Proposed Solar Farm
Dragon LNG Meadow
Milford Haven

Dragon LNG

November 2021

BARTON WILLMORE
PLANNING / DESIGN / DELIVERY

Proposed Solar Farm
Dragon LNG Meadow
Milford Haven
Planning Statement

Prepared on behalf of Dragon LNG Limited

Status:	Draft	Final
Issue/Rev:	01	02
Date:	November 2021	November 2021
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Ref: 33264/A3/AG

Date: November 2021

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1.0 INTRODUCTION

1.1 This Planning Statement has been prepared by Barton Willmore on behalf of Dragon LNG Limited (hereafter referred to as the 'Applicant'), who are working in partnership with Anesco limited, and provides information in support of the full planning application at Dragon LNG Meadow, Milford Haven (hereafter referred to as the 'Site') for the proposed development as described below (hereafter referred to as the 'Application'):

> **Construction and operation of a solar farm, an education building, composing solar modules, solar inverters and all associated infrastructure and works, including engineering, drainage and landscaping.**

1.2 The Statement sets out the details of the Application and should be read in conjunction with the drawings and information accompanying the planning application which comprise:

Table 1.1 – Accompanying Documents

Report / Plan	Consultant
Application Form	Barton Willmore
Planning Statement	Barton Willmore
Design and Access Statement	Barton Willmore
Site Location Plan	Anesco
Planning Site Layout	Anesco
Block Plan	Anesco
Single Line Diagram	Anesco
Typical Building Plans & Elevations	Anesco
Typical Section Through Array	Anesco
Typical Cable Ladder Details	Anesco
Typical Fence Detail	Anesco
Ecology Report	SLR
Flood Risk Assessment	SLR
Solar Photovoltaic Glint and Glare Study	Pager Power

Heritage Assessment	SLR
Agricultural Land Quality	Land Research Associates
Landscape and Visual Technical Note	Barton Willmore
Transport Statement	Motion
Field Classroom – Proposed West Elevation	Pembroke Design Limited
Field Classroom – Proposed East Elevation	Pembroke Design Limited
Field Classroom – Proposed Roof Plan and Front Elevation	Pembroke Design Limited
Field Classroom – Proposed Ground Floor Plan	Pembroke Design Limited
Field Classroom – Proposed Site and Site Section	Pembroke Design Limited
Field Classroom – Existing Site and Site Section	Pembroke Design Limited
Field Classroom – Location Plan	Pembroke Design Limited

1.3 The remainder of this Statement comprises the following chapters:

- Section 2.0 provides a description of the application Site, its surroundings and any relevant planning history of the Site;
- Section 3.0 describes the Proposed Development in more detail;
- Section 4.0 sets out the need for renewable energy and the sustainability implications of the development;
- Section 5.0 sets out the relevant national, regional and local planning policies and guidance relevant to the Site and the Proposed Development;
- Section 6.0 considers the main planning issues and provides an assessment of how the application complies with planning policy; and
- Section 7.0 summarises the Planning Statement and draws conclusions.

Dragon LNG Limited

1.4 Dragon LNG Limited is a company committed to providing their customers with competitive access to the UK's natural gas market through a safe and reliable Liquified Natural Gas (LNG) terminal while remaining profitable and agile in the evolving energy sector. Their LNG terminal at Waterson, Milford Haven in Pembrokeshire, receives, stores and regasifies LNG which is a vital source of clean and reliable energy for the UK.

1.5 Dragon LNG Limited is a sister company of Milford Energy Limited. Both Dragon LNG Limited and Milford Energy Limited are 100% owned by the same entity, Dragon LNG Group Limited. Although this application is made bv Dragon LNG Limited, it is the intention to transfer ownership and operatorship of the solar panels and plant at the meadow area of the Waterston site to Milford Energy Limited.

Anesco Ltd

1.6 Anesco Ltd is a national company dedicated to helping businesses, local authorities, housing associations and homeowners to reduce their carbon emissions. Anesco provides comprehensive energy services, from audits through to recommendations, installations and capital funding plans. Anesco's specialist team has managed some of the UK's largest and most complex energy efficiency projects.

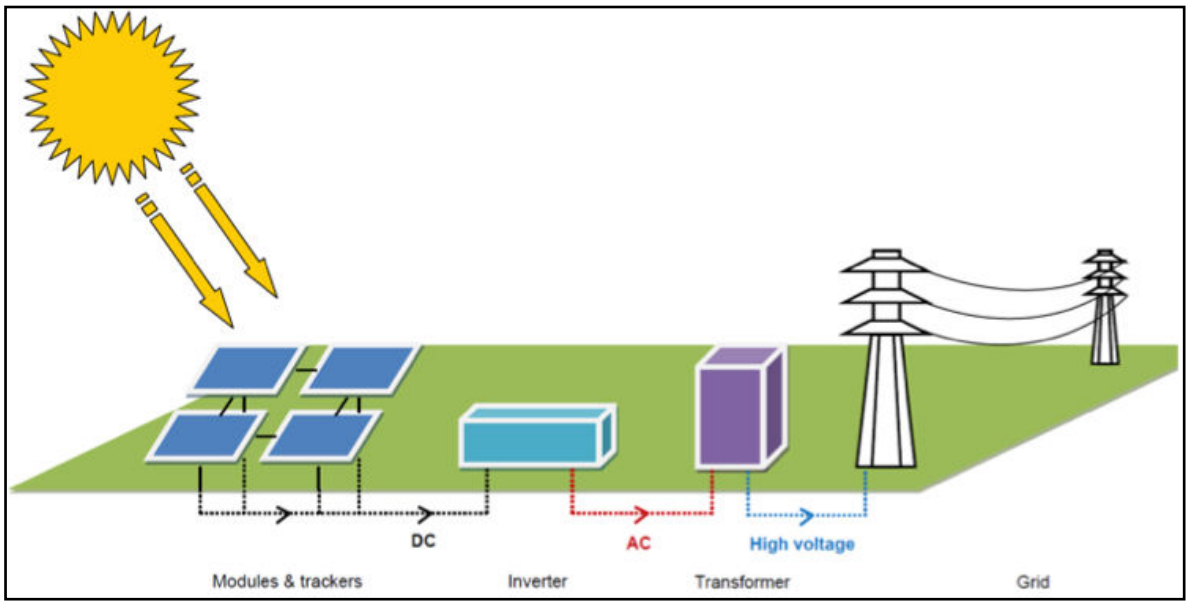
1.7 Anesco has designed and built some of the Country's largest solar farms with a total of 525MW of solar constructed in the UK across 105 sites. The company were the first in the UK to introduce subsidy-free solar farms and they are playing a key role in moving the country towards and low carbon and renewable future.

Solar Technologies – Photovoltaic (PV)

1.8 Two alternative approaches have been developed to capture the sun's energy and convert it into electricity – solar thermal and solar photovoltaic ('PV'). Solar thermal power generation uses a thermal process to convert heat energy into electricity, for example by using concentrated solar radiation to create high temperature steam in conjunction with conventional steam turbines for electricity generation.

1.9 PV solar, in contrast, converts the sun's light directly into electricity based on semiconductor technology. The key components of a solar farm are the solar panels, inverters and transformers as illustrated in the diagram overleaf.

Figure 1.1: Key Components of a Solar Farm



1.10 A solar panel consists of a cluster of photovoltaic cells that convert solar irradiation into direct current electricity. When sunlight strikes the panel's surface, a flow of electrons is generated proportional to both the intensity of the sunlight, and to the surface area of the panel. Solar panels are connected in series to obtain higher voltages and in parallel to increase total current. Groups of panels are assembled into modules.

1.11 Direct current ('DC') electricity generated by the modules is converted by an inverter to alternating current ('AC') electricity, and its voltage is stepped-up via a transformer. High voltage AC electricity is exported to the grid.

1.12 There are several different PV solar technologies which have been developed using different materials and manufacturing processes. The majority of installed PV solar capacity uses crystalline silicon technology that comprises solar cells made of specially prepared silicon crystals. Crystalline silicon technology includes both mono crystalline and multi crystalline cells and is a well-established technology with a relatively long and satisfactory track record.

Environmental Impact Assessment

1.13 A Request for a Screening Opinion under Regulation 5 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 was submitted to Pembrokeshire County Council (hereafter referred to as 'the Council').

1.14 A formal screening opinion was subsequently issued by the Council dated 29 September 2021. The Screening Opinions concluded that the development is unlikely to have significant effects on the environment and the Council have confirmed that the proposal is not EIA development and accordingly an EIA is not required to accompany this planning application.

2.0 THE SITE AND PLANNING HISTORY

Site Location

2.1 The Site is located between the settlements of Milford Haven (approximately 1.2km west) and Neyland (approximately 2.9km east) within the administrative area of Pembrokeshire County Council. The uses surrounding the Site include the following:

- North/East: The industrial complexes of the Dragon LNG Terminal are located immediately north-east of the site.
- South: Predominantly grassland immediately to the south, interspersed with shrubs. Beyond this is the Milford Haven Waterway (MHW). Pembroke Power Station is also located on the southern side of the MHW, approximately 1.8km south of the Site.
- West: The boundary is marked by dilapidated security fencing and patches of scrubby vegetation, while the fields themselves are separated by a robust existing hedgerow. There is a small ancient woodland to the north-west of the Site.

Site Description

2.2 The Site measures approximately 15.8 hectares (ha) and comprises two pastoral fields between the Dragon LNG Terminal to the north and the coastline of the MHW to the south. The Site boundaries are predominantly defined by existing hedgerows, with the southern boundary marked only by post and wire stock fences.

2.3 There are a number of Public Rights of Way (PROW) present within the wider area, the most notable of which are:

- PRoW PP51/22, which extends east-west along the coastline to the south of DLNG Terminal. It runs adjacent to the southern Site boundary before running north along the western boundary to meet PRoW PP65/38/1;
- PRoW PP65/38/1, which continues northwards to meet the B4325 to the east of Milford Haven;
- A cluster of PRoW in the south-eastern extent of the study area to the south and east of Llanreath, including PRoW SP32/3/3; and
- PRoW SP34/7/2 and SP34/7/1, which extend east-west along the southern coastline of the waterway.

2.4 The Pembrokeshire Coast Path National Trail extends along approximately 300km of the Pembrokeshire coastline. It incorporates a number of the PRoW set out above, including PRoW

PP51/22 adjacent to the Site, and SP34/7/2/ and SP34/7/1 on the southern coastline of the MHW.

2.5 The site is located within Flood Zone 1 of the Natural Resources Wales Flood Map for Planning and is therefore not constrained by flood risk in planning policy terms.

2.6 The Site is not located within a Conservation Area and there are no listed buildings or Scheduled Ancient Monuments within the Site. The nearest listed buildings include Stable Block at Castle Hall (Grade II) and the Arched Entry to South of Castle Hall House (Grade II) which are approximately 1.35km south-east of the site.

2.7 According to the Agricultural Land Classification predictive data map the Site is located predominantly within Grade 2 agricultural land, meaning it is good quality agricultural land, with areas of 3b and 4.

2.8 It is understood that there are no Tree Preservation Orders (TPOs) within the Site.

Planning History

2.9 Pre-application advice from the Council (PR/0272/21) has confirmed that there is no planning history relating to this specific site that would be relevant to this case, albeit that part of the site has been included in previous applications for amendments to the approved LNG Terminal (application ref. 03/1324/PA and 06/0493/PA).

Pre-application Advice

2.10 The pre-application advice from the Council on 21/10/2021 highlights that the principle of renewable energy production is supported by national and local planning policy and states that the proposal is resource efficient and climate responsive. It is also noted that the proposed development is flexible and adaptable in terms particularly of the relatively ease of returning the site to its former condition and use on the expiration of the development's life. The Council's pre-application advice also confirmed the scope of the supporting application documentation.

3.0 THE PROPOSED DEVELOPMENT

Proposed Solar Farm

3.1 The Application Site is approximately 15.8 ha and will comprise a photovoltaic (PV) solar farm capable of an installed generating capacity of 9.99 Megawatts (MW). The solar farm is proposed to be installed for a 40-year period. The development would include an array of solar PV panels, cabling and panel mounting frames.

3.2 The proposal will utilise a renewable energy source to generate electricity. A solar farm of this size is expected to power approximately 2,895 average UK homes. Furthermore, the project is expected to generate 11,093MWh per annum which is anticipated to save over 2,563 tonnes of CO2 emissions per annum. As such, the proposed development will play a very significant role in enabling combating climate change and the move towards a low carbon future.

3.3 The principal elements of the proposal are as follows:

- The panels would be approximately 0.5m above the ground and have a height of no greater than 2.5m.
- There would be approximately 43 inverters mounted onto the back of the arrays.
- A total of 4 low voltage (LV) cabins each with an open-air transformer would be installed within the arrays as well as high voltage (HV) switchgear.
- 2.4m high deer fence and CCTV.
- An education building set into the slope of the site comprising a mono pitch design with a green roof to minimise its impact upon the surrounding area. It measures 20m x 12m 4.7 m in height (at the highest point) and is positioned to the north of the proposed solar farm. Internally the building accommodates a field classroom with associated storage and toilets. The building elevations would be finished in larch cladding with UPVC windows and doors. Vehicular access is provided via the existing lane to the west with lay-by parking provision for circa 7 vehicles. The green roof would also accommodate solar panels.

Grid Connection

3.4 The works required to connect the Solar Farm to the National Grid will be undertaken separately by the Distribution Network Owner's (DNO) utilising its permitted development rights prescribed in s.17 of the Town and Country Planning (General Permitted Development)

Order 1995. The connection into the grid therefore does not form part of the Application. The route will be confirmed by the statutory undertaker nearer the time once the necessary surveys have been undertaken and the optimum route identified.

4.0 NEED AND SUSTAINABILITY

4.1 In the 21st century climate change is a recognised phenomenon of international and global significance. The scientific evidence is overwhelming and identifies that climate change, as a result of rising greenhouse gas emissions, threatens the stability of the world's climate. The continuing production of greenhouse gases and carbon dioxide in particular, is considered to be contributing to the increasing rate of climate change.

4.2 In the UK the main strategy for tackling climate change is to significantly reduce greenhouse gas emissions by creating a low carbon economy. As more than two thirds of the world's carbon dioxide emissions come from the way we produce and use energy, energy policy must play a major part in meeting the climate change challenge.

4.3 Although the Government is implementing measures to save energy at the same time energy demand worldwide continues to increase. Therefore, a key element of the Government's energy strategy is to provide support for low carbon technologies and in particular incentivise the development of renewable technologies used to generate electricity. Considering the risk posed by climate change and depleting fossil fuel reserves the Proposed Development represents an important part of the UK's strategy to reduce carbon dioxide emissions and improve security of energy supply.

4.4 The Welsh Government's approach to climate change follows a "Team Wales" approach – meaning public bodies to work together to maximise resources, develop consistent communications and minimise duplication on the path to net zero, and that by working together and taking collective action they can deliver a stronger, fairer and cleaner Wales for future generations. Their main strategies include achieving cleaner air, putting an end to harmful agricultural pollution, a decisive shift away from fossil fuel extraction and towards green energy, working towards a net zero public sector in Wales by 2030, and going beyond recycling and making Wales a zero waste nation.

4.5 The remainder of this section identifies the context and policy framework which underpin the need for the Proposed Development.

International Policy Framework

4.6 It is widely accepted that greenhouse gas emissions need to be significantly reduced and in 2005 the Kyoto Protocol came into effect providing the first ever framework for international action. Under the Protocol, the United Kingdom, together with 37 other industrialised countries (called "Annex I countries"), committed themselves to reducing greenhouse gas emissions by 5.2% from 1990 levels by the year 2012.

4.7 The UK, along with other EU countries has signed up to the EU renewables directive. The purpose of the directive is to set targets for the proportion of energy each member state must generate from renewable energy sources including wind, solar, tidal and biomass. The directive states that 15 percent of total UK energy consumption should be generated from renewables by 2020, with this target rising to 80 percent by 2050.

National Policy Framework

4.8 The United Kingdom's Climate Change Programme was launched in November 2000 by the British Government to tackle climate change and cut greenhouse gas emissions. To implement this strategy a raft of legislation and guidance has emerged since that time which has reinforced the national commitment towards addressing both the causes and consequences of climate change.

4.9 The key initiatives and policy documentation is outlined below in date order:

Stern Review 2006

4.10 The Stern Review acknowledges that reducing the risk of climate change requires collective and urgent action. The Review scrutinises the problems of climate change from a global rather than a national perspective and provides specific guidance on how a collective international response is required to tackle climate change. The Review recognises that the challenges for the UK include accelerating the deployment of a portfolio of low-carbon technologies which are internationally available.

Energy White Paper 2007

4.11 The Energy White Paper sets out policy to deliver a secure, low carbon energy mix for the UK and announces specific measures that will ensure individuals; businesses and Government save energy and reduce their carbon emissions. The overarching goal is to reduce carbon dioxide emissions by some 60% by 2050, with real progress by 2020. This surpasses the initial threshold targets which were set in 1997 when the UK government committed itself beyond the Kyoto Protocol target by setting a national goal to reduce carbon dioxide emissions by 20% below 1990 levels by 2010. The Energy White Paper sets out a framework for action to address the challenges facing the country in relation to climate change, cutting greenhouse gas emissions and the need to ensure secure energy supplies.

4.12 The 2007 White Paper reiterates previous commitments made in the 2003 Energy White Paper and Planning Policy Statement 22 on Renewable Energy and the importance of renewable energy generation and the supporting infrastructure. It is stated that renewable energy as a source of low carbon electricity is central to reducing emissions and maintaining the reliability

of energy supplies when indigenous reserves of fossil fuels are declining more rapidly than expected. Renewable energy sources derived from the sun are free and do not rely on finite sources available from the earth's reserves.

Climate Change Act (2008)

4.13 The Climate Change Act 2008 is the basis for the UK's approach to tackling and responding to climate change. It requires that emission of carbon dioxide and other greenhouse gases are reduced and that climate change risks are prepared for. The Act also establishes the framework to deliver on these requirements.

4.14 The Climate Change Act commits the UK government to a legally binding target of at least an 80% cut in greenhouse gas emissions by 2050, to be achieved through action in the UK and abroad. This target is against a 1990 baseline.

Energy Act (2013)

4.15 The Energy Act was granted assent on 18th December 2016. Through the Energy Act, the Government aims to further its objectives to meet the UK's decarbonisation and renewable targets. The Bill will establish a legislative framework for delivering secure, affordable and low carbon energy.

4.16 One of the key elements of the Bill is the introduction of new long-term contracts to provide stable financial incentives to invest in all forms of low carbon energy generation.

UK Solar PV Strategy Part 1: Roadmap to a Brighter Future (October 2013)

4.17 In October 2013, the DECC produced the UK Solar PV Strategy Part 1: Roadmap to a Brighter Future. The strategy recognises that Solar PV is one of a range of key renewable energy technologies that can help to create a clean, balanced UK energy mix. This strategy sets out the vision for solar PV in the UK.

4.18 To ensure this overarching strategic vision is achieved, the roadmap goes onto set out four guiding principles which are designed to form the basis of the Government's strategy for solar PV. These principles can be summarised as follows:

1. Ensure that solar PV has a role alongside other energy generation technologies in delivering carbon reductions, energy security and affordability for consumers;
2. Ensure that the deployment of solar PV delivers genuine carbon reductions in order to meet the UK's target of 15 per cent renewable energy by 2020;

3. Ensure that solar PV proposals are appropriately sited by giving proper weight to environmental considerations. Furthermore, provide opportunities for local communities to influence decisions that affect them; and
4. Ensure that the challenges of deploying high volumes of solar pv are understood and responded to in an appropriate manner.

UK Solar PV Strategy Part 2: Delivering a Brighter Future (April 2014)

4.19 The UK Solar PV Strategy Part 2: Delivering a Brighter Future (April 2014) goes onto reaffirm that the Government recognises that solar PV is an important part of the UK's energy mix. While the roadmap established the principles for solar PV deployment in the UK, part 2 of the Government's strategy focuses on how the overall strategy for further solar PV deployment will be realised.

4.20 The strategy identifies that while large-scale solar farms provide opportunities for greater generation, they can have a negative impact on the rural environment if not well-planned and well-screened. The Strategy also recognises that when well-managed, solar farms could be beneficial for wildlife. The strategy therefore again highlights that one of the key principles set out in part 1 of the strategy is that solar PV proposals should be appropriately sited by giving proper weight to environmental considerations. For this to be achieved it sets out the Solar Trade Association 'Solar Farms 10 Commitments', which are listed in the Table 4.2 below.

Table 4.2: Solar Trade Association - Solar Farms 10 Commitments

1	**"We will focus on non-agricultural land or land which is of lower agricultural quality.**
2	**We will be sensitive to nationally and locally protected landscapes and nature conservation areas, and we welcome opportunities to enhance the ecological value of the land.**
3	**We will minimise visual impact where possible and maintain appropriate screening throughout the lifetime of the project managed through a Land Management and/or Ecology plan.**
4	**We will engage with the community in advance of submitting a planning application.**
5	**We will encourage land diversification by proposing continued agricultural use or incorporating biodiversity measures within our projects.**
6	**We will do as much buying and employing locally as possible.**
7	**We will act considerately during construction, and demonstrate 'solar stewardship' of the land for the lifetime of the project.**
8	**We will seek the support of the local community and listen to their views and suggestions.**
9	**We commit to using the solar farm as an educational opportunity, where appropriate.**
10	**At the end of the project life we will return the land to its former use".**

The Clean Growth Strategy and Clean Growth Grand Challenge

4.21 The 'Clean Growth Strategy (2017)' published by the UK Government sets out ambitious policies and proposals, through to 2032 and beyond, to reduce emissions across the economy and promote clean growth.

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

Renewable Energy Directive (2018)

4.23 The Renewable Energy Directive (2018) includes a binding EU overall target for 2030 of at least a 32% of energy from renewable resources.

The UK's Draft Integrated National Energy and Climate Plan (NECP), January 2019

4.24 This document emphasises the UK's commitment to maintaining a robust climate framework that takes into account evolving scientific knowledge on climate change.

4.25 In the context of the challenge posed by climate change and declining fossil fuel reserves, there is an established need for renewable energy generation.

Energy White Paper (December 2020)

4.26 Nationally, the Government announced plans to transition to net zero by 2050 through the Energy White Paper (December 2020). The document acknowledges the need to act and achieve the target through "investment and innovation by the public and private sectors". One of the goals to achieve net carbon energy within the White Paper is the growth of "clean energy technologies". Page 9 of the White Paper sets out:

4.27 *"Decarbonising the energy system over the next thirty years means replacing – as far as it is possible to do so - fossil fuels with clean energy technologies such as renewables, nuclear and hydrogen."*

4.28 One clear way to decarbonise the energy system is through clean electricity, which the White Paper outlines *"will become the predominant form of energy, entailing a potential doubling of electricity demand and consequently a fourfold increase in low-carbon electricity generation."* To address this demand, the White Paper acknowledges that *"a low-cost, net zero consistent system is likely to be composed predominantly of wind and solar"* with the need for *"sustained growth in the capacity of these sectors in the next decade to ensure that we are on a pathway that allows us to meet net zero emissions in all demand scenarios".*

4.29 The White Paper notes that by 2050, energy demand is likely to double as a result of increased uptake in electric vehicles and the electrification of heat, which in turn means there is a

requirement for a fourfold increase in the amount of low carbon generation that is currently in the grid, in order to hit the net zero target. Essentially, we need to speed up the rate of delivery of renewable and low carbon energy compared to current delivery rates.

Net Zero Wales Carbon Budget 2 (2021 to 2025) (October 2021)

4.30 Net Zero Wales is the first all-Wales Plan to tackle the climate emergency, and the first which has net zero as its guiding ambition. It represents a new phase in their decarbonisation journey with a new net zero target. The document highlights that alongside reducing fossil-fuelled generation in Wales, there is a need to increase generation from renewables in ways which are the most cost effective and beneficial for Wales.

Pembrokeshire County Council Climate Emergency

4.31 In May 2019, the Council declared a climate emergency and in July 2019 members voted to create an action plan to steer PCC towards becoming a net zero-carbon local authority by 2030. The Council follow a pragmatic approach to becoming a net zero-carbon local authority by 2030, initially focussing on the carbon emissions that were measured by the Council, however recognising that this approach needs to be flexible to accommodate changing circumstances, such as including the reporting requirements introduced by the Welsh Government as part of their ambition for a carbon neutral public sector by 2030.

4.32 The action plan highlights that the Council has sought to significantly increase the amount of renewable electricity that it generates but has been frustrated by the limited capacity of the local electricity-distribution network. The document also makes reference to the fact that the County of Pembrokeshire has 20% of all installed solar PV capacity in Wales, which is testament to the excellent solar irradiance found at Pembrokeshire's latitude compared with other areas of the country.

Location Requirements for Solar Farms

4.33 It should be noted that solar farms have very specific locational requirements which means they cannot be located 'anywhere', and suitable location are severely limited. These are outlined below:

- Grid Connection - Solar farm developments cannot be located 'anywhere' as they have to be able to connect to the National Grid where there is sufficient capacity to export the power that will be generated from the development. The grid connection for this development is directly into the Dragon LNG facility where there is an existing arrangement.

- Ensuring Viability and Feasibility - When a suitable connection is found other factors need to be taken into consideration, which ultimately impact upon the viability and feasibility of a solar farm. In simple terms, a solar farm could potentially be located up to circa 2km from the point of a suitable grid connection, however, the level of efficiency drops the further away from the connection. As such, it is preferable to locate the site immediately adjacent to the point of connection to ensure a feasible scheme.

- Land Designations - The Applicant also seeks to ensure that their sites avoid sites with protective designations such as Green Belt, National Parks, Areas of Outstanding Natural Beauty (AONB), Sites of Scientific Interest (SSSI) and Conservation Areas. When these elements are factored in, it further limits where solar farms can be located.

4.34 In summary, there are very few sites where solar farms can be located, when factors such as suitable grid connection, viability and feasibility and land use designations are taken into account.

5.0 PLANNING POLICY CONTEXT

5.1 The following section provides an overview of the national and local planning policies that are specifically relevant to the application site and proposed renewable energy generation.

National Policy Framework

5.2 It is widely accepted that greenhouse gas emissions need to be significantly reduced and in 2005, the Kyoto Protocol came into effect providing the first ever framework for international action. Under the Protocol, the United Kingdom, together with 37 other industrialised countries (called "Annex I Countries"), committed themselves to reducing greenhouse gas emissions by 5.2% from 1990 levels by the year 2012.

5.3 The Committee on Climate Change (CCC) published a report in May 2019, titled 'Net Zero – The UK's contribution to stopping global warming'. The report responded to a request from the Government to reassess the UK's long-term emissions targets and recommended a new emissions target for the UK: net zero greenhouse gases by 2050.

5.4 Chapter 6 of CCC's report refers to delivering a net zero emissions target for the UK. The chapter sets out a number of actions, including the transition to a net zero emissions economy and what is needed to underpin delivery of net zero emissions un the UK. 'Part b' sets out key near term actions to put the UK on track on net – zero greenhouse gases emissions by 2050, and recommends that more rapid electrification must be accompanied with greater build rates of low carbon generation capacity, accompanied by measures to enhance the flexibility of the electricity system to accommodate high proportions of inflexible generation. In addition, the report presents that development of new infrastructure will be important in opening new avenues for decarbonisation.

Energy Efficiency Strategy (February 2016)

5.5 The Welsh Government published the 'Energy Efficiency Strategy' in February 2016, which highlights the Welsh Government's plan to promote energy efficiency from 2016 until 2026.

5.6 The strategy emphasises that The Welsh Government has an ambition to make the long-term transition to a low carbon energy system.

Energy White Paper (December 2020)

5.7 The UK Government published 'The Energy White Paper – Powering our Net Zero Future' in December 2020 (hereafter referred to as the 'White Paper'. The White Paper builds on the Prime Minister's Ten Point Plan and provides a long term strategic vision for the UK's energy

system. The White paper establishes the Government's goal of a decisive shift from fossil fuel to clean energy, in power, buildings and industry, whilst creating jobs and growing the economy.

5.8 The White Paper confirms that the renewable capacity has grown significantly since 2010, due to the rapid growth of renewables. This growth in renewable capacity has been driven by the deployment of wind, solar and biomass. The increase is attributed to the falling costs of these types of renewable energy which has allowed deployment in a 'subsidy-free' market.

5.9 As part of the Prime Minister's Ten Point Plan for a Green Industrial Revolution, the Government will continue to hold regular Contracts for Difference (CfD) auction rounds every 2 years to bring forward a range of low-cost renewable technologies. It has been announced that the next auction (in late 2021) will be open to onshore wind, solar photovoltaics and other established technologies, as well as offshore wind. The Government is hoping to award CFDs for a total of around 12GW of low-cost renewable generation. The White Paper is clear that:

> *"A low-cost, net zero consistent system is likely to be composed predominantly of wind and solar"*

and that:

> *"Onshore wind and solar will be key building blocks of the future generation mix, along with offshore wind."*

5.10 Renewable energy generation from solar has been identified by the White Paper as a key element of the future energy mix in the UK. It states that the UK needs

> *"…sustained growth in the capacity of these sectors in the next decade to ensure that we are on a pathway that allows us to meet net zero emissions in all demand scenarios".*

National Planning Policy

Future Wales: The National Plan 2040

5.11 Future Wales is Wales' national development framework (hereafter referred to as 'Future Wales'), setting the direction for development in Wales to 2040. It is a development plan with a strategy for addressing key national priorities through the planning system, including sustaining and developing a vibrant economy, and achieving decarbonisation and climate resilience.

5.12 Future Wales was published on the 24th of February 2021 and is the highest tier of development plan. Future Wales is one of a number of documents concerned with infrastructure and development in Wales.

5.13 Future Wales recognises the challenges climate change poses and recognises the significant impacts on the wellbeing of both current and future generations. Future Wales sets out that increasing temperatures and extreme weather events caused by climate change are putting pressure on infrastructure and the built environment, which all contribute to social and economic resilience. Future Wales:

- Supports a low carbon economy and the decarbonisation of industry, and the growth of sustainable and renewable energy; and
- Supports infrastructure development, including transport, energy and digital communications.

5.14 Future Wales recognises that Wales can become a world leader in renewable energy technologies. The Welsh Government recognises our potential for solar generation and supports both large and community scaled projects and commits to ensuring the planning system in Wales provides a strong lead for renewable energy development.

5.15 Policy 17 of Future Wales refers to 'renewable and low carbon energy and associated infrastructure'. Policy 17 sets out that 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 and that in determining planning applications for renewable and ow carbon energy development, decision-makers must give significant weight to the need to meet Wales' international commitments and target to generate 70% of consumed electricity by renewable means in 2030 in order to combat the climate emergency.

5.16 Future Wales also highlights Carmarthen and the Haven Towns as areas with strong potential for solar energy generation, and the Welsh Government wishes to see energy generation, storage and management play a role in supporting the economy in South West Wales. Local ownership and distribution is important to ensuring communities in proximity to renewable energy development benefit from it and that our future energy system better serves Wales.

5.17 The cumulative impacts of existing and consented renewable energy schemes should also be considered.

Planning Policy Wales (PPW) (Edition 11) (February 2021)

5.18 Edition 11 of PPW was published on the same day as Future Wales, 24th February 2021. PPW sets out the land use planning policies of the Welsh Government. The primary objective of

PPW is to ensure that the planning system contributes towards the delivery of sustainable development and improves the social, economic, environmental and cultural well – being of Wales, as required by the Planning (Wales) Act 2015, the Well – being of Future Generations (Wales) Act 2015 and other key legislation.

5.19 Paragraph 3.30 (Climate Change, Decarbonisation and the Sustainable Management of Natural Resources) of PPW sets out that the Welsh Government declared a climate emergency in 2019, in order to co-ordinate action nationally and locally to help combat the threats of climate change. It further sets out that the planning system plays a key role in tackling the climate emergency through the decarbonisation of the energy system and the sustainable management of natural resources.

5.20 Paragraph 5.7.1 of PPW sets out that low carbon electricity must become the main source of energy in Wales. Renewable electricity will be used to provide both heating and transport in addition to power. This paragraph further emphasises that the future energy supply mix will depend on a range of established and emerging low carbon technologies.

5.21 Paragraph 5.7.6 sets out that the planning system should secure an appropriate mix of energy provision, which maximises benefits to our economy and communities whilst minimising potential environmental and social impacts. Paragraph 5.7.7 presents that the benefits of renewable and low carbon energy, as part of the overall commitment to tackle the climate emergency and increase energy security, is of paramount importance. The continued extraction of fossil fuels will hinder progress towards achieving overall commitments to tackling climate change. The planning system should:

- Integrate development with the provision of additional electricity grid network infrastructure;
- Optimise energy storage;
- Facilitate the integration of sustainable building design principles in new development;
- Optimise the location of new developments to allow for efficient use of resources;
- Maximise renewable and low carbon energy generation;
- Maximise the use of local energy sources, such as heat networks;
- Minimise the carbon impact of other energy generation; and
- Move away from the extraction of energy minerals, the burning of which is carbon intensive.

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

5.22 The Well – being of Future Generations Act requires public bodies in Wales to think about the long-term impact of their decisions to work better with people, communities, and each other to prevent persistent problems such as climate change.

5.23 The Act puts in place seven well – being goals which makes it clear for how the public bodies must work to achieve all of the goals, not just one or two.

- A Prosperous Wales.
- A Resilient Wales.
- A More Equal Wales.
- A Healthier Wales.
- A Wales of Cohesive Communities.
- A Wales of Vibrant Culture and Thriving Welsh Language.
- A Globally Responsible Wales.

Technical Advice Notes (TAN) Wales

5.24 TAN's provide detailed planning advice, and local planning authorities take them into account when they are preparing development plans. The following TAN's are relevant to the proposal:

- TAN 5 – Nature Conservation and Planning;
- TAN 11 – Noise;
- TAN 12 – Design; and
- TAN 24 – The Historic Environment.

Local Planning Policy

5.25 The current Local Development Plan (LDP) for Pembrokeshire County Council was adopted on 28th February 2013. The LDP establishes a vision-based development strategy and policies to guide the development and use of land in Pembrokeshire (excluding the Pembrokeshire Coast National Park) from adoption to 2021. It provides the policy context for directing development to appropriate locations, conserving the natural, built and historic environment and providing a basis for rational and consistent decision-making on planning applications. The LDP will remain an extent development plan until it is superseded by the Pembrokeshire County Council Local Development Plan Review (LDP2) currently being prepared, expected to be adopted in 2022.

5.26 The Council's pre-application response (Reference: PR/0272/21) confirms the relevant planning policies within the adopted LDP as follows:

- LDP Policy SP1 – Sustainable Development

  "All development proposals must demonstrate how positive economic, social and environmental impacts will be achieved and adverse impacts minimised."

- LDP Policy SP2 – Port and Energy Related Development

  "Development at the Ports of Milford Haven and Fishguard will be permitted for port related facilities and infrastructure, including energy related development."

- LDP Policy SP16 – The Countryside

  "The essential requirements of people who live and work in the countryside will be met whilst protecting the landscape and natural and built environment of Pembrokeshire and adjoining areas. Development which minimises visual impact on the landscape and relates to one of the following will be promoted: 1. Enterprises for which a countryside location is essential; 2. Opportunities for rural enterprise workers to be housed in suitable accommodation that supports their employment; and 3. The re-use of appropriate existing buildings."

- LDP Policy GN1 – General Development Policy

  "Development will be permitted where the following criteria are met: 1. The nature, location, siting and scale of the proposed development is compatible with the capacity and character of the site and the area within which it is located; 2. It would not result in a significant detrimental impact on local amenity in terms of visual impact, loss of light or privacy, odours, smoke, fumes, dust, air quality or an increase in noise or vibration levels; 3. It would not adversely affect landscape character, quality or diversity, including the special qualities of the Pembrokeshire Coast National Park and neighbouring authorities; 4. It respects and protects the natural environment including protected habitats and species; 5. It would take place in an accessible location, would incorporate sustainable transport and accessibility principles and would not result in a detrimental impact on highway safety or in traffic exceeding the capacity of the highway network; 6. Necessary and appropriate

service infrastructure64, access and parking can be provided; 7. It would not cause or result in unacceptable harm to health and safety; 8. It would not have a significant adverse impact on water quality; and 9. It would neither contribute to the coalescence of distinct settlements nor create or consolidate ribbon development."

- LDP Policy GN2 – Sustainable Design

"Development will be permitted where relevant criteria are met: 1. It is of a good design which pays due regard to local distinctiveness and contributes positively to the local context; 2. It is appropriate to the local character and landscape/townscape context in terms of layout, scale, form, siting, massing, height, density, mix, detailing, use of materials, landscaping and access arrangements / layout; 3. It incorporates a resource efficient and climate responsive design through location, orientation, density, layout, land use, materials, water conservation and the use of sustainable drainage systems and waste management solutions; 4. It achieves a flexible and adaptable design; 5. It creates an inclusive and accessible environment for users that addresses community safety; 6. It provides a good quality, vibrant public realm that integrates well with adjoining streets and spaces and 7. It contributes to delivering well designed outdoor space with good linkages to adjoining streets, spaces and other green infrastructure."

- LDP Policy GN3 – Infrastructure and New Development

"Where development generates a directly related need for new or improved infrastructure, services or community facilities and this is not already programmed by a service or infrastructure company, then this must be funded by the development, and: 1. Related in scale and kind to the development; and 2. Provided on site wherever appropriate. In exceptional circumstances contributions may be made to the provision of facilities elsewhere, provided their location can adequately service the development. The timely provision of directly related infrastructure, services and community facilities shall be secured by planning condition(s), the seeking of planning obligation(s) by negotiation, and/or by any other agreement or undertaking. The viability of a development will be a key consideration when securing planning obligations and dispensation

may be allowed where these requirements cannot be supported by land values.

Measures necessary to physically deliver a development and ensure that it is acceptable in planning terms will be required in the first instance. Where appropriate contributions may be sought for a range of purposes, including: 1) Affordable housing 2) Recreational and Amenity Open Space 3) Sustainable Transport Facilities 4) Education 5) Community Facilities, including libraries, 6) Regeneration 7) Waste 8) Renewable and low carbon energy 9) Biodiversity In the event that viability considerations indicate that not all the identified contributions can reasonably be required, priority contributions will be determined on the basis of the individual circumstances of each case. In the case of housing developments, priority will be given to affordable housing unless there is an overwhelming need for the available contribution, in whole or in part, to be allocated for some other appropriate purpose/s."

- LDP Policy GN4 – Resource Efficiency and Renewable & Low Carbon Energy Proposals

  "Development proposals should seek to minimise resource demand, improve resource efficiency and seek power generated from renewable resources, where appropriate. They will be expected to be well designed in terms of energy use. Developments which enable the supply of renewable energy through environmentally acceptable solutions will be supported."

- LDP Policy GN22 – Prior Extraction of the Mineral Resource

  "Where new development is permitted in an area of mineral resource, prior extraction of any economic reserves of the mineral must be achieved, wherever appropriate in terms of economic feasibility and environmental and other planning considerations, prior to the commencement of the development."

- LDP Policy GN37 – Protection and Enhancement of Biodiversity

  "All development should demonstrate a positive approach to maintaining and, wherever possible, enhancing biodiversity.

Development that would disturb or otherwise harm protected species or their habitats, or the integrity of other habitats, sites or features of importance to wildlife and individual species, will only be permitted in exceptional circumstances where the effects are minimised or mitigated through careful design, work scheduling or other appropriate measures."

- LDP Policy GN38 – Protection and Enhancement of the Historic Environment

"Development that affects sites and landscapes of architectural and/or historical merit or archaeological importance, or their setting, will only be permitted where it can be demonstrated that it would protect or enhance their character and integrity."

Supplementary Planning Guidance

5.27 The Council's pre-application response also details that the 'Renewable Energy Supplementary Planning Guidance' (SPG) and 'Biodiversity SPG' are relevant for the proposal.

5.28 The Renewable Energy SPG was adopted in October 2016 and elaborates on Plan policies seeking to balance the benefits that renewable energy development can have against the need to protect the natural and historic environment.

5.29 The Biodiversity SPG was adopted in May 2021 and provides guidance to everyone involved with development proposals on legal responsibilities, obligations and the protection, conservation, and enhancement of biodiversity during the development process.

6.0 ASSESSMENT OF DEVELOPMENT

6.1 This section identifies the main planning issues and provides an analysis of how the development proposals accord with planning policy at national and local levels. The following matters are considered in turn:

1. The Principle of Development;
2. Design Considerations;
3. Impact upon Residential Amenity;
4. Sustainable Transport and Highways Safety;
5. The Natural Environment;
6. The Historic Environment; and
7. Site Specific Infrastructure.

1. The Principle of Development

6.2 Strategies for achieving decarbonisation and climate-resilience is at the core of Future Wales and this national development framework is an important lever to deliver the change needed.

6.3 Additionally, the principles of sustainable development have been at the heart of planning policy since PPW was first published in 2002. Planning policies, proposals and decisions must seek to promote sustainable development and support the well-being of people and communities across Wales.

6.4 Paragraph 5.9.1 of PPW states that local authorities should facilitate all forms of renewable and low carbon energy development and should seek cross-department co-operation to achieve this. In doing so, planning authorities should seek to ensure their area's full potential for renewable and low carbon energy generation is maximised and renewable energy targets are achieved, while paragraph 5.9.14 asserts that planning authorities should support and guide renewable and low carbon energy development to ensure their area's potential is maximised.

6.5 The Pembrokeshire LDP recognises that Pembrokeshire has significant potential to provide further energy from all renewable sources, building on its existing role as an energy centre. Policy GN4 highlights that "developments which enable the supply of renewable energy through environmentally acceptable solutions will be supported."

6.6 Policy SP2 is also supportive of the principle of energy related development at the Port of Milford Haven, although the development is not one that requires to be located within the SP2 designation albeit that the necessity for grid connection is acknowledged by the Council in their pre-application response.

6.7 The site is situated within an area of mineral resource where the prior extraction of any economic reserves must be considered prior to commencement of development to comply with LDP Policy GN22. However as the site will be decommissioned and returned to its former state after the 40 year period and there are benefits of the proposed development in terms of renewable energy, these benefits are considered to take precedence over the need to extract mineral reserve as confirmed by the Council in their pre-application response.

6.8 Given the positive planning position in Future Wales, Planning Policy Wales and Pembrokeshire's LDP, it is considered that the principle of development is acceptable, subject to it being demonstrated that the development would not have any adverse impacts that cannot be suitably mitigated.

6.9 The planning application is accompanied by a suite of technical documents which demonstrate that the proposal would not lead adverse harm and appropriate mitigation can be provided where necessary.

2. Design Considerations

6.10 The design and layout of the solar farms is driven by functional requirements, together with site characteristics and there is limited scope for revision, certainly in terms of the appearance of the arrays and associated infrastructure.

6.11 Please refer to the enclosed Design and Access Statement for further details.

3. Impact upon Residential Amenity

6.12 There are dispersed and sporadic residential settlements present in both Milford Haven and Neyland as well as a notable settlement in the south-east of the study area comprising clusters of homes at Pennar Park and Llanreath at a range of 2.2-2.5km from the Site, however the proposal by virtue of its location and form will not give rise to any unacceptable impacts upon residential amenity.

6.13 The Solar Photovoltaic Glint and Glare study undertaken by Pager Power which accompanies this application found that there are no significant impacts upon surrounding dwellings and therefore mitigation is not required.

4. Sustainable Transport and Highways Safety

6.14 A Transport Statement has been undertaken by Motion and is submitted as part of the Application. This document undertakes an assessment of the local road network and vehicular movements associated with the development during construction and once operational, and assess the impact and outlines if mitigation is necessary.

6.15 HGV construction traffic will route to the Site via travelling south down the A4076, then taking the A477 south before taking Scoveston Road, finally taking the B4325 west until the application site is reached.

6.16 There are two distinctive elements to the scheme which has the potential to impact upon highways safety, the construction phase and the operational phase:

- Construction Phase – The construction phase of the development will lead to a temporary increase in traffic on the road network surrounding the site for a 24 week period. On average during this period, it is expected that the development will lead to an increase in traffic movements of five two-way vehicle movements per day which will have minimal impact on highway capacity.

- Operational Phase – During the operational phase of the development, there will be a minimal increase in traffic volumes with operational traffic comprising of one van accessing the application site twice per month i.e. two two-way vehicle movements per month.

6.17 In order to reduce or avoid this potential disturbance arising from heavy goods vehicles, a Construction Traffic Management Plan (CTMP) is proposed.

6.18 The existing access from the north will also be used for the construction phase as the road has previously accommodated HGV movements for constructions works and as such is suitable. Minor improvements will be made, such as the provision of an area of hardstanding within the application site for vehicles to manoeuvre in and over which they would drive prior to accessing the public highway to reduce the risk of mud being trafficked onto the public highway. Once construction is completed, the level of traffic generated during the operational phase of the development will be minimal.

6.19 The proposed development Faccords with national and local planning policy requirements, safe and suitable access to the Site can be achieved by all modes, and the level of traffic associated with the proposed development would not result in a detrimental impact on highway safety or in traffic exceeding the capacity of the adjoining highway network in accordance with PPW and Pembrokeshire LDP Policy GN1.5.

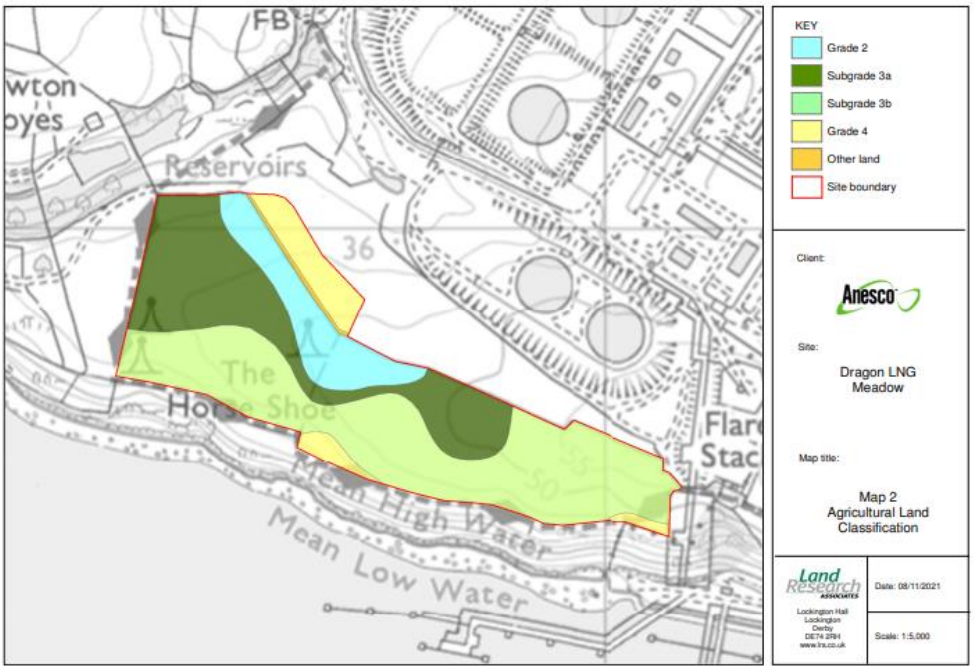
5. The Natural Environment

Agricultural Land Classification

6.20 An Agricultural Land Survey (ALS) has been undertaken by Land Research Associates and forms part of the Application submission. The report concludes that 12% of the land is Grade

2, 30% is Subgrade 3a, 48% is Subgrade 3b and 9% is Grade 4. 1% of the land is classed as 'other land'. Map 2 from the ALS Report is shown below for reference:

Figure 5.1: Map 2 from the Agricultural Land Survey Report



6.21 It is noted that PPW states that agricultural land of grades 1, 2 and 3a of the Agricultural Land Classification system (ALC) is the best and most versatile and should be conserved as a finite resource for the future, however it can be developed if there is an overriding need for the development.

6.22 The ALS report sets out that the Grade 2 land occurs in the north of the site where soils are deepest. Machinery land access is likely to be restricted by wetness (caused by the combination of moist local climate and moderately high topsoil clay content). Subsoil stoniness and restricted rooting depth are also likely to result in reduced yields of arable crops in dry summers due to droughtiness.

6.23 The Subgrade 3a includes land with moderately shallow soils (typically 40-50 cm). The limited rooting depth precludes the growth of some root crops, and results in droughtiness likely to limit average yields of cereal crops.

6.24 Although there would be some loss of best and most versatile land this would be justified as the proposed development is unable to be directed to land in a lower agricultural grade as the grid connection is directly into the adjacent Dragon LNG facility via an 11kV connection into an existing arrangement within this site. Additionally, it is clear that there is an overriding need for the development as there is a need for renewable energy production in order to achieve both local and national renewable policy objectives and as the development is

proposed to be installed for a 40-year period it would not result in a permanent loss in any event. The proposal is therefore consistent with paragraph 3.59 of PPW.

Landscape

6.25 An LVTN is submitted as part of the planning application, which has been prepared by Barton Willmore LLP. The LVTN assesses the landscape character in the surrounding area, as well as undertaking an assessment of the development for key viewpoints from short and long distances.

6.26 A landscape appraisal of the Site has been undertaken which establishes that it is located in a strongly industrialised rural coastal landscape between the settlements of Milford Haven (approximately 1.2km west) and Neyland (approximately 2.9km east) with the study area being strongly influenced by industrial built development. The Site itself does not have any relevant landscape designations, however, it is noted that areas such as the Pembrokeshire Coast National Park (PCNP) encompasses land in the south-eastern extent of the study area to the immediate west of the Pembroke Refinery. At its nearest, the PCNP is located approximately 2.4km south-west of the Site.

6.27 A comprehensive series of mitigation measures has been developed to avoid or reduce adverse landscape and visual effects arising from the Proposed Development, which include the following:

- Retaining as far as possible the existing structure of vegetation on the Site and managing vegetation and grassland to encourage improved biodiversity;
- Offsetting proposed panels a minimum of 15m from the Pembrokeshire Coast Path to limit the potential for close range views and reduce the impact on longer distance views;
- Provision of a new native species hedgerow along the southern edge of the eastern field of the Site. The hedgerow will be set back from the Pembrokeshire Coast Path (and up against the proposed fence) to maximise the retention of an open buffer around the PRoW and screening of the Proposed Development;
- Planting of a block of native scrub with limited tree planting within the eastern extent of the Site to reduce the impact of the Proposed Development on views from the Pembrokeshire Coast Path and longer distance views from the east;
- Refurbish/replace the existing interpretation boards in the south-east of the Site, and provide an area of new native species rich grassland to improve the experience for users of the route; and
- Remove existing scrub and dilapidated fencing on the western Site boundary and replace with native species hedgerow to improve the appearance of the boundary and screen views of the Site from the Pembrokeshire Coast Path.

6.28 In summary, although there are likely to be adverse effects on landscape and visual receptors as a result of the Proposed Development, however the majority of these will be highly localised, and their significance will be limited by the industrial context. The significance of adverse effects is expected to diminish with the establishment of the comprehensive mitigation measures, and improved management of the existing features of the Site. As a result, adverse residual effects can be minimised and there is potential for long-term beneficial effects on the landscape of the Site itself.

6.29 On this basis, the Site is considered to have capacity to accommodate the Proposed Development without unacceptable adverse impact on landscape character and visual amenity in accordance with Policy SP16 of the LDP.

Ecology

6.30 The Application is accompanied by an Ecological Impact Assessment which has been prepared by SLR. The appraisal assesses the ecological value of the site at present and noted the findings of a walkover survey that had been undertaken.

6.31 The Site does not contain any statutory designated sites for nature conservation or non-statutory designated sites for nature conservation.

6.32 The eastern field of the site is dominated by neutral grassland, regularly used for grazing. There are wides strips of neutral grassland with a longer sward along the western and southern boundaries of the western field and along the southern and eastern boundaries of the eastern field. At the time of the survey these areas of neutral grassland were found to not be botanically diverse.

6.33 The table below extracted from the Ecological Impact Assessment summarises the net impact of the scheme upon receptors of ecological importance.

Table 6.1: Extract of Net Impact Upon Important Ecological Features (including Site Enhancement) from the Ecological Impact Assessment

Important Ecological Receptor	Scale at which Feature is Important	Overall Net Impact
Milford Haven Waterway SSSI	Local	Positive impact upon bats, including horseshoe bats, through new native hedgerow and woodland planting.
Hedgerows H1-2 & boundary scrub	Local	No damage to boundary vegetation, including Root Protection Zones (RPZs), with the exception of a two minor gaps in

		each hedgerow, totalling 26 metres, to facilitate access. Planting of 786 metres of native species-rich hedgerow. Planting of 0.0995ha of native woodland. Positive (Significant) impact at the local level.
Foraging and Roosting Bats	Local	No damage or loss of potential bat roosts, and provision of six additional roosting opportunities. Provision of enhanced foraging and commuting opportunities, through new native hedgerow and woodland planting. Positive (Significant) impact at the local level.
Reptiles	Less than Local	Sensitive working measures when working within boundary habitats. Seeding of 0.089ha of EM1 General Meadow Mixture, 0.0995ha of woodland planting and the creation of five reptile hibernacula will enhance the Site for reptiles. Positive (Minor) impact at less than local level.
Breeding Birds	Less than Local	Killing or injuring birds/ damaging or destroying their nests will be avoided by clearing the site outside of the main bird breeding season (i.e. September to February), or immediately following a search by an ecologist. Erection of two pole-mounted barn owl and two pole-mounted kestrel boxes; planting of 786 metres of new native hedgerow and 0.0995ha of native woodland. Positive impact at less than Local level.
Biodiversity Net Gain	N/A	Predicted increase of 5.31 biodiversity units, from a baseline of 48.04 units to 53.35 post-installation. This equates to a 11.06% net increase.

6.34 Therefore, the Site has been assessed appropriately in terms of its ecological value and there are no significant constraints that would prevent the solar panels from being installed on Site. Furthermore with the proposed mitigation measures including planting and landscaping, the

proposals will result in an increase in biodiversity net gain in accordance with Policy GN1 and GN37 of the LDP.

6. The Historic Environment

Cultural Heritage

6.35 The Site is not located within a Conservation Area and there are no listed buildings or Scheduled Ancient Monuments within the Site. The nearest listed buildings include Stable Block at Castle Hall (Grade II) and the Arched Entry to South of Castle Hall House (Grade II) which are approximately 1.35km south-east of the site.

6.36 In order to assess the impact of the development, a Historic Environment Desk-Based Assessment has been prepared by Cotswold Archaeology. The assessment concludes that historic agricultural remains would retain little, if any, archaeological interest and would be of accordingly low heritage significance. The examination of such remains under archaeological conditions would contribute little further to our understanding of historic agricultural practices and/or of local land-use.

6.37 It also notes that historic agricultural remains would retain little, if any, archaeological interest and would be of accordingly low heritage significance. The examination of such remains under archaeological conditions would contribute little further to our understanding of historic agricultural practices and/or of local land-use.

6.38 The proposed development would also result in no harm to the significance of any heritage assets within the Site environs as a result of change to setting as well as no harm to the significance of the Milford Haven Waterway Historic Landscape. As such the proposed solar farm is considered acceptable in heritage and archaeological terms in accordance with Policy GN38 of the LDP.

7. Site Specific Infrastructure

Flood Risk Assessment and Drainage Strategy

6.39 A Flood Risk Assessment and Surface Water Drainage Strategy has been prepared by SLR and accompanies the application.

6.40 As the site lies wholly in Flood Zone A, there is no need to justify the location of the development, and the acceptability criteria is considered passed.

6.41 Two options are proposed for surface water drainage which involve either complete infiltration to ground, or discharge to surface waters. In lieu of infiltration testing data from the site, an infiltration rate has been extracted testing undertaken locally, 2.5km north west of the proposed development area and in similar sandstone geology.

Option 1 indicates that all flows will be conveyed to a swale feature with a volume capacity 7.3m3 which will completely infiltration to ground.

Option 2 however adopts a different methodology and provides all attenuation within a swale but with a restricted outflow to discharge runoff into a small watercourse, north of the site boundary. A hydro-brake will be used to restrict flows to the smallest viable discharge rate that can be suitably engineered (1l/s).

6.42 In both instances, modelling of the swale has been developed to a design standard of the 1% AEP plus 20% accommodation for climate change based on the urban creep (10%) allowance impermeable area. An extra 2m3 has been added to both swale volumes to accommodate direct rainfall into the swale.

6.43 The pollution mitigation effects of the vegetated swale for both groundwater and surface water discharge are sufficient to satisfy the criteria of the Simple Index Method for runoff draining from the impermeable built development (ie: the proposed education building).

6.44 Residual flood events in excess of the design standard have also been considered, and all events greater than the 1% AEP plus 20% climate change will revert to the pre-existing runoff regime discharging west / north west towards the watercourse and pond receptor.

6.45 The surface water drainage strategy presented in this report demonstrates that adequate SuDS space provision is afforded within the development and that the proposed scheme is feasible and compliant to appropriate best practice and regulatory requirements and can be maintained in accordance with best practice.

6.46 The proposed drainage strategy is therefore acceptable and accords with the objectives of PPW (paragraph 6.6.17) and Policy GN2 of the LDP.

7.0 SUMMARY

7.1 The Government policy strongly encourages the development of renewable energy schemes, for which there is an urgent need, providing that environmental issues are not adverse, and if applicable, appropriate mitigation measures implemented. In addition, in May 2019 Pembrokeshire Council declared a climate emergency with the intention of becoming a net zero-carbon local authority by 2030.

7.2 This Planning Statement demonstrates that the Proposed Development has been carefully designed to take account of national and local planning policies, and the Site's opportunities and constraints. Furthermore, the environmental reports and assessments which accompany the Planning Application demonstrate that the Proposed Development will not have an adverse impact on the built environment, surrounding landscape, the natural environment, the historic environment, environmental or site-specific requirements.

7.3 The Proposed Development comprises a solar PV farm of approximately 9.99 MW, which will utilise a renewable energy source for the production of electricity, which can make a valuable contribution to meeting the challenge of tackling climate change and producing renewable electricity and continuing to embrace the positive steps the UK government is making in the delivery of renewable energy capacity and output. Additionally, the proposals offer additional benefits, including a predicted biodiversity net gain.

7.4 The Proposed Development is clearly sustainable development that has the full support of National Planning PolicyFuture Wales, Planning Policy Wales and the Council's adopted Local Development Plan and is compliant with and all other relevant planning policies, as demonstrated in Section 6.0 of this Statement.

7.5 The Proposed Development is clearly sustainable development that has the full support of Future Wales, Planning Policy Wales and the Council's adopted Local Development Plan and is compliant with and all other relevant planning policies, as demonstrated in Section 6.0 of this Statement.

7.6 Based on the evidence and justification set out in this Planning Statement and other supporting documentation, and in accordance with planning policy, it is respectfully requested that this application is approved.