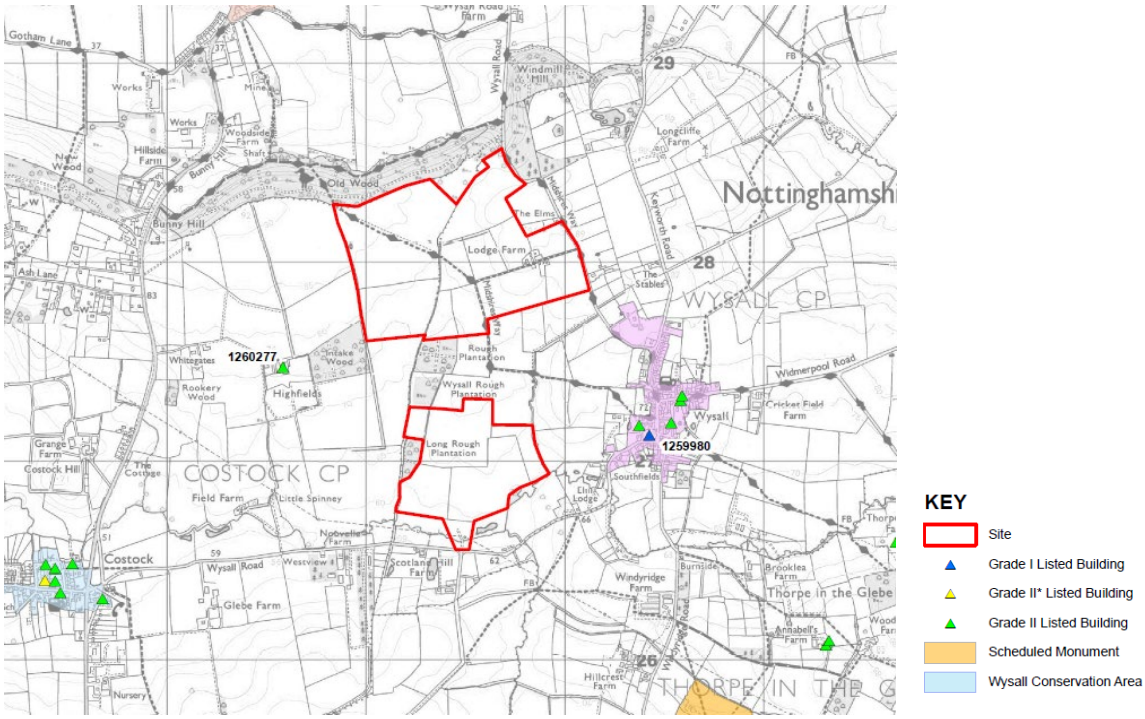
3.54. No designated heritage assets lie within the Willoughby 2 study area.

3.55. The north-western extent of the Wysall Conservation Area lies c. 215m to the south-east of the northern parcel and the south-western extent of the Conservation Area lies c. 295m east of the southern parcel. The Conservation Area contains one Grade I Listed Building (the Church of Holy Trinity c. 510m east of the southern parcel (1259980)) and four Grade II Listed Buildings.

3.56. The Grade II Listed Highfields lies c. 435m west of the northern parcel and 670m west of the southern parcel (1260277).

3.57. Similarly to the Willoughby 1 study area, this pre-application enquiry is supported by a separate pre-application heritage assessment of the Willoughby 2 study area to inform pre-application discussions regarding the proposed solar farm development and provides information with regards to the significance of the historic environment and archaeological resource.

3.58. The findings of the pre-application heritage statement will similarly be used to inform the final landscape mitigation proposals and layout design for the proposal. Any future full planning application will also be supported by a full detailed heritage statement which fully assess the acceptability of the scheme in relation to impacts to the historic environment and archaeological resource, including any impacts to significance through changes to setting.

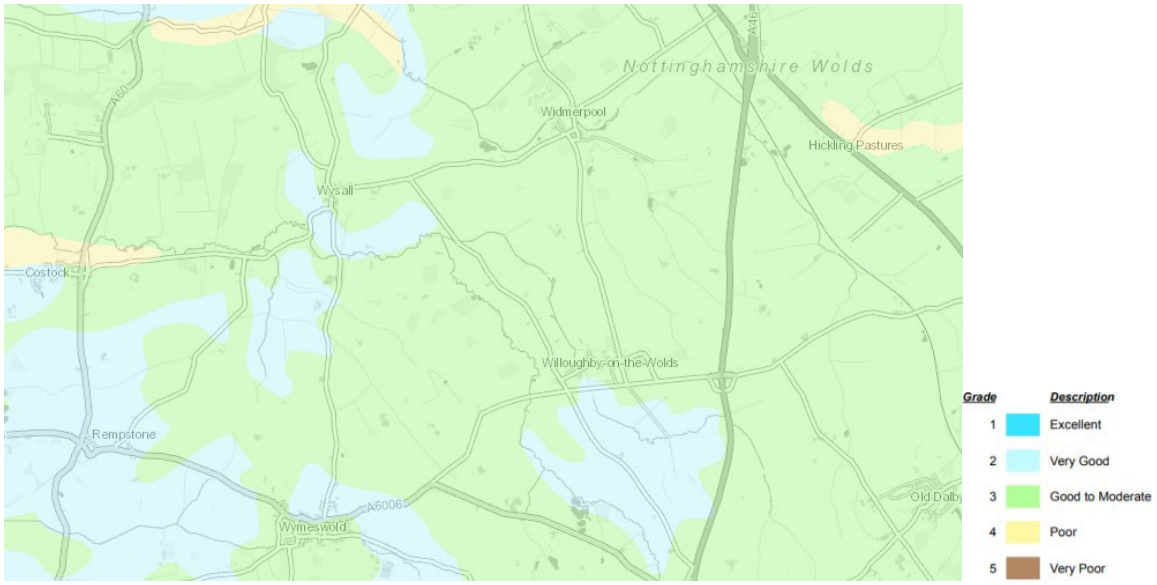


Designated Heritage Assets

Agricultural Land Classification

3.59. Similarly to the Willoughby 1 study area,, the below extract taken from Natural England Provisional Agricultural Land Classification Maps shows that the whole of the Willoughby 2 study area is defined as Grade 3 (good to moderate) land. As per Annex 2 of the NPPF (2021), this means that the site may be deemed 'best and most versatile land'.

3.60. Again, the applicant has commissioned a detailed Agricultural Land Classification (ALC) Report to establish a detailed grading of the agricultural land value across the study area. The results of the ALC report are submitted in support of this pre-application enquiry. The result of the assessment identifies the Willoughby 2 study area to be made up of Grade 3b and Grade 4 agricultural land.



Planning History

3.61. A search of Rushcliffe Borough Council's online planning records identifies the following history for the Willoughby 2 study area:

- **97/00439/FUL** - Lodge Farm Bradmore Road Wysall Nottingham Notts NG12 5QR | Construct farm workers bungalow | Approved July 1997
- **96/00560/GDO24** - Lodge Farm Bradmore Road Wysall Nottingham Notts NG12 5QR | Install 15m tower, together with six sector antenna, four dish antenna, and telecommunications cable. | Prior approval not required June 1996

3.62. In addition to the above, the following planning history within immediate proximity to the Willoughby 2 study area has been identified as relevant to the proposed development:

- **22/00303/FUL** - Land To North East Of Highfields Farm Bunny Hill Costock Nottinghamshire | Construction of a solar farm and battery stations together with all associated works, equipment and necessary infrastructure. | Under Consideration
    - The Above application relates to a full planning application submitted for a largescale Solar Farm on land immediately adjacent to the west of the Willoughby 2 study area. As part of this pre-application enquiry, the applicant is requesting the advice of the Council regarding potential cumulative impacts of the proposed development in considering the proximity of the adjacent renewable energy scheme.
- **21/02318/SCREIA** - Land North Of Wysall Road, Costock, Loughborough | Environmental impact assessment screening request for proposed construction of a Solar farm and associated infrastructure on land north of Wysall Road, Costock, Loughborough | Screened as Non-EIA development September 2021
    - The above screening opinion was requested in relation to the above development proposal at Land north east of Highfields Farm, Bunny Hill.

3.63. In addition to the above application on the land adjacent to the Willoughby 2 study area,, a review of the Department for Business, Energy and Industrial Strategy (BEIS) Renewable energy Planning Database (December 2021) identifies the following applications which have been submitted to Rushcliffe Borough Council for Renewable Energy Development.

Site Name	Technology Type	Installed Capacity (MW)	Application Reference	Status
Lodge Farm - Orston	Solar PV (Ground)	12.4	13/01609/FUL	Approved Nov 2013 (operational)
Cotgrave solar farm	Solar PV (Ground)	4.9	14/01221/FUL	Approved Jan 2015 (operational)
Radcliffe Solar Farm	Solar PV (Ground)	4.2	14/01228/FUL	Approved Nov 2014 (operational)
Langar Lane	Solar PV (Ground)	10	14/01594/FUL	Approved Dec 2014 (operational)
Barn Farm (Stanford On Soar)	Solar PV (Ground)	30	14/01589/FUL (Appeal Ref: APP/P3040/W/15/3005788)	Refused Oct 2014 Appeal Dismissed Oct 2015
Elton solar farm	Solar PV (Ground)	5	14/01739/FUL	Approved Feb 2015 (operational)
Land Off Mill Lane	Solar PV (Ground)	1.9	15/00972/FUL	Approved Sep 2015 (permission expired)
Stragglethorpe Road farm	Solar PV (Ground)	5	15/01776/FUL	Approved Dec 2015 (operational)

Holme Farm Solar Park	Solar PV (Ground)	4.2	15/01971/FUL	Approved Jan 2016 (abandoned)
Cotgrave Solar Farm Battery	Battery	1	15/02835/FUL	Approved Jan 2016 (abandoned)
Kegworth Deep Lock	Small Hydro	1	19/00232/LBC	Approved Apr 2019 (awaiting construction)
British Geological, Keywork Solar Panels	Solar PV (Roof)	0.62	20/02647/PA14J	Approved Dec 2020 (under construction)
Sharpley Hill Solar Farm	Solar PV (Ground)	4.2	21/00703/FUL	Approved Dec 2021 (under construction)
New Lane, Whatton - Solar Photovoltaic System	Solar PV (Ground)	0.25	21/02716/CLUPRD	Withdrawn Nov 2021
New Lane, Whatton - Solar Photovoltaic System	Solar PV (Ground)	0.25	21/03114/FUL	Under Consideration

BEIS Renewable Energy Planning Database Extract

3.64. The above extract identifies that there have been a significant number of planning applications submitted to Rushcliffe Borough Council for Ground Mounted PV Schemes over the past couple of years, however, very few schemes have been submitted for large scale ground mounted Solar PV schemes of a similar scale to this proposal. Nevertheless, the large majority have been granted planning permission which suggests that the Council has previously taken a positive approach towards renewable energy development and as such has a track record in supporting appropriate applications.

4. Development Proposal

4.1. The main element of the proposal consists of the construction, operation, maintenance and decommissioning of a ground mounted solar park with a maximum export capacity of up to 49.9 megawatts laid out across various field enclosures across the site.

4.2. The photovoltaic panels would be laid out in straight arrays set at an angle of between 10 to 35 degrees from east to west across the field enclosures within the western parcel of the site. The distance between the arrays would respond to topography but would typically be between 3.5 metres to 6 metres. The top northern edges of the panels would be up to 3 metres above ground level and the south lower edges of the panels would be no less than 0.7 metres above ground level. The arrays would be static. The site would be retained as grassland able to be grazed by sheep.

4.3. The application proposal will also include the development of ancillary battery storage and associated infrastructure, including a proposed below ground cable route which will connect the solar farm with a point of connection located on the existing 132kV overhead powerline situated within the southern extent of the southern parcel within the Willoughby 2 study area. The location of the proposed ancillary battery storage and customer substation are yet to be determined, however will likely be located in close proximity to the proposed point of connection.

4.4. The precise route of the cable route connecting the proposed PV layout to the point of connection is yet to be determined but will be provided as part of any full application.

4.5. The application proposal would also include a package of landscape, ecological and biodiversity benefits that could include the installation of barn owl boxes, bird nesting boxes, bee hives, log piles, restoration of traditional field boundaries, and other hibernacula such as small buried rubble piles suitable for reptile species, amphibians and insect life. Land between and beneath the panels can be used for biodiversity enhancements and seasonal grazing. Existing hedgerows surrounding the site would be bolstered with additional hedgerow and tree planting. The new hedgerows would deliver biodiversity enhancements by providing green ecological corridors.

4.6. The proposed development would, typically, have a life of up to 40 years at the end of which the modules would be decommissioned, removed from the site and the site returned to its previous use, agricultural land.

4.7. As set out above, the applicant is presenting the total land available to them to accommodate the proposed development to seek advice from the Council and assist the identification of the most appropriate and acceptable location for the development. At this stage no conceptual layout for the development has been prepared, as the applicant seeks input form the Council to narrow down the most suitable site parcels within the site boundary to accommodate the proposed development. In support of this pre-application advice request the applicant has prepared and submitted a colour coded assessment of the field parcels contained within the site boundary as informed by the technical assessments conducted to date. As part of this pre-application enquiry we seek the Council's opinion on the traffic light rating provided to inform the final layout of the PV arrays and associated equipment.

4.8. The total land available to the applicant for the proposed development measures approximately 180ha across the two separate study areas. As a general rule of thumb, developers and installers of solar farms typically require approximately 2 hectares of land (five acres) to achieve 1 megawatt of power output (once development buffers and zoning restrictions have been considered). On this general rule of thumb the applicant therefore does not require the whole site area to deliver the proposed 49.9MW output. Using this as a basis to calculate the rough area required by the applicant to accommodate the development, an area in the region of 100 hectares is required.

Renewable Energy and Carbon Displacement

4.9. Subject to final design, the solar farm would generate clean renewable energy for the equivalent of approximately 15,150 homes a year. The anticipated CO2 displacement is around 21,500 tonnes per annum[2].

4.10. The proposal would provide a clean, renewable and sustainable form of electricity. It would make a valuable contribution to the generation of electricity at a local level. The scheme would add to the Council's progress in meeting its renewable energy target. It would also assist in meeting national targets.

4.11. In addition, the proposal would make a valuable contribution to offsetting greenhouse gas emissions and help tackle climate change. These are important wider environmental benefits that should be given significant weight in the overall planning balance. The scheme would accord with the National Planning Policy Framework and the thrust of various Acts, Directives and Statements issued in respect of renewable energy.

[2] https://publications.parliament.uk/pa/cm201314/cmselect/cmenergy/180/180vw21.htm

5. Planning Policy Context

5.1. This section of the Statement identifies the national and local planning policy and guidance pertinent to the site and development proposal. The plan-led approach to development as established by Section 38(6) of the Planning and Compulsory Purchase Act 2004, and Section 70(2) of the Town and Country Planning Act, requires development proposals to accord with the adopted development plan unless material consideration indicate otherwise.

5.2. Government's Planning Practice Guidance on Determining Planning applications (last updated 15 March 2019) sets out what may be a material consideration. Paragraph 8 of the guidance states **"A material planning consideration is one which is relevant to making the planning decision in question (e.g. whether to grant or refuse an application for planning permission). The scope of what can constitute a material consideration is very wide and so the courts often do not indicate what cannot be a material consideration. However, in general they have taken the view that planning is concerned with land use in the public interest, so that the protection of purely private interests such as the impact of a development on the value of a neighbouring property or loss of private rights to light could not be material considerations"**. Paragraph 9 goes on to identity the weight that may be given to a material consideration and states **"The law makes a clear distinction between the question of whether something is a material consideration and the weight which it is to be given. Whether a particular consideration is material will depend on the circumstances of the case and is ultimately a decision for the courts. Provided regard is had to all material considerations, it is for the decision maker to decide what weight is to be give to the material considerations in each case, and (subject to the test of reasonableness) the courts will not get involved in the question of weight".**

5.3. The components of the Development Plan pertinent to the pre-application site and development proposals comprise:

- Rushcliffe Borough Council Local Plan Part 1: Core Strategy 2014;
- Rushcliffe Borough Council Local Plan Part 2: Land and Planning Policies 2019;

Development Plan

5.4. The adopted Development Plan for Rushcliffe Borough Council is made of up of the Local Plan Part 1: Core Strategy (2014) and Local Plan Part 2: Land and Planning Policies (2019). A summary of the key relevant policies is set out below:

Rushcliffe Borough Council Local Plan Part 1: Core Strategy 2014

5.5. **Policy 2 (Climate Change)** - This policy sets an expectation for all development to mitigate against and adapt to climate change by complying with national and local targets for reducing carbon emissions. Paragraph 5 provides specific guidance in respect of renewable/ low carbon energy generation and states that following:

> *"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. In line with the energy hierarchy, adjacent new developments will be expected to utilise such energy wherever it is feasible and viable to do so".

5.6. In addition to the policies set out in detail above, the following policies of the adopted Local Plan Part 1: Core Strategy are considered relevant and informative for the development proposals:

- Policy 1 – Presumption in Favour of Sustainable Development;
- Policy 3 – Spatial Strategy;
- Policy 10 – Design and Enhancing Local Identity;
- Policy 11 – Historic Environment;
- Policy 16 – Green Infrastructure, Landscape, Parks and Open Spaces;
- Policy 17 – Biodiversity; and,
- Policy 18 – Infrastructure.

Rushcliffe Borough Council Local Plan Part 2: Land and Planning Policies 2019

5.7. **Policy 16 (Renewable Energy)** – This policy sets out the development management criteria specific for new proposals for new renewable energy generating development. The policy sets out:

1. 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.*

5.8. In addition to the policies set out in detail above, the following policies of the adopted Local Plan Part 2: Land and Planning Policies are considered relevant and informative for the development proposals:

- Policy 1 – Development Requirements;
- Policy 17 – Managing Flood Risk;
- Policy 18 – Surface Water Management;
- Policy 19 – Development Effecting Watercourses;
- Policy 22 – Development in the Countryside;
- Policy 28 – Conserving and Enhancing Heritage Assets;
- Policy 37 – Trees and Woodland; and,
- Policy 38 – Non-designated Biodiversity Assets and the Wider Ecological Network.

Material Considerations

Rushcliffe Climate Change Strategy 2021 – 2030

5.9. The Rushcliffe Borough Council Climate Changes Strategy was first adopted in November 2021 and together with the Council's Carbon Management Action Plan sets out the steps the Council will take towards reducing greenhouse gas emissions for the Borough. In addition to the Council's own commitment to become a carbon neutral organisation by 2030, the Climate Change Strategy also sets out the Council's commitment to ensure the whole of the Rushcliffe Borough Council will be net zero by 2050. In achieving these targets, the Climate Changes Strategy focuses on three key areas:

- Council – Reducing the emissions associated with the Council's own buildings and activities;
- Conservation – Protecting and increasing the Council's green spaces and their ability to absorb CO_2; and,
- Community – Supporting residents and businesses to reduce their emissions.

Rushcliffe Borough Council Carbon Management Plan 2020

5.10. The Rushcliffe Borough Council Carbon Management Plan 2020 sets out the key actions the Council will take in implementing their Climate Change Strategy. With regards to renewable energy the Council commits to developing supplementary planning documents for renewable energy developments to promote the delivery of new renewable energy generating development to support the delivery of the D2N2 Energy Strategy.

D2N2 Energy Strategy

5.11. Sets out the Clean Growth and Energy Strategy for Derbyshire and Nottinghamshire Counties. The Strategy sets out key targets for the Counties to promote the rollout of low carbon and renewable energy developments, including a target to achieve a 100% low carbon energy supply by 2030 with 60% renewable energy generation output generated by local low carbon sources and an increase of 180MW in electricity storage.

National Planning Policy Framework

5.12. The 4th edition of the NPPF was published in July 2021 (as amended) and includes minor clarifications to the revised document that was published in February 2019 which split the Framework into 17 topic-based chapter. Overall, for the NPPF 4th edition, the over-arching presumption in favour of sustainable development remains. Material for this application is how Government has placed a greater emphasis on the delivery of infrastructure, including energy and how this is integral towards fulfilling the economic arm of achieving sustainable development.

5.13. The Framework is clear that planning decisions must be made in accordance with Planning Law. **Paragraph 2** states that planning law requires that applications for planning permission must be determined in accordance with the Local Plan, unless material considerations indicate otherwise. Paragraph 2 continues that: *"Planning policies and decisions must also reflect relevant international obligations and statutory requirements"*.

5.14. **Paragraph 8** of the Framework identifies how the planning system has three overarching objectives towards achieving sustainable development.

5.15. The revised NPPF stated how these objectives are interdependent and need to be pursued in mutually supportive ways so that opportunities can be taken to secure net gains across each of the different objectives.

5.16. **Paragraph 8(a)** 'an economic objective' has been strengthened and the NPPF now makes it clearer how "identifying and coordinating provision of infrastructure" is integral towards fulfilling the economic arm of achieving sustainable development.

5.17. The three overarching objectives are listed as:

> a) an economic objective - to help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right types is available in the right places and at the right time to support growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure;

b) a social objective - to support strong, vibrant and healthy communities, by ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations; and by fostering a well-designed and safe built environment, with accessible services and open spaces that reflect current and future needs and support communities' health, social and cultural well-being; and

c) an environmental objective - to contribute to protecting and enhancing our natural, built and historic environment; including making effective use of land, helping to improve biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adaptin

5.18. **Paragraph 9** advises how these overarching objectives should be delivered through the preparation and implementation of plans and the application of policies in the Framework. **Paragraph 10** states *"So that sustainable development is pursued in a positive way, at the heart of the Framework is a presumption in favour of sustainable development"*.

5.19. **Paragraph 15** of the Framework sets out how the planning system should be genuinely plan-led. It goes on to state how succinct and up-to-date plans should provide a positive vision for the future of each and provide a framework for assessing the economic, social and environmental priorities. **Paragraph 16** set out how plans should be prepared with the objective of contributing to the achievement of sustainable development. **Paragraph 20** identifies how, in line with the presumption on favour of sustainable development, plans should make sufficient provision for the provision of infrastructure and energy.

5.20. The identification and delivery of energy schemes is therefore acknowledged by the NPPF as one of the strategic policies that contributes towards achieving the presumption on favour of sustainable development. **Paragraph 81** confirms the Government's commitment to supporting sustainable economic growth and states (inter alia) *"Planning policies and decisions should help create the conditions in which businesses can invest, expand and adapt. Significant weight should be placed on the need to support economic growth and productivity, taking into account both local business needs and wider opportunities for development. The approach taken should allow each area to build on its strengths, counter any weaknesses and address the challenges of the future"*. The application proposal specifically counter and addresses the weakness in the security of electricity supply.

5.21. **Paragraph 84**, supporting a prosperous rural economy, is also pertinent as the Development Plan identifies the site as being located in open countryside, it states how planning decisions should enable the sustainable growth of all types of businesses in the rural areas; and the development and diversification of agricultural and other land-based rural businesses.

5.22. Section 14 of the NPPF relates to meeting the challenge of climate change, flooding and coastal change. **Paragraph 150** of the NPPF sets out the planning policy perspective with regards to increasing the use and supply of renewable and low carbon energy. Through the paragraph, Government requires the decision maker to:

a) provide a positive strategy for energy from these sources, that maximises the potential for suitable development, while ensuring that adverse impacts are addressed satisfactorily (including cumulative landscape and visual impacts);

b) consider identifying suitable areas for renewable and low carbon energy sources, and supporting infrastructure, where this would help secure their development; and

c) identify opportunities for development to draw its energy supply from decentralised, renewable or low carbon energy supply systems and for co- locating potential heat customers and suppliers.

5.23. Section 15 of the NPPF relates to conservation and enhancement of the natural environment. **Paragraph 174** highlights that new development should be prevented from contributing to or being put at unacceptable risk from, or being adversely affected by unacceptable levels of soil, air, water or noise pollution or land instability. It identifies how decisions should provide net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures. The Framework has deleted its specific policy paragraph that dealt with land quality (former paragraph 112) and the issue of best and most versatile agricultural land is now dealt with by footnote 53 which 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"*. Annex 2 of the Framework provides a glossary of terms and defines 'best and most versatile agricultural land' as land in grades 1, 2 and 3a of the Agricultural Land Classification.

5.24. 5.33 Section 16 of the NPPF is concerned with 'Conserving and enhancing the historic environment'. It identifies heritage assets as 'an irreplaceable resource' and notes that they should be conserved in a manner appropriate to their significance, so that they can be enjoyed for their contribution to the quality of life of existing and future generations. Paragraph 199 of the NPPF states that where development proposals are likely to affect a designated heritages asset, great weight should be given to the asset's conservation and any harm to, or loss of, the significance of a designated heritage asset (from its alteration or destruction, or from development within its setting) should require clear and convincing justifications. Paragraphs 201 and 202 continue to state:

> ***"Where a proposed development will lead to substantial harm to (or total loss of significance of) a designated heritage asset, local planning authorities should refuse consent, unless it can be demonstrated that the substantial harm or total loss is necessary to achieve substantial public benefits that outweigh that harm or loss, or all of the following apply:***
>
> - ***the nature of the heritage asset prevents all reasonable uses of the site; and***
> - ***no viable use of the heritage asset itself can be found in the medium term through appropriate marketing that will enable its conservation; and***
> - ***conservation by grant-funding or some form of not for profit, charitable or public ownership is demonstrably not possible; and***
> - ***the harm or loss is outweighed by the benefit of bringing the site back into use.***
>
> ***Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the***

public benefits of the proposal including, where appropriate, securing its optimum viable use".

5.25. Overall, the Framework confirms that the primary objective of development management is to foster the delivery of sustainable development, not to hinder or prevent it. Local Authorities should approach development management decisions positively - looking for solutions rather than problems so that applications can be approved wherever it is practical to do so.

Planning Practice Guidance (PPG)

5.26. Government's Planning Practice Guidance is a web-based resource that provides planning guidance on various planning policy and development management topics. The key topics relevant to this application proposal are:

- Climate Change 15 March 2019;
- Renewable and low Carbon Energy:
- Historic Environment:
- Natural Environment;
- Open Space, Sports and Recreation Facilities, Public rights of Way and Local Green Space; and
- Strategic Environmental Assessment and Sustainability Appraisal.

Renewable and Low Carbon Energy

5.27. This guidance reaffirms Government's commitment towards increasing the amount of renewable energy and low carbon technologies within the UK.

5.28. Paragraph 007 of the guidance considers the role of criteria based polices in planning for renewable energy.

5.29. Paragraph 13 of the guidance sets out the planning considerations that relate to large scale ground-mounted solar photovoltaic farms.

5.30. Importantly, the guidance acknowledges the appropriate use of agricultural land for renewable energy provided it allows for continued agricultural use and/or encourages biodiversity improvements around arrays; and the use of the agricultural land has been demonstrated as necessary. The guidance also identifies how ground mounted solar schemes are temporary structures whereby 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.

Practical Guidance on Climate Change

5.31. Government's Practical Guidance on Climate Change identifies how addressing climate change is one of the core land use planning principles which the National Planning Policy Framework expects to underpin in both plan-making and decision-taking. Paragraph 3 sets

out examples of mitigating climate change by reducing emissions, these include (i) Providing renewable and low carbon energy technologies and (ii) providing opportunities for decentralised energy. The proposal would achieve both.

5.32. Paragraph 5 of the guidance identifies how impacts of climate change needs to be taken into account in a realistic way. It goes on to state that local planning authorities should consider identifying no or low-cost responses to climate change that also deliver other benefits. In this instance the proposal is landowner and developer led; and as such there is no financial costs associated with the delivery of this response to climate change for the Local Planning Authority. Furthermore, the development proposal would deliver other climate change benefits such as biodiversity and hydrological enhancements.

Other Guidance

5.33. The National Policy Statements (NPSs) provide the planning policy framework for examining and determining Nationally Significant Infrastructure Projects (NSIPs). Whilst the proposed development fall below the threshold of a NSIP (50MW installed capacity) and thus the NPSs are not directly relevant, they do form a material consideration in the determination of the planning application.

5.34. The Following NPSs are considered to be relevant to the development proposals:

- EN-1 – Overarching NPS for Energy;
- EN-3 – NPS for Renewable Energy Infrastructure; and
- EN-5 – NPS for Electricity Networks Infrastructure.

5.35. Following the publication of the Energy White Paper in December 2020, the Government announced that they would review the existing National Policy Statements for Energy to both reflect the strategic approach set out within the Energy White Paper and ensure that we continue to have a planning policy framework which can support the infrastructure required for the transition to net zero. Whilst not currently adopted, the Government have recently consulted on revised draft energy NPSs (September 2021) closing on the 29th November 2021.

5.36. This Planning Statement is supported by an Energy Policy Statement which is provided at Appendix 2 of this report and sets out the other legislative background and guidance supporting the delivery of standalone renewable energy schemes. These documents form key components of central and local Government's policy and commitments to renewable and low carbon energy and should be considered material to the determination of this scheme.

APPENDIX 2 – ENERGY POLICY STATEMENT

6. Planning Assessment

6.1. This section of the Statement contains a high-level appraisal of the development proposal against the relevant material planning considerations. These considerations have been derived from an understanding of the site and its surrounds and the policy analysis of the previous section.

6.2. As set out in section 2 of this Statement, the Council has announced a climate change emergency and are seeking to further promote a cutting of emissions within the borough. Government has also announced that the UK will eradicate its net contribution to climate change by 2050. In June 2020, the Government's Committee on Climate Change (CCC) has identified how current policy, including planning policy, is insufficient to meet existing targets and a net zero target for 2050 would not be credible unless policy is ramped up significantly. The CCC concluded that the delivery of renewable energy generation must continue to progress with great urgency in order to meet the UKs next carbon budget. Consistently strong deployment of low-carbon generation is crucial to meeting the Net Zero target.

6.3. In setting a net-zero target, one critical delivery requirement is the recognised need to continue to expand rapidly the supply of low-carbon power. Renewables only accounted for 11% of the total UK energy consumption in 2018 (and 33% of electricity generation) and this provides clear evidence how the rapid provision of low-carbon energy should be given significant weight in the planning balance.

6.4. The challenge is more acute at the local level where Rushcliffe Borough Council announced a climate emergency, and in such committing the Council to achieving net zero for its own operations by 2030. Through the adoption of their Climate Change Strategy, Rushcliffe Borough Council have gone one step further in committing to achieve net zero carbon emissions for the Borough as a whole by 2050.

6.5. The D2N2 Energy Strategy for Derbyshire and Nottinghamshire specifically identifies the significant role that renewable energy and low carbon development, such as the proposed development, have to play in achieving both the local and regional targets. It is specifically set out within the D2N2 strategy that to deliver these net zero targets, the region is targeting to achieve a 100% low carbon energy supply by 2030 with 60% renewable energy generation output generated by local low carbon sources and an increase of 180MW in electricity storage. In 2016 only 11.6% of electricity consumption within the D2N2 region was generated from local low carbon sources. It is established that to achieve the required targets by 2030, a rapid deployment of large scale renewable and low carbon is required.

6.6. Policy 2 of the adopted Local Plan Part 1 and Policy 16 of the Local Plan Part 2 sets out how the Council will take a positive stance on renewable energy development providing that they do not adversely affect the character of sensitive landscapes, nature conservation interests, residential and recreational amenity, the historic environment or BMV agricultural land. Since the adoption of the Local Plan Part 1 in 2014 and the Local Plan Part 2 in 2019, there has been a growing emphasis on the delivery of renewable energy development, not only nationally, but specifically within the D2N2 regional area in particular.

6.7. The site is not located within a statutory landscape designation such as a National Park or Area of Outstanding Natural Beauty and the site lie outside of the designated Green Belt. The site is considered to be of local value in the hierarchy of landscape designations or of low

status in terms of the requirement for landscape consideration as advised within Paragraph 171 of the NPPF.

6.8. The adopted Development Plan recognises that one of the key challenges is to recognise the strength provided to the economy by farm diversification. This is addressed through adopted Policy 22 of the adopted Local Plan Part 2 which support the principle of farm diversification and the development of renewable energy schemes within the open countryside. Policy 22 does not outline criteria in which diversification is supported so for the avoidance of doubt, the proposals do not comprise the function of the wider holding nor lead to fragmentation or severance of the existing farmsteads. The development will not lead to unacceptable impact on the viability of nearby town or village centres. Key ecological functions and habitats at the site will be maintained and enhanced.

6.9. Based on the Natural England Agricultural Land Classification for the West Midlands Region (ALC004) the site is wholly located within Grade 3 land. As per Annex 2 of the NPPF (2021), this means that the site may be deemed 'best and most versatile land'. The proposed development at this site seeks to protect against the loss of best and most versatile land, particularly Grade 1 and 2. Notwithstanding this, the applicant has commissioned a detailed Agricultural Land Classification survey and report to determine the specific grading of the land. The result of the assessments identify the Site Area to be comprised of Grade 3b or Grade 4 agricultural land. Based on the findings of the assessment the proposed development would therefore not result in the significant loss of Best and Most Versatile agricultural land.

6.10. The adopted Development Plan seeks to protect the environmental quality of Rushcliffe Borough. This application is supported by separate Heritage and Landscape & Visual Statements for the two study areas assessing the proposals' impact within the context of the site. A full suite of detailed documents would accompany the submission of a detailed planning application.

6.11. A renewable energy scheme of this size can only be positioned in the open countryside as ground mounted solar arrays have specific land take requirements. The site is not located within any sensitive areas as defined by the EIA regulations and as such by virtue of its siting, the proposal has taken into account the need to protect the valuable landscape and ecological resources provided within the surrounding countryside, whilst providing for the sensitive exportation of renewable energy sources in accordance with the policies set out in the NPPF. The local, regional and national 2030 and 2050 targets provide significant weight in favour of the development proposal as significant acceleration of low carbon and renewables will be required to meet these target. It is considered the wider environmental benefits associated with the increased generation of renewable energy greatly outweighs any perceived adverse impacts the development may have on the surrounding countryside and impact. The landscape character will be assessed elsewhere in this Statement. As such, the requirements of Policy 16 of the Local Plan Part 2 are met.

Site Selection

6.12. The NPPF states that local planning authorities should identify suitable areas for renewable energy in development plans; it further states that substantial energy development outside these areas should demonstrate that the proposed location meets the criteria used in identifying the suitable areas. Notwithstanding the above, the NPPF also states that in determining renewable energy applications, local planning authorities should approve an

application if its impacts are acceptable or can be made acceptable, unless material considerations indicate otherwise.

6.13. The adopted development plan does not currently identify any suitable area for solar development. Accordingly, since there are no specific search areas for renewables, the site selection is guided by the development control considerations laid out through the development management policies of the Development Plan and the operational needs and requirements of the development proposal; these are guided by:

- A suitable location to benefit from sunlight intensity levels – the site should be relatively flat (or south facing) and free of any buildings or landscape features that could cause overshadowing;
- A suitable location with access to the grid which has capacity;
- A suitable location which is served / can be served by appropriate highway infrastructure;
- Encouraging the effective use of land, where a proposal involves Greenfield land, the use of land has been shown to be necessary and poorer quality land has been used in preference to higher quality land;
- A site with minimal environmental constraints.
- A suitable site of the right size, shape and orientation that can accommodate circa 49.9MWp solar scheme; and
- A suitable site which is available for the duration of the proposed scheme.

Restoration

6.14. The proposal is for a temporary structure with a modelled operational lifespan of 40 years.

6.15. Following cessation of energy generation at the site, and as part of the contractual obligations with the landowner, all panels, security fence and inverters will be decommissioned, and all plant and machinery will be removed from the site. The extant use of the site will be restored thereafter.

Localised Landscape Impact

6.16. As set out elsewhere in this statement, the pre-application is supported by separate Landscape and Visual Assessments which individually assess the 'Willoughby 1' and 'Willoughby 2' study areas within the application boundary. The salient points from each assessment are set out below:

<u>Willoughby 1</u>

- The Willoughby 1 study area is split into 4 parcels of land which, broadly speaking, lie to the north of Willoughby-on-the-Wolds and within an area of gently undulating agricultural landscape. Various watercourses drain the local area with Kingston Brook being the most evident in the landscape around the village. The landform slopes south to north, and the site's topography reflects the underlying landform of the Wolds and the

presence of Kingston Brook. The site does not lie within any statutory designated landscape.

- The study area benefits from a sense of enclosure provided by blocks of woodland and changes in the topography. This results in limited opportunities to gain views into the site's interior particularly from the nearby public highways. Views from PRoWs are less restricted, due to proximity and lower hedgerow height along their certain sections. In addition, a number of PRoWs cross the site where views would be open and very close range.

- The western parcel can be described as being potentially more visible from the western and south western part of the study area. The onsite assessment, however, confirmed that public vantage points are very limited and views restricted despite the change in levels and scale of the parcel.

- The central parcel of the site is enclosed by the rising landform west and east of it, and not visible from the wider and medium range landscape. Very close range views are available as one travels along Widmerpool Lane, past these particular field enclosures. Such views also include the site's eastern parcel, which is located to the east of Widmerpool Lane. Views are gained largely due to the modest height of the boundary hedgerows.

- The eastern most parcels are visible in very close to close range views from PRoWs that cross the landscape to the north east of Willoughby-on-the-Wolds.

- The above described parcels, whilst visible in certain views, do not appear to be visually sensitive over and beyond the sensitivity of an ordinary countryside.

- Proximity to residential dwellings and availability of views, is a constrain that can be mitigated against through sensitive planting.

- The overall sense of enclosure and dispersed nature of the site, suggests that the development within the site is not constrained in landscape character or visual terms, but mitigation planting should be explored to reduce the existing very limited inter-visibility further.

<u>Willoughby 2</u>

- The Willoughby 2 study area lies within an area of gently undulating agricultural landscape and the site's topography is uncomplicated. A watercourse crosses the southern most part of the study area and marks a localised lower ground with the topography rising to the north and south, and enclosing the site. The landform gently rises and plateaus immediately to the west and east of the site, and provides further containment. The study area does not lie within any statutory designated landscape.

- Due to the undulating landform across the area, the site benefits from a sense of enclosure, which is reinforced by blocks of woodland, lines of trees, and roadside hedgerows. Whilst the study area slopes north to south, there are localised variations in levels which result in certain parts of the site being more enclosed and less visible.

- There are, however, views into the study area from Bradmore Road and Wysall Road albeit these are limited and localised. Some medium range views do exist from the south, including south of Wysall Road and possibly around Windyridge Farm.

- Overall, the northern and central parcels of the study area, whilst visible in certain views from the east and south do not appear to be visually sensitive over and beyond the sensitivity of an ordinary countryside.

- Proximity to residential dwellings and availability of views, is a constrain that can be mitigated against through sensitive planting.

- The overall sense of enclosure and inter-visibility with the local receptors suggest that development within the study area is not constrained in landscape character or visual terms. The layout, however, should take into account mitigation planting to reduce the level of change and create a strong landscape framework around the site.

6.17. Overall, it is considered that the siting of the solar panels and battery storage modules within the individual field enclosures can be discussed through constructive dialogue with the LPA officers in order to achieve a form of development that reflects and adapts to the landscape and the physical attributes of the local constraints, such as vegetation, inter-visibility, and nearby residential receptors.

Ecological Impact

6.18. There are no sites of national ecological importance within the boundary of the site or within a 2km radius, however, the site does abut a local Site of Importance for Nature Conservation (SINC) to the north of the northern parcel within the Willoughby 2 Study Area. Policy 38 of the adopted Local Plan Part 2 sets out the planning policy test that development proposals have to pass in order to justify development that may affect such areas. The policy states, first and foremost, that development proposals likely to affect local areas of nature conservation significance, such as SINCs, will not be permitted unless the need for the development outweighs the local significance of the site to the biodiversity of the District. Firstly, the installation of solar panels and supporting infrastructure on site will not directly impact on the adjacent SINC through the removal of habitat. Secondly, a key aim is to ensure that there is a net gain in biodiversity as a result of the proposals. The application proposal would include a package of landscape, ecological and biodiversity benefits to offset any harm the Council associate with the development proposal.

6.19. This pre-application advice request is supported by separate Preliminary Ecological Appraisals (PEA) for the separate 'Willoughby 1' and 'Willoughby 2' study areas together with supporting ecological Constraints and Opportunities Plans which have been informed by an Extended Phase 1 Habitat Survey conducted between the 26th and 28th of January 2022 by Clarkson and Woods. The findings of the PEA identify that whilst there are certain sensitive ecological receptors present this site, it is considered that the development would be able to mitigate any adverse impacts through careful design.

6.20. The proposed scale of the development allows for substantial ecological mitigation areas, which could lead to a net biodiversity gain in the long-term and would in turn be compliant with relevant legislation and policy. This could also include the installation of barn owl boxes, bird nesting boxes, bee hives, log piles, restoration of traditional field boundaries, and other hibernacula such as small buried rubble piles suitable for reptile species, amphibians and

insect life. Furthermore, there will be sufficient land beneath the panels which can be used for biodiversity enhancements and seasonal grazing.

6.21. There are some mature trees within the fields themselves, as well as trees, hedgerows and woodland blocks at the field boundaries. These existing hedgerows surrounding the site will be retained and bolstered with additional hedgerow and tree planting. The new hedgerows would be of a native species and will deliver biodiversity enhancements by providing green ecological corridors for local wildlife.

6.22. Policy 37 states that if a development proposal adversely impacts on the existing mature trees or woodland within a site, and there must be appropriate mitigation measures to compensate for any harm and reinstate the nature conservation value of the locality. Furthermore, Policy 38 of the Local Plan Part 2 sets out that all developments will be expected to preserve, restore and enhance locally valued and important habitats, including wildlife corridors in order to achieve biodiversity net gains. At this stage, it is thought that no trees or hedgerows will be required to be removed as part of the proposals. In any event, it is considered that the need for renewable energy is such that meets the requirements of Policy 37 and 38, and any limited harm to the onsite flora and fauna, if any, would be suitably compensated through a package of mitigation measures to deliver a substantial biodiversity net gain for the site.

Use of Agricultural Land

6.23. As set out above, the development would not result in the permanent loss of agricultural land. Agricultural activities are expected to coincide with the soil modules, such as sheep grazing, and following cessation of use, the land will be returned to full agricultural use.

6.24. National policy requires development on agricultural land to steer towards areas of poorer quality agricultural land, where this is available, except where this would be inconsistent with other policy and sustainability considerations. The Natural England Agricultural Land Classification Map highlights that the site may encompass undifferentiated Grade 3 land, which is considered to be BMV land. However, it is noted that the Natural England map only presents a broad picture and may not reliably show the land quality for any given area. An Agricultural Land Classification Report is submitted in support of this pre-application enquiry which identifies the Site as Grade 3b or Grade 4 agricultural land.

6.25. The site selection constraints discussed earlier in this section, coupled with the clear unprecedented need to rapidly increase the amount of renewables, represent clear and compelling evidence for the use of the parcel even if it was deemed to be BMV land.

Impact on Residential Amenity

6.26. Landscape and visual baseline conditions have been considered within the separate Pre-application Landscape and Visual Statement for each for the two study area. In conclusion it is considered that whilst there are some limited views towards the site parcels from proximate residential receptors, with the inclusion of recommended mitigation measures, the proposed development could be successfully accommodated within the site without unacceptable effects on residential amenity.

6.27. The siting of the solar panels and battery storage modules within the individual field enclosures can be discussed through constructive dialogue with the LPA officers in order to achieve a form of development that reflects and adapts to the landscape and the physical

attributes of the local constraints, such as vegetation, inter-visibility, and nearby residential receptors.

Heritage and Archaeology Considerations

6.28. This pre-application advice request is duly supported by separate Pre-application Heritage Statements, prepared by Pegasus Group, to identify the heritage constraints and opportunities associated with the proposed development and ancillary infrastructure within each of the two site study areas. A summary of the conclusions for each assessment is included below:

Willoughby 1

6.29. In respect of the Willoughby 1 study area, the assessment has considered the setting of the following designated heritage assets in detail:

- Thorpe in the Glebe medieval settlement, including church site and open field system Scheduled Monument;
- The Grade I Listed Church of St Mary and All Saints;
- The Grade II Listed Church Site Farmhouse; and
- The Grade II Listed Annabells Farm.

6.30. Mitigation measures are recommended in order to lessen the impact on the above designated heritage assets comprise the following:

- A setback of open space to create open space/retain agricultural land in the vicinity of the Scheduled Monument in the western extent of the western parcel;
- A setback of panels in the southern extent of the central parcel in the vicinity of the Church of St Mary;
- A setback and strengthening of vegetation planting along the northern boundary of the western extent of the western parcel in the vicinity of Annabells Farm, and the setback of panels from the PRoW to allow views towards the asset to be retained; and
- A setback of panels from the PRoW within the western extent of the western parcel to allow views towards Church Site Farmhouse to be retained.

6.31. With regards to archaeology and based on current evidence, there is a low potential for significant archaeological remains of prehistoric, Roman, post-medieval and modern date within the site.

6.32. There may be potential for medieval remains associated with the deserted settlement of Thorpe in the Glebe to extend into the western extent of the western site which would warrant further investigation. If areas of medieval settlement are present within the site, these may form a constraint to development in terms of significance and cost of mitigation. It is considered that any future development could be subject to a Written scheme of

Investigation (WSI) for the site to include a geophysical survey and potential trial trenching to identify the likely presence of any archaeological remains within the site. As part of this pre-application advice request, we seek the Council's input on the level of information which is required in this regard to support a full planning application.

Willoughby 2

6.33. In respect of the Willoughby 2 study area, the assessment has considered the setting of the following designated heritage assets in detail:

- The Wysall Conservation Area;
- The Grade II Listed Highfields; and
- The Grade I Listed Church of Holy Trinity.

6.34. Mitigation measures recommended in order to lessen the impact on the above designated heritage assets comprise the following:

- A strengthening of vegetation through planting along the eastern extent of the southern boundary of the northern parcel and a slight setback of panels adjacent to the eastern site boundary along Bradmore Road would retain the agricultural approach to the Conservation Area; and
- Planting along the eastern boundary of the southern parcel be strengthened in views west out of the Conservation Area.

6.35. With regards to archaeology, based on current evidence there is a low potential of significant archaeological remains of prehistoric, Roman, medieval and post-medieval to modern date within the site. The modern buildings at Lodge Farm are not considered to be of sufficient heritage interest to be considered heritage assets.

Highway Impact

6.36. The development will be accessed via existing access points on the boundaries of the site parcels currently used by agricultural vehicles for the farming of the land. The existing access points and surrounding highway network are wide enough to safely accommodate construction vehicles, as they are already used by large agricultural vehicles serving nearby farms.

6.37. During construction / installation of the solar farm, there would be trips associated with the delivery of materials to site and arrivals and departures of construction staff. Construction material deliveries will mainly consist of small to medium HGVs while staff trips will mainly consist of vans. During construction / installation of the solar farm the proposals would generate an insignificant number of traffic movements along the local highway.

6.38. A full planning application will be accompanied by a Transport Assessment and Construction Management Plan, developed in correspondence with the Council's Highways Team, assessing the impact of the proposed development on the local highway and providing guidance as to how construction traffic can access the site in the safest and most efficient way, whilst not giving rise to unacceptable levels of congestion.

7. Conclusions

7.1. The proposal consists of the construction, operation, maintenance and decommissioning of a ground mounted solar park with a maximum export capacity of up to 49.9 megawatts. As set out above in this statement, the applicant is presenting the total land available to them (approximately 180ha) to accommodate the proposed development to seek advice from the Council and assist the identification of the most appropriate and acceptable location for the development.

7.2. The temporary and reversible nature of the development, together with the measures that are to be taken to enhance and encourage the ecological diversity of the site, will ensure that in the long term the site can not only be restored to its current use, but will also have been improved, through resting the land. The wider environmental benefits and sustainability credentials associated with the increased production of energy from renewable sources represents a significant case in favour of the development proposals.

7.3. The cessation of intensive agricultural practices within the site coupled with appropriate management to facilitate the development of a diverse grassland beneath the array would benefit a range of native wildlife for its 40-year operational period. This long-term benefit, coupled with various ecological mitigation measures, will ensure that the proposal delivers a net ecological gain whilst delivering huge public benefit recognised by national and local policy.

7.4. The site is largely free from many environmental, ecological and heritage constraints. It is considered that through a sensitive siting and design approach the proposed development of a solar farm, with an extensive package of landscape, ecological and biodiversity benefits informed by primary data collection, can be designed to limit and appropriately mitigate any heritage, landscape and environmental impacts.

7.5. Overall, the proposals are considered to be entirely suitable to the site and its surrounds; consistent with Planning Policy and all relevant material planning considerations; and is capable of achieving a high-quality design as envisaged by the applicant and as required by the Local Planning Authority.

Appendix 1 – Site Location Plan

Appendix 2 – Energy Policy Statement

1. Introduction

1.1. This Energy Policy Statement has been prepared by Pegasus on behalf of Exagen Group Ltd and should be read in conjunction with the supporting Planning Statement and other technical documents that accompany the pre-application advice request. Pre-application advice is sought for the provision of a renewable energy scheme comprising ground mounted photovoltaics with associated battery storage and associated infrastructure at land at Willoughby-on-the-Wolds and Wysall.

1.2. The purpose of this report is to highlight the legislative background and support for standalone renewable energy schemes, and solar technologies in particular, as part of both local climate change mitigation and wider national targets on the use of renewables in the UK. These documents form key components of central and local Government's policy and commitments to renewable and low carbon energy and should be considered material to the determination of this scheme.

2. Background

2.1. The background to the drive to increase the use of renewable sources of energy has its roots in the recognition that the burning of fossil fuels has an adverse effect on the climate of the world as a whole and that global measures are required to deal with it. The extensive use of fossil fuels that accompanied the industrialisation of the world's economy has released large volumes of CO2 back into the atmosphere. The accumulation of greenhouse gases in the upper atmosphere reduces the planet's ability to reflect solar radiation back into space, resulting in a gradual increase in mean global air temperature.

2.2. The scientific evidence on climate change is summarised in 'Climate Change Explained' first published on 23 October 2014 by the Department of Energy and Climate Change. To summarise, it states that there is clear evidence to show that climate change is happening. Measurements show that the average temperature at the Earth's surface has risen by about 0.8°C over the last century. 13 of the 14 warmest years on record have occurred in the 21st century and in the last 30 years each decade has been hotter than the previous one. This change in temperature hasn't been the same everywhere; the increase has been greater over land than over the oceans and has been particularly fast in the Arctic.

2.3. The UK is already affected by rising temperatures. The average temperature in Britain is now 1 Degree Celsius higher than it was 100 years ago and 0.5 Degree Celsius higher than it was in the 1970s.

2.4. Although it is clear that the climate is warming in the long-term, temperatures aren't expected to rise every single year. Natural fluctuations will still cause unusually cold years and seasons. Along with warming at the Earth's surface, many other changes in the climate are occurring:

- warming oceans;
- melting polar ice and glaciers;

- rising sea levels; and
- more extreme weather events.

2.5. Rising levels of carbon dioxide and other gases, such as methane, in the atmosphere create a 'greenhouse effect', trapping the Sun's energy and causing the Earth, and in particular the oceans, to warm. Heating of the oceans accounts for over nine tenths of the trapped energy. Scientists have known about this greenhouse effect since the 19th Century.

2.6. The higher the amounts of greenhouse gases in the atmosphere, the warmer the Earth becomes. Recent climate change is happening largely as a result of this warming, with smaller contributions from natural influences like variations in the Sun's output.

2.7. Carbon dioxide levels have increased by more than 40% since before the industrial revolution. Other greenhouse gases have increased by similarly large amounts. All the evidence shows that this increase in greenhouse gases is almost entirely due to human activity. The main contribution to this is the burning of fossil fuels for energy.

2.8. About 43% of the carbon dioxide produced goes into the atmosphere, and the rest is absorbed by plants and the oceans. Deforestation reduces the number of trees absorbing carbon dioxide and releases the carbon contained in those trees.

2.9. The Government advises that if action is now taken to radically reduce greenhouse gas emissions, there's a good chance that we can limit average global temperature rises to 2 Degree Celsius. By taking action now we could:-

- Avoid burdening future generations with greater impacts and costs of climate change;
- Enable economies to cope better by mitigating environmental risks and improving energy efficiency there will be wider benefits to health, energy security and biodiversity; and
- Benefit economically because if we delay acting on emissions, it will only mean more radical intervention in the future at greater cost.

2.10. It is also recognised that taking action now can also help to achieve long-term, sustainable economic growth from a low-carbon economy.

2.11. There is a plethora of Government legislation, guidance and policy which support the transition to a low carbon future and the continued roll out of renewables and low carbon energy and associated infrastructure. The UK is part of an international effort to combat climate change. The UK is a party to the United Nations Framework Convention on Climate Change (UNFCCC) and as such has signed up to international climate change obligations, such as the Kyoto Protocol and the Paris Agreement.

3. National Legislative Context

3.1. With regards to the need for development, the explicit need to introduce a step change in how the country deals with climate change was recognised via the UK Government's declaration of an environmental and climate change emergency on 1 May 2019, following the findings of the Intergovernmental Panel on Climate Change (IPCC) who concluded that, to

avoid a greater than 1.5°C rise in global warming, global emissions would need to fall by around 45 per cent from 2010 levels by 2030, and reach net zero by 2050 at the very latest.

3.2. The recently published IPCC Sixth Assessment report is a stark warning of the devastation that will be unleashed if we fail to urgently limit global temperature rises, and has been referred to as a "Code Red for Humanity "by the Secretary- General of the UN, António Guterres, illustrating the urgent and desperate need for rapid decarbonisation.

3.3. Through their climate emergency declaration, the Government recognises the need to move swiftly to capture economic opportunities and green jobs in the low carbon economy while managing risks for workers and communities currently reliant on carbon intensive sectors. As part of its contributions to international efforts, the UK also has domestic legislation and policies in place to reduce greenhouse gas emissions. These are focused on a number of key climate change challenges, these include:

- The reduction of CO2 emissions to tackle climate change;
- The promotion of competitive energy markets in the UK; and
- Security of decentralised energy supplies.

3.4. This subsection goes on to summarise the following relevant provisions:

Committee on Climate Change June 2020

3.5. The UK Committee on Climate Change advises the government on progress on tackling climate change.

3.6. In June 2020, the Committee on Climate Change published its Reducing UK Emissions report which provides an annual review of UK progress in reducing greenhouse gas emissions. This is the first annual report since the UK set a legally binding 'net zero by 2050' target and was due to be released in the lead up to the UN climate conference COP26 in Glasgow (before this was postponed until 2021).

3.7. The report provides important new advice to Government on framing a recovery from the COVID-19 pandemic that both accelerates the transition to Net Zero and strengthens our resilience to the impacts of climate change, whilst driving new economic activity. The report states that energy networks must be strengthened in order to support the electrification of transport and heating. The report highlights five investment priorities, one of which addresses the UKs energy networks. The paper identifies how: -

- It is 12 months since Net Zero became law, requiring the UK to reduce net emissions of greenhouse gases to zero by 2050. Initial steps towards a net zero policy package have been taken, but this was not the year of policy progress that the Committee called for in 2019. Current policy is insufficient for even the existing targets and a net zero target would not be credible unless policy is ramped up significantly.
- Power sector plans are advancing in line with the large scale required for the net-zero target. The power sector has been a major success story in the past decade. Emissions have decreased around 62% over the period 2008 - 2018 reflecting real decarbonisation of energy produced in the UK.

- This has resulted in a transition from fossil fuel-based power to renewables. For example, in Q3 2019, renewables provided more electricity than fossil fuels for the first time in the UK's history. This has wider importance when considering that electrification will increase demand for electricity over the coming decades.

- The goal to substantially expand supplies of low-carbon power must be accompanied by steps in the Energy White Paper to encourage a resilient and flexible energy system.

Climate Change Act 2008 and the Climate Change Act 2008 (2050 Target Amendment) Order 2019

3.8. As part of its contributions to international efforts, the UK also has domestic legislation and policies in place to reduce greenhouse gas emissions. The Climate Change Act 2008 established long-term statutory targets for the UK to achieve reductions in greenhouse gases by 2050 against a 1990 baseline. The Act originally set a legally binding target of an 80% cut in greenhouse gas emissions by 2050. On 12 June 2019, as a direct response to the climate change emergency declaration, the Government laid the draft Climate Change Act 2008 (2050 Target Amendment) Order 2019 to amend the Climate Change Act 2008 by introducing a target for at least a 100% reduction of greenhouse gas emissions (compared to 1990 levels) in the UK by 2050. This is otherwise known as a net zero target because some emissions can remain if they are offset by removal from the atmosphere and/or by trading in carbon units. The legislation was signed into law on 27 June 2019, following approval by the House of Commons and the House of Lords.

3.9. Following the Climate Change Committee's advice on the Sixth Carbon Budget, Prime Minister Boris Johnson agreed to legislate a new target to reduce national emissions by 78% by 2035, with the target enshrined in law at the end of June 2020. This builds on the nations new Nationally Determined Contribution (NDC) to the Paris Agreement, which will see the UK reduce emissions by 68% by 2030 compared to 1990 levels.

The Energy White Paper (2020)

3.10. The Energy White Paper ("EWP") was presented to Parliament on 14 December 2020 and builds upon the Prime Minister's Ten Point plan for a Green Industrial Revolution (which is discussed below).

3.11. The EWP sets out ambitious plans offering support for a variety of technologies and committing funds to support the growth of low-carbon green-technologies. It is intended to entirely reshape British industry and the economy. At the core of the EWP is the commitment to achieve Net Zero and tackle climate change.

3.12. In the introduction to the EWP (pages 2 and 3), the former Secretary of State for Business, Energy and Industrial Strategy (BEIS), Alok Sharma MP, states (inter alia):

> *"The government presents this white paper at a time of unprecedented peacetime challenge to our country. Coronavirus has taken a heavy toll on our society and on our economy. But we will overcome COVID-19 and rebuild our economy, building back better and levelling up the country. As we do so, we must address the intergenerational challenge of climate change. Unchecked, the impact of rising global temperatures represents an existential threat to the planet. So, building back better means building back greener.*

This white paper puts net zero and our effort to fight climate change at its core, following the Prime Minister's Ten Point Plan for a Green Industrial Revolution. The Ten Point Plan sets out how government investment will leverage billions of pounds more of private investment and support up to 250,000 jobs by 2030.

The way we produce and use energy is therefore at the heart of this. Our success will rest on a decisive shift away from fossil fuels to using clean energy for heat and industrial processes, as much as for electricity generation. These are more than academic considerations; the shift to net zero will affect us all. This white paper presents a vision of how we make the transition to clean energy by 2050 and what this will mean for us as consumers of energy in our homes and places of work, or for how businesses use energy to produce goods and services.".

3.13. The EWP seeks to put in place a strategy for the wider energy system that transforms energy and supports a green recovery (page 4).

3.14. Page 5 of the EWP sets out the Government's 'Compelling case for tackling climate change'. The salient points presented by Government are (inter alia):

- We need to act urgently. The future impacts of climate change depend upon how much we can hold down the rising global temperature. To minimise the risk of dangerous climate change, the landmark Paris Agreement of 2015 aims to halt global warming at well below 2°C, while pursuing efforts to limit it to 1.5°C, increasing measures to adapt to climate change, and aligning financial systems to these goals.

- At the global scale, however, we are not presently on track to reach the temperature goal of the Paris Agreement. Based on current national pledges, and assuming the level of ambition does not change, the world is heading for around 3°C of warming by the end of the century.

- The cost of inaction is too high. We can expect to see severe impacts under 3°C of warming. Globally, the chances of there being a major heatwave in any given year would increase to about 79 per cent, compared to a five per cent chance now. Many regions of the world would see what is now considered a 1-in-100-year drought happening every two to five years.

- To meet the temperature goal of the Paris Agreement, the world must collectively and rapidly reduce global emissions to net zero over the next 30 years. Success will mean we are less exposed to flood and heat risks and preserve our national security, our prosperity, and our natural world which are threatened by the global disruption of climate change.

3.15. The Government recognises that decarbonising the energy system over the next thirty years means replacing, as far as it is possible to do so, fossil fuels with clean energy technology such as renewables (EWP Introduction, page 9). The EWP identifies how clean energy will become the predominant form of energy, entailing in a potential doubling of electricity demand and consequently a fourfold increase in low-carbon electricity generation (EWP Introduction, page 10). The Government recognises that growing and supporting green jobs across the country in green industries will also support a green recovery from COVID-19 (page 16).

3.16. The EWP, at page 43, identifies how the Government envisages that (inter alia) "While we are not planning for any specific technology solution, we can discern some key characteristics of the future generation mix. A low-cost, net zero consistent system is likely to be composed of predominantly wind and solar. But ensuring the system is also reliable, means intermittent renewables need to be complemented by technologies which provide power, or reduce demand, when the wind is not blowing, or the sun does not shine". Page 43 goes on to identify batteries as such a technology that can contribute towards the demand side response. Page 45 identifies how "Onshore wind and solar will be key building blocks of the future generation mix, along with offshore wind". It goes on to state how the Government recognised that sustained growth in the capacity of these sectors is needed over the next decade to ensure that we are on a pathway that allows us to meet net zero emissions in all demand scenarios.

UK's National Energy and Climate Plan (NECP)

3.17. BEIS published the UK's National Energy and Climate Plan (NECP) for 2021 to 2030, on 7 June 2021, in order to uphold the Government commitments under the Withdrawal Commitments . The NECP (at page 30) identifies how the EU has a target under the Renewable Energy Directive of 32% of energy coming from renewable sources in 2030, with Member States required to set their own nonbinding contributions to collectively achieve the EU target. As of 31 January 2020, the UK has left the EU and will therefore not contribute to EU targets or be bound by the RED after the Transition Period ends. However, to comply with Government commitments under the Withdrawal Agreement with respect to the NECP, the UK has set out a proportion of renewables in final energy consumption in 2030 of between 22%-29%. This represents a significant challenge as RED progress in 2020 is only 13.6 per cent.

Net Zero - Opportunities for the Power Sector

3.18. The National Infrastructure Commission (NIC) , official advisor to the Government on Infrastructure, has published a report (Net Zero - Opportunities for the Power Sector, March 2020) setting out the key infrastructure requirements needed to meet the UK's 2050 net-zero target, including the amount of renewable energy development that would need to be deployed.

3.19. The NIC recommends that in meeting these targets, the UK's energy mix needs to be made up of around 90% renewables. At page 18 of the report, it is recommended that across all scenarios, significant levels of solar, onshore wind and offshore wind, will need to be deployed in order to ensure that between 129 – 237 GW (gigawatts) of renewable energy capacity is in operation by 2050. To achieve this, the report recommends the following split:

- 56-121 GW of solar;
- 18-27 GW of onshore wind; and
- 54-86 GW of offshore wind.

3.20. To achieve the above targets would require a significant increase in installed solar capacity across the UK, including over nine times the current installed capacity of solar technologies in the UK, which as of September 2021 is around 13.6GW according to BEIS .

Clean Growth Strategy – Leading the way to a low carbon future (2017)

3.21. The Clean Growth Strategy, published in October 2017, sets out a comprehensive set of policies and proposals that aim to accelerate the pace of "clean growth", i.e. deliver increased economic growth and decreased emissions. The Executive Summary (page 9) confirms that for the UK to achieve its fourth and fifth carbon budgets (2023 - 2027 and 2028 - 2032) it will be necessary to drive a significant acceleration in the pace of decarbonisation.

3.22. To achieve the clean growth, the Government states that the UK will need to nurture low carbon technologies, processes and systems that are as cheap as possible, this includes subsidy-free ground mounted solar farms as per the proposed development. The Government places significant emphasis on securing increased investment across the energy systems whilst minimising, as much as possible, the public costs for securing such investments and makes multiple references to how they are seeking the delivery of solar without subsidy. Moreover, page 99 specifically states that the 'Government wants to see more people investing in solar without government support'. It estimates that the low carbon economy could grow 11% per year between 2015 and 2030, four times faster than the projected growth of the economy as a whole. The application proposal would clearly contribute to the delivery of the Clean Growth Strategy.

The Ten Point Plan for a Green Industrial Revolution (November 2020)

3.23. 'The Ten Point Plan for a Green Industrial Revolution – Building back better, supporting green jobs, and accelerating our path to net zero', was published on 18 November 2020 and is aimed at delivering a 'Green Industrial Revolution' in the UK, with the foreword by the Prime Minister stating that the Ten Point Plan will aim to mobilise £12 billion of government investment and potentially three times as much from the private sector, to create and support up to 250,000 green jobs. The Ten Point Plan is followed on from and built on by the Energy White Paper discussed above. Point ten seeks to accelerate the commercialisation of innovative low-carbon technologies, systems and processes in the power.

National Infrastructure Plan (HM Treasury, 2014)

3.24. The National Infrastructure Plan (NIP) 2014 presents an overview of the Government's policies, investments and record on infrastructure delivery since 2010 and details the Government's approach to ensuring that the Top 40 priority investments remain on track to deliver.

3.25. The report confirms a future pipeline investment of £80bn in energy infrastructure.

3.26. The stated objectives (paragraph 8.1) with regard to energy are to:

- ensure power, heat and transport are affordable for households and businesses
- provide energy security to facilitate day-to-day activities and support economic growth
- reduce carbon emissions in order to mitigate climate change and meet its legally binding targets

National Infrastructure Assessment (The National Infrastructure Commission, 2018)

3.27. The first National Infrastructure Assessment (NIA) set out the Commission's plan of action for the country's infrastructure over the next 10-30 years.

3.28. The NIA sets out a number of recommendations to a pathway for the UK's economic infrastructure:

- nationwide full fibre broadband by 2033
- half of the UK's power provided by renewables by 2030
- three quarters of plastic packaging recycled by 2030
- £43 billion of stable long term transport funding for regional cities
- preparing for 100 per cent electric vehicle sales by 2030
- ensuring resilience to extreme drought
- a national standard of flood resilience for all communities by 2050.

National Infrastructure Strategy: Fairer, faster, greener (HM Treasury, 2020)

3.29. 5.46 The National Infrastructure Strategy (NIS) was published on 25 November 2020, a week after the Prime Minister's Ten Point Plan. The NIS sets out the Government's

3.30. plans to deliver an infrastructure revolution in the UK, while "levelling the country up" and achieving its Net Zero target by 2050. The Government's plans to transform the UK's infrastructure networks. It is based around three central objectives: economic recovery (page 11); levelling up and strengthening the Union (page 12); and meeting the UK's net zero emissions target by 2050 (page 13).

3.31. Page 51 confirms (inter alia) "To deliver net zero, the share of generation from renewables needs to dramatically increase. While the UK leads the world in the deployment of offshore wind, greater generation capacity will need to come from onshore wind and solar as well".

3.32. Chapter 4 (page 68) recognises that record-breaking levels of investment in UK infrastructure will be required in the coming years to meet the Government's objectives for economic growth and decarbonisation. It goes on to state that the Government remains strongly committed to supporting private investment and maintaining the UK's status as a leading global destination for private investment.

3.33. Chapter 5 (page 78) of the NIS deals with the need to accelerate and improving delivery. It states (inter alia) "The government wants to deliver infrastructure projects better, greener and faster. That means addressing longstanding challenges such as complex planning processes, slow decision-making, and low productivity in the construction sector"

Net Zero Review: Interim report (December 2020)

3.34. HM Treasury's interim Net Zero Review (NZR) - the first of its kind from a finance ministry – was published on 17 December 2020 to inform next steps in the UK's transition to net zero by

2050. The NZR supports the government's work in maximising opportunities and benefits for the UK over the next 30 years as we transition to net zero and help to ensure an equitable balance of contributions between households, businesses and the taxpayer. The interim report contains initial analysis, rather than policy recommendations, which will guide further work ahead of the publication of the Review's final report next year.

3.35. The NZR (page 24) considers the potential changes in energy process for business and households and states (inter alia) *"Costs of wind and solar energy have already seen significant falls, and some forms of renewable electricity generation in the UK, such as onshore wind, are expected to have lower estimated costs per unit than electricity derived from fossil fuels. Lower long-run energy costs and greater energy efficiency could benefit both businesses and households. One of the priorities of the Energy White Paper is keeping energy bills affordable as the UK decarbonises, especially for the most vulnerable households. Analysis by the National Infrastructure Commission further suggests that household energy bills could be potentially lower or equal to current levels after switching to clean energy"*

3.36. The NZR (page 56) identifies how solar is a proven technology where market institutions are well established, and the technology is commercially viable.

4. Digest of United Kingdom Energy Statistics (July 2021 Edition)

4.1. The Digest of United Kingdom Energy Statistics (DUKES) is the annual energy statistics publication produced by the Department for Business, Energy and Industrial Strategy (BEIS). It provides a detailed and comprehensive picture on the production and consumption of individual fuels and of energy as a whole. The digest is published annually and the latest edition was published in July 2021. The salient points of the report are:

- Energy demand in 2020 was at levels last seen in the 1950s as Covid-19 restrictions affected industrial output, work, leisure, and travel. Energy requirements for industrial use and services (e.g. shops, restaurants, offices) are both down 6 per cent on 2019. Despite warmer weather, domestic demand was up as more people stayed at home.

- Total renewables accounted for 13.6 per cent of total energy consumption in 2020, up from 11.7 per cent in 2019. The strong generation figures owe much to the storm activity of the first quarter of 2020. Whilst capacity has grown five-fold since 2010, the growth rate in recent years has been smaller.

- Fossil fuel generation reached a record low, dropping from 75.4 per cent of generation to 37.7 per cent over the last ten years. Coal generation fell to a new record low, generating just 1.8 per cent in 2020 down from 28.2 per cent in 2010.

- The proportion of renewable generation outstripped fossil fuels for the first time in 2020 as a result record renewable generation. Renewable electricity now represents 43.1 per cent of total generation, up from 36.9 per cent in 2019.

- Growth in new renewable capacity continued to slow with just 1.0 GW added in 2020, the lowest since 2007. Covid-19 restrictions are likely to have contributed to the

slowdown in growth in 2020 but at just 2.1 per cent, this is the slowest growth rate since 2002.

- Low carbon generation also reached a record high of 59.3 per cent despite a drop in nuclear output due to maintenance outages.
- Energy production dropped 3 per cent in 2020, with falls in petroleum production and nuclear production, the latter dropping to a record low due to maintenance outages. Coal production also reached a new record low, down to 1.7 million tonnes from 18.3 million tonnes in 2010.
- In 2020 net import dependency was 27.8 percent, 7.1 percentage points lower than in 2019, and at the lowest level since 2009.

5. International Legislative Context

5.1. This section summarises the following relevant provisions:-

- 1992 United Nations Framework Convention on Climate Change;
- 1997 Kyoto Protocol on Climate Change;
- 2009 Copenhagen Accord;
- United Nations Climate Change Conference, Durban, 2011; and
- Warsaw Conference of the Parties 19 (COP19).

United Nations Framework Convention on Climate Change

5.2. This convention acknowledged the need to protect the global climate. It was opened for signature at the 'Earth Summit' that met in Rio de Janeiro in June 1992, coming into force in March 1994. Recognising that human-induced changes to the atmosphere are affecting the climate, it set out to ensure that atmospheric concentrations of greenhouse gases are stabilised at a safe level.

The Kyoto Protocol

5.3. The Kyoto Protocol to the United Nations Framework Convention on Climate Change (United Nations, 1997) was ratified by the UK in 2002. It sets obligatory targets for committed Annex I countries (including the UK) to take measures aimed at reducing greenhouse gas emissions, such as carbon dioxide (CO2), by an average of 5 % against 1990 levels over the five year period 2008 - 2012. Under the Kyoto Protocol, the UK's commitment is for a reduction in greenhouse gas emissions of 12.5 % from 1990 levels by 2012.

Copenhagen Accord

5.4. The Copenhagen Accord, agreed by leaders representing 49 countries, marks a significant step forward, with countries agreeing to limit global temperature increases to no more than 2°C and making substantial commitments to support developing countries to take action. As

a party to the Copenhagen Accord, the United Kingdom has agreed a range of proclamations and objectives, including that:

- climate change is 'one of the greatest challenges of our time', which must be combated 'urgently';
- the ultimate objective is to stabilise greenhouse gas concentration in the atmosphere 'at a level that would prevent dangerous anthropogenic interference with the climate system';
- any increase in global temperature should be 'below 2 degrees Celsius';
- 'deep cuts' in emissions are required;
- emissions should peak 'as soon as possible'; and
- lower emissions are 'indispensable to sustainable development'.

United Nations Climate Change Conference, Durban, 2011

5.5. The Durban conference considered how to cut emissions to limit global temperature rise to below two degrees to avoid dangerous climate change. Over 120 countries formed a coalition behind the EU's proposal of a 'road map' to a global legally binding agreement, to be put in place by 2015, to curb emissions. The talks resulted in a decision to adopt the second commitment period of the Kyoto Protocol. The conference also agreed to establish a green climate fund to assist poorer countries to make the transition to a low carbon economy.

Warsaw COP19

5.6. At the UN Climate Change Conference in Warsaw 2013, governments took further essential decisions to stay on track towards securing a universal climate change agreement in 2015. The objective of the 2015 agreement is twofold: Firstly, to bind nations together into an effective global effort to reduce emissions rapidly enough to chart humanity's longer-term path out of the danger zone of climate change, while building adaptation capacity; Secondly, to stimulate faster and broader action now.

Glasgow COP26

5.7. More recently, Glasgow was host to the 26th UN Climate Change Conference between 31st October and 12th November 2012. The COP26 climate talks have focused on getting countries to strengthen their emissions-cutting targets by the end of next year in a bid to limit global warming to 1.5 degrees above pre- industrial levels. The talks resulted in not only an official agreement but a series of commitments under the Glasgow Pact to various mitigation and conservation efforts, including but not limited to a pledge to halt and reverse deforestation by 2030, an agreement to end overseas financing of oil and gas projects and an agreement to 'phase down' the use of unabated coal as well as the phasing out of inefficient fossil fuel subsidies.

Town & Country Planning Act 1990 (as amended)
Planning and Compulsory Purchase Act 2004

Bristol
First Floor, South Wing, Equinox North,
Great Park Road, Almondsbury, Bristol, BS32 4QL
T 01454 625945
Bristol@pegasusgroup.co.uk
Offices throughout the UK and Ireland.

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