

Planning Statement

Installation of a solar park on Land near the village of Redwick, south east of
Newport, Wales on the Caldicot Levels

(Coordinates E341478, N185552)

Prepared for

Rush Wall Solar Park Limited

Report prepared for Rush Wall Solar Park Limited

Version 2

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Executive Summary

This report has been prepared in support of the proposal for the Installation of a solar park on Land near the village of Redwick, south east of Newport, Wales on the Caldicot Levels (Coordinates E341478, N185552).

The proposed solar park is a temporary installation with permission being required to allow for a 35 year operation.

The location of this proposal is determined by the rare opportunity to complete an economically viable electricity grid connection that will provide solar (PV) installation with an approximate design capacity of 75MW with the connection opportunity being an available onsite connection to the overhead 132kV electrical lines.

The applicant has chosen the most suitable available land for this project. The location benefits from being well screened and the proposal accommodates and mitigates where necessary, the on-site and off-site constraints of the project.

The proposed solar park is a temporary installation and after its lifetime the site can be returned to its original appearance with all equipment being removed from the site directly following the end of the term and once electricity ceases to be exported to the Grid.

The proposal will introduce important renewable energy generation to contribute towards Wales' strategic objectives of generating 70% of its electricity consumption from renewable energy by 2030 (ref. Welsh Government's 'Energy Generation in Wales 2018' and Planning Policy Wales Edition 10).

Planning Law requires that applications for planning permission must be determined in accordance with the development plan, unless material considerations indicate otherwise.

The application is in compliance with the strategy and policies of the adopted Newport Local Development Plan 2015 and it also promotes the strategy and policies of the Monmouthshire County Council Adopted Local Development Plan 2014; the administrative area of which is adjacent the application site.

In addition, the proposal promotes the objectives and policies of National Planning Policy Wales (PPW) v10 as well as the objectives of the 'Draft' National Development Framework for Wales which is likely to have been adopted during the determination period of this application.

All relevant development plan documents and national planning guidance for Wales support large scale solar renewable energy developments where appropriately sited and where the environmental impacts of a proposal are shown to be acceptable. The application shows that environmental impacts are acceptable and where adverse impacts might occur, these can be satisfactorily mitigated through design and a professionally managed installation.

The proposal also has important environmental, ecological and socio-economic benefits which build upon the case in support of the proposal's compliance with the adopted Development Plan for Newport.

- The proposal will create a solar park with a design capacity of 75MW of clean energy generation.
- 75MW of clean renewable electricity will produce enough clean renewable electricity to power *18,755 homes per year**, a saving of *16,611 tonnes CO₂e***.
- Taking the following into account, a predicted net gain of 144 habitat units is likely, representing a 75% increase over site baseline:
 - habitat losses associated with built infrastructure and associated access tracks,
 - improvement of habitat quality associated with under panel grassland habitats,
 - improved grassland habitat quality associated with reed and ditch buffers,
 - improvement in areas where arable has been planted to grassland.
- In addition, taking the following into account, a predicted net gain of 19.9 River units is likely, representing a 18% increase over site baseline
 - improvement in ditch habitat quality due to changes in land management and active scrub removal to open up ditch habitat.
- Jobs are created through both the consultancy, and construction and operation phases of solar developments. In addition, during construction, workers will use local services and accommodation, providing support for local business and the economy.
- Income is generated from the development and this will also provide important additional payments of local business rates to Newport City Council.
- The development constitutes agricultural diversification. The proposal introduces an economically viable use of relatively poor-quality agricultural land. The land will continue to be grazed post installation of the solar farm.

It is the conclusion of this Statement that the grant of planning permission for this Development of National Significance should be seen as an important opportunity to deliver on the ambitious environmental, economic and social ambitions of the local area, Newport and Wales.

** Based on an annual average domestic consumption per household (Great Britain) of 3,799 kWh. Source BEIS, Regional and Local authority electricity consumption statics 2018.*

*** Based on 'Emissions associated with the generation of electricity at a power station (Electricity generation factors do not include transmission and distribution). Source BEIS, Greenhouse gas reporting: conversion factors 2020.*

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APPENDICES

Appendix 1

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Appendix 2

Copy of Site Layout Plan Ref. 1578-0201-00

Appendix 3

Copy of Fig2.1 of the Environmental Statement – Rush Wall Solar Park Field Numbering Plan

Appendix 4

Copy of Pre-Application Advice letter received from Newport City Council (ref. P/19/00090) dated 14th November 2019

Appendix 5

Copy of Pre-Application Advice letter received from Monmouthshire County Council (ref. DM/2019/01114) dated 15th October 2019

Appendix 6

Copy of Appendix 7 of the LEMP - Biodiversity Metric 3.0

Appendix 7

Copy of Email from The Welsh Government Department for Environment & Rural Affairs ref.
Agricultural Land Classification

Appendix 8

Copy of Scoping Direction report issued by the Planning Inspectorate ref. 3220457

1. INTRODUCTION

1.1 Rush Wall Solar Park Limited is proposing to install a ground-mounted Photo Voltaic (PV) solar development on land near the village of Redwick, south east of Newport, Wales on the Caldicot Levels (Coordinates E341478, N185552). The proposed development when constructed will have an installed generating capacity of approximately 75MW.

1.2 As established by the Developments of National Significance (DNS) (Specified Criteria and Prescribed Secondary Consents) (Wales) Regulations 2016, the proposal falls within the criteria to be considered as a DNS application by virtue of its generating capacity exceeding a threshold of 10MW. The applicant 'Rush Wall Solar Park Limited' has formally notified the Welsh Government of an intention to submit a DNS application and this notification was accepted on 28th September 2020. A copy of the Acceptance Notice is enclosed with the application.

1.3 This report should be read conjunction with the following statements and plans that accompany the application:

1. Application Form
2. Copy of 'Acceptance' notification received from the Planning Inspectorate confirming that the project is, by definition, a Development of National Significance
3. Stand-alone* Drawing refs.
 - 1578-0200-00 Rush Wall Farm Site Location Plan
 - 1578-0201-00 Rushwall Farm Planning Layout
 - 1578-0201-01 Rushwall Flood Risk Mitigation Layout
 - 1578-0201-08 Cable Crossing reen
 - 1578-0201-27 Rushwall Transformer Analysis
 - 1578-0201-28 Mounting System Detail
 - 1578-0201-50 Rushwall Buffer Zones Section Views
 - 1578-0204-00 CCTV Detail
 - 1578-0205-01 Fence Detail
 - 1578-0205-02 HV Fence Detail
 - 1578-0207-00 Transformer Station Detail
 - 1578-0207-02 Aux Transformer Detail
 - 1578-0207-40 Spares Container Detail
 - 1578-0207-41 Welfare Container Detail
 - 1578-0208-10 Rush Wall Farm DNO Access Road Section
 - 1578-0208-50 33kV Private Switchgear
 - 1578-0208-80 DNO HV Compound Plan View
 - 1578-0208-81 DNO HV Compound Elevation Views A&B
 - 1578-0208-82 DNO HV Compound Elevation Views C&D

** A number of additional plans, maps, figures and images are contained within the body / appendices of the supporting reports submitted with the application. These are specifically relevant to the report within which they appear and therefore these are not submitted as independent 'stand-alone' drawings / plans.*

4. Environmental Statement Non-Technical Summary; prepared by JCTR Limited
5. Environmental Statement** (ES); overseen and prepared by JCTR; a specialist Environmental Consultancy. Inclusive of its Appendices, the ES comprises the following Chapter Headings

(ES assessment work 'scoped-in' to the ES and which is not carried out by JCTR is credited in italic text below):

- Chapter 1 – Introduction
- Chapter 2 – Project Description
- Chapter 3 – Methodology and Consultation
- Chapter 4 – Climate Change
- Chapter 5 – Ecology *(ES assessment work carried out by Western Ecology)*
- Chapter 6 – Ornithology *(ES assessment work carried out by Western Ecology)*
- Chapter 7 – Hydrology, Water Quality and Flood Risk *(ES assessment work carried out by Yellow Sub Geo)*
- Chapter 8 – Landscape and Visual *(ES assessment work carried out by Amalgam Landscape)*
- Chapter 9 – Heritage *(ES assessment work carried out by Archaeology Wales)*
- Chapter 10 – Transport *(ES assessment work carried out by Acstro)*
- Chapter 11 – Noise and Vibration *(ES assessment work carried out by Inacoustic)*
- Chapter 12 – Glint and Glare
- Chapter 13 – Human Health
- Chapter 14 – Conclusions

*** Please refer to the Contents Page of the ES for reference to specific assessments that have been carried out and which inform the ES and appear as Appendices within the ES.*

6. Design and Access Statement; prepared by Renplan
7. Planning Statement (this report); prepared by Renplan
8. Sequential Site Selection Report; prepared by ADAS
9. Topographical Survey; prepared by Associated Surveying Consultants
10. Tree Survey Plans numbered 1 – 9; prepared by Woodland and Countryside Management
11. Habitats Regulation Screening Assessment; prepared by Western Ecology
12. Flood Consequences Assessment; prepared by Yellow Sub Geo
13. Construction Traffic Method Statement (CTMP); prepared by Acstro
14. Construction Environmental Management Plan (CEMP); prepared by Yellow Sub Geo
15. Landscape and Ecological Management Plan (LEMP); prepared by Western Ecology
16. Glint and Glare Study – March 2020; prepared by Pager Power

17. Consultation Report; (to be produced following pre-application consultation exercise); prepared by Renplan

2. LOCATION OF THE SITE

- 2.1 The site, comprising several agricultural fields, is located on the Gwent levels in south Wales and lies within the Redwick Parish and the Newport City Council local authority area. The site's eastern boundary is adjacent to Cold Harbour Reen, which marks the border with Monmouthshire County Council.
- 2.2 The Gwent Levels are a distinctive topographic zone comprising of a low-lying, flat and expansive coastal plain extending up to the Severn Estuary. Its elevation is typically between 5 - 6m AOD and generally below 10m AOD.
- 2.3 The land is accessed for installation from Green Street to the south of the site. Green Street in turn is accessed from North Row which links the site to the A4810 to the north.
- 2.3.1 Figure 1 below provides a reference to the location of the application site.

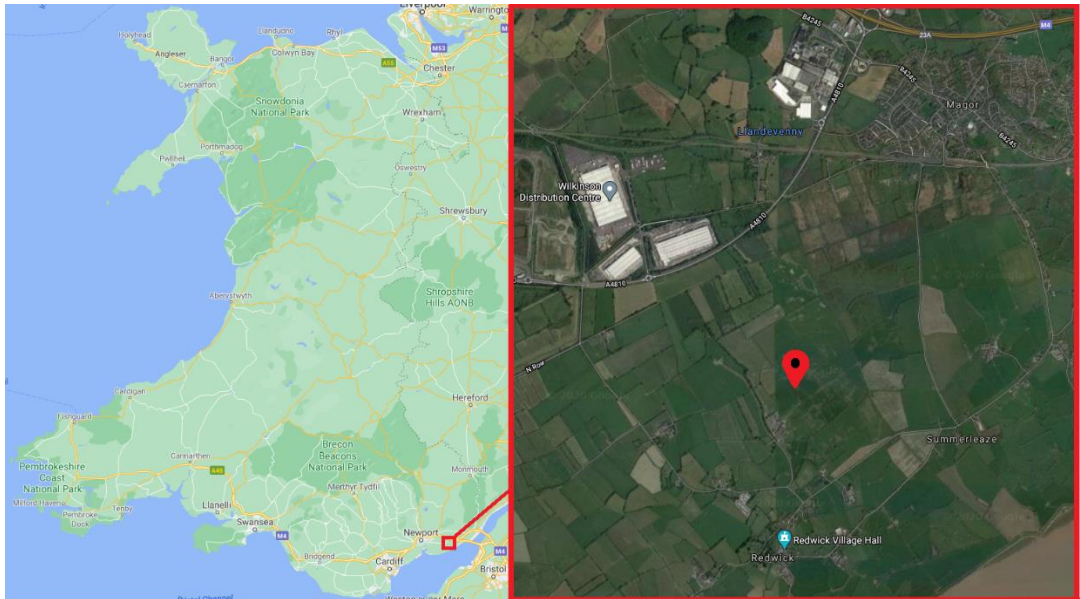


Figure 1 – Site Location

Source: Google Maps/Earth

- 2.3.2 Figure 2 below provides a more detailed map of the location of the site in relation to key surrounding roads and footpaths.

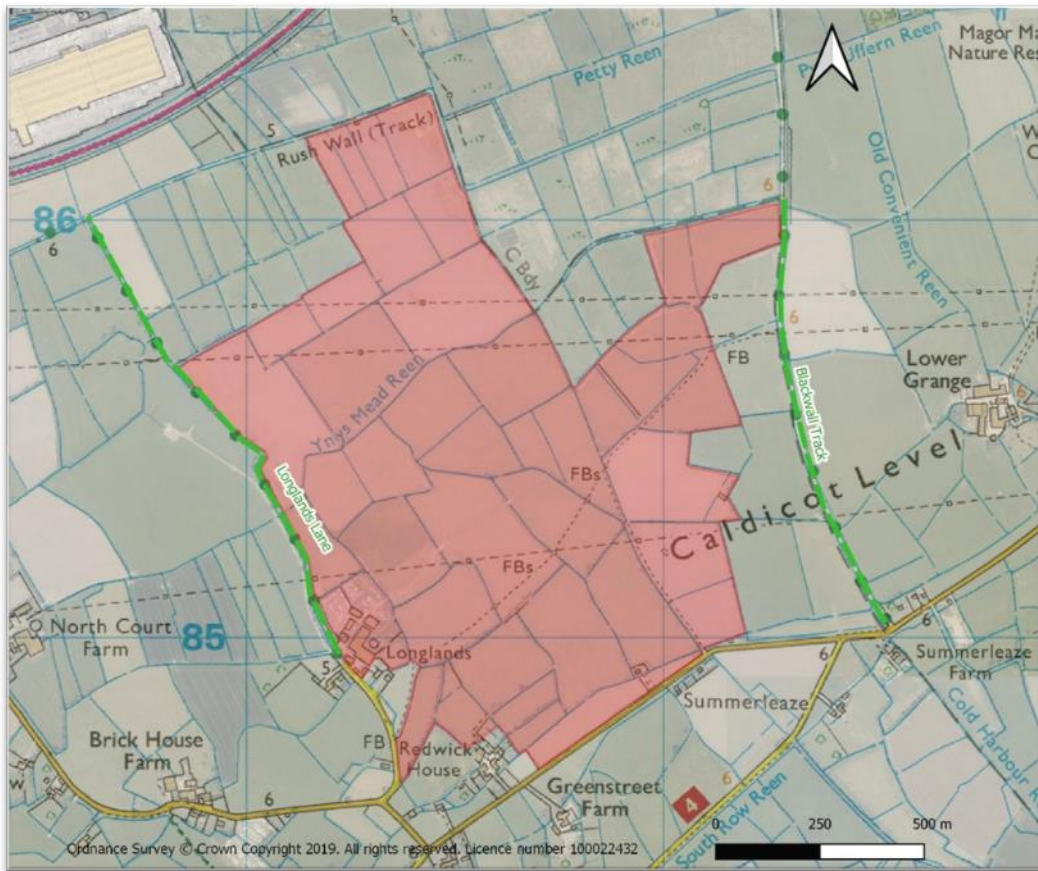


Figure 2: Site Location and Public Rights of Way (*Please note that not all the land shaded / edged red is proposed to be used – please refer to [drawing ref. 1578-0201-00 \(Planning Layout\)](#) for details of the layout*)

- 2.3.3 Within the above area, the site is located on farmland less than a kilometre north of the centre of Redwick village and over one kilometre from the banks of the Severn Estuary. It is relatively flat and made up of irregular shaped fields of variable sizes over a total area of over 100 hectares (See Appendix 3: Field Numbering Plan). The fields on site are bordered by drainage channels (called reens) or agricultural ditches, situated adjacent to or in between hedgerows.
- 2.3.4 The farmland on which the site is located belongs to Longlands Farm, comprising a dairy herd which is housed indoors year-round. Grass and maize are grown on a two to three-year field rotation and used as feed for the herd of 500 cows. Maize is cropped annually, and the grass is harvested six times per year on average. The young cattle also graze some of the fields.
- 2.3.5 The site is traversed east-west by three sets of overhead lines and their associated pylons.

- 2.3.6 Adjacent to the western site boundary there are three dwellings and the farmyard. Two of the three dwellings are owned and occupied by the farm owners. The dwelling adjacent and to the west of the farmyard, is not owned by the farm. The farmyard includes buildings to house livestock, machinery and feed, areas of hardstanding, silage storage and a slurry silo. Caravans are stored just to the north of the farm buildings on an area of compacted gravel.

3. THE PROPOSED SOLAR PARK

3.1 Solar panels convert sunlight to electrical energy. They generate direct current (DC) that is converted by the inverter hardware to alternating current (AC) that can be used by the electricity grid.

3.2 The development is comprised of the following main elements:

- Solar photovoltaic (PV) panels, mounted on a railing sub structure;
- 442 string inverters;
- 43 associated transformers
- Compacted gravel tracks (constructed on a sub layer geogrid membrane) to allow vehicular access between fields;
- A substation access track with a cement based top layer (a statutory requirement of the electricity distribution network operator, Western Power Distribution (WPD));
- Fencing and gates to enclose the panels within each field as illustrated in Figure 2-14 (Drawing no. 1578-0205-01);
- Security and monitoring CCTV mounted on posts within each field, as in Figure 2-15 (Drawing no. 1578-0204-00);
- Welfare and spare parts containers;
- Underground cabling to connect the panels to the substation; and
- A substation within a security-fenced, concrete-based compound measuring approximately 50m x 40m, located at the centre of the site, adjacent to an existing pylon. A T-off connection (i.e. an overhead wire) would provide the point of connection from the substation to the existing 132kV pylon on site. A 10m high single pole communications antenna may be required at the substation.

Construction of the Development

3.3 Construction is expected to take approximately 18-20 weeks, depending on weather and ground conditions, as well as other technical and environmental factors and is likely to consist of the following principal operations:

- Installation of a temporary construction compound and site office facilities;
- Construction of site tracks;
- Excavation of cable trenches and cable laying adjacent to the site tracks
- Construction of substation and inverter hardstanding areas;
- Construction of the substation buildings/compounds;
- Installation of panels and invertors; and
- Reinstatement of land where required.

- 3.4 Construction would be undertaken in accordance with a Construction Environmental Management Plan (CEMP). The CEMP includes strategies and control measures identified for managing the potential environmental impacts of construction and limiting disturbance from construction activities as far as reasonably practicable. These measures would form the basis of more detailed plans and method statements likely to be required as pre-commencement planning conditions.
- 3.5 The main groundworks entail trenching for the installation of underground cables to connect groups of solar panels to the substation. The cable trenching details are shown on Figure NTS-8. The deepest trenching would be approximately 1.2m deep for the high voltage cables.
- 3.6 Where required, temporary mats may also be used in localised areas during the construction phase to reduce ground disturbance.
- 3.7 Where it is necessary for cables to traverse reens and/or ditches, horizontal directional drilling would be utilised to bore cables beneath ditches and reens to minimize disturbance.

Panel Installation

- 3.8 The solar panels and associated infrastructure would occupy an area as shown by the Proposed Layout Plan (Drawing no. 1578-0201-00) which accompanies the DNS application; a copy of which is contained in Appendix 2.
- 3.9 A railing sub-structure would be piled into the ground, frames attached and then the solar panels mounted to the frames (Figure NTS-9). The ground disturbance from piling for the panel supports is expected to be up to 2.5m below ground level. The standard height of panels and mounting systems is 2.6m above ground level (to the top of the panel/rail system), with the exception of panels located on lower ground in the north and west of the site where the panels would be between 2.8m and 3.0m above ground level to account for potential future flood risk.

Supporting Infrastructure

- 3.10 An area for the base of the substation would be excavated prior to the hard-standing plinth concrete pour, after which the associated substation infrastructure would be installed. The ground disturbance associated with the substation is expected to be up to 2m below ground level.
- 3.11 The inverters, spread evenly across the site, would be raised off the ground on hard-standing plinths on gravel pads.

Access Tracks

- 3.12 Compacted gravel tracks would be constructed to facilitate vehicular access between fields. In addition to this, a substation access track with a cement based top layer (a statutory requirement of the electricity distribution network operator, Western Power Distribution) would be constructed, allowing operational access via Longlands Farm. All access tracks would remain in use throughout the operational phase of the project.
- 3.13 It is proposed that access between the farmyard and project area makes use of an existing trackway directly adjacent to Longlands Reen.

Access to Site

- 3.14 Components would be delivered to site using the existing road network. Traffic would follow a designated route between Junction 23A of the M4 and the site access point on Green Street via the A4810 and North Row, as shown in Figure 3 below.

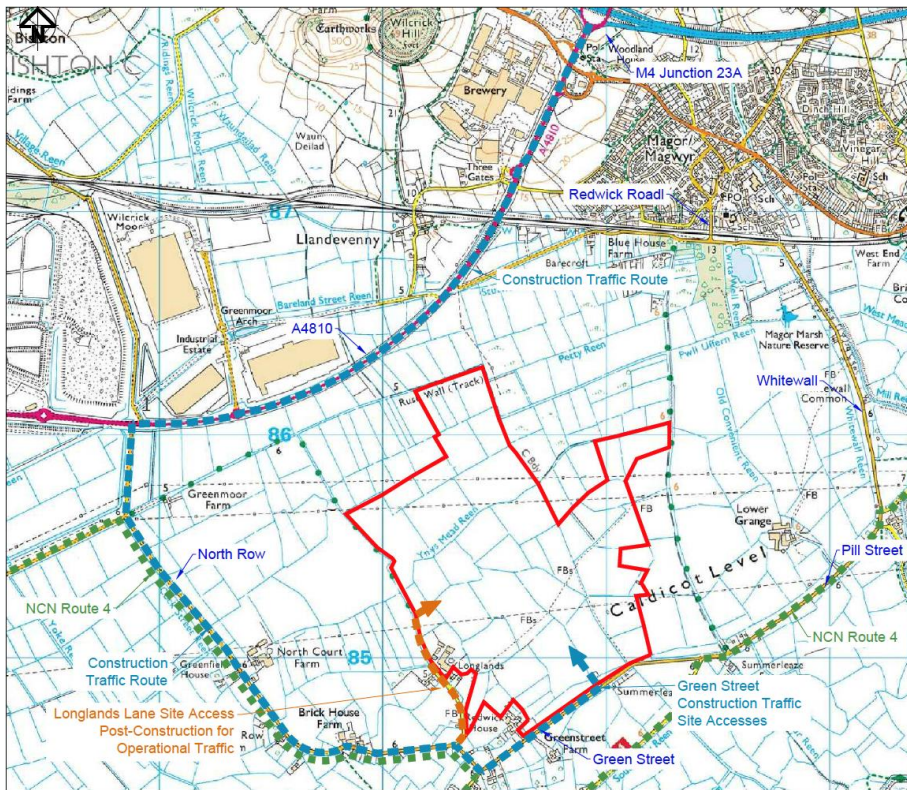


Figure 3: Proposed construction phase access to site (*Please note that not all the land shaded / edged red is proposed to be used – please refer to [drawing ref. 1578-0201-00 \(Planning Layout\)](#) for details of the layout*)

- 3.15 The construction phase is likely to span 18-20 weeks. Construction (and decommissioning) traffic would adhere to a strict construction traffic route. From the M4’s junction 23A, construction traffic would follow the A4810, turn left onto North Row

and left again onto Green Street before accessing the site. Departing traffic would follow the same route back to the M4.

- 3.16 All deliveries to site would be spread over the duration of the construction period. The construction traffic would, at most, result in an additional 38 daily vehicle movements. This equates, on average, to around 5 to 6 additional vehicle movements per hour (based on an 8-hour day).
- 3.17 A Construction Traffic Management Plan (CTMP) would be adhered to. The CTMP sets out the control measures for managing potential adverse effects associated with construction related traffic and would form the basis of more detailed plans and method statements likely to be required as a pre-commencement planning condition.

Operation and Maintenance

- 3.18 Once operational, there is likely to be minimal activity on site, particularly when compared to the construction phase. Much of the monitoring of the site is carried out remotely, though it is expected that the site would be visited at least once a month for inspection and may be regularly visited should livestock be grazing on site. Whilst other site visits would fluctuate based on planned and reactive maintenance, activity on site would remain relatively low, typically in the range of 4-5 days per month.

Decommissioning

- 3.19 The solar park would have a minimum lifetime of 35 years. During decommissioning the above ground infrastructure (solar panels and supports, substation, inverters, switchgear, CCTV & fencing) and the underground cabling would be removed from site. Tracks would be removed, unless the landowner wished for them to be retained. The site is to be returned to its former agricultural landuse.

4. JUSTIFICATION AND SITE SELECTION PROCESS

- 4.1 Solar (PV) technology is widely recognised by the public and the Government as an effective and important means of securing sustainable energy production. These projects must be delivered throughout the country. The challenge is to identify viable opportunities to connect such projects as the limitations of the electricity network typically render it economically unviable to install a solar project due to the costs associated with connection to the grid.
- 4.2 In 2017, the Welsh Government announced a target of meeting 70% of Wales' electricity demand from Welsh renewable electricity sources by 2030. In 2018, Wales reached 50% of electricity consumption being generated by renewable energy, up from 19% in 2014 and 48% in 2017 (Source: Energy Generation in Wales 2018).
- 4.3 There remain significant challenges to meeting the 70% target by 2030. There is minimal economic support following the removal of Feed in Tariff and Renewable Obligation subsidy schemes. Furthermore, there are constraining factors on the electricity distribution network which require significant investment to overcome – often that level of investment required will render generation projects uneconomic.
- 4.4 The onsite opportunity to connect to the overhead 132kV electricity lines represents a rare opportunity to deliver 75MW of clean solar (PV) energy generation without the need for significant system upgrades or a connection to the grid off-site which can sometimes itself be fraught with difficulties.
- 4.5 75MW of clean renewable electricity will produce enough clean renewable electricity to power 18,755 homes per year*, a saving of 16,611 tonnes CO₂e**.
- 4.6 The site location was chosen following a review of all known planning constraints including environmental, policy, residential, access etc.
- 4.7 The site is well located having regard for the nearest residential receptors and heritage / landscape / ecological receptors. It is also close to existing electrical infrastructure within the landscape and makes best use of existing natural landscaping (field boundaries).

* Based on an annual average domestic consumption per household (Great Britain) of 3,799 kWh. Source BEIS, Regional and Local authority electricity consumption statics 2018.

** Based on 'Emissions associated with the generation of electricity at a power station (Electricity generation factors do not include transmission and distribution). Source BEIS, Greenhouse gas reporting: conversion factors 2020.

- 4.8 Securing grid connection in South Wales is very difficult and problematic. Power lines in the area are congested and most are at capacity. The area within the Gwent levels between Newport and Magor is one of the only areas of the network which provides sufficient capacity and this factor has therefore provided a starting point in the search for a suitable site location.
- 4.9 Redwick and the surrounding area also benefits from large scale electricity transmission assets which were initially installed to serve the requirements of heavy industries which once existed along this coastline but are now no longer in operation.
- 4.10 The ability to connect to the grid represents the most significant benefit of the proposed site and is not achievable for an energy generation project of this scale in most other locations within the plan area or even at the national level.
- 4.11 The land area the subject of this application has been carefully selected having regard for the need to ensure the development is well concealed from local views and residential properties.
- 4.12 There are no alternative areas that would provide a site of sufficient scale to accommodate the proposed development at a location that is both available and connectable to the grid. Please refer to the submitted 'Sequential Site Selection Report' prepared by ADAS for further information in respect of the process by which the application site was chosen.
- 4.13 The submitted Landscape and Visual Impact Assessment (LVIA) prepared by Amalgam Landscape confirms that the site is well concealed from the public realm and from local viewpoints and properties.
- 4.14 Furthermore, the site is of poor agricultural land quality; a mosaic of Grade 3b and Grade 4 agricultural land which is not classed as the best and most versatile agricultural land for which planning policy guidance seeks to protect.
- 4.15 This Report addresses the salient planning issues and potential environmental impacts, ultimately concluding that this site is very well suited for a solar (PV) installation. It also offers opportunities for substantial ecological benefits in addition to the benefits of the project's generation design capacity of 75MW of renewable electricity.

5. ENVIRONMENTAL IMPACT ASSESSMENT) (WALES) REGULATIONS 2017

- 5.1 The Application is accompanied by an Environmental Statement (ES); provided in accordance with the EIA Regulations 2017.
- 5.2 A Scoping Direction report was issued by the Planning Inspectorate (ref. 3220457; which is also the DNS application ref) on 12 February 2019. A copy of the report is enclosed within Appendix 8 of this Planning Statement.
- 5.3 The matters of Ecology, Ornithology, Climate, Groundwater, Surface Water Flooding, Landscape Character and Visual Impact, Historic Environment (including Archaeology), Transport (including Road Users) and Noise and Vibration were all 'scoped-in' as part of the ES Scoping Opinion and therefore inform the main body of the submitted ES.
- 5.4 The work the subject of these assessments is discussed throughout this report in the context of the relevant adopted local and national planning guidance. Please refer to the submitted ES or the ES Non-Technical Summary document for specific more detailed discussion and appraisal of the subjects of the ES as well as any stand alone assessments that also comprise the DNS application (please refer to Paragraph 1.4 of this report for a list of these).

6. PLANNING POLICY CONTEXT

6.1 Introduction

6.1.1 In 2017, the Welsh Government announced a target of meeting 70% of Wales' electricity demand from Welsh renewable electricity sources by 2030. In 2018, Wales reached 50% of electricity consumption being generated by renewable energy, up from 19% in 2014 and 48% in 2017 (Source: Energy Generation in Wales 2018).

6.1.2 There remain significant challenges to meeting the 70% target by 2030. There is minimal economic support following the removal of Feed in Tariff and Renewable Obligation subsidy schemes. Furthermore, there are constraining factors on the electricity distribution system in many areas of the electricity network which require significant investment to overcome – often that level of investment required will render generation projects uneconomic.

6.1.3 This project represents an important opportunity to secure renewable energy generation that can be connected without major electricity network development and not reliant on Government subsidy support – this proposal presents a strategically important opportunity for Wales to connect a solar farm with a design capacity of approximately 75MW of clean energy generation as part of a new era of subsidy-free, economically viable renewable energy developments.

6.2 Well-Being of Future Generations Act (Wales) 2015

6.2.1 The Well-Being of Future Generations Act (Wales) 2015 sets out a strategy for the journey we must take to secure the well-being of future generations.

6.2.2 The Wellbeing of Future Generations Act (Wales) Act 2015 sets out a '*sustainable development principle*' requiring planning decisions to comply with the 7 '*well-being goals*' set out in Table 1 on Page 4 of the Document. This is copied below for reference:

TABLE 1

Goal	Description of the goal
A prosperous Wales.	An innovative, productive and low carbon society which recognises the limits of the global environment and therefore uses resources efficiently and proportionately (including acting on climate change); and which develops a skilled and well-educated population in an economy which generates wealth and provides employment opportunities, allowing people to take advantage of the wealth generated through securing decent work.
A resilient Wales.	A nation which maintains and enhances a biodiverse natural environment with healthy functioning ecosystems that support social, economic and ecological resilience and the capacity to adapt to change (for example climate change).
A healthier Wales.	A society in which people’s physical and mental well-being is maximised and in which choices and behaviours that benefit future health are understood.
A more equal Wales.	A society that enables people to fulfil their potential no matter what their background or circumstances (including their socio economic background and circumstances).
A Wales of cohesive communities.	Attractive, viable, safe and well-connected communities.
A Wales of vibrant culture and thriving Welsh language.	A society that promotes and protects culture, heritage and the Welsh language, and which encourages people to participate in the arts, and sports and recreation.
A globally responsible Wales.	A nation which, when doing anything to improve the economic, social, environmental and cultural well-being of Wales, takes account of whether doing such a thing may make a positive contribution to global well-being.

Source: Well-being of Future Generations (Wales) Act 2015 (anaw 2)
http://www.legislation.gov.uk/anaw/2015/2/pdfs/anaw_20150002_en.pdf

6.2.3 The proposal helps secure a sustainable future for the next generations by introducing a renewable energy generation facility that will ensure a future supply of clean power for local communities and businesses. The proposal actively contributes to many of the well-being goals of the Act and contravenes none.

6.2.4 The ‘Sustainable Development Principle’ as discussed in Paragraph 5 (1) sets out that public bodies “*must act in a manner which seeks ensure that the needs of the present are met without compromising the ability of future generations to meet their own needs.*”

- 6.2.5 Section 5 is copied below in its entirety. This proposal should be seen as an opportunity to help promote each of the actions as set out in Paragraph 5(2).

5 The sustainable development principle

(1) In this Act, any reference to a public body doing something “in accordance with the sustainable development principle” means that the body must act in a manner which seeks to ensure that the needs of the present are met without compromising the ability of future generations to meet their own needs.

(2) In order to act in that manner, a public body must take account of the following things –

- (a) the importance of balancing short term needs with the need to safeguard the ability to meet long term needs, especially where things done to meet short term needs may have detrimental long term effect;
- (b) the need to take an integrated approach, by considering how –
 - (i) the body’s well-being objectives may impact upon each of the well-being goals;
 - (ii) the body’s well-being objectives impact upon each other or upon other public bodies’ objectives, in particular where steps taken by the body may contribute to meeting one objective but may be detrimental to meeting another;
- (c) the importance of involving other persons with an interest in achieving the well-being goals and of ensuring those persons reflect the diversity of the population of –
 - (i) Wales (where the body exercises functions in relation to the whole of Wales), or
 - (ii) the part of Wales in relation to which the body exercises functions;
- (d) how acting in collaboration with any other person (or how different parts of the body acting together) could assist the body to meet its well-being objectives, or assist another body to meet its objectives;
- (e) how deploying resources to prevent problems occurring or getting worse may contribute to meeting the body’s well-being objectives, or another body’s objectives.

Source: Well-being of Future Generations (Wales) Act 2015 (anaw 2)
http://www.legislation.gov.uk/anaw/2015/2/pdfs/anaw_20150002_en.pdf

6.3 Future Wales: The National Plan 2040

6.3.1 This document constitutes the Country’s First ‘National Development Framework’ (NDF). It was adopted in February 2021.

6.3.2 The document identifies Wales 2020 to 2040 Challenges and Opportunities and under renewable energy it highlights the ability for Wales to become a world leader in renewable energy technologies and identifies the potential for solar generation. It then states:

6.3.3 Our support for both large and community scales projects and our commitment to ensuring the planning system provides a strong lead for renewable energy development, mean we are well placed to support the renewable sector, attract new investment and reduce carbon emissions.

6.3.4 The NDF sets out strategic and spatial choices which make up the Future Wales' spatial strategy. Policy 17 (Renewable and Low Carbon Energy and Associated Infrastructure) includes the following:

“The Welsh Government strongly supports the principle of developing renewable and low carbon energy from all technologies and at all scales to meet our future energy needs. In determining planning applications of renewable and low carbon energy development, decision-makers must give significant weight to the need to meet Wales’ international commitments and our target to generate 70% of consumed electricity by renewable means by 2030 in order to combat the climate emergency. Applications for large-scale wind and solar will not be permitted in National Parks and Areas of Outstanding Natural Beauty and all proposals should demonstrate that they will not have an unacceptable adverse impact on the environment.”

6.3.5 Policy 18 (Renewable and Low Carbon Developments of National Significance) states:

“Proposals for renewable and low carbon energy projects (including repowering) qualifying as Developments of National Significance will be permitted subject to policy 17 and the following criteria:

- 1) outside of the Pre-Assessed Areas for wind developments and everywhere for all other technologies, the proposal does not have an unacceptable adverse impact on the surrounding landscape (particularly on the setting of National Parks and Areas of Outstanding Natural Beauty);*
- 2) there are no unacceptable adverse visual impacts on nearby communities and individual dwellings;*
- 3) there are no adverse effects on the integrity of Internationally designated sites (including National Site Network sites and Ramsar sites) and the features for which they have been designated (unless there are no alternative solutions, Imperative Reasons of Overriding Public Interest (IROPI) and appropriate compensatory measures have been secured);*
- 4) there are no unacceptable adverse impacts on national statutory designated sites for nature conservation (and the features for which they have been designated), protected habitats and species;*
- 5) the proposal includes biodiversity enhancement measures to provide a net benefit for biodiversity;*
- 6) there are no unacceptable adverse impacts on statutorily protected built heritage assets;*

- 7) *there are no unacceptable adverse impacts by way of shadow flicker, noise, reflected light, air quality or electromagnetic disturbance;*
- 8) *there are no unacceptable impacts on the operations of defence facilities and operations (including aviation and radar) or the Mid Wales Low Flying Tactical Training Area (TTA-7T);*
- 9) *there are no unacceptable adverse impacts on the transport network through the transportation of components or source fuels during its construction and/or ongoing operation;*
- 10) *the proposal includes consideration of the materials needed or generated by the development to ensure the sustainable use and management of resources;*
- 11) *there are acceptable provisions relating to the decommissioning of the development at the end of its lifetime, including the removal of infrastructure and effective restoration."*

6.3.6 The NDF also confirms that:

"The Welsh Government's policies on Developments of National Significance focus on renewable and low carbon energy schemes as it is anticipated that these will be the most common schemes coming forward for consideration in the period of the first plan."

6.3.7 The NDF is very clear of its support for solar projects outside of National Parks and Areas of Outstanding Natural Beauty and states:

"We recognise landscapes across Wales whose intrinsic value should be protected from inappropriate development. Sites in National Parks and Areas of Outstanding Natural Beauty are considered unsuitable for large-scale wind and solar. Outside of these areas a positive policy framework exists [subject to Policy 18]."

6.3.8 The site falls within the South East Region and the NDF states:

"It is vital the region plays its role in decarbonising society and supports the realisation of renewable energy. Policies 17 and 18 set out Future Wales' approach to renewable energy generation across Wales. There is strong potential for wind, marine and solar energy generation and Strategic and Local Development Plans should provide a framework for generation and associated infrastructure."

6.4 **Planning Policy Wales (PPW)**

6.4.1 Welsh Ministers revised Planning Policy Wales (PPW) to reflect the objectives of the strategically set Well-being of Future Generations (Wales) Act 2015. The prevailing

Edition of PPW is Edition 11 (February 2021) sets out the most up to date prevailing National Framework for planning guidance in Wales.

6.4.2 PPW Paragraph 1.18 states that the *“Legislation secures a **presumption in favour of sustainable development** in accordance with the development plan unless material considerations indicate otherwise to ensure that social, economic, cultural and environmental issues are balanced and integrated.”*

6.4.3 Section 5.7 of PPW discusses Energy:

6.4.4 Paragraph 5.7.1 sets out the Welsh Government’s commitment to renewable energy, stating that *“The Welsh Government’s highest priority is to reduce demand wherever possible and affordable, low carbon electricity must become the main source of energy in Wales”*.

6.4.5 PPW Edition 11 is less prescriptive than the previous iteration and does not require a sequential site selection approach prioritising brownfield sites. As such, Paragraph 5.9.15 states that *“Outside identified areas, planning applications for renewable and low carbon energy developments should be determined based on the merits of the individual proposal.”*

6.4.6 Section 5.9 of PPW discusses Renewable and Low Carbon Energy:

6.4.7 Paragraph 5.9.19 sets out the way in which LPA’s should approach proposals for renewable energy. This explains that:

In determining applications for the range of renewable and low carbon energy technologies, planning authorities should take into account:

- *the contribution a proposal will make to meeting identified Welsh, UK and European targets;*
- *the contribution to cutting greenhouse gas emissions; and*
- *the wider environmental, social and economic benefits and opportunities from renewable and low carbon energy development.*

6.4.8 With reference the above important planning considerations:

6.4.9 The submitted application confirms that at an approximate 75MW design capacity, the proposal solar installation represents an important contribution towards the nation’s efforts on tackling climate change; contributing significantly to Newport City Council’s contribution to achieving carbon emission targets and crucially making a significant contribution towards the nation’s target of securing 70% of electricity generation being from renewable sources.

6.4.10 75MW of clean renewable electricity will produce enough clean renewable electricity to power 18,755 homes per year*, a saving of 16,611 tonnes CO₂e**.

6.4.11 Paragraph 5.9.20 states that: *“Planning authorities should also identify and require suitable ways to avoid, mitigate or compensate adverse impacts of renewable and low carbon energy development. The construction, operation, decommissioning, remediation and aftercare of proposals should take into account:*

- *the need to minimise impacts on local communities, such as from noise and air pollution, to safeguard quality of life for existing and future generations;*
- *the impact on the natural and historic environment;*
- *cumulative impact;*
- *the capacity of, and effects on the transportation network;*
- *grid connection issues where renewable (electricity) energy developments are proposed; and*
- *the impacts of climate change on the location, design, build and operation of renewable and low carbon energy development. In doing so, consider whether measures to adapt to climate change impacts give rise to additional impacts.”*

6.4.12 Paragraph 5.9.21 progresses to state that “developers for renewable and low carbon energy developments should, wherever possible, consider how to avoid, or otherwise minimise, adverse impacts through careful consideration of location, scale, design and other measures”.

6.4.13 With reference to the above important planning considerations the submitted application confirms that local impacts will be minimised where possible. The submitted application is accompanied by a Construction and Environmental Management Plan (CEMP) that details measures that would be taken to minimise impacts from installation.

6.4.14 The application is also accompanied by a Landscape and Ecological Management Plan (LEMP) which details a management strategy to secure both landscape and ecological enhancements.

* Based on an annual average domestic consumption per household (Great Britain) of 3,799 kWh. Source BEIS, Regional and Local authority electricity consumption statics 2018.

** Based on 'Emissions associated with the generation of electricity at a power station (Electricity generation factors do not include transmission and distribution). Source BEIS, Greenhouse gas reporting: conversion factors 2020.

- 6.4.15 A detailed Historical Impact Assessment (HIA) comprising also accompanies the submission (contained within the ES) which concludes that the proposal would not have an unacceptable impact on local cultural heritage assets and that any risk to potential archaeology can be managed through the application and subsequent implementation of a suitably worded 'watching brief' planning condition.
- 6.4.16 The submitted application has been specifically designed such to ensure minimal landscape impacts on the wider area and to retain trees, hedgerows and the existing pattern of enclosed fields.
- 6.4.17 The submitted Construction Traffic Management Plan (CTMP) confirms that the installation of the proposal can be managed to ensure minimal disruption to the transportation network.
- 6.4.18 The equipment production and installation work of the proposal will create a carbon footprint. However, the carbon emissions created through the manufacture, transport and installation of the proposal will be balanced or 'offset' by the clean electricity generation of the proposal within a short period of the commissioning of the solar park. The proposal thereafter has important environmental benefits of the production of renewable clean energy.
- 6.4.19 Enclosed within Appendix 6 of this report is a matrix assessment of the net impacts of the proposal. In the absence of other tools specific to Wales, Defra Biodiversity Metric 3.0 has been applied to habitat areas and watercourses at this site to provide a quantitative assessment of biodiversity net gain. This has not been applied to hedgerow habitat.
- 4.3.1 Taking the following into account, a predicted net gain of 144 habitat units is likely, representing a 75% increase over site baseline:
- habitat losses associated with built infrastructure and associated access tracks,
 - improvement of habitat quality associated with under panel grassland habitats,
 - improved grassland habitat quality associated with ree and ditch buffers,
 - improvement in areas where arable has been planted to grassland.
- 4.3.2 In addition, taking the following into account, a predicted net gain of 19.9 River units is likely, representing a 18% increase over site baseline
- improvement in ditch habitat quality due to changes in land management and active scrub removal to open up ditch habitat.
- 6.4.20 Please refer to the LEMP for further information in respect of biodiversity net benefits.

6.5 Technical Advice Notes (TANs)

- 6.5.1 Technical Advice Notes (TANs) take forward the policies and objectives of PPW and provides local authorities with guidance on the relevant factors with which to prepare their local plans and base their planning decisions.
- 6.5.2 TAN 12 (Design) 2016 provides guidance on how good design should be achieved. The objectives of good design as shown in Figure 1 of TAN12, relate to access, character, community safety, environmental sustainability and movement. An overview of the journey to siting and the design of this proposal are set out in a stand-alone document titled 'Design and Access Statement' that accompanies the application.
- 6.5.3 TAN 18 (Transport) 2007 explains how transport impacts should be assessed and mitigated. The primary focus of TAN18 is on development that generates travel demand. However, in the context of this application, although the proposal generates traffic associated with the installation process (as discussed in the submitted Transport Statement), post-installation there would only be infrequent visits by a van for maintenance. No staff are employed at or near the site and there is no access into this development for members of the public.
- 6.5.4 TAN 11 (Noise) 1997 sets out to minimise the adverse impact of noise without placing unreasonable restrictions on development. Small amounts of noise created during the installation process can be managed and small amounts of noise post-installation by transformer / inverter and substation housings are inaudible after a very short distance.
- 6.5.5 TAN 5 (Nature Conservation and Planning) 2009 provides guidance on how proposals should contribute to protecting and enhancing biodiversity. The submitted ecological work (please refer to Chapters 5 and 6 surveys provides advice in so far as the anticipated impacts and recommends appropriate mitigation where necessary.
- 6.5.6 Enclosed within Appendix 6 of this report is a matrix assessment of the net impacts of the proposal. In the absence of other tools specific to Wales, Defra Biodiversity Metric 3.0 has been applied to habitat areas and watercourses at this site to provide a quantitative assessment of biodiversity net gain. This has not been applied to hedgerow habitat.
- 4.3.3 Taking the following into account, a predicted net gain of 144 habitat units is likely, representing a 75% increase over site baseline:
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 - improvement in areas where arable has been planted to grassland.

- 4.3.4 In addition, taking the following into account, a predicted net gain of 19.9 River units is likely, representing a 18% increase over site baseline
- improvement in ditch habitat quality due to changes in land management and active scrub removal to open up ditch habitat.
- 6.5.7 Please refer to the LEMP for further information in respect of biodiversity net benefits.
- 6.5.8 TAN 15 (Development and Flood Risk) 2004 seeks to direct new development away from areas that are at high risk of flooding. Its Development Advice Map classes land according to 3 flood risk zones. The application site is classed as Zone C where there is a known risk of flooding to the area.
- 6.5.9 Nearby areas that are not recognised as being at risk of flooding have been ruled out as suitable for the proposed development (please refer to the Sequential Site Selection Study for further details) and therefore the solar installation has been carefully designed such to ensure it would be ‘flood resilient’ over the life term of the installation (35 years).
- 6.5.10 Further information is contained within the submitted Flood Consequences Assessment.
- 6.5.11 TAN 24 (The Historic Environment) 2017 provides guidance on how the planning system considers the historic environment during development plan preparation and decision making on planning applications.
- 6.5.12 The submitted Historic Impact Assessment and its associated assessments (Please refer to Chapter 9 of the submitted ES) confirms that the proposals would not unacceptably impact local heritage assets and subject to appropriately worded conditions to minimise the risk to any potential unknown buried archaeology, the development can proceed in accordance with prevailing heritage planning guidance contained in TAN24.
- 6.5.13 TAN 6 (Planning for Sustainable Rural Communities) 2010 provides guidance on how planning decisions can help support sustainable rural communities. The proposal the subject of this application provides renewable electricity generation for the local distribution network; providing Wales with a valuable contribution towards reducing carbon emissions and achieving its strategic environmental objectives.
- 6.5.14 TAN 23 (Economic Development) 2014 provides advice on various aspects relating to this area including developing high-level economic planning objectives, assessing the economic benefits of new development, economic development and the rural economy.
- 6.5.15 The solar energy industry provides thousands of jobs worldwide and many of those are in Wales; jobs being created through both the consultancy, and construction and operation phases of solar developments. In addition, during construction phase, workers will use local services and accommodation, providing support for local business and the economy.

6.6 Planning Implications of Renewable and Low Carbon Energy

6.6.1 The Welsh Government Practice Guidance: Planning Implications of Renewable and Low Carbon Energy, published February 2011, summarises the potential impacts and design, mitigation and enhancement measures of solar installations as:

- Landscape and visual
- Glint and glare
- Ecology
- Historic environment
- Agriculture
- Hydrology and flood risk; and
- Cumulative impacts

6.6.2 The DNS application addresses each of these considerations within the submitted Landscape and Visual Impact Assessment (LVIA in Chapter 8 of the ES), the submitted Glint and Glare Assessment (copy enclosed in Appendix 12.1 of the ES), the submitted Ecological reports (please refer to Chapters 4 and 5 of the ES), the Historical Impact Assessment (Chapter 9 of the ES), the Flood Risk and Surface Water Drainage section of the ES (Chapter 7) which should be read in conjunction with the stand alone Flood Consequences Assessment that accompanies the application, and potential for cumulative impacts; discussed within each of the Chapters of the submitted ES.

6.6.3 In so far as the Agricultural impacts of the proposal are concerned, during pre-application engagement, The Welsh Government Department for Environment & Rural Affairs advised the Applicant in respect of the predictive grading of the existing agricultural land of the site.

6.6.4 Welsh Government confirmed (copy of email in Appendix 7) that *“It is the Departments belief that the search area is likely to be no better than ALC Grade 3b; possibly a mosaic of 3b and 4.”* In the circumstances it was advised that *“The Department does not recommend commissioning an ALC [Agricultural Land Classification] survey. The Predictive ALC Map should be taken as best available evidence.”*

6.6.5 An ALC Survey has therefore not been carried out as part of this DNS application.

6.7 Planning for Renewable and Low Carbon Energy – A Toolkit for Planners

6.7.1 The Welsh Government commissioned the preparation of the practice guidance document (“Toolkit”), in order to support local authorities in planning for the development required to meet energy and emissions targets.

6.7.2 Although this document is predominantly focused on how a local authority can prepare a robust evidence base to underpin Local Plan spatial policies that can facilitate the deployment of renewable and low carbon energy systems, the guidance does confirm that the Local Authorities have several key roles to play that can facilitate the use and generation of renewable and low carbon energy including development management. In this regard, it confirms:

“Taking decisions on planning applications submitted to the Local Planning Authority for development; as well as preparing Local Impact Assessments for schemes which are determined by the Planning Inspectorate.”

6.7.3 In order to assist LPAs to plan for the deployment of renewable and low carbon energy systems, the Toolkit provides a methodology for LPAs to follow in order to identify and allocate areas for potential PV Farm projects. This methodology is intended to enable the undertaking of a high-level assessment of the potential capacity ground-mounted PV considering the constraints presented by a range of land-based designations (constraints mapping).

6.7.4 The Toolkit notes that there is currently no standard agreed method to constraints mapping for solar PV farms. As a result, the Toolkit represents only one potential approach which is not enshrined within planning policy, and neither is this binding to the Local Authorities using the guidance.

6.7.5 The Toolkit is intended to enable a visual overview of potential site locations which are in general terms less ‘constrained’ than other locations in the plan area. It acknowledges that the process of constraints mapping will not automatically identify sites which are suitable for the deployment of PV and that consideration of a wider range of factors will be required in order to determine such suitability. Indeed, the guidance explains that:

- ... *“detailed assessment of a particular site may reveal proposed PV farm impacts to be manageable and to meet regulatory and policy requirements*
- *Conversely, land indicated as suitable through GIS mapping may prove to be technically and/or financially unviable”*

6.7.6 The limitations noted above are due to the specific challenges of solar PV farm development and the range of additional considerations which are not included within the Toolkit’s proposed methodology for a high-level assessment. The guidance notes that such additional considerations include the requirement for an economically viable (relatively short distance from the solar array to an appropriate connection point) grid connection, practical access to sites required for development, landowner willingness for development to proceed, and the likely impact on landscape character.

6.8 **Newport City Council Planning Guidance**

6.8.1 The current adopted Local Development Plan is the Newport Local Development Plan 2011-2026 adopted January 2015.

6.8.2 **Newport Local Development Plan (NLP) 2011-2026 adopted January 2015**

6.8.3 The site is unallocated by the Newport Local Development Plan 2011 – 2026 (January 2015) Proposals Map. However, it does designate the site as countryside, within an archaeologically sensitive area, an undeveloped coastal zone and a special landscape area. In addition, the site is also designated as a Site of Special Scientific Interest (SSSI).

Policy CE10 [Renewable Energy]

6.8.4 Policy CE10 confirms that renewable energy schemes will be *“considered favourably, subject to there being no over-riding environmental and amenity considerations.”* Furthermore, it states that *“large scale proposals may be more appropriately located outside of the defined settlement boundary if no appropriate brownfield site exist”* and that the *“cumulative impacts of renewable energy schemes will be an important consideration”*.

6.8.5 Paragraph 4.51 of the supporting text confirms that particular care should be taken when assessing proposals for renewable energy projects in sensitive, designated areas, such as areas of high landscape quality, and areas of nature conservation, or archaeological or historical importance.

6.8.6 It goes on to set out that:

“The Gwent Levels are recognised as an internationally important resource in terms of landscape and heritage and nationally important for ecology. Proposals which affect the special qualities of the Gwent Levels, or any other protected site, will be resisted unless it can be demonstrated that there will be no significant adverse effects.”

6.8.7 Paragraph 4.55 confirms that:

“Brownfield sites within the settlement boundary will be favourably considered and where possible, should be considered before greenfield options.”

However, it also goes on to state:

“Development of larger scale renewable energy schemes may be acceptable on greenfield sites where it can be demonstrated that there will be no significant adverse impacts on the environment and local communities.”

6.8.8 In accordance with the planning guidance set out within the Toolkit, the Council has undertaken a Renewable Energy Assessment, details of which can be found below. This sets out the potential for renewable energy resources and technologies within the plan area. The Development Plan states that this assessment should be considered when evaluating renewable energy proposals.

Policy CE9 [Coastal Zone]

6.8.9 The site also lies within the Gwent Levels area of the 'Undeveloped Coastal Area'. Policy CE9 is therefore relevant and it states:

"i. In the undeveloped coastal area such development is required to be on the coast to meet an exceptional need which cannot reasonably be accommodated elsewhere;

ii. the area is not itself at risk nor will the proposed development exacerbate risks from erosion, flooding or land instability"

6.8.10 Paragraph 4.45 of the supporting text explains that the undeveloped coastal area will:

"Rarely be appropriate for major development. Proposals for such development will need to demonstrate that such a location is essential, and that the proposal is acceptable having regard to other Policies of this Plan. Sufficient information will be required to demonstrate that the proposed development can be carried out without significant adverse effects."

6.8.11 Further salient planning policies of the adopted NLP are:

- SP1 – Sustainability
- SP3 – Flood Risk
- SP4 – Water Resources
- SP5 – Countryside
- SP8 – Special Landscape Areas
- SP9 – Conservation of the Natural, Historic & Built environment
- GP1 – Climate Change
- GP2 – General Amenity
- GP4 – Highways & Accessibility
- GP5 – Natural Environment
- GP6 – Quality of Design
- GP7 – Environmental Protection & Public Health
- CE1 – Routeways, Corridors & Gateways
- CE4 – Historic Landscapes, Parks, Gardens & Battlefields
- CE6 – Archaeology
- CE7 – Conservation Areas

- T8 – All Wales Coastal Path

6.8.12 The submitted DNS application consists of numerous specific assessments that address the impacts of the proposal in respect the matters covered by the aforementioned list of policies. Where identified, impacts are proportionately mitigated and any impacts that cannot be mitigated are not so harmful such that they would warrant a refusal of permission; particularly when balanced against the specific environmental, ecological and socio-economic benefits of the project.

6.8.13 As has been set out, the environmental, ecological and socio-economic benefits of this proposal will weigh heavily in favour of a permission being granted in accordance with the adopted Development Plan and adopted National Planning Guidance.

6.8.14 This DNS submission has to large extent been informed by the pre-application advice received from Newport County Council (NCC). Please refer to Appendix 4 of this Statement for reference to the pre-application advice NCC provided. The advice received, and discussion on how it was born consideration in the making of this application, is discussed in the submitted 'Consultation Report'.

6.9 **Newport City Council Supplementary Planning Guidance (SPG)**

6.9.1 Renewable and Low Carbon Energy Assessment: Torfaen County Borough Council and Newport City Council

6.9.2 A joint study into the potential for the deployment of low carbon energy in Newport and Torfaen was completed in 2013. The study provides an evidence base for the two local authorities and underpins the pertinent local planning policies which relate to renewable energy generation (Policy CE10 within the Newport Local Plan).

6.9.3 The study provides an understanding of local renewable resources, constraints and opportunities, and to identify opportunities to include renewable energy schemes, district heating and combined heat and power into development proposals. However, it is explained within the document that:

“The spatial elements of this study are not intended for use by development management officers to assess individual planning applications for either strategic new development sites that are incorporating renewable energy, or for stand-alone renewable energy generating systems. Further detailed survey work would need to be undertaken to assess development potential and viability.”

6.9.4 The study forms an assessment of the potential for ground mounted PV, based upon a GIS analysis of the following land-based constraints:

- Grade 4 and 5 Agricultural land only
- Areas of Outstanding Natural Beauty
- Nature conservation designations – Sites of Special Scientific Interest (SSSIs), Special Protection Areas of Conservation (SACs), Ramsar Sites, National Nature Reserves (NNR) and Local Nature Reserves (LNRs)
- Sites of Historic Interest – World Heritage Sites, Scheduled Ancient Monuments, Registered Parks and Gardens
- Common Land
- 5m Buffer Zones around rights of way

6.9.5 The outcome of this analysis for the Newport area has been provided in map format. This shows areas which are considered to possess technical potential for ground-mounted PV based upon the GIS analysis of the abovementioned ‘constraints’. The site does fall within an area of ‘constraints’.

6.9.6 It is important to note that the mapped constraints present only a basic and high-level representation of the areas which are least constrained by the above designations. Indeed, the study itself acknowledges that only a small proportion of the total available land would actually be suitable.

6.9.7 Therefore, it assumes that only 1% of the unconstrained land could be used for the deployment of solar PV. It goes on to explain that although this is a somewhat arbitrary figure, it is deemed to reflect the various other constraints, which will further influence the potential of the land. These include the fact that solar farms will have to compete with other land uses, need an economic grid connection and will require unshaded flat land or land inclined to the south.

6.9.8 Planning Obligations SPG

6.9.9 There are no adverse impacts associated with this proposal that would warrant monetary contributions under prevailing Planning Obligations Supplementary Planning Guidance.

6.9.10 However, it is important to note that the proposals are required to provide for off-site Lapwing Mitigation; the proposals of which would be required to be secured via the legal mechanism of Section 106 of the Town and Country Planning Act 1990 (as amended).

6.9.11 The Section 106 Agreement is due to be submitted to accompany the DNS application prior to Week 15 of the DNS Application.

6.9.12 Other Relevant Supplementary Planning Guidance (SPG)

6.9.13 Other relevant supplementary planning guidance to this proposal includes the following:

- Archaeology and Archaeologically Sensitive Areas SPG
- Wildlife and Development SPG
- Trees, Woodland, Hedgerows and Development Sites SPG
- Air Quality SPG
- Parking Standards SPG

6.9.14 The DNS application is accompanied by specialist assessments that properly account for the considerations of the matters covered by the abovementioned SPG documents. These planning considerations are discussed in more detail in submitted Environmental Statement and the stand-alone reports that accompany the DNS application. These assessments and summarised within this report under the next Section of this report; Section 6: Review of Potential Impacts.

6.10 **Planning Guidance issued by Monmouthshire County Council**

6.10.1 Monmouthshire County Council Adopted Local Development Plan

6.10.2 Given the site adjoins the administrative boundary of Monmouthshire County Council (but does not fall within it), there are going to be cross-boundary planning considerations and therefore the Monmouthshire County Council adopted Development and its supplementary planning guidance (SPG) are useful and therefore material considerations to this proposal.

6.10.3 This suite of guidance will however carry significantly less weight to that of Newport City Council's planning guidance as the entire site falls within the Newport administrative area.

6.10.4 Relevant policies of the Monmouthshire Local Development Plan are listed below.

- S7 Infrastructure Provision
- S12 Efficient Resource Use and Flood Risk
- S13 Landscape, Green Infrastructure and the Natural Environment
- S15 Minerals
- S17 Place Making and Design
- S16 Transport
- SD1 Renewable Energy
- SD2 Sustainable Construction and Energy Efficiency
- LC1 New Built Development in the Open Countryside
- LC5 Protection and Enhancement of Landscape Character
- GI1 Green Infrastructure

- 6.10.5 These policies do not cover the administrative area of the application site. However, it has been important to the Applicant to review these and to make sure cross-administrative boundary issues such as ecology and highways for example are properly considered in the light of the objectives of both Newport and Monmouthshire's Local Development Plans.
- 6.10.6 Monmouthshire Supplementary Planning Guidance (SPG)
- 6.10.7 The Renewable Energy and Energy Efficiency SPG March 2016 is a relevant document although it should be pointed out that it is not so much a guidance document for large scale renewable energy installations like the solar (PV) park being proposed. It is primarily focused on guiding traditional (i.e. housing, commercial) development to ensure it is designed sustainably in the interests of maximising renewable energy opportunities and managing energy efficiency.
- 6.10.8 Green Infrastructure April 2015 is also a relevant SPG for Monmouthshire albeit like the Renewable Energy and Energy Efficiency SPG, it is not specifically guiding renewable development infrastructure but rather structured to promote the delivery of green (as in landscape) infrastructure in Monmouthshire.

6.11 **Relevant Statutory Designations**

- 6.11.1 The site lies within an area that is subject to the following statutory designations, which are explained in more detail below:
1. Within a Site of Special Scientific Interest (SSSI)
 2. Within the Gwent Levels Historic Landscape of Outstanding Historic Interest in Wales

SSSI Designation

- 6.11.2 The site falls within the Redwick and Llandeenny SSSI. The boundary for this is shown below in Figure 1.
- 6.11.3 The Countryside Council for Wales (CCW) (now part of Natural Resources Wales (NRW)) has released guidance to explain the special features of these SSSIs. Within the "Site of Special Scientific Interest Citation", the Redwick and Llandeenny SSSI has three features of special interest which are as follows:
- Reen and ditch habitat
 - Insects and other invertebrates
 - Nationally rare plant species

- 6.11.4 In addition to these features, the SSSI is noted to comprise other habitats that contribute to the special wildlife interest in the areas. These include hedgerows and flower rich ditch banks which are important for a wide range of species.
- 6.11.5 It is explained within the related guidance documents that CCW (now part of NRW) are working with the Council, developers, owners and other relevant bodies *“to ensure that where development does take place the special interests of the SSSI are conserved and enhanced”*.
- 6.11.6 Paragraph 3.24 of the supporting text to Local Plan Policy GP5 (General Development Principles – Nature Conservation) sets out that SSSI sites *“will require the fullest regard to the intrinsic value of the site and their nature conservation value. Development with the potential to affect a recognised site will be closely scrutinised for any direct or indirect effects. The developer must demonstrate the case for development and why it could not be located on a site of less significance for nature conservation”*.

Gwent Levels Historic Landscape in Wales

- 6.11.7 The site lies within the Gwent Levels Historic Landscape Area as shown on Figure 1 as designated under the Register of Landscapes, Parks and Gardens of Outstanding Historic Interest in Wales.
- 6.11.8 The area comprises discrete and extensive areas of alluvial wetlands and intertidal mudflats and represent a hand-crafted landscape having been recurrently inundated and reclaimed from the sea since the Roman period. The areas have distinctive patterns of settlement, enclosure and drainage systems belonging to successive periods of use.
- 6.11.9 This area is broken down into 21 ‘character areas’ which reflect the locally distinctive features within the area as shown on Figure 4 below.

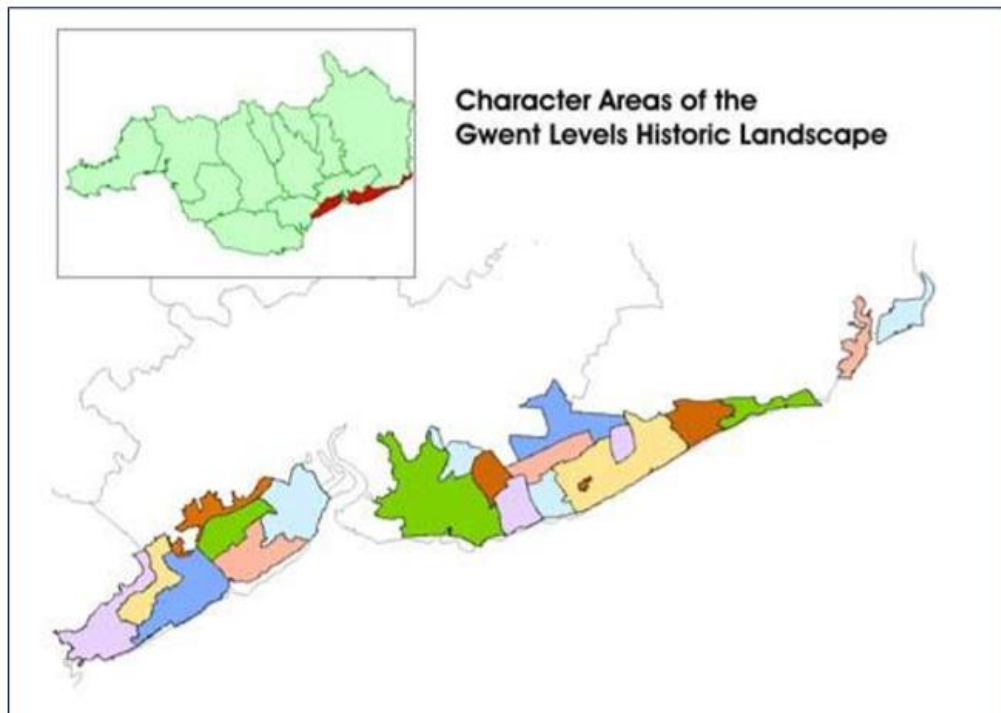


Figure 4: Gwent Levels Historic Landscape Area

6.11.10 The application site appears to fall within the Redwick / Magor / undy and Magor Lower Grange character areas. These areas are described within the Historic Landscape Character record (discussed in detail within the 'Landscape and Visual' as well as the 'Heritage' Chapters (Nos. 8 and 9 respectfully) of the submitted ES. They are briefly characterised as follows:

Redwick/Magor/Undy: Complex "irregular landscape" with some dispersed settlement

Magor Lower Grange: Tintern estate, drained in the mid-thirteenth century

7. REVIEW OF POTENTIAL IMPACTS

7.1 Introduction

7.1.1 Section 6 of this report should be read in conjunction with the submitted Design and Access Statement, the Pre-Application Consultation Report and the various submitted environmental assessment work that form the submitted Environmental Statement and its appendices.

7.2 Transport and Access

7.2.1 It is anticipated that the construction of the solar farm will take some 18 weeks. Peak traffic generation will occur during the initial weeks when crushed stone will be brought onto site to construct the compound area and access tracks. It is anticipated that at its peak, the construction works will generate a maximum of 19 HGV deliveries per day

although it should be noted that there will be significantly less deliveries (a day) during most other weeks of the installation period.

- 7.2.2 The land is accessed for installation from Green Street highway to the south of the site. Green Street in turn is accessed from North Row which links the site to the A4810 to the north. Traffic management will be in place during the construction period; the details of which would be expected to be conditioned for future agreement with the relevant Highways Authorities.
- 7.2.3 Wheel washing facilities will be provided at the access point from Green Street to prevent mud and debris from being carried onto the highway. These measures will ensure the proposed development can be installed within minimal disruption on the highway network and minimal highway safety impacts to users of the highways.
- 7.2.4 After commissioning, the site will only experience very infrequent visits for maintenance, by van/4x4-type vehicle; accessing the site from Longlands Lane which is the principle access to the farmholding.
- 7.2.5 The Transport Chapter of the ES (prepared by Acstro) addresses the various transport and access related considerations to installation of the proposal. It demonstrates that the construction traffic associated with the development will be modest in volume and will have no significant impact on the operation of the surrounding highway network. It also demonstrates that safe access to the site will be provided from the public highway.
- 7.2.6 The Transport Statement concludes that *“the proposed mitigation measures will ensure that construction traffic can safely access the site and that there will be no significant permanent impact on the operation and safety of the surrounding highway network. As such it is considered that the proposed development is acceptable in terms of its Transport impacts.”*
- 7.2.7 The proposal will comply with the relevant access and highway safety planning policy framework of the adopted Development Plan as well as relevant National Planning Policy Guidance.
- 7.2.8 Please refer to the Transport Chapter 10 of the Environmental Statement for further details relating to detailed access considerations and potential impacts.
- 7.3 **Use of Agricultural Land for Ground-Mounted Photovoltaic Solar Farms**
- 7.3.1 During pre-application engagement, The Welsh Government Department for Environment & Rural Affairs advised the Applicant in respect of the predictive grading of the existing agricultural land of the site.

7.3.2 Welsh Government confirmed (copy of email in Appendix 7) that *“It is the Departments belief that the search area is likely to be no better than ALC Grade 3b; possibly a mosaic of 3b and 4.”* In the circumstances it was advised that *“The Department does not recommend commissioning an ALC [Agricultural Land Classification] survey. The Predictive ALC Map should be taken as best available evidence.”*

7.3.3 An ALC Survey has therefore not been carried out as part of this DNS application.

7.4 **Landscape / Visual Amenity**

7.4.1 Chartered landscape consultancy Amalgam Landscape has prepared a Landscape and Visual Impact Assessment (LVIA) in accordance with the Landscape Institute’s prevailing guidance for such proposals. The LVIA informs Chapter 8 of the submitted ES.

7.4.2 Existing field boundary vegetation will be protected and enhanced, to retain and improve the landscape pattern and increase screening for nearby visual amenity receptors.

7.4.3 The LVIA advises that the proposal would be enclosed by mature vegetation with glimpsed views restricted to gaps in the enclosure such as gateways. Amalgam Landscape summarise the landscape and visual impacts of the proposal within Paragraph 8.20 of the ES, as a proposal that would:

- *Add a relatively contained built element to the landscape;*
- *Have a limited indirect influence on any designated landscapes;*
- *Be set within the regular landscape pattern within mainly mature and well-vegetated field boundaries, which will be protected and enhanced through additional planting, including in-fill planting to the existing boundaries, where necessary;*
- *Only be partly overlooked from very close proximity, from gaps in enclosure, the influence dramatically reducing over time and swiftly with distance from the proposed development. Although selectively perceived in close proximity, the proposed development will be a contained built element, set within a well-vegetated landscape, notwithstanding it is temporary and reversible;*
- *Will be perceived from selected open and elevated locations to the north, where it has the potential to be viewed in combination with the nearby consented Llanwern solar scheme. The addition of the proposed development will not significantly increase the perception of numerous solar schemes on either the landscape or views and therefore there will be limited additional cumulative effects as a result of the proposed development; and*

- *Overall, the development will have limited impacts on landscape relevant designations, landscape character and visual amenity receptors and their views.*

7.5 Residential Amenity

- 7.5.1 The closest residential properties and farms to the proposed development site are largely scattered along the minor road network to the north, east, south and west.
- 7.5.2 Broadly to the north, there is a mixture of single and two storey properties stretched out largely to the north of the very enclosed Bareland Street including the two storey Blue House Farm (to the south of the road) and various single and two storey properties at Barecroft Common (to the north of the road). Largely surrounded and enclosed by mature vegetation surrounding the properties, lining the minor road and in the surrounding landscape, wider views are restricted.
- 7.5.3 Broadly to the east, there are scattered largely detached single storey and two storey properties along both sides of Whitewall Lane and Pill Street.
- 7.5.4 To the north-east, along Whitewall Lane, the scattered residential properties are largely set within and enclosed by large well-vegetated gardens on both sides of the minor road as well as the mature vegetation enclosing Whitewall Lane (for the properties to the east of the minor road).
- 7.5.5 Potential visual impacts on residential amenity include views from settlements including towns, villages, hamlets and individual residential properties. The proposals would be largely screened by the surrounding landscape features such as hedgerows and trees. Views are *‘potentially possible from the upper stories of the few nearby residential properties’* (ref. Paragraph 8.15 of the ES).
- 7.5.6 There is also the potential for the proposal to impact residential properties by way of glint and glare. The submitted DNS Application is accompanied by a Glint and Glare Assessment. Chapter 12 of the submitted ES discusses Glint and Glare.
- 7.5.7 The conclusions of the Glint and Glare assessment work in relation to residential impacts are that:
- “Reflections at dwelling receptors are unlikely to be experienced due to restricted visibility of the site, considering the existing and proposed screening in the area.”*
- 7.5.8 The proposals also have the potential to impact residential amenity by way of noise and vibration. In the circumstances, the application addresses Noise and Vibration in Chapter 11 of the submitted ES.

7.5.9 The noise assessment work was carried out by Inacoustic who conclude that in respect of the potential construction and decommissioning impacts, the *“effects will typically be Temporary Negligible to no worse than Minor, at the closest receptor to any works.”* (Paragraph 11.102 of the ES).

7.5.10 Inacoustic also reviewed the potential for operational impacts on the basis of a set of worst-case, candidate input parameters. On the basis of these parameters, Inacoustic predict that the proposal will *“give rise to no worse than a Negligible Impact at the assessed receptors.”* (Paragraph 11.104 of the submitted ES).

7.6 Heritage

7.6.1 A detailed Historical Impact Assessment has been carried out by Archaeology Wales and accompanies the application. This work included a Desk-Based Assessment (DBA) which is contained in Appendix 9.1 of the ES. The DBA reviews the potential for impacts on the settings of heritage assets and buried archaeology.

7.6.2 Concluding their assessment of the proposal in respect of heritage assets such as listed buildings, parks and gardens and scheduled ancient monuments (Chapter 9 of the DBA), Archaeology Wales state that:

“Given the restricted views created by hedgerows and buildings on the levels themselves and the relative distance of many of the designated assets, the Listed Buildings, Parks and Gardens and Scheduled Ancient Monuments are not impacted by the development with the exception of Wilcrick Hill Camp Scheduled Monument (MM127) which has a view over the levels including the proposed development area. However, the view currently encompasses modern development and extent of the view remains unrestricted by the proposals, therefore the impact is considered to be low.” (Paragraph 9 of the HIA as contained in Appendix 9.1 of the ES)

7.6.3 Archaeology Wales also conducted an ‘ASIDOHL2’ study to determine the potential impact of the proposed development to the Gwent Levels Landscape of Outstanding Historic Interest.

7.6.4 The ‘ASIDOHL2’ survey work is included in Appendix 9.2 of the ES. It concludes that in respect of the HLCAs [Heritage Landscape Character Areas] there would be *“a distinct visual change, potentially fragmenting the continuous agricultural landscape currently visible. That being said, significant viewpoints are limited, long distance views across the landscape are soon obscured by boundary vegetation. Steps have been taken to reduce visual impacts, through positioning development back from the main publicly accessible thoroughfares, creating buffer zones around ditches and reens, and retaining existing*

boundary vegetation.” (Paragraph 7.1.6 of the ASIDOHL2 contained in Appendix 9.2 of the ES).

- 7.6.5 Archaeology Wales also reviewed the potential for the proposal to impact buried archaeology. The work informed an Palaeoenvironmental Survey carried out in September 2020. A copy of the Palaeoenvironmental Survey is contained within Appendix 9.3 of the submitted ES. The survey confirmed that only small areas might be impacted by the steel posts of the panel frames of the development.

7.7 Ecology and Ornithology

- 7.7.1 The ecological and ornithological survey work enclosed with this DNS application was carried out by Western Ecology. These subjects form separate Chapters within the ES; Ecology forming Chapter 5 and Ornithology Chapter 6.

Ecology

- 7.7.2 Chapter 5 (Ecology) of the ES assesses the likely significant effects on the environment from the construction, operation and decommissioning of Rush Wall Solar Park on the following environmental receptors and/or resources:

- Designated nature conservation sites
- Notable habitats
- Notable species

- 7.7.3 The ecological survey work concluded that the construction phase of solar park would have no significant adverse effects on valued ecological receptors as the majority of the habitats supporting these features will be retained in an undeveloped buffer zone outside the equipment footprint. This includes interest features of Local, National and International nature conservation sites, habitats such as hedgerows and reens, bats, amphibians, water voles, and aquatic plants and invertebrates.

- 7.7.4 The operation of the solar park will have a minor, long-term positive effect on a range of valued ecological receptors. This will be through retaining the undeveloped buffer zone along site boundaries, reduced management pressures on land that is currently an intensively managed grassland habitat, and the creation of an additional 33ha of grassland habitats on land that is currently in arable rotation.

- 7.7.5 Receptor specific enhancement detailed within the submitted Landscape and Ecology Management Plan (LEMP) includes bat roosting and bird nesting boxes, removal of shading vegetation along ditches, creation of habitat for Shril Carder Bee and management of buffer zone grassland for biodiversity.

- 7.7.6 Cumulative impacts were considered by the ES for a diverse range of planning applications provided by Newport City Council and Monmouthshire County Council. The ES concludes that cumulative impacts are unlikely.

Biodiversity Net Gain

- 4.3.5 In the absence of other tools specific to Wales, Defra Biodiversity Metric 3.0 has been applied to habitat areas and watercourses at this site to provide a quantitative assessment of biodiversity net gain. This has not been applied to hedgerow habitat.
- 4.3.6 Taking the following into account, a predicted net gain of 144 habitat units is likely, representing a 75% increase over site baseline:
- habitat losses associated with built infrastructure and associated access tracks,
 - improvement of habitat quality associated with under panel grassland habitats,
 - improved grassland habitat quality associated with ree and ditch buffers,
 - improvement in areas where arable has been planted to grassland.
- 4.3.7 In addition, taking the following into account, a predicted net gain of 19.9 River units is likely, representing a 18% increase over site baseline
- improvement in ditch habitat quality due to changes in land management and active scrub removal to open up ditch habitat.

Ornithology

- 7.7.7 Chapter 6 (Ornithology) of the ES assesses the likely significant effects on the environment from the construction, operation and decommissioning of Rush Wall Solar Park as described in Chapter 2 on the following environmental receptors and/or resources:
- Nature conservation sites designated for ornithological interest features
 - Wintering and passage birds
 - Nesting birds
- 7.7.8 The ornithological work concluded that following mitigation for breeding and wintering Lapwing, the construction phase of solar park would have no significant adverse effects on ornithological interest features of National and International nature conservation sites within the zone of influence of this development.
- 7.7.9 The ES accepts that there may be temporary disturbance of individual ground nesting birds during the construction phase. The provision of Lapwing breeding mitigation and nesting bird checks prior to the start of works would minimize adverse effects to an acceptable level.

- 7.7.10 By creating an undeveloped buffer zone to the hedgerows and reens, adverse effects on hedgerow and marshland/water nesting birds during construction will be avoided.
- 7.7.11 Following mitigation for wintering Lapwing, the operational phase of solar park would have no significant adverse effects ornithological interest features of National and International nature conservation sites within the zone of influence of this development.
- 7.7.12 Providing optimal habitat away from agricultural operations in the breeding Lapwing mitigation area will give local ground nesting birds the opportunity to nest and successfully raise chicks.
- 7.7.13 Enhancement detailed within the Landscape and Ecology Management Plan (LEMP) includes bird nesting boxes and management of buffer zone grassland for biodiversity which will benefit local bird species.
- 7.7.14 Cumulative impacts were considered for a diverse range of planning applications provided by Newport City Council and Monmouthshire County Council. The ES concludes that cumulative impacts are unlikely.

7.8 Hydrology, Water Quality and Flood Risk

- 7.8.1 Chapter 7 of the ES assesses the Hydrology, Water Quality and Flood Risk considerations of the development proposal. The work was carried out by chartered hydrologists and geologists Yellow Sub Geo.
- 7.8.2 Yellow Sub Geo advise that because the application site is currently used for intensive dairy farming and associated cultivation of forage crops including maize. The conversion of the Site to one of a solar park with associated low-intensity grazing grassland represents *“the opportunity to deliver a moderate beneficial effect to the water quality of the reens and ditches on site. This in turn will have a beneficial effect on the Gwent Levels Redwick Llandevenny SSSI features in the vicinity of the site”* (ref. Paragraph 7.2 of Chapter 7 of the ES).
- 7.8.3 The conversion of the site from intensive agriculture to one of a solar farm with accompanying low-intensity grazing represent a small beneficial effect on the Site’s capacity to hold and store rainfall. The ES outlined that *“this is because the current farming practices involve the use of heavy agricultural equipment that compact soil and lessen infiltration and because the current cultivation of forage crops leaves the soil bare in winter months. Neither will be the case under a solar park system”* (Paragraph 7.3 of the ES).

- 7.8.4 The developer has committed to use of best practice in environmental controls during the construction period, as documented in the appended Outline Construction Environmental Management Plan.
- 7.8.5 The submitted Construction Environmental Management Plan (CEMP) sets out a number of protocols that shall be employed and adhered to during the construction of the solar park in order to manage and mitigate any impacts to the water environment. Effects on the water environment will therefore be controlled at a negligible level during the construction phase.
- 7.8.6 The solar park design has been compiled in order to build into the design inherent mitigation against any future impacts on the water environment.
- 7.8.7 Yellow Sub Geo also carried out A Flood Consequences Assessment (FCA) has also been prepared by Yellow Sub Geo. The assessment confirms that the project has an operational period to 2055/ 2065 and is considered to be classed as “less vulnerable”.
- 7.8.8 The consequences of flooding on the proposed development can be managed to an acceptable level (i.e. a level that does not adversely affect the operation and commercial viability of the solar park). They also conclude that the proposal is considered to be ‘*no risk to the public*’ and that there is ‘*no detriment to flood risk elsewhere*’. (FCA Chapter 8: Conclusions).
- 7.9 **Trees and Hedgerows**
- 7.9.1 Woodland & Countryside Management Ltd. was commissioned to carry out a BS5837 (2012) Tree Survey.
- 7.9.2 The Tree Survey informs the proposal layout and provides protection measures to ensure no harmful impacts to trees or hedgerows during installation.
- 7.9.3 For the avoidance of doubt, the Tree Survey is not an ES document and was produced to assist the layout plans and also the protection measures necessary to hedgerows and trees. A suite of Plans numbered 1 to 9 accompany the DNS application submission.
- 7.10 **Glint and Glare**
- 7.10.1 The Consultants that carried out the Glint and Glare survey work; Pager Power, have also reviewed the potential glint and glare impacts on highway users. The Assessment concludes that “*reflections are not predicted for road users on any major roads due to a*

lack of visibility of the reflecting panel locations” (Ref. ‘Overall Conclusions’: Paragraph 7.1 of the Glint and Glare Survey).

7.10.2 Glint and Glare has already been discussed in the context of residential amenity under the ‘Residential Amenity’ Chapter of this report. In respect of residential amenity, the ‘Overall Conclusions’ Chapter 7 of the Glint and Glare assessment work advises that in relation to predicted residential impacts *“Reflections at dwelling receptors are unlikely to be experienced due to restricted visibility of the site, considering the existing and proposed screening in the area.”* (Ref. Paragraph 7.1)

7.11 **Lifespan of the Development / Decommissioning**

7.11.1 The proposed development would be installed for a 35-year period after which all panels and associated equipment can be removed from the site.

7.11.2 Concerning decommissioning, despite this phase of the development being some 40years away (allowing for the timeframe to implement a permission), the applicant can advise that the development contains mostly recyclable materials including non-reflective recyclable glass, copper, aluminium, steel, and silicon in semi-conductors.

7.11.3 Since 2012, solar (PV) modules have fallen within the remit of the Waste Electrical and Electronic Equipment Regulations (The WEEE Directive). This regulates the appropriate treatment of end-of-life products and requires that manufacturers and importers of electronic and electrical equipment ensure the take-back and recycling of their discarded end-of-life products in Europe.

7.11.4 As and when the decommissioning of this development is required to take place, the applicant will take full advantage of such schemes which are available. A company will be contracted to collect the materials and take them to be recycled.

7.11.5 An example of such a scheme operating today is ‘PV Cycle’ which is a Europe-wide company that operates within the UK. It helps solar plant operators to recycle materials through a free take-back scheme, thereby allowing them to comply with their legal obligations under the WEEE Directive.

8. CONCLUSION

- 8.1 This This report has been prepared in support of the proposal for the Installation of a solar park on Land near the village of Redwick, south east of Newport, Wales on the Caldicot Levels (Coordinates E341478, N185552).
- 8.2 The proposed solar park is a temporary installation with permission being required to allow for a 35 year operation.
- 8.3 The location of this proposal is determined by the rare opportunity to complete an economically viable electricity grid connection that will provide solar (PV) installation with an approximate design capacity of 75MW with the connection opportunity being an available onsite connection to the overhead 132kV electrical lines.
- 8.4 The applicant has chosen the most suitable available land for this project. The location benefits from being well screened and the proposal accommodates and mitigates where necessary, the on-site and off-site constraints of the project.
- 8.5 The proposed solar park is a temporary installation and after its lifetime the site can be returned to its original appearance with all equipment being removed from the site directly following the end of the term and once electricity ceases to be exported to the Grid.
- 8.6 The proposal will introduce important renewable energy generation to contribute towards Wales' strategic objectives of generating 70% of its electricity consumption from renewable energy by 2030 (ref. Welsh Government's 'Energy Generation in Wales 2018' and Planning Policy Wales Edition 10).
- 8.7 Planning Law requires that applications for planning permission must be determined in accordance with the development plan, unless material considerations indicate otherwise.
- 8.8 The application is in compliance with the strategy and policies of the adopted Newport Local Development Plan 2015 and it also promotes the strategy and policies of the Monmouthshire County Council Adopted Local Development Plan 2014; the administrative area of which is adjacent the application site.
- 8.9 In addition, the proposal promotes the objectives and policies of National Planning Policy Wales (PPW) v1 as well as the objectives of the 'Draft' National Development Framework for Wales which is likely to have been adopted during the determination period of this application.

8.10 All relevant development plan documents and national planning guidance for Wales support large scale solar renewable energy developments where appropriately sited and where the environmental impacts of a proposal are shown to be acceptable. The application shows that environmental impacts are acceptable and where adverse impacts might occur, these can be satisfactorily mitigated through design and a professionally managed installation.

8.11 The proposal also has important environmental, ecological and socio-economic benefits which build upon the case in support of the proposal's compliance with the adopted Development Plan for Newport.

- The proposal will create a solar park with a design capacity of 75MW of clean energy generation.
- 75MW of clean renewable electricity will produce enough clean renewable electricity to power 18,755 homes per year*, a saving of 16,611 tonnes CO₂e**.
- Taking the following into account, a predicted net gain of 144 habitat units is likely, representing a 75% increase over site baseline:
 - habitat losses associated with built infrastructure and associated access tracks,
 - improvement of habitat quality associated with under panel grassland habitats,
 - improved grassland habitat quality associated with reed and ditch buffers,
 - improvement in areas where arable has been planted to grassland.
- In addition, taking the following into account, a predicted net gain of 19.9 River units is likely, representing a 18% increase over site baseline
 - improvement in ditch habitat quality due to changes in land management and active scrub removal to open up ditch habitat.
- Jobs are created through both the consultancy, and construction and operation phases of solar developments. In addition, during construction, workers will use local services and accommodation, providing support for local business and the economy.
- Income is generated from the development and this will also provide important additional payments of local business rates to Newport City Council.
- The development constitutes agricultural diversification. The proposal introduces an economically viable use of relatively poor-quality agricultural land. The land will continue to be grazed post installation of the solar farm.

* Based on an annual average domestic consumption per household (Great Britain) of 3,799 kWh. Source BEIS, Regional and Local authority electricity consumption statistics 2018.

** Based on 'Emissions associated with the generation of electricity at a power station (Electricity generation factors do not include transmission and distribution). Source BEIS, Greenhouse gas reporting: conversion factors 2020.

- 8.12 It is the conclusion of this Statement that the grant of planning permission for this Development of National Significance should be seen as an important opportunity to deliver on the ambitious environmental, economic and social ambitions of the local area, Newport and Wales.

APPENDICES

Appendix 1

Copy Site Location Plan Ref. 1578-0200-00

Appendix 2

Copy of Site Layout Plan Ref. 1578-0201-00

Appendix 3

Copy of Fig2.1 of the Environmental Statement – Rush Wall Solar Park Field Numbering Plan

Appendix 4

Copy of Pre-Application Advice letter received from Newport City Council (ref. P/19/00090) dated 14th November 2019

Appendix 5

Copy of Pre-Application Advice letter received from Monmouthshire County Council (ref. DM/2019/01114) dated 15th October 2019

Appendix 6

Copy of Appendix 7 of the LEMP - Biodiversity Metric 3.0

Appendix 7

Copy of Email from The Welsh Government Department for Environment & Rural Affairs ref. Agricultural Land Classification

Appendix 8

Copy of Scoping Direction report issued by the Planning Inspectorate ref. 3220457

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