

PLANNING STATEMENT: CYP SOLAR FARM

GLAIS | SWANSEA



PREPARED BY



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WN1001/15/01A	Site Location A	1:2,500 1:25,000
WN1001/15/01B	Site Location B	1:2,500 1:25,000
WN1001/15/02A	Planning Application Boundary A	1:2,500
WN1001/15/02B	Planning Application Boundary B	1:2,500
WN1001/15/03 r1	Site Layout	1:2,500
WN1001/15/04	PV Panel Details	1:50
WN1001/15/05	DNO Substation and Telecoms Mast Details	1:50
WN1001/15/06	Transformer and Control Equipment Details	1:50
WN1001/15/07	Customer Substation Details	1:50
WN1001/15/08	Spare Part Containers and Control Cabins	1:50
WN1001/15/09 r1	Fencing and Security Layout	1:2,500
WN1001/15/10	Paladin Mesh Fencing Details	1:25
WN1001/15/11	Deer Mesh Fencing Details	1:100
WN1001/15/12 r1	Landscape and Ecological Masterplan	1:2,500
WN1001/15/13 r1	Public Access Details	1:2,500
WN1001/15/14	Remote Set Down Area Details	1:500
WN1001/15/15	Temporary Site Set Down Area Details	1:500
WN1001/15/16	Internal Vehicle Access Tracks Construction Details	1:20
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3.2	Initial Public Access Proposal
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1. INTRODUCTION

1.1 FORWARD

- 1.1.1 Solar farms are a simple and established technology providing a source of safe and clean energy which produce zero emissions when in operation. Solar development is temporary as the panels can be removed at the end of their lifetime, but it also allows the agricultural use of the land to continue through grazing. Solar energy is not only sustainable; it is renewable meaning that we will never run out of it.
- 1.1.2 In 2020 Solar PV accounted for 28% of renewable electricity generation in the UK¹. In 2020 there was circa 13.5GW of installed capacity of solar energy in the UK².
- 1.1.3 Our ever-growing need for energy and where it comes from has been a significant issue recently. To address this the recently published British Energy Security Strategy³ seeks to build a 'British energy system that is much more self-sufficient'. To achieve Net Zero the UK will need to expand its renewable capacity alongside other low carbon options. In terms of large scale solar the Government

"...will continue supporting the effective use of land by encouraging large scale projects to locate on previously developed, or lower value land, where possible..."

- 1.1.4 Solar farms are an effective and unobtrusive way of creating the electricity we all use – with the panels having a low visual impact on the local landscape and creating no noise, pollution, by-products or emissions. Additionally, solar farms result in minimal disturbance to the ground and can significantly enhance local biodiversity, for example through planting a species rich wildflower mix in field margins, creating a more diverse habitat.

1.2 PURPOSE OF THIS STATEMENT

- 1.2.1 This planning statement has been prepared by Sirius Planning on behalf of CYP Solar Ltd to support the planning application for the proposed development of a ground mounted solar farm and associated, ancillary equipment ("the proposed development").

1.3 PLANNING APPROACH

- 1.3.1 As the scheme comprises an electricity generating station with a potential generating capacity of between 10MW and 350MW, it falls within the definition of a 'Development of National Significance' (DNS) under section 4 of the Developments of National Significance (Specified Criteria and Prescribed Secondary Consents) (Wales) Regulations 2016⁴, for the purposes of section 62 (D) of the Town & Country Planning Act 1990 as amended by s19 of the Planning (Wales) Act 2015⁵ ("the Wales

¹ Digest of UK Energy Statistics (DUKES): renewable sources of energy
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/840014/Chapter_6.pdf

² Capacity of, and electricity generated from, renewable sources (DUKES 6.4)
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/729373/DUKES_6.4.xls

³ British Energy Security Strategy (April 2022)
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1069969/british-energy-security-strategy-web-accessible.pdf

⁴ 2016 No. 53 (W.23)

⁵ 2015 anaw 4

Act”).

- 1.3.2 The Act requires the applicant to carry out pre-application consultation before submitting the planning application to PEDW (Planning and Environment Decision Wales). The purpose of the DNS process is to ensure timely decisions are made on those planning applications that are of the greatest significance to Wales because of their potential benefits and impacts. Future Wales: The National Plan 2040 (February 2021) is the development plan for DNS decision-making purposes.

1.4 OUTLINE DESCRIPTION OF THE SITE AND PROPOSAL

- 1.4.1 The application site measures 68.7ha which comprises the cable route and remote set down area. The deployment area covers approximately 26ha of grazing land that is situated on an elevated plateau, c. 570m to the northeast of the village Glais and c. 2km to the east of the village Clydach.
- 1.4.2 The site is mostly situated within the administrative area of Swansea City however there is approximately 2.45ha on the northern boundary that falls within Neath Port Talbot CBC administration.
- 1.4.3 **Drawing WN1001/15/01** identifies the site location.
- 1.4.4 CYP Solar Farm will have an export capacity of circa 20MW of electricity, enough to power approximately 5,300 homes per year based on the UK Average annual domestic electricity consumption during 2021⁶.

1.5 THE APPLICANT

- 1.5.1 CYP Solar Farm is being developed by Windel Energy and Recurrent Energy in partnership.
- 1.5.2 Founded in 2018, Windel Energy is a privately held company that specialises in the development and asset management of renewable energy projects and low carbon technologies.
- 1.5.3 With more than 3 gigawatts (GW) of clean, renewable power and battery energy storage in various stages of development, Windel is at the forefront of low carbon technologies including solar, energy storage, and onshore wind, and are helping to pave the way to achieve the UK’s net zero target by 2050.
- 1.5.4 Windel Energy is committed to responsible land use and believe that the development and delivery of a large-scale solar farm can be achieved in harmony with its surroundings.
- 1.5.5 Recurrent Energy is one of the world’s largest and most geographically diversified utility-scale solar and energy storage project development, ownership, and operations platforms. With an industry-leading team of in-house energy experts, we are a wholly-owned subsidiary of Canadian Solar Inc. and function as Canadian Solar’s global development and power services business.
- 1.5.6 To date Recurrent Energy have completed the development of 9 GWp of solar and 3 GWh of battery storage projects across six continents. Recurrent Energy’s power

⁶ Assumes annual average domestic household power consumption is 3,578kWh

services business manages more than 3.7 GW of operational projects under long-term operations and maintenance (O&M) agreements, and an additional 2.3 GW of contracted projects that will be operated and maintained by Recurrent Energy once they are placed in operation.

1.6 REQUIREMENT FOR AN ENVIRONMENTAL IMPACT ASSESSMENT

- 1.6.1 The Development falls within Category 3 of Schedule 2, 'Energy industry', sub section (a) 'industrial installations for the production of electricity, steam and hot water (unless included in Schedule 1). The applicable threshold for Environmental Impact Assessment (EIA) development exceeds 0.5 hectares, and, as such, the Local Planning Authority must screen the proposal (by the criteria listed in Schedule 3) to ascertain whether there are likely to be the potential for likely significant effects on the environment.
- 1.6.2 A request for a Screening Direction was made on 23rd July 2021 to the then Planning Inspectorate. The Direction was issued on 21st September 2021 confirming that the proposal was not considered to be 'EIA development'. A copy of the Direction is shown in **Appendix 4.1**.

1.7 PRE-APPLICATION DISCUSSIONS

- 1.7.1 Requests for pre-application discussions was made to Swansea Council and Neath Port Talbot County Borough Council on 1st November 2021 and 6th December 2021, respectively. Following preliminary consultations with the Authorities' in-house consultees, Swansea Council issued a response on 14th February 2022 and is included in **Appendix 4.2**. Neath Port Talbot CBC issued a response on 15th February 2022 and is included in **Appendix 4.3**.

1.8 STRUCTURE OF THE PLANNING APPLICATION

- 1.8.1 The pre-application responses including follow up discussions with both authorities set out the information the application should contain which is summarised below.
- Pre-Application Consultation Report
 - Design and Access Statement
 - Transport Assessment (together with any mitigation measures for highway issues)
 - Construction Traffic Management Plan
 - Drainage Strategy
 - Preliminary Ecological Assessment
 - Environment Management Plan
 - Tree Survey and Arboricultural Impact Assessment
 - Landscape and Visual Impact Assessment
 - Green Infrastructure Strategy
 - An assessment of the impacts upon areas identified as sites of importance for nature conservation (SINC) and all areas that would meet the criteria of a SINC.
 - An assessment of ecosystem resilience
 - Proposals for mitigation/compensation for any of the above.
 - Biodiversity Enhancements
 - Agricultural Land Classification Survey
 - Glint and Glare Assessment
 - Coal Mining Risk Assessment
 - Archaeology Desk-based Assessment

- 1.8.2 Except for the Design and Access Statement, drawings and Transport Assessment and [Construction] Environment Management Plan, the above information will be provided separately to this Planning Statement as supporting Technical Appendices.

1.9 PLANNING STATEMENT STRUCTURE

- 1.9.1 This Planning Statement has been organised into the following chapters:

- Introduction
- The Site and Surroundings;
- The Proposed Development;
- Policy Context;
- Need and Site Selection;
- Environmental and Technical Assessments;
- Policy Appraisal; and
- Summary and Conclusions

1.10 STAKEHOLDER CONSULTATION

- 1.10.1 DNS guidance strongly advises early engagement with stakeholders prior to the submission of an application. There is also a statutory requirement for a 6-week period of pre-application consultation in advance of the planning application being submitted to PEDW for acceptance and examination.
- 1.10.2 In advance of the formal Pre-Application Consultation the Applicant implemented an initial programme of consultation alongside the pre-application discussions with the LPAs, which included:
- Letters to immediate neighbours and local key stakeholders;
 - Provision of a project website and contact details;
 - Site meeting with Rights of Way Claimants;
 - Meeting with Member of Parliament for Gower
 - Presentation to Clydach Community Council
- 1.10.3 The formal Pre-Application Consultation commenced in January 2023 and ran for 6 weeks. A Consultation Report on these activities has been prepared as a standalone report in support of the application.

1.11 OBTAINING INFORMATION

- 1.11.1 Electronic copies of all documents submitted to the PEDW in respect of the planning application are available at the following website:
<https://cyp-solar.co.uk/>
- 1.11.2 Paper format copies of the planning application and supporting information are available on request at the following prices:
Full Hard Copy - £175
Electronic Copy - £25
- 1.11.3 All requests for hard copy information should be addressed to the following:
Sirius Planning
4245 Park Approach
Thorpe Park
Leeds LS15 8GB
Planningconsultations@thesiriusgroup.com

2. THE SITE AND SURROUNDINGS

2.1 INTRODUCTION

- 2.1.1 This chapter provides a description of the site in terms of its location, history, and surrounding land uses. It also sets the development within the context of surrounding land uses.
- 2.1.2 The site location and extent of site boundaries are shown in drawing **WN1001/15/01** and below in **Figure 2.1**. The redline site boundary for the planning application extends to a total area of approximately 68.7ha.

Figure 2.1: Site Location



2.2 SITE OVERVIEW

- 2.2.1 The application site comprises numerous grazing fields, scrub and woodland on an elevated plateau. The application site and surrounding areas are rural in nature, characterised by villages and towns in the valleys, typically wooded valley sides above which is grazing land. Farm buildings are dispersed throughout the landscape. Graig Y Pal, an adopted highway (albeit a non-thoroughfare) provides access to the centre of the application site.
- 2.2.2 The centre of Glais is approximately 570m south west of the application site. The larger town of Clydach is located approximately 2km to the west of the application site.
- 2.2.3 The development area will be connected to the local distribution network by underground cabling to an existing 33kV overhead line circa 530m west of Glais, immediately north of old Garth Road (now a cycle track). The cable route which will be in the highway is outlined in **drawing WN1001/15/17**.

2.3 DESCRIPTION OF PROPOSAL SITE

- 2.3.1 For descriptive purposes the application site can be divided into three areas; land to the west and east of Graig Y Pal and land off Ynys Y Mond Road.

Land West of Graig Y Pal

- 2.3.2 Locally known as 'Graig Ola Mountain' this part of the application site comprises a wooded valley and an open, elevated grazing plateau rising to a height of 208m AOD. The grazing land is bound and divided by numerous drystone walls many of which are in a state of disrepair. Within the grazing land are areas of scrub, bracken, bushes and outcropping rock, there are also informal footpaths largely around the perimeter of the 'mountain'. Informal footpaths are also found through the wooded valley, from Glais and Graig Y Pal to the plateau. **Figure 2.2** shows an aerial photograph of the elevated plateau looking south west.

Figure 2.2: Aerial photograph of the elevated plateau looking south west



- 2.3.3 The derelict Craig Y Perchych farmhouse on the west side of Griag Y Pal.

Land East of Graig Y Pal

- 2.3.4 This part of the application site comprises numerous grazing fields, which are largely enclosed by woodland, rising north to the head of the valley to a height of 226m AOD. The fields appear to be heavily grazed by ponies. Nant Y Glais forms part of the eastern site boundary. The lowest part of the proposed deployment area measures 144m AOD.
- 2.3.5 There are no buildings on this part of the site.
- 2.3.6 Graig Y Pal extends beyond the derelict farmhouse further north east to northern most fields of the site. **Figure 2.3** below is an aerial photograph of land to the east of Graig Y Pal looking north east.

Figure 2.3: Aerial photograph of land to the east of Graig Y Pal looking north east



Land off Ynys Y Mond Road

- 2.3.7 Land to the west of Ynys Y Mond Road at Llwyn Du Farm will be used on a temporary basis as a materials set down area during the construction phase. The 0.2ha area is currently an enclosed field used for grazing and has direct access to Ynys Y Mond Road. Grazing fields are located to the south and north of the site, the A4067 is to the immediate west and farms buildings and access track are to the east. **Figure 2.4** below and **drawing WN1001/15/01** shows the location of the set down area.

Figure 2.4: Aerial Image of the remote set down area



2.4 SURROUNDING THE APPLICATION SITE

- 2.4.1 To the north of the (deployment) application site the land falls away to the River Tawe. The valley side is covered by a large plantation, beyond which is Ynys Y Mond Road and the A4067. The settlements of Trebanos, Pontardawe and Alltwen are located circa 1.6km, 2.6km and 1.4km to the north, respectively. To the east and south is a continuation of grazing land and woodland plantations. Whilst land to the east gentle falls away, land to the south rises to circa 269m AOD at Mynydd Drumau. To the west is a continuation of the woodland that bounds the site to the north. Beyond the woodlands is Glais village.

2.5 DESIGNATIONS AND IDENTIFIED RECEPTORS

- 2.5.1 Glais Moraine SSSI and Forest Goch Bog SSSI are located c.780m south west and 1.1km east, respectively from the site.
- 2.5.2 According to the Flood Map for Planning⁷ the site is within a low-risk flood risk area. The temporary set down area is located in flood zone 2.
- 2.5.3 No Scheduled Monuments lie within the boundary of the proposed development area, but there are eight Scheduled Monuments within the 3km study area. No Listed Buildings lie within the proposed development area. Whilst there are 36 Listed Buildings within the 3km study area, only one listed building is within 1km of the site boundary.
- 2.5.4 The Graig Ola - Cwm-cymach Site of Importance for Nature Conservation (SINC) covers an area of 186ha and incorporates a variety of habitats. Approximately 59ha of the application site is located within the SINC of which circa 20ha is solar deployment (land within the security fence). Designated ancient woodland is located (partially) along the northern boundary of the application site. The majority of the southern boundary and land within the application site is ancient woodland.
- 2.5.5 Running parallel to the southeast of the site is an overhead 400kV power line. A below ground gas main crosses the site towards the northern boundary in a north west to south east alignment.
- 2.5.6 The nearest residential properties to the application site are Lletty'r-Wiwer (c. 115m south), Llwyn-erch-Idwal (c.215m south), Cwm -cymach-uchaf (c.200m south) and properties on Graigola Road (c.240m south west).
- 2.5.7 The application site is designated as countryside in the Swansea Local Development Plan. The 2.45ha that falls within Neath Port Talbot CBC administrative area is designated as outside the settlement limits (countryside) in the Adopted Local Development Plan.

2.6 ACCESS

- 2.6.1 The application site is accessible by Graig Y Pal, a single-track road which is currently utilised to access a several residential properties. The track is accessible via Graigola Road approximately 500m southeast of the site. Graig Y Pal is adopted highway to beyond the derelict farmhouse on site.
- 2.6.2 The remote set down area is located on Ynys Y Mond Road. From the A4067/B4291

⁷ <https://naturalresources.wales/flooding/flood-map-for-planning-development-advice-map/?lang=en>

roundabout traveling south into Glais the first left is Ynys Y Mond Road. The proposed set down area is approximately 1.3km further along.

- 2.6.3 Other than the adopted highway there are no public rights of way within the application site. However, there are two footpaths YM2 and YM4 that lead from Graig Y Pal eastwards. Further east these footpaths merge to YM3 and YM5 and ultimately link to bridleway YM370A.

2.7 PLANNING HISTORY

- 2.7.1 Swansea Council's and Neath Port Talbot CBC's planning registers confirm that the application site has not been subject to any previous planning applications.

3. THE PROPOSED DEVELOPMENT

3.1 INTRODUCTION

3.1.1 The proposal relates to the construction, operation, maintenance and decommissioning of a ground mounted solar park plus ancillary infrastructure as comprising the following:

- Photovoltaic (PV) panels;
- Mounting frames – matt finished small section metal structure;
- Scheme of landscaping and biodiversity enhancement;
- Inverters and transformers and associated cabling (largely below ground);
- Distribution Network Operator (DNO) substation and customer cabins;
- Telecoms mast;
- Deer fencing, sympathetic to the area, and infra-red CCTV (CCTV cameras would operate using motion sensors and would be positioned inward only to ensure privacy to neighbouring land and property);
- Temporary set down area;
- Internal service roads; and
- Site access for the construction, operational and decommissioning phases.

3.1.2 CYP Solar Farm will have an export capacity of circa 20MW of electricity, enough to power approximately 5,300 homes per year based on the UK Average annual domestic electricity consumption during 2021.

3.2 SITE DESIGN AND LAYOUT

3.2.1 Due to commercial constraints, potential changes in solar panel, inverter, transformer and substation manufacturer during the determination process an element of flexibility is required in relation to their dimensions, appearance and their arrangement.

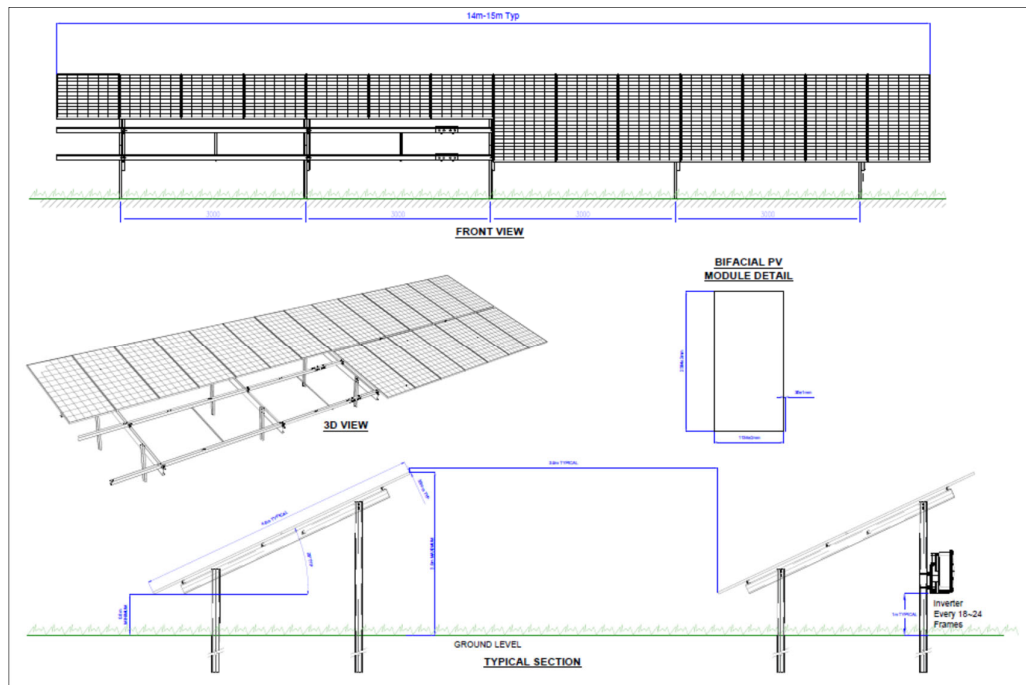
3.2.2 **Drawing WN1001/15/03 r1** shows an indicative layout. A detailed layout and phasing of construction will be agreed with the Local Planning Authority (LPA) by way of planning condition following grant of planning consent.

3.2.3 The panels will be arranged in rows in an east-west alignment across the development areas and will be angled at up to 25° from the horizontal and orientated south. The height of the panels will be up to 3m above ground level; the lowest part of the panel will measure approximately 0.8m above ground level. The rows of panels will be set apart typically 4m to avoid shadowing and allow for scheduled maintenance.

3.2.4 During construction, operation and decommissioning at least 4m setbacks will be established from field boundaries. This setback may be greater where rights of access are being provided for or habitat management.

3.2.5 The mounting frames will be matt finished galvanised steel that will be fixed to the ground employing a pile mounting system, depending on ground conditions. **Drawing WN1001/15/04** and **Figure 3.1** below provide a specification of the panel and frames. The piles will be pushed into the ground via a mobile piling rig.

Figure 3.1: Panel and Frames Specification



3.2.6 The solar panels will be connected to small inverter units which sit in the racking of the frames. The inverters convert the electricity from Direct Current (DC) to Alternating Current (AC). The inverters then feed the transformers which step up the voltage ready to export into the local distribution network via the substation buildings and connecting cables. Details of the proposed ancillary equipment within the site are provided on:

- **Drawing WN1001/15/03** - equipment locations across the development areas;
- **Drawing WN1001/15/05 and 07** – DNO and Customer substation specifications;
- **Drawing WN1001/15/06** - outline details of the containers housing the transformers; and
- **Drawing WN1001/15/08** - outline details of the spare part containers and control cabins

3.2.7 Cabling from the inverters to the substation will be below ground. An earth cable will be required around the perimeter of each development area. Trench depths will vary from 0.4m to 1.3m depending on whether they are for earthing or AC cabling.

3.3 POINT OF CONNECTION AND CABLE ROUTE

3.3.1 The point of connection to the local distribution network is an existing overhead 33kV cable to the immediate south of Garth Road. Upgrade works to facilitate the connection are limited to running the cable up the existing wooden pole and 'teeing' into the cable. These works will be completed by the distribution network operator under their permitted development rights as a statutory undertaker. The laying of the cable to the pole from the proposed solar farm will be carried out by the applicant.

3.3.2 Whilst Garth Road was formally 'stopped up' when the A4067 was constructed it is currently used as a cycle track maintained by Swansea Council. Formal highway

adoption end approximately 150m along the cycle track from the north.

- 3.3.3 The indicative cable route is shown in drawing **WN1001/15/17**. The route is a 'corridor' within the highway in which the cable will be laid. The exact alignment of the route is to be confirmed at detailed design stage via separate authorisation from the Local Highway Authority.

3.4 SITE SECURITY

- 3.4.1 The solar deployment area will be secured by a stock fence (up to 2m in height) or similar. Infra-red (non-visible at night), inward facing pole mounted CCTV cameras (c. 2.5m – 3m in height) will also be provided at between 50m and 100m intervals along the boundary fence. These will enable remote surveillance of the site. Fencing and CCTV camera details are presented on **drawing WN1001/15/09 r1 to 11**. The CCTV cameras will be positioned to avoid views of any private property.
- 3.4.2 Stock fencing will be used to manage conservation grazing across the application site, see **drawing WN1001/15/18** for details.

3.5 CONSTRUCTION PROGRAMME

- 3.5.1 The construction of the solar farm is expected to employ approximately 50 jobs during the peak of a 9-month construction period. An outline Construction Traffic Method Plan (CTMP) accompanies the application and provides details of proposed access arrangements, the anticipated build programme, construction vehicle numbers and type, construction worker numbers and the proposed construction hours. The CTMP will be subject to final approval by the LPA post-consent under the terms of an appropriately worded planning condition.

3.6 SITE ACCESS

- 3.6.1 During the construction phase a temporary, remote set down area is proposed as Graig Y Pal, that leads to the proposed deployment area, cannot accommodate large HGVs. Swept path analysis shown in the CTMP demonstrate that 7.5 tonne (10m long vehicle can access the site using Graig Y Pal with only minor improvements to the adopted highway. See the CTMP for further details.
- 3.6.2 Graig Y Pal, a single-track road accessed via Graigola Road approximately 500m southeast of the site. Graigola Road connects to the B4291 c40m west of the junction with Graig Y Pal. This provides a route to the village of Clydach and A4067 to the north and to M4 Junction 44 to the south.
- 3.6.3 As some site infrastructure and materials will be delivered by 16.1m long articulated HGVs an alternative set down area is required. Land of Ynys Y Mond Road was identified as being suitable and swept path analysis shown in the CTMP confirm this. HGVs will travel north from the B4291 on to Ynys Y Mond Road. Once materials have been dropped off, HGVs would return to the B4291 travelling south along Ynys Y Mond Road. Smaller vehicles (7.5 tonne) transporting materials from the remote set down area to the development site would also travel along Ynys Y Mond Road.
- 3.6.4 The CTMP advises that no highway improvements are required along Ynys Y Mond Road, vehicles accessing and leaving the remote set down area and the development site will need careful management during the 9-month construction phase. The details of this will be agreed with the LPA as part of a condition.

- 3.6.5 Details of the proposed access arrangements during construction are presented in the CTMP. Once operational, the proposal will generate minimal traffic from monthly inspections and maintenance.

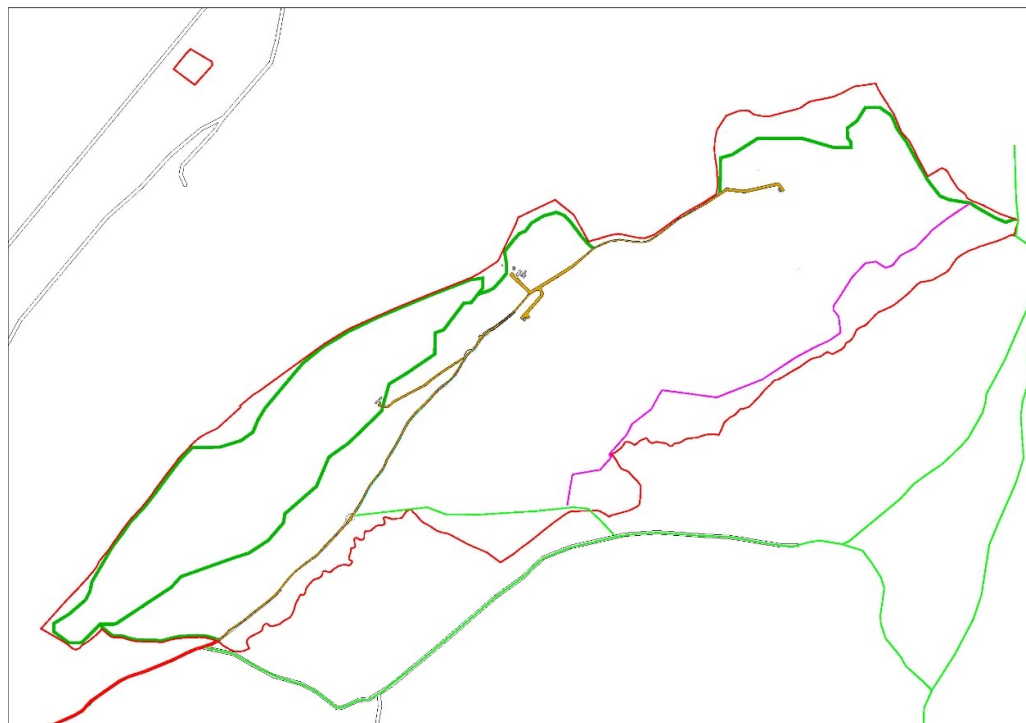
3.7 PUBLIC ACCESS

- 3.7.1 Public access within the site area and wider land holding has been a constant discussion throughout the planning application preparation and Pre-Application Consultation (PAC) process and is outlined in the following stages.

Initial Proposal (PAC Submission)

- 3.7.2 The initial public consultation feedback highlighted the importance of 'Graig Ola Mountain' as an area for public access. Despite it being in private ownership it was that clear the local community had been using part of the application site for recreation; including walking, horse riding and cycling.
- 3.7.3 To facilitate continued access the developer committed to the provision of a network of bridleways and footpaths as part of the proposed development. In discussion with representatives of the local community and Swansea Council's Rights of Way Team, the alignment (including a proposed footbridge) and outline specification of the Public Rights of Way, was established.
- 3.7.4 The initial proposals are as detailed in **drawing WN1001/15/13** (as part of the pre-application consultation stage) are now superseded. Access is highlighted on the below image:

Figure 3.2: Initial Public Access Proposal



- Red – Planning Application Boundary
- Dark Green – New Bridleway
- Purple – New Footpath, South Eastern Boundary

- Light Green – Existing Public Rights of Way
 - Light Brown – Site access / Internal Access Tracks
- 3.7.5 Initial proposals developed as part of the Pre-Application Consultation stage allowed for approximately 3.5km of bridleways and a 1km footpath to be dedicated, all of which will allow a right of access in perpetuity. The dedication will be agreed separately with the Local Authority under the Highway Act 1980.
- 3.7.6 Bridleways are proposed along the periphery of 'Graig Ola Mountain'. The proposed alignments have been walked and discussed with Swansea Council Rights of Way Officers and representatives of the local community. Where the existing public highway adoption terminates a bridleway will continue along the northern site boundary to join the existing bridleway YM370A at the eastern corner of the application site. In addition, a bridleway will be provided from Graig Y Pal westward to Graig Ola Mountain'; opposite where footpath YM2 emerges on Graig Y Pal. Also, a short section of bridleway will provide a link to an existing track and gate on land owned by NRW should public access be allowed through adjoining (third party) land in the future. It is highlighted that no access is proposed onto adjacent land owned by NRW as part of this application.
- 3.7.7 A footpath is proposed along the eastern boundary of the application site that will link existing footpath YM2 to the existing bridleway YM370A at the eastern corner of the application site. A new footbridge will be erected over Nant Y Glais as part of the right of way, the alignment and positioning has been walked and discussed with Swansea Council Rights of Way Officers.
- 3.7.8 **Drawing WN1001/15/13** showed typical cross-sections of the proposed bridleway and footpath. The detailed design and position of the footbridge will be agreed with the LPA as part of a condition.

Planning Application Submission

- 3.7.9 The public access proposals (formal planning submission stage) are as detailed in **drawing WN1001/15/13 R1**. Access is highlighted on the below image:
- Dark Green – Proposed Bridleway
 - Dark Green (Large Areas) – Open Public Access Areas
 - Purple – Proposed Footpath
 - Yellow – Proposed Permissive Footpath, Central Area
 - Light Green – Existing Public Rights of Way
 - Light Brown – Site access / Internal Access Tracks
 - Yellow Dots – Proposed Benches
 - Red Line – Planning Application Boundary

Figure 3.3: Formal Submission – Public Access Proposal



- 3.7.10 The public access proposals have evolved following further consultation during the PAC process with Swansea Council's Right of Way Team and representatives of the local community which included additional site meetings to walk the routes.
- 3.7.11 To facilitate improved public access, solar deployment has been amended to accommodate a central bridleway to traverse the top section of 'Graig Ola Mountain'. The c.5m wide route will allow access through the site, improving sight lines and allowing a variety of route circuits to be taken. An additional two link bridleway have also been added that cross the deployment zones approximately south east to north west, this allows further route options and avoids the need to have to travel down a channelled route through the whole deployment zone.
- 3.7.12 These new bridleways also allow some large open 'rest areas' within the south west, central and northern area of the site. These areas will allow for the retention of the open viewing areas that are currently valued by users of the mountain. A new bench is also proposed for the central viewing area at one of the high points of the site see **drawing WN1001/15/13 R1** for location.
- 3.7.13 A further improvement to site circulation is made to the central area of the site, a new permissive footpath route connects with the existing PROW / adopted highway at the north eastern end of Graig Ola Mountain, running south through the central meadow glades and woodland areas to connect with the new route on the south eastern site boundary (as outlined in initial stage), the link between footpath YM2 and bridleway YM370A. This attractive connecting route will be largely free of solar development, marked by way posts with the addition of two new benches in the meadow areas.
- 3.7.14 The length of the bridleway has increased to 4.5km and the footpaths are now 1.3km in length.

Summary

- 3.7.15 In summary, the proposed bridleways will have a 5m width and the footpath a 2m width. The surface of these routes will not change from that currently in place (grass / bare earth). Once the routes are dedicated the surface and maintenance becomes the responsibility of the Local Authority, although the applicant will ensure vegetation growth adjacent to the route does not cause impediment. The proposed bridleway network and the footpath along the south eastern boundary of the application site will be dedicated, the proposed footpath through the central low lying zone of the site will be a permissive.

3.8 BIODIVERSITY ENHANCEMENTS

- 3.8.1 Biodiversity enhancements are at the fore of the proposals. In addition to land between and beneath the panels, there will be significant areas of land located within the application site that will not be subject to the deployment of solar panels and will be brought under formal management for the life of the scheme.
- 3.8.2 The landscape and visual impact assessment (**Appendix 4.6**), ecological impact assessment and outline ecological management strategy (**Appendix 4.7 and 4.7.1**) provide full details of the enhancement proposals. In summary ecological enhancement options will focus on appropriately managing habitats on site, options include:
- Where solar panels are being installed, a buffer of a minimum 7m is present between the woodland edge and the security fence. This will ensure woodland and woodland edge is protected and retained;
 - All Areas of the higher value semi-improved acid grassland/Molinia Fen are to remain free from panels;
 - No lighting is proposed during operational phase;
 - The landscape has been designed with no new planting to protect the existing native habitats;
 - All grassland, dry acid heath and Molinia Fen Meadow on on-Site will be managed with either a restore, maintain, or enhance management prescription. This will be achieved through a mixture of sensitive cutting regimes and low intensity conservation grazing.
 - Scrub and bracken will be removed from specific areas to improve the condition of the grassland. This will be achieved through mechanical removal and continued management through conservation grazing; and
 - The AWI/Upland Oak Woodland will be fenced to remove all grazing pressure and allow the native understorey to re-establish. Conservation management will then be implemented through low intensity grazing at appropriate times.
 - Removal and monitoring of rhododendron and Japanese knotweed; and
 - Monitor and assess the success of the options.

3.9 CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

- 3.9.1 An outline Construction Environmental Management Plan (CEMP) has been prepared and accompanies the planning application. The CEMP sets out the controls to be implemented to minimise adverse environmental effects during the construction phase of the development. The CEMP outlines how these will be implemented and who by.

3.10 SURFACE WATER MANAGEMENT

- 3.10.1 Although the solar panels will divert the downward path of falling rain, being raised off the ground on frames, they will not reduce the permeable area where they are sited. Rainfall that does fall onto the site will, as now, infiltrate into the soil substrate. Therefore, the surface water runoff from the developed site will be no different pre and post-application. There will be no increase in surface water run-off or exacerbation of off-site risk as a result of the proposals.
- 3.10.2 A Flood Consequences Assessment (**Appendix 4.5**) identifies and assesses the risks of all forms of flooding to and from the development and demonstrates how these flood risks will be managed so that the development remains safe throughout the lifetime, taking climate change into account.

3.11 COMMUNITY OWNERSHIP

- 3.11.1 Future Wales sets the following ambitious targets for the generation of renewable energy:
- For 70% of electricity consumption to be generated from renewable energy by 2030.
 - For one gigawatt of renewable energy capacity to be locally owned by 2030.
 - For new renewable energy projects to have at least an element of local ownership from 2020.
- 3.11.2 The applicant is open to the potential for an element of the scheme to have local ownership but is also aware of the economic challenges this presents. Nonetheless, the applicant would welcome discussions with the Local Authority to understand such opportunities.
- 3.11.3 The applicant is also open to discussions with local stakeholders regarding their potential involvement with habitat management across the proposal site. Should there be sufficient interest, working groups could be co-ordinated on a voluntary basis and under the direction of the appointed contractor to undertake works where appropriate. Such works will be in accordance with the Biodiversity Management Plan and health and safety requirements will be adhered at all times.

3.12 DECOMMISSIONING

- 3.12.1 After 40 years of operation the panels and associated infrastructure will be able to be removed from site. The CTMP will detail the programme and anticipated vehicle movements associated with this phase of proposal.

4. POLICY CONTEXT

4.1 INTRODUCTION

- 4.1.1 This section presents the key policy, legislation and guidance relevant to the proposed development. Section 38(6) of the Planning and Compulsory Purchase Act 2004 Act states that

“...if regard is to be had to the development plan for the purpose of any determination to be made under the Planning Acts the determination must be made in accordance with the plan unless material considerations indicate otherwise

- 4.1.2 The following section considers relevant national strategies, policy and guidance, and Development Plans as far as they are relevant to the proposed development. This relates to matters of energy and planning.

4.2 National Energy Context

Climate Change Act

- 4.2.1 The Climate Change Act 2008 required long term targets for the UK to achieve an 80% reduction in greenhouse gases by 2050 against 1990 levels. In June 2019, the Climate Change Act 2008 (2050 target Amendment) Order came into effect which required the net UK carbon account for the year 2050 to be 100% of 1990 levels.
- 4.2.2 The UK Act requires governments to set legally binding ‘carbon budgets’. Each budget provides a five-year cap on total greenhouse emissions; in order to meet the UK’s emission reduction commitments caps should not be exceeded.
- 4.2.3 The first carbon budget (2008-12) and the second (2013-17) have been met and the UK is on track to outperform the third (2018-22). However, it is not on track to meet the fourth (2023-27) or the fifth (2028-32).
- 4.2.4 On 20 April 2021, the UK Government announced its commitment to reduce carbon emissions by 78% by 2035 compared to 1990 levels (including, for the first time, those from shipping and aviation). The new target was enshrined in law in The Carbon Budget Order 2021 which came into force on 24th June 2021.

Environment (Wales) Act 2016

- 4.2.5 The Act provides the necessary legislation to improve planning and management of natural resources in Wales. Part 2 of the Act relates to Climate Change and places an obligation on Welsh Ministers to reduce greenhouse gas emissions such that in the year 2050 they are at least 80% lower than baseline figures for 1990 or 1995, depending the type of GHG.

Advice Report: Path to a Net Zero Wales

- 4.2.6 Required under the Environment (Wales) Act 2016, the Report provides ministers with advice on Wales’ climate targets between now and 2050 and assesses progress on reducing emissions to date. Prepared in December 2020 by the Climate Change Committee (an independent statutory body) the report states that meeting the Net Zero target in Wales requires action across four key areas; Reducing demand for carbon-intensive activities; Take-up of low-carbon solutions; Expansion of low-carbon energy supplies; Land; and Flexibility to meet Net Zero.
- 4.2.7 In April 2019, the Welsh Government Minister for the Environment, Energy and Rural

Affairs, Lesley Griffiths AM declared a climate emergency in Wales. The Welsh Government initially committed to a 95% reduction in emissions by 2050, but in February 2021 amended this to a legal commitment to achieve net zero emissions by 2050, with a stated ambition to “get there sooner”.

4.2.8 Swansea Council declared a climate emergency in 2019. On 3rd December 2020 a Swansea Council Charter on Climate Change was approved. The Charter commits the Council to work towards becoming a Net Zero organisation by:

- committing to work towards a Net Zero carbon as an organisation by 2030
- taking actions to meet the challenge of a climate emergency
- working collaboratively with partners to develop a strategy
- involving stakeholders including children and young people in a trust building dialogue.

4.2.9 Neath Port Talbot CBC declared a climate emergency on 28th September 2022. the council is now committed to:

- Calling on the UK and Welsh governments to provide the necessary powers and resources to ensure Neath Port Talbot becomes carbon neutral by 2030.
- Publicising the climate emergency.
- Working with relevant experts in research and development in reviewing its current strategies and action plans for addressing climate change.
- Identifying any further necessary policy changes or actions, seeking help from local partners and other research bodies to explain local what local work is already underway, achievements already made and setting targets for the future.
- Updating on further work undertaken by the council in this area on an annual basis.

Prosperity for All: A Low Carbon Wales (March 2019)

4.2.10 The Environment (Wales) Act 2016 requires Welsh Government to reduce emissions of greenhouse gases (GHGs) in Wales by at least 80% for the year 2050 from 1990 levels with a system of interim emissions targets and carbon budgets. Under s39 of that Act, Welsh Ministers must prepare and publish a report for each budgetary period setting out their policies and proposals for meeting the carbon budget for that period.

4.2.11 Prosperity for All: A Low Carbon Wales is the Welsh Government's first statutory decarbonisation plan. It sets out the Welsh government's approach to cut emissions and increase efficiency in a way that maximises wider benefits for Wales, ensuring a fairer and healthier society. It sets out a hundred policies and proposals that directly reduce emissions and support the growth of the low carbon economy.

4.2.12 It specifically seeks to reduce the use of fossil fuels for power generation, and promote and accelerate the deployment of renewable energy generation. The plan also recognises that energy storage and flexibility services will need to be provided to integrate with new renewable energy development as part of a whole system approach.

4.2.13 The Welsh Government published its second statutory decarbonisation plan (LCDP2) in Autumn 2021. The Plan sets out:

- the overall vision for Wales in 2025 and beyond to 2050, an overview of the reduction trajectory, the latest emissions data, and a broader view of our consumption emissions and global responsibilities.

- setting out the pathways for each emissions sector, describing what is in scope, where the emissions come from, progress to date
- setting out our governance structures, performance indicators, financial costings; and
- highlighting key engagement and emissions reducing deliverables over this carbon budget and the timeframe for developing our third delivery Plan to meet Carbon Budget 3.

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

4.2.14 In addition to the policy provisions outlined above, under the Well-being of Future Generations (Wales) Act 2015 all public bodies in Wales have a duty to secure sustainable development by improving the economic, social, environmental and cultural well-being of Wales to achieve the 7 “well-being goals”. All planning applications in Wales need to demonstrate how they align with the seven well-being goals:

- 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.

1 – A Prosperous Wales

4.2.15 The goal seeks for an innovative, productive and low carbon society. The CYP solar farm represents a multi-million pound investment in the local economy, a development which will help Wales (and the local community) shift energy generation to a low carbon source. The site construction phase and ongoing operation will provide local employment and supply chain opportunities.

2 – A Resilient Wales

4.2.16 The goal seeks to maintain and enhance a biodiverse natural environment with healthy function ecosystems. The development will assist in the nation enhancing and protecting the natural environment through the production of green energy and local biodiversity enhancements. The development will lead to biodiversity net gain and works which will support the functioning of the ecosystem at a site level through improvements to the SINC, thereby increasing ecological resilience to change.

3 – A More Equal Wales

4.2.17 The goal seeks a society where everyone can reach their potential no matter their background or circumstances. The site will provide employment and training opportunities throughout the construction and operational phases, providing ongoing socio economic benefit. Further opportunities are to be explored for community ownership to enable investments to be made into the scheme.

4 – A Healthier Wales

4.2.18 The goal aims to maximise people’s physical and mental well-being. The development will formalise permitted public access to the site. A range of access routes have been further improved through the consultation process, creating

additional routes and areas to sit and relax. Increased numbers of users are expected to the area, overall promoting active lifestyles.

5 – A Wales of Cohesive Communities

- 4.2.19 The goal seeks to promote attractive, viable, safe and well connected communities. The site design has been informed by a number of environmental assessments, to minimise adverse effects and has been subject to a thorough consultation process with the local community. The scheme will benefit the local community through the provision of enhanced public access, financially through community benefit fund, and the allow the creation of local green energy.

6 – A Wales of Vibrant Culture and Thriving Welsh Language

- 4.2.20 This goal promotes and protects culture, heritage and the Welsh language, encourages participation in arts, sports and recreation. The scheme has been designed with respect, and to ensure no harm, to local cultural heritage assets. The development will provide further local recreation assets through the provision of new bridleways and footpaths.

7 – A Globally Responsible Wales

- 4.2.21 The CYP solar farm development is considered to make a positive contribution to local and global well-being through the creation of green energy. Statutory guidance on the Act (Shared Purpose: Shared Future 1: Core Guidance) explains that action on climate change benefits both people and communities in Wales, whilst also contributing to the wider global effort to tackle the causes of climate change and reduce its effects.

4.3 NATIONAL PLANNING POLICY CONTEXT

Future Wales: The National Plan 2040

- 4.3.1 Future Wales: The National Plan 2040 (Adopted February 2021) is the national plan that sets the direction of development in Wales to 2040. Future Wales constitutes the development plan for DNSs in line with s38(6) of the Planning and Compulsory Purchase Act 2004. It states:

Wales can become a world leader in renewable energy technologies. Our wind and tidal resources, our potential for solar generation, our support for both large and community scaled 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.

- 4.3.2 As set out in legislation (Planning & Compulsory Purchase Act 2004 as amended by the Planning (Wales) Act 2015), applications for Developments of National Significance must be determined in accordance with Future Wales, which is the national development plan for Wales.
- 4.3.3 Future Wales identifies 11 Outcomes to be achieved in 20 years-time. Outcome 9 seeks a Wales where people live in places that sustainably manage their natural resources and reduce pollution. Outcome 11 seeks a Wales where people live in places which are decarbonised and climate-resilient.
- 4.3.4 Future Wales states:

Wales is abundant in opportunities to generate renewable energy and the Welsh Government is committed to maximising this potential. Generating renewable energy is a key part of our commitment to decarbonisation and tackling the climate emergency.

4.3.5 Furthermore, Future Wales sets the following ambitious targets for the generation of renewable energy:

- For 70% of electricity consumption to be generated from renewable energy by 2030.
- For one gigawatt of renewable energy capacity to be locally owned by 2030.
- For new renewable energy projects to have at least an element of local ownership from 2020.

4.3.6 The National Plan includes Policies 17 and 18 which are strategic spatial and detailed criteria-based policies respectively and should be considered together in the determination of applications.

4.3.7 Policy 17 demonstrates the Welsh Government's support in principle for all renewable energy projects and technologies. Proposals should ensure there is no significant unacceptable detrimental impact on the surrounding natural environment and local communities and that the development delivers positive social, environmental, cultural and economic benefits. Policy 17 - Renewable and Low Carbon Energy and Associated Infrastructure states:

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 for 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....

Proposals should describe the net benefits the scheme will bring in terms of social, economic, environmental and cultural improvements to local communities....

4.3.8 Policy 18 provides a decision-making framework for renewable and low carbon energy technologies. Policy 18 - Renewable and Low Carbon Energy 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.

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

4.3.9 Policy 32 – Haven Waterway and Energy states:

“...New energy-related development should support local and regional communities and provide jobs and investment in training and skills.

In determining any applications for energy proposals, consideration should be given to the contribution it will make to decarbonising energy supplies, the impacts on the landscape, seascapes, natural and historic environment and the economic benefits they would bring to the region.

On-shore developments associated with off-shore renewable energy projects will be supported in principle.

Planning Policy Wales Edition 11

4.3.10 The Welsh Government published Planning Policy Wales Edition 11 (PPW) in February 2021. PPW forms the overarching national level source of planning policy for Wales. It has been updated to take into account Future Wales and the Wellbeing of Future Generations Act which incorporates the 7 wellbeing goals. It seeks to support the presumption in favour of sustainable development within the planning system.

4.3.11 PPW sets out the specific planning policies for achieving sustainable development across Wales. Figure 4 sets out the key planning principles of this national policy, stating that:

“The planning system has a vital role to play in making development resilient to climate change, decarbonising society and developing a circular economy

for the benefit of both the built and natural environments and to contribute to the achievement of the well-being goals.”

4.3.12 Chapter 5 (Productive and Enterprising Places) of PPW sets out the Welsh Government’s policies regarding Enterprising Placemaking and Well-being across Wales. One of the key aims in relation to energy is:

- For Wales to generate 70% of its electricity consumption from renewable generation by 2030;
- For one Gigawatt of renewable electricity capacity in Wales to be locally owned by 2030; and
- Actively managing the transition to a low carbon economy.

4.3.13 Chapter 5 of PPW outlines the importance of the planning system to deliver these targets, paragraph 5.7.15 states:

“The planning system has an active role to help ensure the delivery of these targets, in terms of new renewable energy generating capacity and the promotion of energy efficiency measures in buildings.

4.3.14 Paragraph 5.9.19 states 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.*

4.3.15 Paragraph 5.9.20 continues stating:

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.*

4.3.16 Chapter 5 also outlines that before an application is submitted “...developments should, wherever possible, consider how to avoid, or otherwise minimise, adverse impacts through careful consideration of location, scale, design and other measures”. Furthermore, active engagement with the local community should be undertaken at

pre-application stage.

- 4.3.17 Paragraph 5.9.15 of Planning Policy Wales Edition 11 confirms that the need for renewable energy generation is not a material planning consideration. It states:

...planning applications for renewable and low carbon energy developments should be determined based on the merits of the individual proposal. The local need for a particular scheme is not a material consideration, as energy generation is of national significance and there is a recognised need to optimise renewable and low carbon energy generation.

Technical Advice Note 5: Nature Conservation and Planning (2009)

- 4.3.18 This Technical Advice Note provides advice about how the land use planning system should contribute to protecting and enhancing biodiversity and geological

conservation. It:

- sets out the key principles of planning for nature conservation;
- provides advice about the preparation and review of development plans, including the relevant statutory requirements;
- addresses nature conservation in development management procedures;
- deals with the conservation of internationally and nationally designated sites and habitats and also covers local sites; and
- deals with the conservation of protected and priority species.

Technical Advice Note 18: Transport

- 4.3.19 TAN18 states that in relation to traffic management well designed and implemented traffic management measures can help to secure planning objectives in a number of ways, including:

- reducing community severance, noise, local air pollution and traffic accidents;
- promoting safe walking, cycling and public transport;
- improving the attractiveness of urban areas by helping to avoid or manage congestion;
- controlling on street parking (including resident parking schemes) in areas of high parking demand;
- promoting safer road conditions leading to improved opportunity for children's safety and play; and
- promoting safer road conditions in rural areas and reducing the impact of roads on the environment whilst maintaining access for rural businesses."

Technical Advice Note 15: Development and Flood Risk

- 4.3.20 TAN 15 is a technical advice note that provides technical guidance to supplement Planning Policy Wales (PPW), in relation to development and flooding. TAN 15 advises on development and flood risk, and provides a framework within risks arising from both river and coastal flooding, and from additional run-off from development in any location, can be assessed.

- 4.3.21 The general approach of PPW and TAN 15 is to advise caution with respect to new development in areas at high risk of flooding by setting out a precautionary framework to guide planning decisions. The overarching aim of the precautionary framework (in order of preference), is to:

- Direct new development away from those areas which are at high risk of flooding.

- Where development has to be considered in high risk areas (zone C) only those developments which can be justified on the basis of tests (outlined in sections 6 and 7 of TAN 15), are located within such areas

Technical Advice Note 24: The Historic Environment (2017)

- 4.3.22 The purpose of TAN24 is to provide guidance on how the planning system considers the historic environment during development plan preparation and decision making on planning and Listed Building (LBC) applications.
- 4.3.23 Conservation Principles should be used by others (including owners, developers and other public bodies) to assess the potential impacts of a development proposal on the significance of any historic asset/assets and to assist in decision making where the historic environment is affected by the planning process.
- 4.3.24 There are six principles.
- Historic assets will be managed to sustain their values.
 - Understanding the significance of historic assets is vital.
 - The historic environment is a shared resource.
 - Everyone will be able to participate in sustaining the historic environment.
 - Decisions about change must be reasonable, transparent and consistent.
 - Documenting and learning from decisions is essential.
- 4.3.25 Applicants and other organisations are strongly encouraged to make use of these Conservation Principles when considering development proposals and other works to historic assets. It is important for those responsible to understand the heritage values and assess the significance of the historic assets that will be affected.

4.4 LOCAL CONTEXT

Swansea Local Development Plan 2010 to 2025

- 4.4.1 Swansea Local Development Plan 2010 to 2025 was formally adopted on 28 February 2019. The Plan sets out the vision, objectives, strategy and policies for managing development in Swansea and contains a number of local planning policies. It makes provision for the use of land for the purposes of housing, employment, retailing, recreation, transport, tourism, minerals, waste, and community uses. The policies relevant to the proposal are:
- PS 1: Sustainable Places
 - PS 2: Placemaking and Place Management
 - PS 4: Sustainable Employment Strategy
 - HC1: Historic and Cultural Environment
 - HC 3: Development in the Welsh Language Sensitive Area
 - ER 1: Climate Change
 - ER 2: Strategic Green Infrastructure Network
 - ER 5: Landscape Protection
 - ER 6: Designated Sites of Ecological Importance
 - ER 8: Habitats and Species
 - ER 9: Ecological Networks and Features of Importance for Biodiversity
 - ER 11: Trees, Hedgerow and Development
 - CV 2: Development in the Countryside
 - T1: Transport Measures and Infrastructure
 - T5: Design Principles for Transport Measures and Infrastructure

- T 7: Public Rights of Way and Recreational Routes
- EU 1: Renewable and Low Carbon Energy Proposals
- RP 1: Safeguarding Public Health and Natural Resources
- RP2: Noise Pollution
- RP3: Air and Light Pollution
- RP 4: Water Pollution and the Protection of Water Resources
- RP 5: Avoidance of Flood Risk
- RP 6: Land Contamination
- RP 7: Land Instability
- RP 13: Safeguarding Minerals

4.4.2 Each of the above policies are detailed below.

4.4.3 **Policy PS 1: Sustainable Places** seeks to protect the countryside from inappropriate development. It states:

In order to deliver sustainable places and strategically manage the spatial growth of the County, the delivery of new homes, jobs, infrastructure and community facilities must comply with the Plan's sustainable settlement strategy that requires:

- i. Development to be directed to the most sustainable locations within the defined settlement boundaries of the urban area and Key Villages;*
- ii. New homes and jobs to be delivered in a manner consistent with growth forecasts and the Plan's Sustainable Housing and Employment Strategies;*
- iii. The safeguarding and protection of the character and openness of Green Wedges; and*
- iv. Inappropriate development in the countryside to be resisted*

4.4.4 **Policy PS 2: Placemaking and Place Management** is a strategic policy that seeks to protect Swansea's natural and built environmental assets and reinforces that sensitive design and choice of location of new development can have a positive effect. It states that:

Development should enhance the quality of places and spaces, and respond positively to aspects of local context and character that contribute towards a sense of place.

The design, layout and orientation of proposed buildings, and the spaces between them, should provide for an attractive, legible, healthy, accessible and safe environment. All proposals should ensure that no significant adverse impacts would be caused to people's amenity. Depending on the nature, scale and siting of the proposal, development should also:

- i. Have regard to important elements of local heritage, culture, landscape, townscape, views and vistas;*
- ii. Ensure neighbourhoods benefit from an appropriate diversity of land uses, community facilities and mix of densities that in combination are capable of sustaining vibrancy;*
- iii. Create or enhance opportunities for Active Travel and greater use of public transport;*
- iv. Integrate effectively with the County's network of multi-functional open spaces and enhance the County's green infrastructure network;*
- v. Enhance public realm quality, incorporating public art where appropriate;*

- vi. Provide for a hierarchy of interconnected streets and spaces;*
- vii. Ensure active frontages onto streets and spaces to provide natural surveillance and character;*
- viii. Provide an accessible environment for all;*
- ix. Provide appropriate parking and circulation areas for cars, cycles, motor bikes and service vehicles;*
- x. Deliver new, and/or enhance existing, connections to essential social infrastructure and community facilities;*
- xi. Maximise opportunities for sustainable construction, resource efficiency and contributions towards increased renewable or low carbon energy generation;*
- xii. Avoid the loss of land and/or premises that should be retained for its existing use or as an area of open space;*
- xiii. Avoid unacceptable juxtaposition and/or conflict between residential and non-residential uses;*
- xiv. Ensure no significant adverse impact on natural heritage and built heritage assets;*
- xv. Ensure resilience is not undermined and does not result in significant risk to human health, well-being or quality of life; and*
- xvi. Ensure that commercial proposals, including change of use proposals:*
 - a. incorporate active frontages and shopfront designs that make a positive contribution to the street scene,*
 - b. provide appropriate enclosure,*
 - c. relate well to the character of the host building,*
 - d. do not compromise the ability to deliver priority regeneration schemes.*
- xvii. Have regard to the implications for infrastructure and services*

4.4.5 **Policy PS 4: Sustainable Employment Strategy** seeks to ensure delivery of strategic employment land requirements based on the city region context.

Opportunities for business growth and the potential for the creation of 13,600 additional jobs over the Plan period result in a requirement for 19 hectares of employment land. This will be provided for by means of a Sustainable Employment Strategy, which is based on:

- i. Allocating mixed use Strategic Development Areas that incorporate substantive areas for new, or retained, employment uses of varying scale at the following locations:*
 - 1. SD G: Land north of M4 Junction 46 (14 Ha);*
 - 2. SD H: Land north of Waunarlwydd/Fforestfach (26 Ha);*
 - 3. SD I: Swansea Vale (4 Ha);*
 - 4. SD J: Swansea Central Area (4 Ha);*
 - 5. SD K: Fabian Way Corridor (12 Ha),*
- ii. Retaining land for employment that is in active viable employment use that forms part of the employment land bank, including existing employment estates and business parks;*

iii. Allowing small scale sustainable employment developments within Key Villages, plus appropriate rural enterprises within the countryside to help enhance and diversify the rural economy; and

iv. Adopting a flexible approach where appropriate to deliver proposals that will create significant numbers of new high quality jobs within the highest skilled and/or knowledge economy employment sectors

- 4.4.6 **Policy HC1: Historic and Cultural Environment** seeks to secure the sustainable management, preservation and enhancement of the character and appearance of the historic and cultural environment, whilst supporting appropriate heritage led regeneration proposals to realise the social and economic potential of these assets.

The County's distinctive historic and cultural environment will be preserved or enhanced by:

i. Requiring high quality design standards in all development proposals to respond positively to local character and distinctiveness;

ii. Identifying and safeguarding heritage assets, sites and their settings;

iii. Supporting heritage and cultural led regeneration schemes;

iv. Safeguarding and promoting use of the Welsh language.

- 4.4.7 **Policy HC 3: Development in the Welsh Language Sensitive Area** seeks to ensure that developments do not negatively impact on the linguistic balance of an area, and instead form sustainable developments which integrate into the social and cultural fabric of the community.

The Welsh language will be safeguarded and promoted throughout the County.

Within the Welsh Language Sensitive Area the Council may subject the following developments on windfall sites to a Welsh Language Impact Assessment:

i. Residential development for 10 or more dwellings; and

ii. Retail, commercial or industrial development with a total floorspace of 1000 sq. m or more.

Planning applications for the above scale and type of developments on allocated sites within the Welsh Language Sensitive Area will be required to submit a Welsh Language Action Plan. This should set out the measures to be taken to protect, promote and enhance the Welsh language.

- 4.4.8 **Policy ER 1: Climate Change** seeks to reduce carbon emissions and provides against the impacts of climate change. The policy states:

To mitigate against the effects of climate change, adapt to its impacts and ensure resilience, development proposals should take into account:

i. Reducing carbon emissions;

ii. Protecting and increasing carbon sinks;

iii. Adapting to the implications of climate change at both a strategic and detailed design level;

iv. Promoting energy and resource efficiency and increasing the supply of renewable and low carbon energy;

- v. Avoiding unnecessary flood risk by assessing the implications of development proposals within areas susceptible to flooding and preventing development that unacceptably increases flood risk; and*
- vi. Maintaining ecological resilience.*

4.4.9 **Policy ER 2: Strategic Green Infrastructure Network** seeks to protect and enhance green Infrastructure through a network of multifunctional green and blue spaces, corridors and environmental features which surround, thread through, shape and help form settlements and the wider countryside.

Green Infrastructure will be provided through the protection and enhancement of existing green spaces that afford valuable ecosystem services.

Development that compromises the integrity of such green spaces, and therefore that of the overall Green Infrastructure network, will not be permitted.

Development will be required to take opportunities to maintain and enhance the extent, quality and connectivity of the County's multi-functional Green Infrastructure network, and where appropriate:

- i. Create new interconnected areas of Green Infrastructure between the proposed site and the existing strategic network;*
- ii. Fill gaps in the existing network to improve connectivity; and*
- iii. In instances where loss of Green Infrastructure is unavoidable, provide mitigation and compensation for the lost assets.*

4.4.10 **Policy ER 5: Landscape Protection** seeks to ensure that the character and quality of the County's landscape is protected from inappropriate development.

Development will not be permitted that would have a significant adverse effect on the character and quality of the landscape of the County.

Priority will be given to protecting, enhancing and managing the character and quality of the following Special Landscape Areas (SLAs), as shown on the Proposals Map and listed below:

- i. Mawr Uplands*
- ii. Lower Loughor Valley and Estuary and Southern part of the Burry Inlet; and*
- iii. North East Gower and Cockett Valley*
- iv. Garngoch and Lower Afon Llan Valley*

Within SLAs, development will only be permitted where there is no significant adverse impact, including cumulative impact, on the character and quality of the landscape. The development should aim to protect and enhance the features for which the SLA has been designated.

Where appropriate, a Landscape Impact Assessment will be required in order to consider the impact of the development on the designated area.

In exceptional circumstances, where development is necessary and could result in a significant landscape impact, a landscaping scheme will also be required and appropriate mitigation and enhancement measures should be provided.

4.4.11 **Policy ER 6: Designated Sites of Ecological Importance** seeks to ensure that the nature conservation value of designated sites is protected from harmful development and that the Council fulfils its obligation to maintain and enhance biodiversity and

ecosystem resilience.

Development will not be permitted that would result in a likely significant adverse effect on the integrity of sites of international or national nature conservation importance, except in the circumstances specified in relevant legislation.

Development that would adversely affect locally designated sites of nature conservation importance should maintain and enhance the nature conservation interest of the site. Where this cannot be achieved development will only be permitted

where it can be demonstrated that:

- i. The need for the development outweighs the need to protect the site for nature conservation purposes;*
- ii. There is no satisfactory alternative location for the development that avoids nature conservation impacts; and*
- iii. Any unacceptable harm is kept to a minimum by effective avoidance measures and mitigation, or where this is not feasible, compensatory measures must be put in place to ensure that there is no overall reduction in the nature conservation value of the area.*

4.4.12 Policy ER 8: Habitats and Species seeks to minimise detrimental impacts on protected habitats and species and ecosystem resilience.

Development proposals that would have a significant adverse effect on the resilience of protected habitats and species will only be permitted where:

- i. The need for development outweighs the nature conservation importance of the site;*
- ii. The developer demonstrates that there is no satisfactory alternative location for the development which avoids nature conservation impacts; and*
- iii. Any unavoidable harm is minimised by effective mitigation to ensure that there is no reduction in the overall nature conservation value of the area. Where this is not feasible, compensation measures designed to conserve, enhance, manage and, where appropriate, restore natural habitats and species must be provided.*

4.4.13 Policy ER 9: Ecological Networks and Features of Importance for Biodiversity seeks to protect and enhance the intervening habitats and spaces that provide crucial links between the designated sites.

Development proposals will be expected to maintain, protect and enhance ecological networks and features of importance for biodiversity. Particular importance will be given to maintaining and enhancing the connectivity of ecological networks which enable the dispersal and functioning of protected and priority species.

Development proposals that could result in an adverse effect on the connectivity of ecological networks and features of importance for biodiversity will only be permitted where:

- i. The need for the development outweighs the nature conservation value of the site;*
- ii. It can be demonstrated that there is no satisfactory alternative location for the development;*

- iii. A functional connected element of the natural resource is retained as part of the design of the development; and*
- iv. Compensatory provision will be made of comparable or greater ecological value to that lost as a result of the development.*

4.4.14 **Policy ER 11: Trees, Hedgerow and Development** seeks to ensure that suitable trees, whether they are protected by legislation or not, are retained and protected on any development site.

Development that would adversely affect trees, woodlands and hedgerows of public amenity or natural/cultural heritage value, or that provide important ecosystem services, will not normally be permitted.

Ancient Woodland, Ancient Woodland Sites, Ancient and Veteran Trees merit specific protection and development will not normally be permitted that would result in:

- i. Fragmentation or loss of Ancient Woodland;*
- ii. The loss of an Ancient or Veteran Tree;*
- iii. Ground damage, loss of understorey or ground disturbance to an area of Ancient Woodland or Ancient or Veteran Tree's root protection area;*
- iv. A reduction in the area of other semi natural habitats adjoining Ancient Woodland;*
- v. Significant alteration to the land use adjoining the Ancient Woodland;*
- vi. An increase in the likely exposure of Ancient Woodland, Ancient or Veteran Tree to air, water or light pollution from the surrounding area;*
- vii. Alteration of the hydrology in a way that might impact on Ancient Woodland, Ancient or Veteran Trees;*
- viii. Destruction of important connecting habitats relating to Ancient Woodland;*
- ix. Destruction of Plantations on Ancient Woodland Sites (PAWS); and/or*
- x. Development in close proximity to Ancient Woodland and Ancient and Veteran Trees.*

Where necessary, planning applications for development proposals on sites containing, or adjacent to, trees will be required to provide: a tree survey; an arboricultural impact assessment; an arboricultural method statement; and/or a tree protection plan. Where trees are to be replaced a scheme for tree replacement must be agreed prior to the commencement of development, including details of planting and aftercare.

4.4.15 **Policy CV 2: Development in the Countryside** seeks to ensure protection of the countryside for the economic, social and environmental benefits provided.

Outside defined settlement boundaries development will be required to ensure that the integrity of the countryside is conserved and enhanced.

There is a presumption against development in the countryside, except where it is for:

- i. The purposes of agriculture, forestry or other rural enterprise;*
- ii. The expansion of an existing rural business;*

- iii. Affordable housing to meet local need at acceptable and sustainable locations within, or infilling, or adjoining settlements, or as minor extensions to small groups of dwellings in the countryside;*
- iv. A rural exception site for employment in or adjoining a settlement;*
- v. Development to allow a small business to operate from home;*
- vi. One Planet Development;*
- vii. Necessary infrastructure provision and enhancement of infrastructure networks; or*
- viii. Recreational equine activities.*

Countryside development must be of a sustainable form with prudent management of natural resources and respect for the cultural heritage of the area

Wherever possible, existing buildings should be re-used or adapted and if this is not feasible new buildings should be located within or close to existing groups of buildings.

Proposals to increase the number of residential chalets within the chalet developments of Hareslade, Holts Field, Miles Lane and Sandy Lane will not be permitted.

4.4.16 Policy T 1: Transport Measures and Infrastructure. This Strategic Policy emphasises that movement, connectivity and legibility of transport links are critical components in the creation of a successful place and an efficient transport network is critical to support economic growth.

Development must be supported by appropriate transport measures and infrastructure, and depending on the nature, scale and siting of the proposal will be required to:

- i. Within SDAs and relevant H 1 sites, prioritise the delivery of the key transport measures and schemes identified in the Transport Measures Priority Schedule, which must be delivered in an efficient and timely manner in accordance with development phases;*
- ii. Be designed to provide safe and efficient access to the transport network, which includes the Active Travel, public transport and street networks;*
- iii. Safeguard, enhance and expand the Active Travel network, particularly by means of improving connectivity;*
- iv. Reduce reliance on car use by maximising the potential of movement to/from the development by public transport, including ensuring developments within the urban area are located a walkable distance to a public transport access point on a route with a high frequency service;*
- v. Ensure all new transport measures are designed as integral elements of a scheme by means of a Placemaking approach;*
- vi. Deliver the new transport infrastructure and improvement measures that are required to mitigate the impact of the development; and*
- vii. Ensure developments are served by appropriate parking provision and circulation areas, including adequate road widths to allow access for service vehicles.*

Development that would have an unacceptable impact on the safe and efficient operation of the transport network will not be permitted.

- 4.4.17 **Policy T 5: Design Principles For Transport Measures and Infrastructure** seeks to promote developments which, through their design and layout, give priority to movements by active transport and public transport, whilst appreciating the demands of service vehicles:

All proposals must ensure that the design of development, together with any supporting transport measures and infrastructure:

- i. Maximises the accessibility of the site via public transport and Active Travel;*
- ii. Provides suitable facilities and a safe, attractive environment for pedestrians, cyclists and other non- motorised modes of transport;*
- iii. Allows for the safe, efficient and effective movement of vehicles, inclusive of service vehicles;*
- iv. Minimises vehicle speeds where appropriate;*
- v. Considers the place and movement of any transport infrastructure in-line with Streets Hierarchy and User Hierarchy concepts to ensure appropriately designed transport infrastructure;*
- vi. Does not encourage extraneous traffic unless there is a specific strategic need for an access route through the area;*
- vii. Does not give rise to any significant adverse effect on the natural heritage, and the historic and cultural environment is preserved or enhanced;*
- viii. Maintains the character of rural lanes and public paths;*
- ix. Complies with the principles of Access For All;*
- x. Accords with standards of good practice, including the Active Travel Act Design Standards; and*
- xi. Considers, and responds to, the findings of any relevant Travel Plan and/or Transport Assessment.*

- 4.4.18 **Policy T 7: Public Rights of Way and Recreational Routes** seeks to protect the County's PROW network for public access and recreational purposes.

Development that significantly adversely affects the character, safety, enjoyment and convenient use of a PROW will only be permitted where an acceptable alternative route is identified and provided.

Linkages, and where appropriate extensions, to the existing PROW network will be expected from all new developments, which must have regard to the existing character of the PROW and the aspiration to improve access for all.

- 4.4.19 **Policy EU 1: Renewable and Low Carbon Energy Proposals** sets out criteria against which all proposals for renewable and low carbon energy development will be assessed.

Proposals for renewable or low carbon energy development will be permitted subject to the following criteria:

- i Strategic Search Area (SSA)*

Within or adjacent to the SSA proposals for wind energy greater than 25MW will be permitted subject to criteria 3 to 5; all other proposals for renewable

and low carbon energy will only be permitted where they can demonstrate they would not prejudice the purpose of the SSA.

ii. Local Search Areas (LSAs) Solar PV

Within the LSAs, proposals for solar PV between 5 – 50 MW will be permitted subject to criteria 3 to 5. All other proposals for renewable and low carbon energy will only be permitted where they can demonstrate they would not prejudice the purpose of the LSA.

iii. Proposals for all types of renewable and low carbon energy development and associated infrastructure, either on their own, cumulatively or in combination with existing, approved or proposed development, should comply with all other relevant policies in the Plan and should not have a significant adverse effect on:

a. The characteristics and features of the proposed location as a result of the siting, design, layout, type of installation and materials used;

b. Public amenity or public accessibility to the area;

c. Radar, Aircraft Operations or Telecommunications;

d. Carbon sinks, unless it can be demonstrated that on-site loss can be adequately mitigated;

iv. Satisfactory mitigation should be in place to reduce the impact of the proposal and its associated infrastructure; and in the case of solar proposals must mitigate against any impacts of glint and glare. Proposals shall make provision for the restoration and after-care of the land for its beneficial re-use. This will be agreed with the LPA prior to the development being carried out.

v. Where necessary, additional compensatory benefits will be sought in accordance with Policy IO 1 Supporting Infrastructure and Planning Obligations

4.4.20 Policy RP 1: Safeguarding Public Health and Natural Resources seeks to ensure that the County's natural environment is protected from materially harmful development.

Development will not be permitted that would result in significant risk to: life; human health and well-being; property; controlled waters; or the natural and historic environment, particularly in respect of:

i. Air, noise or light pollution;

ii. Flood risk;

iii. The quality or quantity of water resources;

iv. Land contamination;

v. Land instability or subsidence;

vi. Sustainable development of mineral resources; and

vii. Sustainable waste management.

Development will not be permitted if judged to have a significant adverse effect on the integrity of any European Designated Sites, either alone or in combination with other plans or projects.

4.4.21 Policy RP 2: Noise Pollution seeks to take into account the nature of the soundscape which exists in an area and the characteristics of the place, or specific

activities which have shaped it.

Where development could lead to exposure to a source of noise pollution it must be demonstrated that appropriate mitigation measures will be implemented, and incorporated into the design of the development to minimise the effects on existing and future occupants.

Noise sensitive developments will not be permitted unless effective and appropriate mitigation is carried out to prevent exposure to existing noise generating uses. Development will not be permitted if it would cause, or result in, a significant increase in levels of environmental noise in an identified Noise Action Planning Priority Area, or would have unacceptable impacts on an identified Quiet Area or the characteristics of tranquillity that led to the designation of a Quiet Area.

- 4.4.22 **Policy RP 3: Air and Light Pollution** seeks to ensure that significant risk to air quality are not created by virtue of emissions from the development itself of the additional new traffic movements it would generate and that the design and operation of lighting systems are satisfactory and/or to prevent light pollution.

Where development could lead to exposure to a source of air or light pollution it must be demonstrated that appropriate mitigation measures will be implemented, and incorporated into the design of the development to minimise the effects on existing and future occupants.

- 4.4.23 **Policy RP 4: Water Pollution and the Protection of Water Resources** seeks to protect and restore clean water to ensure its long term sustainable use.

Development that compromises the quality of the water environment, or does not comply with good water resource management, will not be permitted.

Development proposals must make efficient use of water resources and, where appropriate, contribute towards improvements to water quality. SuDS must be implemented wherever they would be effective and practicable.

Watercourses will be safeguarded through green corridors/ riparian buffers: to protect water quality and water habitats and species; and to provide for flood plain capacity.

Development proposals that would have a significant adverse impact on biodiversity, fisheries, public access or water related recreation use of water resources, will not be permitted.

- 4.4.24 **Policy RP 5: Avoidance of Flood Risk** seeks a sustainable approach to flooding by avoiding flood hazard areas and new development will be expected to be located away from unnecessary flood risk.

In order to avoid the risk of flooding, development will not be permitted:

i. In areas at risk of fluvial, pluvial, coastal and reservoir flooding, unless it can be demonstrated that the development can be justified in-line with national guidance and is supported by a technical assessment that verifies that the new development is designed to alleviate the threat and consequences of flooding;

ii. In areas at risk of flooding from local sources, unless the Council is satisfied with the proposed drainage strategy;

iii. Where it would lead to an increase in the risk of flooding on the site or elsewhere from fluvial, pluvial, coastal or increased water run-off from the site;

- iv. Where it would have a detrimental effect on the integrity of existing fluvial, pluvial or coastal flood defences;*
- v. Where it would impede access to existing and future tidal and fluvial defences for maintenance and emergency purposes; or*
- vi. Where the proposal does not incorporate environmentally sympathetic flood risk mitigation measures, such as SuDS, unless it can be demonstrated that such measures are not feasible*

4.4.25 **RP 6: Land Contamination** seeks to ensure that any risks to development arising from contamination or landfill gas generation are identified and accurately assessed and that, where appropriate, satisfactory measures are taken to overcome the risks identified.

Development proposals on land where there is a risk from actual or potential contamination or landfill gas will not be permitted unless it can be demonstrated that measures can be taken to satisfactorily overcome any significant risk to life, human health, property, controlled waters, or the natural and historic environment.

4.4.26 **RP 7: Land Instability** seeks to steer development away from areas of unstable land.

Development which would create, affect or might be affected by unstable or potentially unstable land will not be permitted where there would be a significant direct risk to life, human health, property, buildings and structures, or the natural heritage on the site or in its vicinity.

Development will only be permitted on unstable or potentially unstable land where:

- It can be satisfactorily demonstrated that proposals to make the land capable of supporting the development are adequate; and*
- The necessary mitigation measures will be in place before development commences or are an integral part of the construction works.*

Within the defined Slip Area of Graig Trewyddfa, development will not be permitted

4.4.27 **RP 13: Safeguarding Minerals** seeks to ensure that resources are safeguarded from sterilisation in case society requires access to them in the future.

Development within mineral safeguarding areas that would permanently sterilise identified resources of aggregates will only be permitted where it can be demonstrated that:

- i. The extraction of the mineral is impracticable, uneconomic or environmentally unacceptable;*
- ii. The mineral has already been extracted or can be extracted satisfactorily prior to the development taking place;*
- iii. The scale and location of the development would have no significant impact on the potential working of the resource; or*
- iv. There is an overriding need for the development.*

Developments of a temporary nature will only be permitted where it can be demonstrated that the proposal will be implemented and the site restored within a timescale that the mineral is likely to be needed

4.4.28 The Neath Port Talbot County Borough Council Local Development Plan (2011-2026) was adopted January 2016. The LDP guides the future development providing a clear vision for the County Borough setting out where, when and how much new development can take place over the next 15 years (2011-2026). The relevant policies to the proposal are:

- SP 1: Climate Change
- SC 1: Settlement Limits
- SP 4: Infrastructure
- SP 6: Development in the Valleys Strategy Area
- SP 14: The Countryside and the Undeveloped Coast
- SP 15: Biodiversity and Geodiversity
- EN 6: Important Biodiversity and Geodiversity Site
- EN 7: Important Natural Features
- EN 8: Pollution and Land Stability
- SP 16: Environmental Protection
- M 1: Development in Mineral Safeguarding Areas
- SP 18: Renewable and Low Carbon Energy
- RE 1: Criteria for the Assessment of Renewable and Low Carbon Energy Development
- SP21: Built Environment and Historic Heritage
- BE 1: Design
- WL 1: Development in Language Sensitive Areas

4.4.29 Each of the above policies are detailed below.

4.4.30 **Policy SP 1: Climate Change** is a strategic policy that is of fundamental importance to the LDP influences every aspect of the Plan's development.

The causes and consequences of climate change will be addressed by implementing the following measures.

In relation to the causes of climate change:

- 1. The efficiency and sustainability of the County Borough's settlements will be enhanced through developing more cohesive and efficient settlements and settlement patterns, and consequently more sustainable travel patterns;*
- 2. Greenhouse gas emissions from transport will be minimised through encouraging freight/commercial transport by alternatives to road (e.g. rail or sea);*
- 3. Dependence on the private car and the need to travel in general will be reduced through promoting alternative means of transport and more efficient use of existing facilities, co-location and joint use of facilities;*
- 4. Provision will be made for the County Borough's appropriate contribution to renewable and low carbon energy generation.*

In relation to the consequences of climate change:

- 1. Likely increased flood risk will be taken into account and addressed by ensuring that there is greater resilience by avoiding development on land that is at risk from flooding in the first instance in accordance with the sequential approach set out in national guidance or in locations that could increase the risk of flooding elsewhere;*
- 2. The fragmentation of habitats will be minimised and opportunities made for habitat and species change and migration where possible.*

4.4.31 **Policy SC 1: Settlement Limits** seeks to protect the countryside from inappropriate development.

Development within settlement limits that is proportionate in scale and form to the role and function of the settlement as set out in the Settlement Hierarchy will be acceptable in principle.

Outside settlement limits, development will only be permitted under the following circumstances:

- 1. It constitutes a sustainable small scale employment use adjacent to a settlement limit; or*
- 2. It constitutes live-work unit(s) immediately adjacent to a settlement limit in the Valleys Strategy Area only; or*
- 3. It constitutes the small-scale expansion of an existing business or the suitable conversion of an existing building; or*
- 4. It constitutes the appropriate replacement of an existing dwelling; or*
- 5. It is an affordable housing exception site; or*
- 6. It is an appropriate rural enterprise dwelling; or*
- 7. It is an appropriate 'One Planet Development'; or*
- 8. It is a sustainable tourism or farm diversification proposal that is suitable in a countryside location; or*
- 9. It is associated with the provision of public utilities, infrastructure and waste management facilities that cannot reasonably be located elsewhere; or*
- 10. It is associated with either agriculture, forestry, minerals or energy generation; or*
- 11. It relates to the appropriate provision of accommodation for Gypsies / Travellers; or*
- 12. It constitutes the provision of open space and small scale ancillary facilities adjoining the settlement limit.*

Where development is permitted outside settlement limits, any new buildings must be located adjacent to existing buildings or settlements wherever possible and be of an appropriate scale and form.

4.4.32 **Policy I 1 Infrastructure Requirements** sets out the general principle that any proposal for new development will be expected to meet the infrastructure needs that it generates. It lists the broad range of matters that need to be addressed.

In addition to infrastructure improvements necessary to make a development acceptable in health, safety and amenity terms, additional works or funding may be required to ensure that, where appropriate, the impact of new development is mitigated.

These requirements will include consideration of and appropriate provision for:

- Affordable housing;*
- Open space and recreation facilities;*
- Welsh language Infrastructure (in Language Sensitive Areas);*
- Community facilities including community hubs;*
- Biodiversity, environmental and conservation interests;*

- *Improving access to facilities and services including the provision of walking and cycling routes;*
- *Historic and built environment and public realm improvements;*
- *Community and public transport;*
- *Education and training.*

4.4.33 **Policy SP 6 Development in the Valleys Strategy Area** is a strategic that sets out the main measures that will be taken to implement the strategy of reinvigorating the valleys area.

In the Valleys Strategy Area, the local economy and communities will be enhanced and reinvigorated and the distinctive environment will be protected through the following area-specific measures:

1. *Identifying Pontardawe and the Upper Neath Valley as Strategic Growth Areas (SGAs);*
2. *Making provision for the majority of new valleys residential development within the identified SGAs;*
3. *Safeguarding employment sites and uses;*
4. *Promoting a mixed use regeneration scheme at Glynneath;*
5. *Undertaking public realm improvements in Glynneath and Pontardawe Town Centres;*
6. *Identifying Rheola as a tourism site and safeguarding key tourism amenities;*
7. *Taking a flexible approach to encourage employment uses, including live-work units;*
8. *Taking a flexible approach to encourage small scale retail proposals;*
9. *Protecting cultural identity including areas of importance for the Welsh language.*

4.4.34 **Policy SP 14: The Countryside and the Undeveloped Coast** seeks to conserve the County Borough's countryside, landscapes and undeveloped coast, support rural enterprise including tourism and leisure activities and concentrate development in sustainable locations.

The countryside and undeveloped coast, including landscapes, seascapes and agricultural land, will be protected and where feasible enhanced through the following measures:

1. *The protection of the open countryside through the control of inappropriate development outside settlement limits;*
2. *The protection of the undeveloped coast through the control of inappropriate development;*
3. *The designation and protection of Special Landscape Areas;*
4. *The designation and protection of Green Wedges.*

4.4.35 **Policy SP 15: Biodiversity and Geodiversity** aims aim to ensure that biodiversity is fully taken into account in all planning decisions.

Important habitats, species and sites of geological interest will be protected, conserved, enhanced and managed through the following measures:

1. The identification of the following Internationally and Nationally designated sites within the County Borough to enable their protection:

- (a) Special Areas of Conservation (SACs) and Ramsar Sites;*
- (b) Sites of Special Scientific Interest (SSSIs);*
- (c) National Nature Reserves (NNRs).*

2. The identification and protection of sites of regional and local importance;

3. The protection of important natural heritage features.

- 4.4.36 **Policy EN 6: Important Biodiversity and Geodiversity Site** seeks to ensure that there is no reduction in the overall value of the area or feature. Where mitigation is not possible, compensation measures will normally be required to offset harm as far as practicable. However, compensation measures are considered to be a last resort option.

Development proposals that would affect Regionally Important Geodiversity Sites (RIGS), Local Nature Reserves (LNRs), Sites of Interest for Nature Conservation (SINC), sites meeting SINC criteria or sites supporting Local Biodiversity Action Plan (LBAP) or S42 habitats or species will only be permitted where:

- 1. They conserve and where possible enhance the natural heritage importance of the site; or*
- 2. The development could not reasonably be located elsewhere, and the benefits of the development outweigh the natural heritage importance of the site.*

Mitigation and/or compensation measures will need to be agreed where adverse effects are unavoidable.

- 4.4.37 **Policy EN 7: Important Natural Features** seeks to retain and enhance local landscape features that are of importance for biodiversity, such as trees, woodland, hedgerows and other field boundaries, watercourses, wetlands and ponds and green lanes.

Development proposals that would adversely affect ecologically or visually important natural features such as trees, woodlands, hedgerows/field boundaries, watercourses or ponds will only be permitted where:

- 1. Full account has been taken of the relevant features in the design of the development, with measures put in place to ensure that they are retained and protected wherever possible; or*
- 2. The biodiversity value and role of the relevant feature has been taken into account and where removal is unavoidable, mitigation measures are agreed.*

- 4.4.38 **Policy SP 16: Environmental Protection** sets out the approach that will be taken to protect and improve the environment as far as possible.

Air, water and ground quality and the environment generally will be protected and where feasible improved through the following measures:

- 1. Ensuring that proposals have no significant adverse effects on water, ground or air quality and do not significantly increase pollution levels;*
- 2. Giving preference to the development of brownfield sites over greenfield sites where appropriate and deliverable;*

3. Ensuring that developments do not increase the number of people exposed to significant levels of pollution

- 4.4.39 **Policy EN 8: Pollution and Land Stability** seeks to ensure that developments will not exacerbate existing problems, cause new problems or result in more people being routinely exposed to unacceptable pollution levels of any type.

Proposals which would be likely to have an unacceptable adverse effect on health, biodiversity and/or local amenity or would expose people to unacceptable risk due to the following will not be permitted:

- *Air pollution;*
- *Noise pollution;*
- *Light pollution;*
- *Contamination;*
- *Land instability;*
- *Water (including groundwater) pollution.*

Proposals which would create new problems or exacerbate existing problems detailed above will not be acceptable unless mitigation measures are included to reduce the risk of harm to public health, biodiversity and/or local amenity to an acceptable level.

- 4.4.40 **Policy M 1 Development in Mineral Safeguarding Areas** seeks to protect from other types of permanent development which would either sterilise them or hinder their extraction.

Development proposals within mineral safeguarding areas will only be permitted where it can be demonstrated that:

- 1. The mineral concerned is no longer of any value or potential value; or*
- 2. The mineral can be extracted satisfactorily prior to the development taking place; or*
- 3. In the case of temporary development, it can be implemented and the site restored within the timescale that the mineral is likely to be needed; or*
- 4. There is an overriding need for the development; or*
- 5. The scale and location of the development would have no significant impact on the possible working of the resource.*

- 4.4.41 **Policy SP 18: Renewable and Low Carbon Energy** seeks to deliver a proportionate contribution to meeting Wales' national renewable energy targets and energy efficiency targets.

A proportionate contribution to meeting national renewable energy targets and energy efficiency targets will be made while balancing the impact of development on the environment and communities. This will be achieved by:

- 1. Encouraging where appropriate, all forms of renewable energy and low carbon technology development;*
- 2. Encouraging energy conservation and efficiency measures in all new major development proposals;*
- 3. Ensuring that development will not have an unacceptable impact on the environment and amenity of local residents.*

- 4.4.42 **Policy RE1 Criteria for the Assessment of Renewable and Low Carbon Energy Development** sets out criteria against which all proposals for renewable and low carbon energy development will be assessed:

Proposals for renewable and low carbon energy development will only be permitted subject to the following criteria:

- 1. Large scale wind farm developments (>25MW) will be expected to be located within the boundaries of the refined Strategic Search Areas.*
- 2. Proposals for wind farms of any size outside the SSAs will only be permitted where it is demonstrated that there will be no unacceptable impact on visual amenity or landscape character through the number, scale, size, design and siting of turbines and associated infrastructure.*
- 3. Small scale wind farm developments (<5MW) will be required to demonstrate that impacts are confined to the local scale.*
- 4. All renewable energy or low carbon energy development proposals will be required to demonstrate that:*
 - (a) Measures have been taken to minimise impacts on visual amenity and the natural environment;*
 - (b) There will be no unacceptable impacts on residential amenity;*
 - (c) The development will not compromise highway safety;*
 - (d) The development would not interfere with radar, air traffic control systems, telecommunications links, television reception, radio communication and emergency services communications; and*
 - (e) There are satisfactory proposals in place for site restoration as appropriate.*

- 4.4.43 **Policy SP21: Built Environment and Historic Heritage** seeks to conserve and enhance the built environment and heritage of the whole County Borough including the identified 'gateways'.

The built environment and historic heritage will, where appropriate, be conserved and enhanced through the following measures:

- 1. Encouraging high quality design standards in all development proposals;*
- 2. Protecting arterial gateways from intrusive and inappropriate development;*
- 3. Safeguarding features of historic and cultural importance;*
- 4. The identification of the following designated sites to enable their protection and where appropriate enhancement:*
 - (a) Landscapes of Historic Interest;*
 - (b) Historic Parks and Gardens;*
 - (c) Conservation Areas;*
 - (d) Scheduled Ancient Monuments; and*
 - (e) Listed Buildings and their curtilage*

- 4.4.44 **Policy BE 1: Design** seeks to ensure that development proposals will complement and enhance the area generally, including its arterial gateways, townscapes, landscape and seascape, and retain existing character where this is desirable.

All development proposals will be expected to demonstrate high quality design which fully takes into account the natural, historic and built environmental context and contributes to the creation of attractive, sustainable places.

Proposals will only be permitted where all of the following criteria, where relevant, are satisfied:

- 1. It complements and enhances the character and appearance of the site, building or area in terms of siting, appearance, scale, height, massing and elevation treatment;*
- 2. It respects the context of the site and its place within the local landscape, including its impact on the important arterial gateways into the County Borough, its effects on townscape and the local historic and cultural heritage and it takes account of the site topography and prominent skylines or ridges;*
- 3. It utilises materials appropriate to its surroundings and incorporates hard and soft landscaping and screening where appropriate;*
- 4. It would not have a significant adverse impact on highway safety, the amenity of occupiers of adjacent land or the community;*
- 5. Important local features (including buildings, amenity areas, green spaces and green infrastructure, biodiversity and ecological connectivity) are retained and enhanced as far as possible;*
- 6. It achieves and creates attractive, safe places and public spaces, taking account of 'Secured by Design' principles (including where appropriate natural surveillance, visibility, well lit environments and areas of public movement);*
- 7. It plays a full role in achieving and enhancing an integrated transport and communications network promoting the interests of pedestrians, cyclists and public transport and ensures linkages with the existing surrounding community;*
- 8. It uses resources, including land and energy, as efficiently as possible through:*
 - (a) Making the best and most efficient use of the land available through being of appropriate density taking into account the character and appearance of the area, normally a minimum of 35 dwellings per hectare in the Coastal Corridor Strategy Area or a minimum of 30 dwellings per hectare in the Valleys Strategy Area;*
 - (b) The layout and form of the development does not preclude the reasonable use of other adjacent land;*
 - (c) Developing brownfield land in preference to greenfield land where possible;*
 - (d) Minimising building exposure while maximising solar gain.*
- 9. Its drainage systems are designed to limit surface water run-off and flood risk and prevent pollution;*
- 10. The layout and design of the development achieves inclusive design by ensuring barrier free environments, allowing access by all and making full provision for people with disabilities.*

- 4.4.45 Policy WL 1: Development in Language Sensitive Areas sets out when a language action plan is needed.

The following development proposals within the identified language sensitive areas will be required to submit a Language Action Plan, setting out the measures to be taken to protect, promote and enhance the Welsh language:

(a) Residential development for 10 or more dwellings;

(b) Retail, commercial or industrial development with a total floorspace of 1,000 sqm or more

Neath Port Talbot Renewable and Low Carbon Energy Supplementary Planning Guidance 2017

- 4.4.46 The Supplementary Planning Guidance (SPG) gives information about NPTCBC's planning approach to renewable and low carbon energy in Neath Port Talbot and sets out the relevant matters that will need to be taken into consideration when developments are being planned in the County Borough.
- 4.4.47 The Council's planning policy in relation to the various types of renewable and low carbon energy is set out in the Neath Port Talbot Local Development Plan Strategic Policy SP18 (Renewable and Low Carbon Energy) and detailed policies RE1 (Criteria for the Assessment of Renewable and Low Carbon Energy Developments) and RE2 (Renewable and Low Carbon Energy in New Development).



5. NEED AND SITE SELECTION

5.1 INTRODUCTION

- 5.1.1 This chapter sets out the need for the proposed solar farm and presents the site selection.

5.2 NEED FOR THE DEVELOPMENT

- 5.2.1 The importance of renewable energy generation as part of the response to climate change is recognised at both a UK Government level and at a local level. Future Wales confirms 'in principle' support for the development of renewable energy at all scales and Paragraph 5.9.15 of Planning Policy Wales Edition 11 confirms that the need for renewable energy generation is not a material planning consideration. It states:

“...planning applications for renewable and low carbon energy developments should be determined based on the merits of the individual proposal. The local need for a particular scheme is not a material consideration, as energy generation is of national significance and there is a recognised need to optimise renewable and low carbon energy generation”.

- 5.2.2 Chapter 4 of this Planning Statement has set out the key national and local planning policy that is relevant to the Development.
- 5.2.3 Both Future Wales and PPW set the following ambitious targets for the generation of renewable energy in Wales:
- For 70% of electricity consumption to be generated from renewable energy by 2030;
 - For one gigawatt of renewable energy capacity to be locally owned by 2030
 - For new renewable energy projects to have at least an element of local ownership from 2020.
- 5.2.4 In February 2021, the Welsh Government set out its legal commitment to achieve net zero emissions by 2050⁸. The Energy Generation in Wales 2018 report⁹ estimates that 50% of electricity consumption comes from renewable sources leaving a significant shortfall if the Government's target is to be met.
- 5.2.5 At the local level, both Swansea's and Neath Port Talbot's Local Development Plans outline an objective to promote renewable and low carbon energy production. Furthermore, Swansea Council adopted a Climate Change Charter in 2020 and Neath Port Talbot CBC adopted a Decarbonisation and Renewable Energy Strategy in 2020.
- 5.2.6 It is widely accepted that electricity produced from solar energy has a positive benefit compared to traditional forms of electricity generation in terms of avoiding carbon emissions. Furthermore, renewable energy from solar PV supports the national economic objective to diversify energy supply and to lessen dependence on the generation of fossil fuels. The Welsh Government consequently considers that the wider benefits to society and the economy (of renewable energy) are significant and must be given weight by decision makers in reaching their decisions on individual applications.

⁸ <https://gov.wales/wales-commits-net-zero-2050-sets-out-ambitions-get-there-sooner>

⁹ Energy Generation in Wales 2018: <https://gov.wales/sites/default/files/publications/2019-10/energy-generation-in-wales-2018.pdf>

- 5.2.7 CYP Solar Farm will have an export capacity of circa 20MW of electricity, enough to power approximately 5,300 homes per year based on the UK Average annual domestic electricity consumption during 2021. In addition, the operation of the scheme would reduce the emissions of the gases sulphur dioxide and nitrogen oxide, which contribute to the production of acid rain.

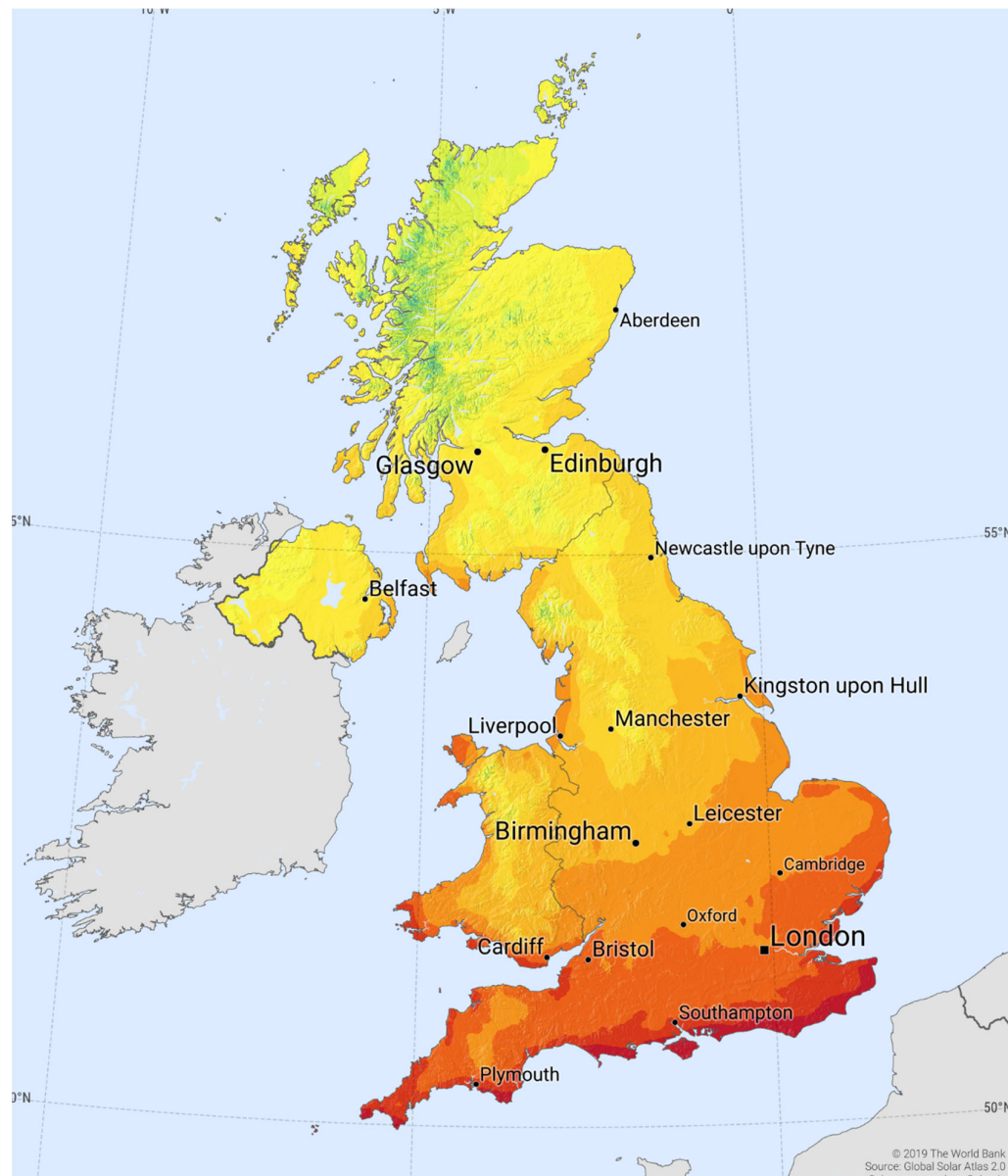
5.3 SITE SELECTION

- 5.3.1 The application site was selected through an extensive search criteria exercise undertaken by the Applicant. South Wales represents a particularly favourable area for solar deployment because of the high levels of solar irradiation.
- 5.3.2 A range of technical, environmental and economic factors are considered when assessing a site for ground-mounted solar PV development. Key factors for consideration include:
- Solar irradiation levels;
 - Availability and proximity of the local distribution network (grid);
 - Proximity to local population;
 - Topography;
 - Field size and shape;
 - Potential for overshadowing;
 - Development Plan Policy;
 - Access to the site for construction/decommissioning traffic;
 - Agricultural land quality;
 - Landscape sensitivity and visual impact amenity;
 - Nature conservation and potential for enhancement;
 - Flood risk; and
 - Land availability.

Solar Irradiation Levels

- 5.3.3 UK irradiation levels are illustrated below in **Figure 5.1**. It shows that South Wales receives some of the highest amounts of sunshine in Wales. This presents a particularly favourable area for solar development as it allows for significantly more electricity generation than other site locations.

Figure 5.1: UK Irradiance Levels



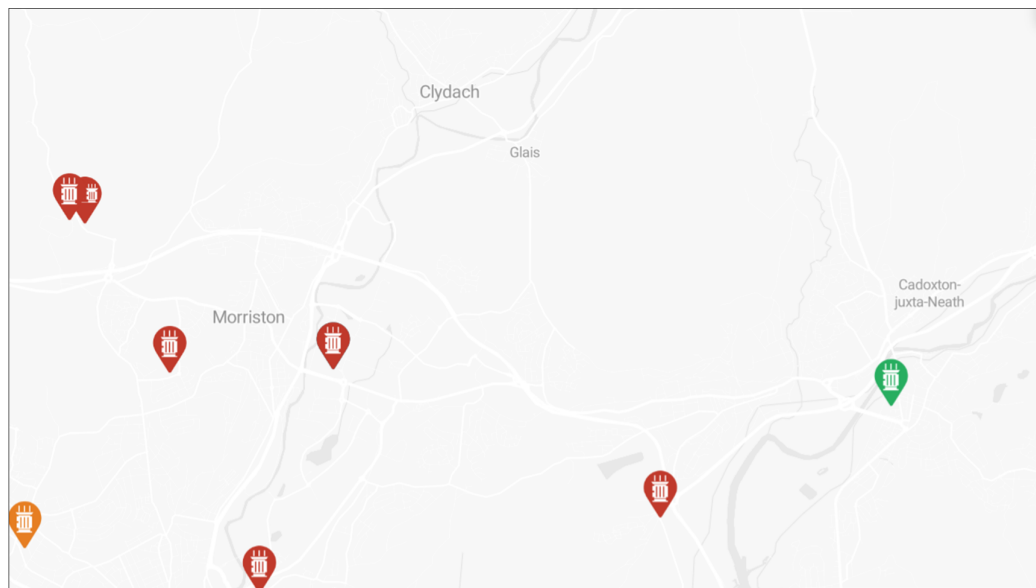
Availability and Proximity to Distribution Network

- 5.3.4 An important aspect of solar farm development is having access to the local distribution network, or 'grid'. To export electricity generated by a solar farm there must be sufficient capacity in the network to accommodate the additional power from the development.
- 5.3.5 Discussions with National Grid (the Distribution Network Operator (DNO) for the area) advised that the network in South Wales is highly constrained in terms of available capacity. The available 'Heat Maps' which show potential capacity on the network is constantly evolving as supply and demand fluctuates as new infrastructure comes to the network or old is removed.
- 5.3.6 The discussions culminated in a grid offer from the DNO and the applicant agreed for

a connection at the existing overhead line at Garth Road, Glais. The DNO considered this location was an efficient way of supplying electricity (on a scale of the proposal) to the network, avoiding excessive connection costs. The applicant had little control over the location of the point of connection.

- 5.3.7 **Figure 5.2** below is the National Grid Heatmap from October 2022 which illustrates the local grid network and where there is available capacity to export energy back into the grid. The substations highlighted red are at their operational limit and therefore installation of most levels of distributed generation and a local connection is highly unlikely and may require extensive reinforcement works. Whilst the substations highlighted green have headroom for distributed generation and connection, the available capacity is limited would not accommodate that generated by the proposed development or the connection costs were not feasible. As can be seen from the map, the area of search is therefore severely restricted due to the lack of grid capacity.

Figure 5.2: National Grid Heatmap, October 2022



- 5.3.8 Proximity to an available grid connection is critical to the viability of any renewable energy project, particularly solar PV. The industry-standard approach is to secure sites within 3.5km of a grid connection. This is partly due to the excessive costs of the cable and the trenching works, partly due to the requirement for easements to enable the crossing of third-party land, and necessary roadworks which may disrupt local communities. Additionally, long cables introduce voltage drops and unwanted energy losses which cause further difficulties for the distribution network operators.
- 5.3.9 Consideration of land closer to the point of connection has been given but discounted as there are significant areas of higher flood risk, national ecological designations (SSSI), proximity to built-up areas, potentially historic contaminated land, policy designations (green wedge) and limited availability of landowners willing to lease their land.

Proximity to Local Population

- 5.3.10 For any development, minimising potential impacts to residential amenity is a key aspect. Therefore, distance from centres of population is a key locational factor for proposed solar farms. In some cases, it is not possible to be distant from the curtilage of every residential property however it is an important element of the site selection process to minimise impacts on local residences.
- 5.3.11 The low height of the solar panels (up to 3m above ground level), the topography of the site in relation to nearby towns and villages, existing vegetation screening, means that longer distance views of the proposed development are limited. This has been confirmed in the Landscape and Visual Impact Assessment (LVIA) **Appendix 4.6**.
- 5.3.12 The site was selected due to its relative distance from nearby villages of Glais (570m from the village centre), Clydach (approximately 2km from the town centre) and Alltwen (approximately 1.5km from the village centre).

Topography

- 5.3.13 Flat or gently sloping land to the south is preferred for solar development as construction is more straightforward, shading between arrays is minimised and more consistent and flat land is typically less visible where the surrounding topography is also flat or has gentle gradients. The design of the development will however respond to the terrain and physical features
- 5.3.14 The application site comprises land that is both flat, with little or no gradient, and gently south sloping land and so it is well suited to the proposed development.

Field Size

- 5.3.15 In the efficient deployment of solar, large, open fields are preferable. However, smaller fields with established field boundaries will help to visually contain a solar proposal and be more sympathetic to local landscape character. Therefore, a balanced approach to field size and boundary treatment is needed.
- 5.3.16 The application site includes a range of field sizes with established woodlands surrounding the deployment areas.

Site Specific Allocation

- 5.3.17 The adopted Swansea Local Development Plan identifies local search areas (LSAs) for solar proposals with a capacity of between 5MW and 50MW. The location of the LSAs is a result of the Renewable Energy Assessment (REA) ¹⁰ undertaken by Swansea Council in 2018 which evaluates the potential energy capacity of renewable and low carbon technologies in the County.
- 5.3.18 The 11 LSAs total over 520ha located largely to the north of the M4 motorway. The REA states:

These Solar LSAs do not mean an automatic presumption in favour of renewable energy development, but identify the least constrained areas within Swansea following the methodology utilised by the REA.

¹⁰ <https://archif.abertawe.gov.uk/media/26347/ED072-REA-Update-May-2018/pdf/REAMay2018.pdf>

- 5.3.19 In identifying the LSAs the REA mapped numerous constraints, which included:
- Built up areas and infrastructure;
 - Environmental and heritage constraints (for example, AONB, National and Local Nature Reserves, Ancient Monuments, RAMSAR site, SACs SPAs, SINC's);
 - Slopes greater than 15 degrees;
 - Best and most versatile agricultural land;
 - Special Landscape Areas;
 - 10km buffer to electricity lines;
 - Historic parks and gardens;
 - Registered historic landscapes;
 - Common land; and
 - Ancient woodland.
- 5.3.20 Following further desktop assessments and aerial mapping to remove isolated built-up areas (such as dwellings or playing fields) the remaining 60 plus sites were assessed for high or outstanding landscape value and potential high susceptibility to the type of landscape change. The REA considered these factors were more likely to give rise to potentially significant potential impacts on the landscape.
- 5.3.21 The application site was not considered as part of the desktop landscape assessment exercise. Whilst not explicitly stated in the REA it is likely the application site's partial designation as a SINC and ancient woodland precluded further consideration. However, as this application demonstrates through extensive survey works and thoughtful design these designations are not a constraint to development. In fact the proposal will protect and significantly enhance the current mosaic of habitats across the application site.
- 5.3.22 'Policy EU 1: Renewable and Low Carbon Energy Proposals' sets out criteria against which all proposals for renewable and low carbon energy development will be assessed. Criteria ii states:
- Within the LSAs, proposals for solar PV between 5 – 50 MW will be permitted subject to criteria iii to v. All other proposals for renewable and low carbon energy development will only be permitted where they can demonstrate they would not prejudice the purpose of the LSA*
- 5.3.23 It is considered that the proposed solar farm at Craig Y Perchych will not prejudice the purpose of the LSA's as the proposal:
- Has an accepted grid offer from the distribution network operator and the point of connection to the 'grid' which is located over 5km from the nearest LSA. This separation distance should not affect available capacity on the distribution network for any proposals made in the LSAs.
 - Will protect and provide a significant enhancement to the on-site designations for the life of the scheme. Therefore delivering benefits beyond the renewable, clean energy and exceeding the policy objective of EU1. Furthermore, paragraph 2.13.4 states "the REA suggest that there is significant potential within the whole of the County for the development of renewable and low carbon technologies and developers are encouraged to explore all aspects of the County's capability to contribute to lowering UK carbon emissions within the energy sector".
 - Will not stifle development of LSAs given that Welsh Government has not set any upper limits on renewable energy generation.

Access to Site for Construction

- 5.3.24 Appropriate access to the solar development areas must be available for the construction, operational and decommissioning phases.
- 5.3.25 Graig Y Pal, a single-track road accessed via Graigola Road approximately 500m southeast of the site. Graigola Road connects to the B4291 c40m west of the junction with Graig Y Pal. This provides a route to the village of Clydach and A4067 to the north and to M4 Junction 44 to the south.
- 5.3.26 During the construction phase a temporary, remote set down area is proposed as Graig Y Pal, that leads to the application site, cannot accommodate large HGVs. Swept path analysis shown in the CTMP demonstrate that a 7.5 tonne (7m long vehicle can access the site using Graig Y Pal with only minor improvements to the adopted highway. See the CTMP for further details.
- 5.3.27 As some site infrastructure and materials will be delivered by 16.5m long articulated HGVs an alternative set down area is required. Land of Ynys Y Mond Road was identified as being suitable and swept path analysis shown in the CTMP confirms this.
- 5.3.28 The CTMP advises that no highway improvements are required along Ynys Y Mond Road, vehicles accessing and leaving the remote set down area and the development site will need careful management during the 9-month construction phase.

Agricultural Land Classification

- 5.3.29 National level guidance on the deployment of ground mounted solar expresses a preference to avoid 'Best and Most Versatile Agricultural Land'. Grades 1, 2 and 3A of the Agricultural Land Classification are considered to be best and most versatile land, whilst 3B, 4 and 5 are not.
- 5.3.30 The soil survey presented in **Appendix 4.4** has determined there are no elements of 'Best and Most Versatile' agricultural land within the proposed deployment area. However, as part of the operation of the solar farm grazing will form a key part of the habitat management regime. In addition, the construction and decommissioning of the solar farm will have little impact on the land quality as the fields will continue to be grazed on removal of the panels and associated infrastructure.

Landscape Designations

- 5.3.31 Consideration of national and local landscape designations such as Areas of Outstanding Natural Beauty, National Parks and Special Landscape Areas was undertaken when assessing the potential solar site.
- 5.3.32 The application site is not subject to any national or local level landscape designations. The Mynydd y Garth Special Landscape Area is located approximately 1.6km to the north. Effects upon landscape character have been assessed by the LVIA (see **Appendix 4.6**).

Nature Conservation Designations

- 5.3.33 Consideration of national and international ecological designations such as Sites of Scientific Interest (SSSI), Special Areas of Conservation (SAC), Special Protection

Areas (SPA) and Ramsar sites was undertaken when assessing the sites potential for a solar proposal.

- 5.3.34 The Graig Ola - Cwm-cymach Site of Importance for Nature Conservation (SINC) covers an area of 186ha and incorporates a variety of habitats. Approximately 59ha of the application site is located within the SINC of which circa 26ha is solar deployment (land within the security fence). Designated ancient woodland is located (partially) along the northern boundary of the application site. The majority of the southern boundary is within the application site is ancient woodland.
- 5.3.35 Biodiversity enhancement schemes are an integral part of solar proposals as the land is effectively managed for 40 years for the benefit of ecology. As part of the proposals for CYP Solar Farm, ecological management is a core element. Not only is the deployment area managed for species rich grassland, areas within the site not subject to solar PV development will also be managed to secure ecological benefits. The Outline Ecological Management Strategy (OEMS) (**Appendix 4.7.1**) outlines land management options for the 67.7ha application site and demonstrates why these designations are not a constraint to the proposed development. The OEMS also justifies the approach to the proposed management and how such options will be implemented.

Flood Risk

- 5.3.36 The proposed PV deployment area is located within Flood Zone A and therefore considered to be at little or no risk of fluvial or tidal / coastal flooding.

Commercial Agreement with the Landowner

- 5.3.37 Having established the area's potential to accommodate the development it was then necessary to investigate whether sufficient land would be available to allow the development to proceed. To this effect, discussions were held with the landowner to determine interest.
- 5.3.38 The proposed development presents an attractive proposition to the landowners due to the comparative uplift in returns that could be achieved from the land. Commercial terms have been agreed with the landowners for the construction and operation of a solar farm subject to the necessary consents. This established the fundamental deliverability of the development on these sites.

5.4 CONCLUSION

- 5.4.1 It has been demonstrated through the above site selection criteria that there are no suitable and available alternatives within a reasonable distance of the point of connection. Once the preferred sites were identified, the environmental assessment and iterative design process necessitated further refinement so that public access could be provided, potential adverse environmental effects minimised and ecological benefits maximised.

6. ENVIRONMENTAL AND TECHNICAL ASSESSMENTS

6.1 INTRODUCTION

- 6.1.1 This chapter summarises the environmental topics that are not deemed to be significantly affected by the proposal and were confirmed as not requiring assessment by the LPA's pre-application feedback. A brief justification is also provided for each topic. The chapter also summarises the findings of the survey and assessment work requested by the LPAs.

6.2 ASSESSMENTS CONFIRMED AS NOT REQUIRED TO SUPPORT THE APPLICATION

- 6.2.1 The following topic areas have not been assessed as part of this application:

- Air Quality
- Noise
- Socio-economic
- Hydrology

Air Quality

- 6.2.2 Solar developments have no direct source of emissions to the atmosphere during the operational phase. Possible impacts to local air quality only have the potential to occur during the short period of the construction phase through vehicular and plant emissions and through the creation of dust.
- 6.2.3 The site is not within or near an Air Quality Management Area and proposed traffic generation will not lead to significant vehicle emissions. Excessive dust is unlikely to be generated through anchoring of the frames to the ground as the frames will be secured by piles that will be pushed into the ground. Excavation is limited to trenching thus minimising the potential for ground disturbance and the entertainment of dust. Vehicle movements on site will be limited to transportation of equipment from the set down area to solar array development areas.
- 6.2.4 An outline CEMP has been prepared as part of the planning application from which a detailed CEMP will be prepared by the appointed contractor which will be implemented during the construction period and will outline measures to control dust and air emissions.
- 6.2.5 Given the limited duration of the proposed construction works and the nature of works during the construction phase the potential for dust creation will be relatively low.

Noise

- 6.2.6 It is unlikely that noise generation from the proposal will give rise to concerns at nearest noise sensitive receptors. The following sound power levels at source are anticipated:
- Use of string inverter systems. Noise levels from the Inverters would be designed to achieve a level below 65dB(A) @ 1m.
 - Noise levels from transformers: 65dB LAeq @ 1m sound pressure level (typically 55dB LAeq @ 7m).
 - Containerised substation switchgear noise level would be designed not to exceed a noise level of 65dB(A) @ 1m.
- 6.2.7 The noise generated during the operational phase will only occur when the solar farm is generating electricity, during daytime hours.

- 6.2.8 **Table 6.1** below provides approximate distances between the nearest residential properties and noise sources from the proposal.

Table 6.1: Approximate Distances Between Nearest Noise Sensitive Receptors and Site Based Noise Sources

Noise Source	Lletty'r-Wiwer	Llwyn-erch-Idwal	Cwm-cynnach-uchaf
Substation	1,090m	670m	820m
String Inverter	130m	350m	350m
Transformer	720m	610m	530m

- 6.2.9 Due to the considerable distances between source and receptor it is expected that any contribution from the proposal to background noise levels would not be detected.
- 6.2.10 Construction works would involve the movement of soils, piling and the construction of infrastructure and solar panels and associated plant. Excavators, vehicles, mini hydraulic piling, cranes, mobile plant, concrete plant and power tools would all, at some time during the construction programme, be operating on the Site. In addition, ancillary equipment such as small generators, pumps and compressors may also be operating periodically.
- 6.2.11 The above noise sources and their associated activities would vary from day to day, may be in use at different stages of the construction period, and for relatively short durations. The noisiest activities are expected to be generated during soil movement and site set-up during the initial stages of construction and during plant installation when piling rigs, power tools, mobile plant or similar may be in use.
- 6.2.12 The actual noise level produced by construction work would vary at the nearest property boundaries at any time depending upon a number of factors including the plant location, duration of operation, hours of operation, intervening topography and type of plant being used.
- 6.2.13 Again, the distance between the noise source and the identified receptors would be greatest mitigating factor for any potential nuisance.

Socio-Economic

- 6.2.14 One of the Welsh Government's key priorities is for low carbon electricity to become the main source of energy in Wales. Not only is this a reaction the Welsh Government setting out its legal commitment to achieve net zero emissions by 2050, but also to the realisation that renewable and low carbon energy developments offer significant potential for communities and small businesses.
- 6.2.15 At a local level the need to mitigate the effects of climate change, e.g., reduce greenhouse gas emissions, promote generating renewable and low carbon energy, is accepted as a key issue. Based on this, the proposed development would contribute to local and regional economic growth aspirations, supporting the area as an energy cluster and providing progress in meeting energy targets
- 6.2.16 Across the lifecycle of solar projects a range of skills and training are required, but a current shortage of skill levels is a barrier to growth within the energy industry. However, there is clear transferability of skills from other sectors and numerous entry points for employment across the different phases of project development. As such

the proposed development has the potential to create domestic value in each segment of project lifecycle.

- 6.2.17 The proposed development could potentially generate numerous socio-economic and economic benefits throughout the 40-year lifespan. The development could employ approximately 50 people in the initial 9-month construction phase, followed by maintenance staff over the 40 year operational phase. The labour force employed throughout the initial nine-month construction stage could generate significant revenue for the local economy.
- 6.2.18 Employment onsite would support local business through daily expenditure and also any accommodation required during the construction period. The proposed development could also allow local business to operate with clean energy. Allowing them to market themselves as low carbon businesses. It could be particularly attractive to investors, clients and the tourism market.
- 6.2.19 The proposed development will also contribute to local services and infrastructure through significant business rates per annum.
- 6.2.20 The applicant has also offered to create a community benefit fund that would be created on energisation of the proposal. The fund would receive a one of payment of £1,000 per MW installed.
- 6.2.21 The potential for an element of the scheme to be locally owned is also being considered and the applicant would welcome discussions with the Local Authority to understand such opportunities.

Hydrology

- 6.2.22 All sources of flooding have been considered, these are fluvial (river) flooding, tidal (coastal) flooding, groundwater flooding, surface water (pluvial) flooding, sewer flooding and flooding from artificial drainage systems/infrastructure failure. NRW data shows that the site has not historically flooded.
- 6.2.23 It should be noted that the proposed development of the solar farm will be located within DAM Zone A and Flood Zone 1 and the area within DAM Zone C2, Flood Zones 2 and 3 will only to be used on a temporary basis for approximately 9 months and will then revert back to grazing land.
- 6.2.24 The proposed development is classified as 'less vulnerable', 'less vulnerable' uses are appropriate within DAM Zone A and C2. There are no constraints relating to flooding from rivers or the sea, other than to avoid increasing risk elsewhere.
- 6.2.25 There will be no net loss in flood storage capacity or impact on movement of floodwater across the site. The overall direction of the movement of water will be maintained within the developed site and surrounding area. The conveyance routes (flow paths) will not be blocked or obstructed.
- 6.2.26 In conclusion, the flood risk to the site can is considered limited; the site is situated in DAM Zone A, with only the temporary laydown area being located in Zone C2, with a low annual probability of flooding from all sources.
- 6.2.27 It is generally accepted that the presence of solar panels on site may slightly change the pattern of runoff with the potential for minor erosion at the base of the panels.

There is empirical evidence found that with well-maintained grass underneath the panels, the solar panels themselves did not have a significant impact on the runoff volumes, peaks or time to peak.

- 6.2.28 The FCA (**Appendix 4.5**) demonstrates that the proposed development would be operated with minimal risk from flooding, would not increase flood risk elsewhere and is compliant with the requirements of the Future Wales and PPW11. The development should not therefore be precluded on the grounds of flood risk.

6.3 ASSESSMENTS REQUIRED TO SUPPORT THE APPLICATION

- 6.3.1 The pre-application feedback from Swansea Council and Neath Port Talbot CBC advised that the following environmental topics should be included with the planning application.

- Landscape and visual impact
- Ecology
- Traffic and Transport
- Heritage
- Glint and Glare
- Agricultural Land Quality
- Flood Consequence
- Arboriculture

- 6.3.2 The following were also requested during the pre-application discussion stage and the formal PAC stage:

- Green Infrastructure Plan
- Construction Environmental Management Plan
- Coal Mining Risk Assessment.

- 6.3.3 A preliminary programme of community consultation has been carried out, further consultations need will be undertaken as part of the pre-application consultation stage.

- 6.3.4 The following section summarises the findings of the above assessments.

6.4 Landscape and Visual Impact Appraisal

- 6.4.1 **Appendix 4.6** shows the LVIA which considered the location of the site upon a transitional zone, development form and local context (vegetation and topographic elements), and concluded that the scheme will have a limited adverse impact on characteristic elements of the landscape character area and LANDMAP's Aspect Area's.

- 6.4.2 The greatest level of effects are seen upon the host Visual Sensory Aspect Areas, VS989 East of Glais, but overall the effect is of a 'Moderate-Minor' level and 'Not Substantial' overall.

- 6.4.3 Development is proposed over the less landscape (and ecologically) sensitive mosaic grassland areas, avoiding direct impacts upon the more sensitive landscape elements. It is also noted that the site and surrounding area are not subject to any national, regional or local landscape designations.

- 6.4.4 The overall level of landscape effect upon the site is determined by consideration of the landscape sensitivity and magnitude of landscape effect. As a result a Moderate

level of landscape effect is considered. This is a noticeable effect, but one that is not considered to be of a 'Substantial' level overall and is not, in itself, material in the decision making process.

- 6.4.5 The visual assessment demonstrated that the areas and levels of visibility to the proposed development were limited from what would be expected on a scheme of this scale and as illustrated on the ZTV. The ZTV with visual barriers illustrates that within 500m of the site boundary all visibility to the north/north-west is screened, covering the area of River Tawe Valley to the north western side of the river.
- 6.4.6 The assessment considered the relevant residential receptors, groups, and settlements that were shown to have theoretical visibility to the scheme proposals within the study area. No receptors were considered to experience visual effects of a 'substantial' nature. Despite the scale of the site, set upon rising upland areas, there are few receptors with open visibility to the site, at the most, partial views to limited fringe areas of the site are only possible, and seen at a distance that reduces the visible scale of effects. The site is set within a rising upland area, flanked by vegetation and landform, the key residential areas are generally focussed to the lower lying valley areas and side slopes, which limits the potential for views to the site area.
- 6.4.7 The LVIA demonstrates that the proposed CYP Solar Farm development could be successfully integrated into the surrounding landscape without causing substantial and wide scale harm to the landscape character and without long term substantial adverse impacts to visual amenity in the local area.

6.5 Ecology

- 6.5.1 Ecology surveys and survey updates were conducted in 2020, 2021, 2022 and 2023 and include Phase 1 and National Vegetation classification surveys, invasive species, badger, bats, breeding birds, reptiles and otter; see **Appendix 4.7**.
- 6.5.2 The 67.7ha site is comprised mostly of horse-grazed acid and/or neutral improved, semi-improved and poor semi-improved grassland fields, that were bounded by mature oak woodland, dry stone walls and earth banks. Areas of scrub, bracken, a small area of acid fen, and patches of dwarf heath shrub primarily along the walls, were also present.
- 6.5.3 Habitats of Principal Importance (HPI) were present including lowland dry acid grassland, lowland meadows, and off-Site upland oak woodland. 79% of the Site forms part of Graid Ola-Cwm-cymach Site of Nature Conservation Interest (SNCI).
- 6.5.4 Good numbers of common lizard (local value) were present within retained grassland and areas of scrub proposed for removal.
- 6.5.5 The breeding bird assemblage was of district value, with notable species recorded in off-site woodland and other boundary features as well as low numbers of skylark in fields. Following comments made by NRW during the PAC stage over the scope of breeding bird surveys, three breeding bird survey visits were conducted in April – June 2023. The updated survey results confirmed the findings of the previous scoping surveys. The bat assemblage included a wide range of species typical for South Wales, including lesser horseshoe and greater horseshoe which were each assessed as district value.

- 6.5.6 No records of hazel dormouse were present within 2km of the site. This species is likely to be present in suitable habitat adjacent to the site, however, the proposals will have no impact on this species.
- 6.5.7 On 3rd August 2023, the applicant was alerted to the recording of date waxcaps on the plateau a week prior by a third-party. Following consultation with Swansea Council, the location was obtained and a site visit was conducted on 26th September to search and map any other specimens. No additional date waxcaps were recorded during the survey visit, further details can be found in **Appendix 4.7**.
- 6.5.8 Comments from NRW (dated 17th February 23) received during the PAC stage have been addressed in the updated Ecology Impact Assessment, see **Appendix 4.7**.
- 6.5.9 The proposed scheme retains almost all the habitat on-Site, but for small amounts removed for fencing and cabling. It also includes the proposal of a new public footpath and bridle routes to divert and buffer footfall around the important habitat features.
- 6.5.10 Overall, the proposed scheme has been designed to provide and improve opportunities for biodiversity as per the below:
- Where solar panels are being installed, a buffer of a minimum 7m is present between the woodland edge and the security fence. This will ensure woodland and woodland edge is protected and retained;
 - All Areas of the higher value semi-improved acid grassland/Molinia Fen are to remain free from panels;
 - No lighting is proposed during operational phase;
 - The landscape has been designed with no new planting to protect the existing native habitats;
 - All grassland, dry acid heath and Molinia Fen Meadow on on-Site will be managed with either a restore, maintain, or enhance management prescription. This will be achieved through a mixture of sensitive cutting regimes and low intensity conservation grazing.
 - Scrub and bracken will be removed from specific areas to improve the condition of the grassland. This will be achieved through mechanical removal and continued management through conservation grazing; and
 - The AWI/Upland Oak Woodland will be fenced to remove all grazing pressure and allow the native understorey to re-establish. Conservation management will then be implemented through low intensity grazing at appropriate times.
 - Removal and monitoring of rhododendron and Japanese knotweed; and
 - Monitor and assess the success of the options.

6.6 Traffic and Transport

- 6.6.1 The main traffic and transport related effects of the proposal will be associated with the movement of vehicles to and from the site during the construction / decommissioning phases of the development, as opposed to when the development is operational.
- 6.6.2 Vehicle access to the proposed development will be provided via Graig Y Pal. Swept Path analysis shows that the road is not wide enough to accommodate a 16.48m FTA articulated vehicle. However, vehicles up to a 7.17m LG rigid vehicle can access the proposal site. To accommodate deliveries made by larger vehicles including articulated HGVs, a remote set down area on Ynys Y Mond Road is proposed. The topographical survey and swept path analysis on Ynys Y Mond Road indicates that it

can accommodate 16.48m articulated HGVs.

- 6.6.3 Adequate vehicle parking for staff and delivery vehicles will be provided within the development site.
- 6.6.4 The traffic assessment included in this report is based on a realistic traffic impact scenario and demonstrates the development traffic effects will be negligible.
- 6.6.5 No collisions have occurred at the proposed site access location in the last five years.

6.7 Heritage

- 6.7.1 An archaeological desk-based assessment (DBA) has been undertaken for the application site and is included at **Appendix 4.8**.
- 6.7.2 The DBA highlights and assesses the impact upon standing and buried remains of potential archaeological interest and to ensure that they are fully investigated and recorded if they are disturbed or revealed as a result of subsequent activities associated with the proposed development.
- 6.7.3 The DBA concludes that no Registered Historic Landscape, Registered Historic Park and Gardens, Conservation Area or Listed Building will be directly or indirectly affected by any development. Furthermore, no Scheduled Monuments will be directly affected by the proposed development.
- 6.7.4 A total of nine specific monuments of potential archaeological interest were identified within the application site boundary. Eight of these features will not experience intrusive groundworks therefore no mitigation is proposed. The remaining potential site cultivation ridges could be monitored through a watching brief during the construction phase to characterise the ridges and confirm whether they are cultivation ridges or not and their date.

6.8 Glint and Glare

- 6.8.1 An assessment has been undertaken to analyse the possible effects of glint and glare from a proposed solar photovoltaic (PV) development. The report is shown in **Appendix 4.9**.
- 6.8.2 The results of the analysis have shown that reflections from the proposed development are geometrically possible towards 40 out of 63 identified dwelling receptors.
- 6.8.3 Visibility of the reflecting solar panel area is removed by the presence of existing screening in the form of vegetation and the terrain. Therefore, no impact is predicted and mitigation is not required.
- 6.8.4 The results of the analysis have shown that solar reflections from the proposed development are geometrically possible towards road users along approximately 1.7km of the A4067 and the B4291. Predicted solar reflections are screened by existing vegetation, buildings, and terrain and therefore no impact is predicted to be experienced by road users, and mitigation is not recommended.

6.9 Agricultural Land Quality

- 6.9.1 An agricultural land quality survey of the application site was undertaken in November 2021 and is included at **Appendix 4.4**.

- 6.9.2 The land has a mixture of shallow and deeper loamy soils over sandstone, with some slowly permeable clays towards the east of the application site. Most of the application site is of subgrade 3b or grade 4 agricultural quality, limited by adverse climate, soil wetness and soil depth limitations. Small areas of the application site with very steep land are of grade 5 quality.
- 6.9.3 In conclusion no best and most versatile agricultural land will be effected by the proposed development.

6.10 Flood Consequence Assessment

- 6.10.1 The FCA (**appendix 4.5**) considers all sources of flooding have been considered, these are fluvial (river) flooding, tidal (coastal) flooding, groundwater flooding, surface water (pluvial) flooding, sewer flooding and flooding from artificial drainage systems/infrastructure failure.
- 6.10.2 It should be noted that the proposed development of the solar farm will be located within DAM Zone A and Flood Zone 1 and the area within DAM Zone C2, Flood Zones 2 and 3 will only to be used on a temporary basis for approximately 9 months and will then revert back to grazing land. An updated FCA has been prepared to take account of the comments received from NRW during the PAC stage (dated 17th February 23). The updated FCA provides details on predicted flood water levels for the temporary set down area and also further clarity on how the proposal meets the TAN15 Justification Test.
- 6.10.3 The proposed development is classified as 'less vulnerable', 'less vulnerable' uses are appropriate within DAM Zone A and C2. There are no constraints relating to flooding from rivers or the sea, other than to avoid increasing risk elsewhere.
- 6.10.4 There will be no net loss in flood storage capacity or impact on movement of floodwater across the site. The overall direction of the movement of water will be maintained within the developed site and surrounding area. The conveyance routes (flow paths) will not be blocked or obstructed.
- 6.10.5 It is generally accepted that the presence of solar panels on site may slightly change the pattern of runoff with the potential for minor erosion at the base of the panels. There is empirical evidence of the effect of solar development, a recent research paper found that, with well-maintained grass underneath the panels, the solar panels themselves did not have a significant impact on the runoff volumes, peaks or time to peak.
- 6.10.6 The development should not therefore be precluded on the grounds of flood risk.

6.11 Arboricultural Assessment

- 6.11.1 **Appendix 4.10** includes a tree survey in accordance with BS5837(2012). The survey sought to assess tree cover and understand arboricultural impacts associated with the installation of a solar farm and an offsite HV cable.
- 6.11.2 Tree cover in both areas was primarily native. Highest value tree stock including two large woodlands were located within the solar farm site. The two woodlands included areas of woodland falling within the Ancient Woodland Inventory.
- 6.11.3 Arboricultural impacts associated with both elements of the proposals are limited. No

trees are proposed for removal in order to accommodate the installation of the offsite HV cable. The solar farm too has been designed to avoid tree loss; though installation of essential infrastructure, namely internal HV cables and site access, may require select tree removal.

- 6.11.4 The present report provides recommendations for a formal Arboricultural Method Statement that should be conditioned as part of any future planning permission. The recommendations to be included within the Arboricultural Method Statement will allow for the safe retention of trees as part of the proposals.
- 6.11.5 A separate landscape management plan has been produced which will ensure that the retained habitats on site can be managed and impacts from the proposals mitigated appropriately.

6.12 Green Infrastructure Plan

- 6.12.1 **Appendix 4.11** shows the Green Infrastructure Plan (GIP) for the proposal. Key to the Plan is a network of integrated spaces and features, not just individual elements; but rather 'multi-functional' to provide multiple benefits simultaneously.
- 6.12.2 The GIP shows how the proposed access to and around the proposal site will increase connectivity between existing public rights of way, but also provide significant benefits to local biodiversity and renewable energy generation as part of the 40 year life of the scheme.

6.13 Construction Environmental Management Plan

- 6.13.1 An Outline Construction Environmental Management Plan (OCEMP) has been prepared and describes how a detailed, site specific CEMP will be developed to avoid, minimise or mitigate any construction effects on the environment and the surrounding community. This OCEMP covers site activities which may require operational controls in relation to potential environmental impacts and details mitigation measures to minimising risks to the environment.

6.14 Coal Mining

- 6.14.1 Comments from the Coal Authority received during the PAC stage required the preparation of a Coal Mining Risk Assessment.
- 6.14.2 The risk assessment (see **Appendix 4.12**) identified that there is one coal seam that may lie at shallow depth at the site, although this is recorded as being 'thin' in nature in this area by the British Geological Society. There are no recorded shallow coal mine workings or entries at the site, or any evidence of potential unrecorded shallow mine workings.
- 6.14.3 Furthermore, there are only two areas of proposed sensitive structures which lie near or within the possible outcrop of the Swansea Five-Foot Seam (i.e. close to or within the Coal Authority's Development High Risk Area). The risk from unrecorded mine workings is currently considered as low. To confirm this conclusion, further site investigation is proposed prior to the commencement of works on site, this requirement can be condition as part of any planning consent.



7. POLICY APPRAISAL

7.1 INTRODUCTION

7.1.1 This chapter provides an appraisal of the proposed development against the development plan and other material considerations, to determine if planning permission should be granted. The structure of the chapter is as follows:

- Principle of the development;
- Landscape and visual;
- Flood risk;
- Noise;
- Historic environment;
- Ecology and trees;
- Agricultural land classification;
- Highways and traffic;
- Socio Economic; and
- Glint and Glare.

7.2 PRINCIPLE OF THE DEVELOPEMENT

7.2.1 National and local planning policy is overwhelmingly supportive of renewable energy developments and therefore the 'in principle' acceptability of the proposed development is established.

7.2.2 Policy 17 of Future Wales states

"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."

7.2.3 The proposal will make a significant contribution to meeting the target of "70% of consumed electricity by renewable means by 2030." In addition to the generation of renewable energy the scheme will deliver the following benefits:

- grassland diversity and structure will be improved, benefiting ground nesting birds and all species that forage in grassland. Woodland enhancement through fencing to prevent overgrazing will improve woodland structure, creating new nesting opportunities and enhancing the foraging resource for woodland species;
- in social and economic terms, the scheme could employ 50 people in the 9 month construction phase, followed by maintenance staff over the 40 year lifespan;
- provision of improved public access to and through the proposal site;
- opportunity for potential community ownership of the scheme;
- employment onsite would support local business through daily expenditure and also any accommodation required during the construction period.

7.2.4 Policy 18 takes a positive approach to proposals for renewable energy development so long as it meets environmental criteria. The benefits the scheme realises through the reduction in carbon emissions, the enhancements to local biodiversity and the positive effects to the local economy far outweigh the limited adverse effects.

7.2.5 The potential effects have been fully assessed and where appropriate mitigated as a result of an iterative design process for the development, and through careful consideration of environmental control, abatement techniques, and high quality process and ecological management.

7.2.6 Planning Policy Wales 11 (PPW11) reinforces this by stating:

“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.”

7.2.7 Paragraph 5.9.6 of PPW11 states that:

“Targets must not be seen as maximum limits, but rather used as a tool to maximise available resource. Planning applications should not be refused on the basis of exceeding a renewable energy target”.

7.2.8 The renewable share of Wales’ total electricity generation increased from 25% in 2018 to 27% in 2019¹¹. The Energy Generation in Wales 2019 Report also estimates that 51% of electricity consumption comes from renewable sources. As mentioned above Welsh Government have a target to increase this to 70% by 2030. Paragraph 5.9.15 of Planning Policy Wales Edition 11 confirms that the need for renewable energy generation is not a material planning consideration as such the proposal will ‘optimise renewable and low carbon energy generation’.

7.2.9 At a local level, paragraph 1.1.23 of the Swansea Local Development Plan (LDP) confirms support for renewable energy in that “there are potentially significant opportunities for renewable energy generation and new energy infrastructure to help meet carbon reduction requirements”. Policy EU1: Renewable and Low Carbon Energy Proposals is a general criteria-based policy which states:

ii. Local Search Areas (LSAs) -

Within the LSAs, proposals for solar PV between 5 – 50 MW will be permitted subject to criteria iii to v. All other proposals for renewable and low carbon energy development will only be permitted where they can demonstrate they would not prejudice the purpose of the LSA

7.2.10 Paragraph 5.3.90 of the Neath Port Talbot LDP states that “...developments will be encouraged in principle...”. Policy RE1 states:

All renewable energy or low carbon energy development proposals will be required to demonstrate that:

(a) Measures have been taken to minimise impacts on visual amenity and the natural environment;

(b) There will be no unacceptable impacts on residential amenity;

(c) The development will not compromise highway safety;

(d) The development would not interfere with radar, air traffic control systems, telecommunications links, television reception, radio communication and emergency services communications; and

(e) There are satisfactory proposals in place for site restoration as appropriate

7.2.11 Chapter 5 of this Planning Statement sets out detailed site selection criteria which demonstrates the need for the development in the proposed location and why the proposal would not prejudice the purpose of the LSAs. It is considered that the proposed CYP Solar Farm will not prejudice the purpose of the LSA’s as the proposal:

- Has an accepted grid offer from the distribution network operator and the point of connection to the ‘grid’ which is located over 5km from the nearest LSA. This

¹¹ <https://gov.wales/sites/default/files/publications/2021-01/energy-generation-in-wales-2019.pdf>

separation distance should not affect available capacity on the distribution network for any proposals made in the LSAs.

- Will protect and provide a significant enhancement to the on-site ecological designations for the life of the scheme. Therefore delivering benefits beyond renewable, clean energy and exceeding the policy objective of EU1. Furthermore, paragraph 2.13.4 states *“the REA suggest that there is significant potential within the whole of the County for the development of renewable and low carbon technologies and developers are encouraged to explore all aspects of the County’s capability to contribute to lowering UK carbon emissions within the energy sector”*.
- Will not stifle development of LSAs given that Welsh Government has not set any upper limits on renewable energy generation.

7.2.12 Chapter 5 of the Planning Statement and the Design and Access Statement sets out how the proposal has evolved following detailed non-statutory consultation and the formal Pre-Application Consultation. Details of how the project team have refined the scheme’s design to recognise stakeholder feedback is presented in the Consultation Report.

7.2.13 This application is accompanied by environmental assessments which demonstrate the significant benefits of the proposals and that the identified adverse impacts can be addressed through thoughtful design and mitigation and a careful approach to construction and the reversible nature of the proposal.

7.2.14 Renewable energy generation has an important role in achieving sustainable development. As part of decarbonising the Welsh economy, the proposal will provide economic, social and environmental enhancements. Economic benefits will include the creation of temporary jobs, supporting local supply chains during the construction phase, an opportunity for potential community ownership and support the low carbon decentralised energy generation in South Wales as a key growth sector. Social benefits will be realised through decentralised energy generation and not relying on energy imports and improved public access. Environmental gains would be secured through carbon reduction, and connectivity and biodiversity enhancements.

7.2.15 Therefore, the proposal demonstrates that the requirements of Policy 17 and 18 of Future Wales, Policy ER1 and EU1 of the Swansea JLP and policy RE1 of the Neath Port Talbot LDP.

7.3 LANDSCAPE AND VISUAL AMENITY

Landscape

7.3.1 The LVIA states that the application site is located within an area of great contrasts, from heavy industrialised river valleys (as seen in areas of Clydach) to wooded valley sides and windswept open plateau tops. Based on the criteria within the methodology (**Appendix 4.6.1**) at a site level the assessment concluded a ‘Medium’ landscape value. At a wider district level a ‘Low-Medium’ value was concluded.

7.3.2 It is noted that development is proposed over the less landscape (and ecologically) sensitive mosaic grassland areas, avoiding direct impacts upon the more sensitive landscape elements. It is also noted that the site and surrounding area are not subject to any national, regional or local landscape designations.

7.3.3 The solar farm proposal, at a site level by nature of its scale, would markedly change

the character of the local area, within an area of high susceptibility to change. Essentially the potential to diminish its sense of place. Whilst notably these potential effects are localised to the 26ha deployment area, the development facilitates wider scale landscape and ecological enhancements over a much larger area across the c.67ha application site.

- 7.3.4 It is acknowledged that the character of the local landscape within the deployment area will change however, the retention and management of surrounding vegetation (acknowledged to be one of the key landscape characteristics) and proposed mitigation will lessen the visual prominence of the solar farm, aiding landscape integration.
- 7.3.5 The overall level of landscape effect upon the site is determined by consideration of the landscape sensitivity and magnitude of landscape effect, as a result a Moderate level of landscape effect overall, this is a 'Not Substantial' effect.
- 7.3.6 With regard to the construction and decommissioning activities, any effects on landscape character and landscape receptors during the construction and decommissioning phases will be temporary and short term in duration.

Visual Amenity

- 7.3.7 The visual assessment demonstrated that the areas and levels of visibility to the proposed development were limited from what would be expected on a scheme of this scale and as illustrated on the ZTV (see **Appendix 4.6.2**).
- 7.3.8 The assessment considered the relevant residential receptors, groups, and settlements that were shown to have theoretical visibility to the scheme proposals within the study area. No receptors were considered to experience visual effects of a 'substantial' nature.
- 7.3.9 The application site is set within a rising upland area, flanked by vegetation and landform, the key residential areas are generally focussed to the lower lying valley areas and side slopes, which limits the potential for views to the site area. Overall, the assessment has established that despite the scale of the site, there are few receptors with open visibility to the site. At most, partial views to limited fringe areas of the site are only possible and seen at a distance that reduces the visible scale of effects.
- 7.3.10 The viewpoints illustrate how even though limited areas of the site are often perceptible, due to the separation distances, and change in viewing angle, the arrays upon the site edges are viewed as small scale features set upon a hillside horizon feature. Numerous plantations, deciduous woodland and scrub blocks upon the hillsides additionally combine to filter views to the site from many locations, reducing its visual prominence.

Summary Conclusion

- 7.3.11 The LVIA demonstrates that the proposed solar farm development could be successfully integrated into the surrounding landscape without causing substantial and wide scale harm to the landscape character and without long term substantial adverse impacts to visual amenity in the local area.
- 7.3.12 In terms of Policy 18 of Future Wales the LVIA has confirmed no substantial effect on

landscape character. Furthermore, the LVIA has confirmed that substantial visual effects will not be experienced at nearby communities and individual dwellings.

- 7.3.13 PS 2: Placemaking and Place Management of the Swansea LDP states that:

The design, layout and orientation of proposed buildings, and the spaces between them, should provide for an attractive, legible, healthy, accessible and safe environment. All proposals should ensure that no significant adverse impacts would be caused to people's amenity.

Depending on the nature, scale and siting of the proposal, development should also:

i. Have regard to important elements of local heritage, culture, landscape, townscape, views and vistas..."

- 7.3.14 Policy ER 5: Landscape Protection of the Swansea LDP states:

Development will not be permitted that would have a significant adverse effect on the character and quality of the landscape of the County."

- 7.3.15 Policy SP 14: The Countryside and the Undeveloped Coast of the Neath Port Talbot LDP states:

The countryside and undeveloped coast, including landscapes, seascapes and agricultural land, will be protected and where feasible enhanced through the following measures:

1. The protection of the open countryside through the control of inappropriate development outside settlement limits...

- 7.3.16 Policy SP 18 Renewable and Low Carbon Energy of the Neath Port Talbot LDP states:

A proportionate contribution to meeting national renewable energy targets and energy efficiency targets will be made while balancing the impact of development on the environment and communities. This will be achieved by:

3. Ensuring that development will not have an unacceptable impact on the environment and amenity of local residents.

- 7.3.17 The LVIA confirms that the solar farm proposal, at a site level by nature of its scale, would markedly change the character of the local area, the development is however proposed over the less landscape (and ecologically) sensitive mosaic grassland areas, avoiding direct impacts upon the more sensitive landscape elements. It is also noted that the site and surrounding area are not subject to any national, regional or local landscape designations. Overall, this is considered not be a substantial effect, thus reflecting the objectives of the above policies with regard to landscape character.

- 7.3.18 The viewpoint assessment, undertaken with the aid of photomontages, demonstrated that generally, despite the ground coverage of the scheme, there are very limited publicly accessible and residential areas that will have close range and expansive views over large areas of the solar farm. No Substantial visual effects are concluded from any of the viewpoint locations. Despite the visibility, the near range viewpoint locations serve to illustrate the sensitive siting of the solar arrays set within the established trees and scrub at the site, and demonstrating how the open upland western plateau area is generally not visible from within the lower lying populated wider landscape (excluding the arrays on the fringe areas of the plateau). Therefore,

the proposal demonstrates that the requirements of Policy 18 of Future Wales, PPW11 and PS2 and ER5 of the Swansea Joint Local Development Plan and SP14 and SP18 of the Neath Port Talbot LDP would be satisfied and that the proposal would not have an unacceptable impact on landscape character and visual amenity.

7.4 HYDROLOGY AND FLOOD RISK

- 7.4.1 A Flood Consequence Assessment (FCA) has been carried out for the proposed development in accordance with guidance contained in PPW11 and TAN15. The FCA identifies and assesses the risks of all forms of flooding to and from the development and demonstrates how these flood risks will be managed so that the development remains safe throughout its lifetime taking climate change into account.
- 7.4.2 Natural Resources Wales through the Development Advice Maps identifies that the majority of the site (all the PV deployment area) is located within DAM Zone A and is not at risk of fluvial or tidal flooding. The temporary laydown area is located within Zone DAM Zone C2, however, this will only be used on a temporary basis for approximately 9 months and will then revert to grazing land during the operational phase. Following NRW's comments from the PAC stage, information on the justification of the site has been included in the FCA.
- 7.4.3 The proposed development is classified as 'less vulnerable', 'less vulnerable' uses are appropriate within DAM Zone A and C2. There are no constraints relating to flooding from rivers or the sea, other than to avoid increasing risk elsewhere. The justification test is not applicable.
- 7.4.4 In terms of surface water runoff, empirical evidence has found that, with well-maintained grass underneath the panels, the solar panels themselves do not have a significant impact on the runoff volumes of surface water.
- 7.4.5 Policy 18 of Future Wales states that "Proposals for renewable and low carbon energy projects (including repowering) qualifying as Developments of National Significance will be permitted subject to:

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;"
- 7.4.6 Policy RP 4: Water Pollution and the Protection of Water Resources of the Swansea LDP states:

Development that compromises the quality of the water environment, or does not comply with good water resource management, will not be permitted...
- 7.4.7 Policy RP 5: Avoidance of Flood Risk of the Swansea LDP states:

In order to avoid the risk of flooding, development will not be permitted:

i. In areas at risk of fluvial, pluvial, coastal and reservoir flooding, unless it can be demonstrated that the development can be justified in-line with national guidance and is supported by a technical assessment that verifies that the new development is designed to alleviate the threat and consequences of flooding;
- 7.4.8 Policy SP1: Climate Change of the Neath Port Talbot LDP states:

The causes and consequences of climate change will be addressed by implementing the following measures...

In relation to the consequences of climate change:

1. Likely increased flood risk will be taken into account and addressed by ensuring that there is greater resilience by avoiding development on land that is at risk from flooding in the first instance in accordance with the sequential approach set out in national guidance or in locations that could increase the risk of flooding elsewhere;...

- 7.4.9 The FCA concludes that flood risk from all sources would be minimised, the consequences of flooding are acceptable, and the development would be in accordance with the requirements of TAN15. It is considered that the proposal accords with the objectives of Policy 18 of Future Wales, Policy RP4 and RP5 of the Swansea LDP and policy SP1 of the Neath Port Talbot LDP.

7.5 NOISE AND VIBRATION

- 7.5.1 As part of pre-application discussions with Swansea Council and Neath Port Talbot CBC it was agreed that a detailed noise assessment was not required to accompany the planning application. It is unlikely that noise generation from the proposal will give rise to concerns at nearest noise sensitive receptors due to the considerable distances between source and receptor (detailed in **Table 6.1** above). The noise generated during the operational phase will only occur when the solar farm is generating electricity, during daytime hours. It is expected that any contribution from the proposal to background noise levels would not be detected at the nearest noise sensitive receptors.

- 7.5.2 Policy 18 of Future Wales 2040 states that "Proposals for renewable and low carbon energy projects (including repowering) qualifying as Developments of National Significance will be permitted subject to...

7. there are no unacceptable adverse impacts by way of shadow flicker, noise, reflected light, air quality or electromagnetic disturbance;

- 7.5.3 Paragraph 5.9.20 of PPW11 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;

- 7.5.4 Policy RP2: Noise Pollution of the Swansea LDP states that:

Where development could lead to exposure to a source of noise pollution it must be demonstrated that appropriate mitigation measures will be implemented, and incorporated into the design of the development to minimise the effects on existing and future occupants.

- 7.5.5 Policy EN8: Pollution and Land Stability of the Neath Port Talbot LDP states:

Proposals which would be likely to have an unacceptable adverse effect on health, biodiversity and/or local amenity or would expose people to unacceptable risk due to the following will not be permitted:

- *Air pollution;*
- *Noise pollution;...*

7.5.6 Solar Farms are inherently quiet operations, with only the air-cooling systems associated with the inverters and substations and the general operation of the transformers generating sound power levels.

7.5.7 The pre-application discussions with both LPAs confirmed that a detailed noise assessment was not required due to the nature of the proposed operations and significant distance to the nearest noise sensitive receptors. The proposal is therefore considered to satisfy the requirements for noise protection afforded by Policy 18 of Future Wales and policy RP2 of the Swansea LDP and policy EN8 of the Neath Port Talbot LDP.

7.6 HISTORIC ENVIRONMENT

7.6.1 A Heritage Desk-Based Assessment has been reviewed by Cadw and Glamorgan Gwent Archaeological Trust as part of pre-application discussions. In response, they confirmed that no further information was required to support the determination of the application.

7.6.2 No Registered Historic Landscape, Registered Historic Park & Gardens, Conservation Area or Listed Building will be directly or indirectly affected by any development. No Scheduled Monuments will be directly affected by the proposed development. There may be limited indirect impact on round cairn with cist on Mynydd Drumau, but due to distance the potential indirect impact will be minor.

7.6.3 A total of nine specific (non-designated) monuments of potential archaeological interest have been identified within the proposed development boundary, these include dry-stone walls, earthworks and small quarries. The archaeological value of these features range from low to medium and subject to the proposed mitigation the potential impacts would range from minor to moderate.

7.6.4 Policy 18 of Future Wales 2040 states that “Proposals for renewable and low carbon energy projects (including repowering) qualifying as Developments of National Significance will be permitted subject to...

6. there are no unacceptable adverse impacts on statutorily protected built heritage assets;

7.6.5 Paragraph 5.9.20 of PPW11 states:

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 impact on the natural and historic environment;*

7.6.6 Policy HC1: Historic and Cultural Environment of the Swansea LDP states that:

The County’s distinctive historic and cultural environment will be preserved or enhanced by:

- Requiring high quality design standards in all development proposals to respond positively to local character and distinctiveness;*

- ii. Identifying and safeguarding heritage assets, sites and their settings;*
- iii. Supporting heritage and cultural led regeneration schemes;*
- iv. Safeguarding and promoting use of the Welsh language.*

7.6.7 Policy SP21: Built Environment and Historic Heritage of the Neath Port Talbot LDP states:

The built environment and historic heritage will, where appropriate, be conserved and enhanced through the following measures:

- 1. Encouraging high quality design standards in all development proposals;*
- 2. Protecting arterial gateways from intrusive and inappropriate development;*
- 3. Safeguarding features of historic and cultural importance;*
- 4. The identification of the following designated sites to enable their protection and where appropriate enhancement:*
 - (a) Landscapes of Historic Interest;*
 - (b) Historic Parks and Gardens;*
 - (c) Conservation Areas;*
 - (d) Scheduled Ancient Monuments; and*
 - (e) Listed Buildings and their curtilage*

7.6.8 Policy BE1: Design of the Neath Port Talbot LDP states that:

All development proposals will be expected to demonstrate high quality design which fully takes into account the natural, historic and built environmental context and contributes to the creation of attractive, sustainable places.

Proposals will only be permitted where all of the following criteria, where relevant, are satisfied:

- 2. It respects the context of the site and its place within the local landscape, including its impact on the important arterial gateways into the County Borough, its effects on townscape and the local historic and cultural heritage and it takes account of the site topography and prominent skylines or ridges;...*

7.6.9 After mitigation (suggested watching briefing during the construction phase), no substantial effects on any known archaeological remains, listed buildings or scheduled monuments are predicted. As such it is considered that the proposed development meets the objectives of Policy 18 of Future Wales, PPW11 and policy HC1 of the Swansea LDP and policies SP21 and BE1 of the Neath Port Talbot LDP.

7.7 ECOLOGY AND TREES

7.7.1 Three statutory designated sites were recorded within 10km of the site boundary, these included Crymlyn Bog SAC & RAMSAR (4353m south), Forest Goch Bog SSSI (1233m east) and Glais Moraine SSSI (777m west). The following non-statutory sites were recorded within 2km of the Site, these included Dyffryn Woods (241m east), Pandy Farm (980m north), Swansea Canal (950m north west) Tawe Corridor (370m north west) and Wildlife Trust Reserve (240m east), NRW Priority Area (Woodland - PAWS) (240m east), Birchgrove Hill - Mynydd Drumau (310m south), NPT Watercourses SINC (on site) and Graig Ola - Cwm-cymach, Glais SINC (on site).

7.7.2 Ecology surveys and subsequent updates were conducted in 2020, 2021, 2022 and

2023 and include Phase 1 and National Vegetation classification surveys, invasive species, badger, bats, breeding birds, reptiles and otter.

- 7.7.3 The 67.7 ha site is comprised mostly of horse-grazed acid and/or neutral unimproved, semi-improved and poor semi-improved grassland fields, that were bounded by mature oak woodland, dry stone walls and earth banks. Areas of scrub, bracken, a small area of acid fen, and patches of dwarf heath shrub primarily along the walls, were also present.
- 7.7.4 No evidence of badger setts was found on Site.
- 7.7.5 Good numbers of common lizard (local value) were present within retained grassland and areas of scrub proposed for removal.
- 7.7.6 The breeding bird assemblage was of district value, with notable species recorded within the woodland as well as low numbers of skylark in fields. The bat assemblage included a wide range of species typical for South Wales, including lesser horseshoe and greater horseshoe which were each assessed as district value.
- 7.7.7 No records of hazel dormouse were present within 2km of the site. This species is likely to be present in suitable habitat on and adjacent to the site, however, the proposals will have no impact on this species.
- 7.7.8 Following consultation with Swansea Council a fungi survey was conducted to search and map any specimens. No date waxcaps were recorded during the survey visit.
- 7.7.9 A tree survey in accordance with BS5837(2012) sought to assess tree cover and understand arboricultural impacts associated with the installation of a solar farm and cable to the point of connection. Tree cover in both areas was primarily native. Highest value tree stock including two large woodlands were located adjacent to the solar deployment area. The two woodlands included areas of woodland falling within the Ancient Woodland Inventory.
- 7.7.10 Policy 18 of Future Wales 2040 states that “Proposals for renewable and low carbon energy projects (including repowering) qualifying as Developments of National Significance will be permitted subject to...

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;

- 7.7.11 Paragraph 5.9.20 of PPW11 states:

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 impact on the natural and historic environment;*

7.7.12 Policy ER2: Strategic Green Network of the Swansea LDP states that:

Green Infrastructure will be provided through the protection and enhancement of existing green spaces that afford valuable ecosystem services.

Development that compromises the integrity of such green spaces, and therefore that of the overall Green Infrastructure network, will not be permitted.

Development will be required to take opportunities to maintain and enhance the extent, quality and connectivity of the County's multi-functional Green Infrastructure network, and where appropriate:

- Create new interconnected areas of Green Infrastructure between the proposed site and the existing strategic network;*
- Fill gaps in the existing network to improve connectivity; and*
- In instances where loss of Green Infrastructure is unavoidable, provide mitigation and compensation for the lost assets.*

7.7.13 Policy ER 6: Designated Sites of Ecological Importance of the Swansea LDP states:

Development will not be permitted that would result in a likely significant adverse effect on the integrity of sites of international or national nature conservation importance, except in the circumstances specified in relevant legislation.

Development that would adversely affect locally designated sites of nature conservation importance should maintain and enhance the nature conservation interest of the site. Where this cannot be achieved development will only be permitted

where it can be demonstrated that:

- The need for the development outweighs the need to protect the site for nature conservation purposes;*
- There is no satisfactory alternative location for the development that avoids nature conservation impacts; and*
- Any unacceptable harm is kept to a minimum by effective avoidance measures and mitigation, or where this is not feasible, compensatory measures must be put in place to ensure that there is no overall reduction in the nature conservation value of the area.*

7.7.14 Policy ER 8: Habitats and Species of the Swansea LDP states:

Development proposals that would have a significant adverse effect on the resilience of protected habitats and species will only be permitted where:

- The need for development outweighs the nature conservation importance of the site;*
- The developer demonstrates that there is no satisfactory alternative location for the development which avoids nature conservation impacts; and*
- Any unavoidable harm is minimised by effective mitigation to ensure that there is no reduction in the overall nature conservation value of the area. Where this is not feasible, compensation measures designed to conserve, enhance, manage and, where appropriate, restore natural habitats and species must be provided.*

7.7.15 Policy ER 9: Ecological Networks and Features of Importance for Biodiversity of the Swansea LDP states:

Development proposals will be expected to maintain, protect and enhance ecological networks and features of importance for biodiversity. Particular importance will be given to maintaining and enhancing the connectivity of ecological networks which enable the dispersal and functioning of protected and priority species.

Development proposals that could result in an adverse effect on the connectivity of ecological networks and features of importance for biodiversity will only be permitted where:

- i. The need for the development outweighs the nature conservation value of the site;*
- ii. It can be demonstrated that there is no satisfactory alternative location for the development;*
- iii. A functional connected element of the natural resource is retained as part of the design of the development; and*
- iv. Compensatory provision will be made of comparable or greater ecological value to that lost as a result of the development.*

7.7.16 Policy ER 11: Trees, Hedgerow and Development of the Swansea LDP states:

Development that would adversely affect trees, woodlands and hedgerows of public amenity or natural/cultural heritage value, or that provide important ecosystem services, will not normally be permitted.

Ancient Woodland, Ancient Woodland Sites, Ancient and Veteran Trees merit specific protection and development will not normally be permitted that would result in:

- i. Fragmentation or loss of Ancient Woodland;*
- ii. The loss of an Ancient or Veteran Tree;*
- iii. Ground damage, loss of understorey or ground disturbance to an area of Ancient Woodland or Ancient or Veteran Tree's root protection area;*
- iv. A reduction in the area of other semi natural habitats adjoining Ancient Woodland;*
- v. Significant alteration to the land use adjoining the Ancient Woodland;*
- vi. An increase in the likely exposure of Ancient Woodland, Ancient or Veteran Tree to air, water or light pollution from the surrounding area;*
- vii. Alteration of the hydrology in a way that might impact on Ancient Woodland, Ancient or Veteran Trees;*
- viii. Destruction of important connecting habitats relating to Ancient Woodland;*
- ix. Destruction of Plantations on Ancient Woodland Sites (PAWS); and/or*
- x. Development in close proximity to Ancient Woodland and Ancient and Veteran Trees.*

Where necessary, planning applications for development proposals on sites containing, or adjacent to, trees will be required to provide: a tree survey; an arboricultural impact assessment; an arboricultural method statement; and/or a tree protection plan. Where trees are to be replaced a scheme for tree

replacement must be agreed prior to the commencement of development, including details of planting and aftercare.

7.7.17 Policy SP 15: Biodiversity and Geodiversity of the Neath Port Talbot LDP states:

Important habitats, species and sites of geological interest will be protected, conserved, enhanced and managed through the following measures:

1. The identification of the following Internationally and Nationally designated sites within the County Borough to enable their protection:

- (a) Special Areas of Conservation (SACs) and Ramsar Sites;*
- (b) Sites of Special Scientific Interest (SSSIs);*
- (c) National Nature Reserves (NNRs).*

2. The identification and protection of sites of regional and local importance;

3. The protection of important natural heritage features.

7.7.18 Policy EN 6: Important Biodiversity and Geodiversity Sites of the Neath Port Talbot LDP states:

Development proposals that would affect Regionally Important Geodiversity Sites (RIGS), Local Nature Reserves (LNRs), Sites of Interest for Nature Conservation (SINC), sites meeting SINC criteria or sites supporting Local Biodiversity Action Plan (LBAP) or S42 habitats or species will only be permitted where:

- 1. They conserve and where possible enhance the natural heritage importance of the site; or*
- 2. The development could not reasonably be located elsewhere, and the benefits of the development outweigh the natural heritage importance of the site.*

Mitigation and/or compensation measures will need to be agreed where adverse effects are unavoidable.

7.7.19 Policy EN 7: Important Natural Features of the Neath Port Talbot LDP states:

Development proposals that would adversely affect ecologically or visually important natural features such as trees, woodlands, hedgerows/field boundaries, watercourses or ponds will only be permitted where:

- 1. Full account has been taken of the relevant features in the design of the development, with measures put in place to ensure that they are retained and protected wherever possible; or*
- 2. The biodiversity value and role of the relevant feature has been taken into account and where removal is unavoidable, mitigation measures are agreed.*

7.7.20 Policy BE 1: Design of the Neath Port Talbot LDP states:

All development proposals will be expected to demonstrate high quality design which fully takes into account the natural, historic and built environmental context and contributes to the creation of attractive, sustainable places.

Proposals will only be permitted where all of the following criteria, where relevant, are satisfied:

....

5. Important local features (including buildings, amenity areas, green spaces and green infrastructure, biodiversity and ecological connectivity) are retained and enhanced as far as possible;...

- 7.7.21 As set out in Ecology Impact Assessment (**Appendix 4.7**) the proposed scheme retains almost all the habitat on-site, but for small amounts removed for fencing and cabling. It also includes the proposal of a new public footpath and bridleways to divert and buffer footfall around the important habitat features.
- 7.7.22 Mitigation and enhancements have been proposed including the management of the grasslands and woodland and wildlife box installation. There will be no lighting on-Site to maintain connectivity and flyways for the bats recorded. Also included is an Ecological Management Plan. Overall, the proposed scheme has been designed to provide and improve significant opportunities for biodiversity for the life of the proposal.
- Where solar panels are being installed, a buffer of a minimum 7m is present between the woodland edge and the security fence. This will ensure woodland and woodland edge is protected and retained;
 - All Areas of the higher value semi-improved acid grassland/Molinia Fen are to remain free from panels;
 - No lighting is proposed during operational phase;
 - The landscape has been designed with no new planting to protect the existing native habitats;
 - All grassland, dry acid heath and Molinia Fen Meadow on on-Site will be managed with either a restore, maintain, or enhance management prescription. This will be achieved through a mixture of sensitive cutting regimes and low intensity conservation grazing.
 - Scrub and bracken will be removed from specific areas to improve the condition of the grassland. This will be achieved through mechanical removal and continued management through conservation grazing; and
 - The AWI/Upland Oak Woodland will be fenced to remove all grazing pressure and allow the native understorey to re-establish. Conservation management will then be implemented through low intensity grazing at appropriate times.
 - Removal and monitoring of rhododendron and Japanese knotweed; and
 - Monitor and assess the success of the options.
- 7.7.23 Date waxcaps are known to prefer unimproved grassland that is grazed, and this and associated fungal species would be vulnerable to significant changes in habitat type including reduced grazing. As the proposals aim to maintain the higher value habitats and increase their extent over the 40- year life of the scheme, it is not predicted there will be a significant adverse effect on date waxcaps nor other fungal species that may be present.
- 7.7.24 Arboricultural impacts associated with the proposals are limited as no trees are proposed for removal in order to accommodate the installation of the offsite HV cable or solar farm; though installation of essential infrastructure, namely internal cables and site access, may require select tree removal.
- 7.7.25 A formal Arboricultural Method Statement will be prepared prior to commencement to allow for the safe retention of trees as part of the proposals.
- 7.7.26 As such it is considered that the proposed development meets the objectives of Policy 18 of Future Wales, PPW11 and policies ER2, ER6, ER8 and ER9 and ER11 of the

Swansea LDP and policies SP15, EN6, EN7 and BE1 of the Neath Port Talbot LDP.

7.8 AGRICULTURAL LAND QUALITY

7.8.1 A Soils and Agricultural Quality Assessment is presented in **Appendix 4.4** and confirms grades 3b, 4 and 5 across the application site. In conclusion no best and most versatile agricultural land will be effected by the proposed

7.8.2 Paragraph 3.58 of PPW11 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”.

7.8.3 Policy CV6: Development in the Countryside of the Swansea LDP states:

Countryside development must be of a sustainable form with prudent management of natural resources and respect for the cultural heritage of the area

7.8.4 Furthermore, the development areas will still be grazed as a grassland management technique albeit not to current intensity. As such it is considered that the proposed development meets the objectives of PPW11 and policy CV2 of the Swansea LDP.

7.9 HIGHWAYS AND TRAFFIC

7.9.1 The Transport Statement (which incorporates the CTMP) sets out the current and proposed access arrangements to the application site, the anticipated construction programme, construction vehicle numbers and routing of deliveries, construction worker numbers and the proposed construction hours. The scope of this detail was agreed with Swansea Council's Highway Engineers as part of pre-application discussions.

7.9.2 The construction of the solar farm is expected to last around 9 months. During this period, there will be journeys associated with the arrival and departure of site staff and the delivery of parts and construction materials.

7.9.3 During this period, there will be approximately 190 deliveries to the remote set down area, or 380 individual movements (in and out).

7.9.4 Only small HGVs (10m rigid) will be able to access the site directly, without using the remote set down area. It is envisaged that approximately 60 deliveries will be made by small HGVs during the 9-month construction phase, the equivalent of one delivery each working day.

7.9.5 Vehicle movements between the remote set down and the deployment area will be circa 380 shuttle deliveries across the nine-month construction period. When combined with the 60 direct deliveries this equates to 440 across the nine months using Graig Y Pal.

7.9.6 The 440 deliveries equates to an average of approximately two per day during the nine-month period. As detailed above however, months two, four and seven are the busiest.

7.9.7 An estimated 50 staff will be on site during the peak of the construction period, depending on the phases of the construction schedule. It is envisaged that staff will be from both local and regional contractors who will be encouraged to use shared transport such as minibus or car-sharing providing this is possible in terms of current

public health guidelines. All vehicle parking will be provided within the temporary construction compound, there will be no parking on the local highway network.

7.9.8 The proposed vehicular access route to the application site falls entirely within Swansea Council's responsibility.

7.9.9 Policy 18 of Future Wales 2040 states that "Proposals for renewable and low carbon energy projects (including repowering) qualifying as Developments of National Significance will be permitted subject to...

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;

7.9.10 Paragraph 5.9.20 of PPW11 states:

The construction, operation, decommissioning, remediation and aftercare of proposals should take into account:

the capacity of, and effects on the transportation network

7.9.11 Policy T 1: Transport Measures and Infrastructure of the Swansea LDP states:

Development must be supported by appropriate transport measures and infrastructure, and depending on the nature, scale and siting of the proposal will be required to:

i. Within SDAs and relevant H 1 sites, prioritise the delivery of the key transport measures and schemes identified in the Transport Measures Priority Schedule, which must be delivered in an efficient and timely manner in accordance with development phases;

ii. Be designed to provide safe and efficient access to the transport network, which includes the Active Travel, public transport and street networks;

iii. Safeguard, enhance and expand the Active Travel network, particularly by means of improving connectivity;

iv. Reduce reliance on car use by maximising the potential of movement to/from the development by public transport, including ensuring developments within the urban area are located a walkable distance to a public transport access point on a route with a high frequency service;

v. Ensure all new transport measures are designed as integral elements of a scheme by means of a Placemaking approach;

vi. Deliver the new transport infrastructure and improvement measures that are required to mitigate the impact of the development; and

vii. Ensure developments are served by appropriate parking provision and circulation areas, including adequate road widths to allow access for service vehicles.

Development that would have an unacceptable impact on the safe and efficient operation of the transport network will not be permitted.

7.9.12 Policy T 5: Design Principles For Transport Measures and Infrastructure of the Swansea LDP states:

All proposals must ensure that the design of development, together with any supporting transport measures and infrastructure:

i. Maximises the accessibility of the site via public transport and Active Travel;

- ii. Provides suitable facilities and a safe, attractive environment for pedestrians, cyclists and other non- motorised modes of transport;*
- iii. Allows for the safe, efficient and effective movement of vehicles, inclusive of service vehicles;*
- iv. Minimises vehicle speeds where appropriate;*
- v. Considers the place and movement of any transport infrastructure in-line with Streets Hierarchy and User Hierarchy concepts to ensure appropriately designed transport infrastructure;*
- vi. Does not encourage extraneous traffic unless there is a specific strategic need for an access route through the area;*
- vii. Does not give rise to any significant adverse effect on the natural heritage, and the historic and cultural environment is preserved or enhanced;*
- viii. Maintains the character of rural lanes and public paths;*
- ix. Complies with the principles of Access For All;*
- x. Accords with standards of good practice, including the Active Travel Act Design Standards; and*
- xi. Considers, and responds to, the findings of any relevant Travel Plan and/or Transport Assessment.*

7.9.13 Solar farms do not generate large amounts of traffic even during the construction phase which in this case is estimated to be a 9-month period. The extent of proposed mitigation measures will be dependent on the appointed contractor for the construction of the facility. However, the CTMP outlines several broad measures that could be readily implemented which include:

- The use of a banksman to help guide deliveries into sites;
- Advisory temporary signage on the highway for works in the area;
- Temporary signage along the proposed route to ensure deliveries follow agreed routes;
- Provide sufficient parking areas within the plots and adjacent to the temporary construction compound so there is no parking on the highway or potential blockage to access tracks;
- Vehicles carrying loose material shall be sheeted;
- The use of bowsers/sprays as necessary during dry conditions to prevent dust and the use of wheel cleaning facilities to prevent transfer on to the highway as required;
- Secure the site to prevent unauthorised access;
- Regularly monitor the condition of the highway for spoil transfer or damage and rectify as required;
- Contact local residents prior to construction works commencing advising of anticipated duration and a contact number to advise of any issues/concerns; and
- Turning engines off when not in use.

7.9.14 As such it is considered that the proposed development meets the objectives of Policy 18 of the Future Wales, PPW11 and policies T1 and T5 of the Swansea LDP.

7.10 SOCIO ECONOMIC

7.10.1 The social and economic benefits of the proposed development are clear. Through localised energy production more benefits can be directed to the local communities through skills, quality jobs and a greater retention of economic value.

- 7.10.2 The proposed development could potentially generate numerous socio-economic and economic benefits throughout the 40-year lifespan. The development could employ 50 people in the initial 9-month construction phase, followed by maintenance staff over the 40 year operational phase. The labour force employed throughout the initial nine-month construction stage could generate significant revenue for the local economy.
- 7.10.3 The applicant is also open to discussions regarding potential community ownership as part of the proposal.
- 7.10.4 Employment onsite would support local business through daily expenditure and also any accommodation required during the construction period. The proposed development could also allow local business to operate with clean energy. Allowing them to market themselves as low carbon businesses. It could be particularly attractive to investors, clients and the tourism market.
- 7.10.5 As part of pre-application discussions and feedback received during the PAC with stakeholders, public access to and through the application site will be significantly improved. This will provide improved accessibility for a range of users including walkers, horse riders and cyclists not only across the site but also links to surrounding, existing public rights of way. The proposed public access will be place in perpetuity, beyond the life of the solar farm. It is considered this benefit will provide significant opportunities to improve local wellbeing by increasing access to green infrastructure.
- 7.10.6 Policy 17 – Renewable and Low Carbon Energy and Associated Infrastructure of Future Wales states:
- Proposals should describe the net benefits the scheme will bring in terms of social, economic, environmental and cultural improvements to local communities.*
- 7.10.7 Policy 32 – Haven Waterway and Energy states:
- “...New energy-related development should support local and regional communities and provide jobs and investment in training and skills.*
- 7.10.8 Paragraph 5.7.6 of PPW11 states:
- 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. This forms part of the Welsh Government’s aim to secure the strongest economic development policies, to underpin growth and prosperity in Wales, recognising the importance of decarbonisation and the sustainable use of natural resources, both as an economic driver and a commitment to sustainable development.*
- 7.10.9 PPW11 continues in paragraph 5.9.19 to state:
- In determining applications for the range of renewable and low carbon energy technologies, planning authorities should take into account:*
- the wider environmental, social and economic benefits and opportunities from renewable and low carbon energy development.*
- 7.10.10 Policy PS 4: Sustainable Employment Strategy of the Swansea LDP states:

Opportunities for business growth and the potential for the creation of 13,600 additional jobs over the Plan period result in a requirement for 19 hectares of employment land. This will be provided for by means of a Sustainable Employment Strategy, which is based on:...

iii. Allowing small scale sustainable employment developments within Key Villages, plus appropriate rural enterprises within the countryside to help enhance and diversify the rural economy; and

iv. Adopting a flexible approach where appropriate to deliver proposals that will create significant numbers of new high quality jobs within the highest skilled and/or knowledge economy employment sectors

7.10.11 Policy T 7: Public Rights of Way and Recreational Routes Swansea LDP states:

Development that significantly adversely affects the character, safety, enjoyment and convenient use of a PROW will only be permitted where an acceptable alternative route is identified and provided.

Linkages, and where appropriate extensions, to the existing PROW network will be expected from all new developments, which must have regard to the existing character of the PROW and the aspiration to improve access for all.

7.10.12 Policy SP 6 Development in the Valleys Strategy Area of the Neath Port Talbot LDP states:

In the Valleys Strategy Area, the local economy and communities will be enhanced and reinvigorated and the distinctive environment will be protected through the following area-specific measures:

- 1. Identifying Pontardawe and the Upper Neath Valley as Strategic Growth Areas (SGAs);*
- 2. Making provision for the majority of new valleys residential development within the identified SGAs;*
- 3. Safeguarding employment sites and uses;*
- 4. Promoting a mixed use regeneration scheme at Glynneath;*
- 5. Undertaking public realm improvements in Glynneath and Pontardawe Town Centres;*
- 6. Identifying Rheola as a tourism site and safeguarding key tourism amenities;*
- 7. Taking a flexible approach to encourage employment uses, including live-work units;*
- 8. Taking a flexible approach to encourage small scale retail proposals;*
- 9. Protecting cultural identity including areas of importance for the Welsh language*

7.10.13 Policy I 1 Infrastructure Requirements of the Neath Port Talbot LDP states:

In addition to infrastructure improvements necessary to make a development acceptable in health, safety and amenity terms, additional works or funding may be required to ensure that, where appropriate, the impact of new development is mitigated.

These requirements will include consideration of and appropriate provision for:

- *Affordable housing;*

- *Open space and recreation facilities;*
- *Welsh language Infrastructure (in Language Sensitive Areas);*
- *Community facilities including community hubs;*
- *Biodiversity, environmental and conservation interests;*
- *Improving access to facilities and services including the provision of walking and cycling routes;*
- *Historic and built environment and public realm improvements;*
- *Community and public transport;*
- *Education and training*

7.10.14 Furthermore, the proposed development offers the opportunity to build awareness of the energy sector and expand the knowledge network through potential collaboration with local schools and accessibility around the site. Therefore, it is considered the proposed development meets with the objectives of Policies 17, 18 and 32 of Future Wales, PPW11 and Policies PS4 and T7 of the Swansea LDP and policies SP6 and T1 of the Neath Port Talbot LDP.

7.11 GLINT AND GLARE

7.11.1 An assessment has been undertaken to analyse the possible effects of glint and glare from a proposed solar photovoltaic (PV) development. The report is shown in **Appendix 4.9**.

7.11.2 The results of the analysis have shown that reflections from the proposed development are geometrically possible towards 40 out of 63 identified dwelling receptors.

7.11.3 Visibility of the reflecting solar panel area is removed by the presence of existing screening in the form of vegetation and the terrain. Therefore, no impact is predicted and mitigation is not required.

7.11.4 The results of the analysis have shown that solar reflections from the proposed development are geometrically possible towards road users along approximately 1.7km of the A4067 and the B4291. Predicted solar reflections are screened by existing vegetation, buildings, and terrain and therefore no impact is predicted to be experienced by road users, and mitigation is not recommended.

7.11.5 Therefore, the proposed development meets the requirements of Policy 18 – Renewable and Low Carbon Energy Developments of National Significance in that the “*there are no unacceptable adverse impacts by way of... reflected light...*”.

7.11.6 Policy EU 1: Renewable and Low Carbon Energy Proposals states:

Proposals for renewable or low carbon energy development will be permitted subject to the following criteria:

...

iii. Proposals for all types of renewable and low carbon energy development and associated infrastructure, either on their own, cumulatively or in combination with existing, approved or proposed development, should comply with all other relevant policies in the Plan and should not have a significant adverse effect on:

- a. The characteristics and features of the proposed location as a result of the siting, design, layout, type of installation and materials used;*
- b. Public amenity or public accessibility to the area;*
- c. Radar, Aircraft Operations or Telecommunications;*
- d. Carbon sinks, unless it can be demonstrated that on-site loss can be adequately mitigated;*

...

7.11.7 Policy SP 18: Renewable and Low Carbon Energy of the Neath Port Talbot LDP states:

A proportionate contribution to meeting national renewable energy targets and energy efficiency targets will be made while balancing the impact of development on the environment and communities. This will be achieved by:

- 1. Encouraging where appropriate, all forms of renewable energy and low carbon technology development;*
- 2. Encouraging energy conservation and efficiency measures in all new major development proposals;*
- 3. Ensuring that development will not have an unacceptable impact on the environment and amenity of local residents.*

7.11.8 Policy RE1 Criteria for the Assessment of Renewable and Low Carbon Energy Development of the Neath Port Talbot LDP states:

Proposals for renewable and low carbon energy development will only be permitted subject to the following criteria:

...

4. All renewable energy or low carbon energy development proposals will be required to demonstrate that:

- (a) Measures have been taken to minimise impacts on visual amenity and the natural environment;*
- (b) There will be no unacceptable impacts on residential amenity;*
- (c) The development will not compromise highway safety;*
- (d) The development would not interfere with radar, air traffic control systems, telecommunications links, television reception, radio communication and emergency services communications; and*
- (e) There are satisfactory proposals in place for site restoration as appropriate.*

7.11.9 Therefore, it is considered the proposed development meets with the objectives of Policies 18 of Future Wales, PPW11 and Policy EU1 of the Swansea LDP and policies SP18 and RE1 of the Neath Port Talbot LDP.

7.12 SUMMARY OF KEY PLANNING ISSUES

7.12.1 This Planning Statement considers the key planning issues associated with the proposed development. The principle of development is strongly supported by national and local planning policy.

7.12.2 Where a potentially adverse impact has been identified through the assessment work this has resulted in alterations to the design of the scheme.

7.12.3 The policy appraisal summarises that following mitigation and/or enhancement there will be no substantially adverse impacts to the following environmental topics:

- Landscape and visual amenity
- Ecology;
- Historic environment;
- Highways;
- Arboriculture; and
- Flood risk.

7.12.4 The proposed development is in accordance with the Development Plan Policies.

8. SUMMARY & CONCLUSIONS

8.1 INTRODUCTION

- 8.1.1 This Planning Statement describes a proposal by CYP Solar Ltd to construct and operate at solar farm on approximately 68ha of land.
- 8.1.2 The scheme will have an export capacity of circa 20MW of electricity, enough to power approximately 5,300 homes per year based on the UK Average annual domestic electricity consumption during 2021.
- 8.1.3 Approximately 26ha of the application site will be used for the deployment of solar panels and associated equipment. The majority of the site will be used for ecological management and enhancement for the life of the proposal and the provision of public access in the form of approximately 3.5km of proposed bridleways and a 1km footpath in perpetuity.

8.2 NEED FOR THE DEVELOPMENT AND LOCATION

- 8.2.1 National and local planning policy is overwhelmingly supportive of renewable energy developments and therefore the 'in principle' acceptability of the proposed development is established.
- 8.2.2 A range of technical, environmental and economic factors are considered when assessing a site for ground-mounted solar PV development. Key factors for consideration include:
- Solar irradiation levels;
 - Availability and proximity of the local distribution network (grid);
 - Proximity to local population;
 - Topography;
 - Field size and shape;
 - Potential for overshadowing;
 - Development Plan Policy;
 - Access to the site for construction/decommissioning traffic;
 - Agricultural land quality;
 - Landscape sensitivity and visual impact amenity;
 - Nature conservation and potential for enhancement;
 - Flood risk; and
 - Land availability.

8.3 ENVIRONMENTAL ASSESSMENTS

- 8.3.1 Pre-application feedback from Swansea Council and Neath Port Talbot CBC advised that the following environmental topics should be included with the planning application.
- Landscape and visual impact
 - Ecology Impact
 - Traffic and Transport
 - Heritage
 - Glint and Glare
 - Agricultural Land Quality
 - Flood Consequence
 - Arboriculture.

- 8.3.2 In addition, Green Infrastructure, Construction Environmental Management and coal mining risks have also been considered.
- 8.3.3 It is considered that potential impacts from the construction, operation and decommissioning of the proposal are not significant and, when balanced against the pressing need for renewable energy, energy security and that local and national government strategies support this, the identified potential impacts following mitigation are considered acceptable.

8.4 PLANNING POLICY

- 8.4.1 This policy appraisal has considered the key planning issues associated with the proposed development. The principle of development is supported strongly by National and Local planning policy.
- 8.4.2 The proposed development is considered to be entirely in accordance with Policies 17 and 18 of Future Wales, PPW and the adopted Local Development Plans of Swansea and Neath Port Talbot.

8.5 CONCLUSION

- 8.5.1 The proposed development will realise substantial benefits in terms of renewable electricity, enhanced local biodiversity and improved public access opportunities for the local area and is in accordance with the Development Plan. Consequently, it is considered that planning permission should be granted for the proposed development.

