Proposed Energy Storage System on land at Maes Bach, CF38 1SL

784-B068921

Planning, Design and Access Statement

Net Zero Twenty-Five Limited

October 2024

Document prepared on behalf of Tetra Tech Limited

TETRA TECH Planning

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Acronyms/Abbreviations

Acronyms/Abbreviations	Definition
CEMP	Construction Environmental Management Plan
CTMP	Construction Traffic Management Plan
ESS	Energy Storage System
FCA	Flood Consequences Assessment
LVIA	Landscape and Visual Assessment
PDAS	Planning, Design and Access Statement
PPW	Planning Policy Wales
RCTBC	Rhondda Cynon Taf Borough Council
SLA	Special Landscape Areas
SSSI	Sites of special scientific interest

1.0 Introduction

1.1 This Planning, Design and Access Statement (PDAS) has been prepared by Tetra Tech, on behalf of Net Zero Twenty Five Ltd ('the Applicant') (managed by Firstway Energy) in respect of a proposal for temporary planning permission for a period of 40 years for the erection of an Energy Storage System (ESS), together with associated infrastructure, site access, landscaping and ancillary works on land at Maes Bach at the southeastern edge of Pontypridd, CF38 1SL ('the Site').

1.2 This statement comprises a description of the Site and its surroundings in section 2; the relevant planning history is set out in section 3; section 4 sets out the key legislation relative to flexible energy storage schemes within the UK and provides an understanding of the important role and function of battery storage in promoting the aim of a net zero energy system; the development proposals described in section 5; section 6 explains the design and access of the proposal; with section 7 setting out the planning policy context; and an appraisal of the main matters are set out in section 8; lastly, the conclusions are at section 9.

1.3 The following drawings are submitted for consideration:

Drawing number	Title
FST025-SP-01 Rev 03	Site Location Plan
FST025-PL-00 Rev 04	Existing Site Layout Plan
FST025-PL-01 Rev 08	Proposed Site Layout Plan
FST025-SD-01 Rev 01	132kV Substation (Plan)
FST025-SD-02 Rev 01	132kV Substation (Section)
FST025-SD-03 Rev 01	DNO Control Room
FST025-SD-01 Rev 01	40ft storage container
FST025-SD-05 Rev 01	40 ft customer switchgear
FST025-SD-06 Rev 01	40 ft welfare office
FST025-SD-07 Rev 01	ESS unit
FST025-SD-08 Rev 01	Twin skid (TX)

FST025-SD-09 Rev 01	PCSK inverter
FST025-SD-10 Rev 01	ESS interface cabinet
FST025-SD-11 Rev 01	Aux transformer
FST025-SD-12 Rev 02	180,000L water tank
FST025-SD-13 Rev 01	Water hydrant
FST025-SD-14 Rev 01	CCTV camera and pole
FST025-SD-15 Rev 01	2.4m palisade fence and security gate
FST025-SD-16 Rev 01	Access track

1.4 The following documents are also submitted as part of this application for consideration:

- Pre-application consultation report (including Statement of Community Involvement) by Tetra Tech;
- Archaeological and Heritage Desk-Based Assessment by Tetra Tech;
- Construction Traffic Management Plan by Ardent Consulting Engineers;
- Noise Assessment by Ardent Consulting Engineers;
- Flood Consequence Assessment (including drainage strategy) by Ardent Consulting Engineers;
- Arboricultural Impact Assessment by Barton Hyett Associates;
- Tree Survey by Barton Hyett Associates;
- Landscape and Visual Impact Assessment by Richard Hammond Landscape Architect Ltd;
- Illustrative Landscape Masterplan by Richard Hammond Landscape Architect Ltd;
- Ecological Impact Assessment by engain;
- Outline Energy Storage System Safety Management Plan by Firstway Energy.

2.0 The Site and surroundings

2.1 The Site is located on land at Maes Bach at the southeastern edge of Pontypridd, CF38 1SL.

2.2 The Site is located within the administrative area of Rhondda Cynon Taf and any development therefore must comply with the Rhondda Cynon Taf Local Development Plan.

2.3 The Site is located within a Special Landscape Area as designated within the Local Plan. Further details of the SLA designation are provided in the planning policy section.

2.4 There are two Grade II listed buildings and one Scheduled Monument within a 1km radius of the proposed site:

- Tomen y Clawdd: Scheduled Ancient Monument (GM064)
- Treforest Textile Printers: Grade II Listed Building (24885)
- Treforest Textile Printers: Grade II Listed Building (24885)

2.5 The surrounding land uses are predominantly agricultural. There is a farmstead located directly adjacent to the east of the Site and another farmstead located 560m to the north of the Site. Immediately adjacent to the south of the Site is Maes Bach Solar Farm (planning ref: 14/1014/10) which is an operational solar photovoltaics (PV) farm with an output of 4.9MW.

2.6 On 1 December 2022, an application was made by Elgin Energy EsCo for the installation of a solar photovoltaic electricity generating station, ancillary development and a substation (application DNS/3282038). This site, which comprises approximately 40ha, consists of several parcels of land which are located to the north and west of the application Site. The application was granted consent, subject to conditions on 12 September 2023.

3.0 Planning history

3.1 There are no relevant previous planning applications on the Site. However, as set out above, planning permission was granted on 30 December 2014 for the installation of a solar farm and associated infrastructure on land immediately adjacent to the south of the Site (application ref: 14/1014/10.

Elgin Energy Site

3.2 Although there is no planning history for the application Site, as set out in the previous section, consent was recently granted for a 40ha PV farm on land to the north and west of the application Site. Due to its size the application was considered under Article 15(2) of the Development of National Significance (DNS) Procedure Order. A copy of the Inspector's decision is attached at Appendix 1.

3.3 As set out in paragraph 8 of the decision notice, the solar panels proposed would be arrange in a series of rows, up to a height of 3.2m. The 16 proposed inverters would be 2.4m wide, 7m long and 3m high.

3.4 The Inspector considered the following to be key considerations in the determination of the application:

- The landscape character and visual amenity of the area;
- The setting of heritage assets;
- Flood risk; and
- Ecology.

3.5 We wish to note the following points taken from the Inspector's decision (note we omit issues relating to flood risk as part of the site is in Flood Zone C whereas the application Site is Flood Zone A):

- Whilst the site itself is rural in character, the area in the immediate vicinity is influenced by the presence of previously built development and various infrastructure such as overhead powerlines and the nearby Maes Bach solar farm;
- The proposal would be visible, but this does not necessarily result in any significant harm to landscape character. In this instance the topography, low

level of the development, existing and proposed landscaping screens it from views and minimises potential effects upon the area's landscape character;

- Although the development would be apparent from at close from public footpaths, such views are experienced over a relatively short period of time and distance;
- The proposal would be seen within the context of and as a continuation of the consented solar farm at Maes Bach. Overall, the cumulative impact of the proposal would be negligible;
- The proposal would be visible from a number of local vantage points. However, the issue is whether that visibility is likely to have a significant adverse impact. In visual terms the impact of the proposal is of limited significance due to the screening of topography, existing and proposed features and the relatively low level nature of the works;
- There is one heritage asset outside of the site but located within the 1km study area (Tomen Y Clawdd) which has very limited intervisibility with the site. In terms of the wider 5km study area, it is judged that there would be no more than a negligible effect on the setting of Rhiw Saeson Caerau hillfort;
- The proposed development would have no significant effects on the settings of listed structures in the vicinity of the site not their significance as historic assets. The landscape strategy would further soften any visual changes to the setting of the heritage receptors;
- The package of mitigation measures proposed adequately address ecology concerns;
- The proposal is for the purpose of reasons of overriding public interest i.e. combatting the effects of climate change and improving and assisting in energy security in line with planning policy and its benefits would be of primary importance for the environment;
- The proposal would result in the loss of a limited area of agricultural land for a temporary period of time. Any limited harm is outweighed by the need to provide a more sustainable form of electricity to meet society's needs. Therefore, the proposal is in line with national planning policy.

4.0 Need for development and the role of energy storage

Prosperity for all: A low carbon Wales (2019)

4.1 This document comprises 100 policies and proposals which seek to achieve Wales's 2016-2020 carbon budget and 2020 emissions targets. Of particular importance is the Low Carbon Delivery Plan which is set out below.

4.2 Policy 10 refers to Energy Systems Planning including approaches that seek to maximise grid usage and defining and creating a zero carbon area.

4.3 Policy 26 states "Planning is a key lever for Wales in determining the sources of fuel for power generation".

4.4 Policy 27 emphasises the importance that energy storage plays in helping to balance our energy system. It acknowledges the role these uses play in terms of decarbonising the energy industry and increase energy efficiency. It continues "The cost, efficiency and advancement of storage, particularly batteries, means it is becoming a common and viable part of our energy networks. We support the removal of barriers to such technology.". The text continues that it wishes to remove the need for such applications to be removed from the DNS process and allow decisions to be taken at a local level.

4.5 Policy 31 reiterates the Welsh governments renewable energy target of 70% of Wales's electricity consumption to be generated from renewables by 2030.

4.6 Policy 35 places emphasis on the need for energy innovation to increase flexibility and utilise storage technology to match supply and demand. Application of this policy, "will maximise power infrastructure assets and build in flexibility that provides affordability, security and low carbon solutions."

4.7 Policy 36 focuses on market regulation and investment in smart technologies to encourage the development of energy storage and demand-side response. The supporting text states that the move towards cleaner, low carbon generation provide wider benefits to society including a decentralised system which allows householders and businesses from high energy costs by locating generation near to demand, thereby improving the resilience and flexibility of the energy system.

4.8 The document makes big pledges to reducing carbon emissions/footprint which will improve the well being of residents. The use of renewable energies play a large part in this and therefore sufficient and efficient storage of energy produced by such means is integral to this ambition.

Energy Act (2023)

4.9 The Energy Act (2023) received Royal assent on 26th October 2023 and was revised on 31st January 2024.

4.10 The Act amends the Energy Act 1989 to provide that generating electricity from stored energy is included as a definitive subset of generation.

4.11 The Act also inserts a new definition of 'stored energy', being energy that has been converted from electricity and is stored for the future reconversion into electricity.

Wellbeing of Future Generations (Wales) Act 2015

4.12 This Act was first approved in June 2015, with the most recent updates being approved in July 2024. The Act sets out 7 wellbeing goals for national and local government, local health boards and other public bodies in Wales to adhere to:

- A globally responsible Wales;
- A prosperous Wales;
- A resilient Wales;
- A healthier Wales;
- A more equal Wales;
- A Wales of cohesive communities;
- A Wales of vibrant culture and thriving Welsh language.

4.13 The Act puts in place a "sustainable development principle" which informs organisations how to meet their duty under the Act, it includes the importance of balancing short-term needs with the need to safeguard the long-term needs.

4.14 The Act includes the following definitions:

- Prosperous: "an innovative, productive and low carbon society which

recognises the limits of the global environment and therefore uses resources efficiently and proportionately (including acting on climate change)…"

- Globally responsible: "A nation which when doing anything to improve the economic, social, environmental and cultural well-being of Wales, takes account of whether doing such a thing may make a positive contribution to global well-being."

4.15 The Act includes provision for requiring public bodies to, in their powers, aid in increasing the capacity of renewable energy equipment installed. In 2017, the Welsh Government announced a target of meeting the equivalent of 70% of Wales' electricity demand from Welsh renewable electricity sources by 2030. The Act therefore requires public bodies to assist in meeting this target through their decision making powers.

Rhondda Cynon Taf Corporate Plan for 2024-2030 "Working with our communities"

4.16 This Plan subsumes the Council's previous document "Think Climate Rhondda Cynon Taf. Making Rhondda Cynon Taf Carbon Neutral by 2030". It sets out the following ambitions:

By 2030:

- RCT will be a carbon neutral Council;
- The County Borough will be as close to carbon neutral as possible;
- We will have contributed to meeting the Welsh Government's ambition of a Net Zero public sector.

5.0 The proposed development

5.1 The proposed development seeks temporary planning permission for a period of 40 years for the erection of an ESS, together with associated infrastructure, site levelling works, site access, landscaping and ancillary works.

5.2 There is presently no formal vehicular access to the Site and therefore the proposal includes a new access to be opened straight onto the field allowing for traffic to turn into the proposed site access road off Maesmawr Road. The proposed site access track will utilise the new entrance next to the adjacent private track and will be constructed through the Site to the ESS units.

5.3 The proposed development, save for maintenance access, will be unmanned. Once operational, it is anticipated that there would be approximately two maintenance visits per month.

5.4 Within the proposed compound there are 66 ESS units; arranged predominantly in clusters of 4, with one cluster of 2. A 132kV substation is also proposed on the south of the Site.

5.5 Two twenty-foot containers will be located to the northeast of the Site, one utilised as storage container and the other as a well-being office. A 40ft switchboard will also be located within the Site's main compound.

5.6 A 180,000-litre water tank is located at the main entrance of the Site for ease of access for the emergency services. Fire hydrants are also proposed around the ESS compound. Two access points are proposed for access into the ESS compound.

5.7 Any operational lighting will be motion activated for security purposes.

5.8 A package of landscaping mitigation measures is proposed as part of the development including:

- The management of existing hedgerows along the northern boundary to screen views of the proposed development from the adjacent footpath;
- Potential new hedgerow and tree belt to the eastern boundary to enclose the ESS compound and provide screening from the east;

- Retain vegetation through offsetting development from the root protect during the construction phase;
- Potential new planting to the north western corner of the stie to reinforce existing hedgerows and provide additional habitat links with retained trees as well as providing further screening of views from Pound Farm Lane at the west;
- Planting of wildflower grass mix around the compound perimeter.

5.9 A security fence and acoustic fencing will surround the Site in addition to the inclusion of 16 CCTV cameras will be placed along several sections of the fence.

5.10 Parking for maintenance vehicles is also proposed.

6.0 Design and Access

6.1 As highlighted in both local and national planning policy, design is a vital consideration for new development.

6.2 ESS structures are relatively standard facilities which tend to have limited scope on the size of the individual units and associated infrastructure. However, the design approach taken by the Applicant for this proposal seeks to limit the impact on the landscape and amenity of the area; taking into consideration local heritage assets, residential properties, rights of way within proximity of the Site.

6.3 This section of the report sets out to describe and evaluate the following elements of the proposal:

- Scale
- Layout
- Height
- Materials
- Landscape
- Appearance
- Access

Scale and layout

6.4 The Site has been configured for operational requirements and has been situated in the best location with regards to proximity to Maes Bach Solar Farm and the Distribution Network Operator, The National Grid ED (South Wales).

6.5 The proposed ESS will comprise 66 ESS units arranged predominantly in clusters of 4. Each ESS unit will measure approximately 7.810m long, 2.438m wide and 2.795m in height.

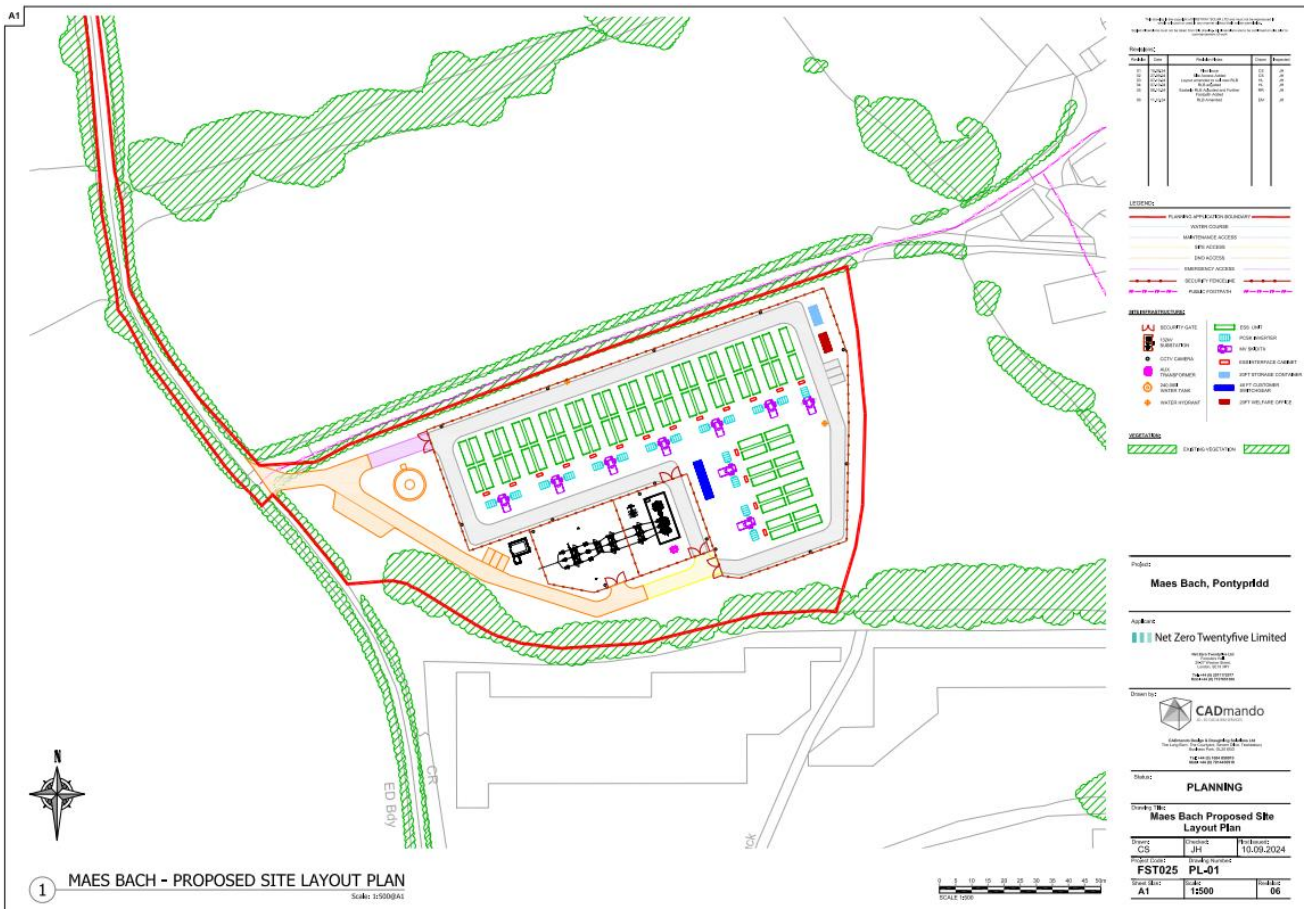
6.6 A 132kV substation is proposed which will enable the stored electricity to be released onto the wider distribution network. The point of connection will be via an underground cable to the Pontypridd National Grid - Upper Boat Substation to the northeast of the Site.

6.7 In addition to the above, the proposed development will include:

- 66 ESS units;
- 1 sub-station;
- 1 inverters linked to 9 MV skid units;
- 18 interface units;
- 1 aux transformer;
- 1 storage container;
- 1 customer switchgear;
- 1 welfare office.
- A water hydrant and a water tank with a capacity of 180,000 litres;
- Security gates, security fencing and CCTV cameras;
- Parking spaces for maintenance visits; and
- An access track including an emergency access point.

6.8 Below is an extract from the Site Layout Plan which is being submitted for consideration as part of this application.

Figure 1: Proposed Site Layout



Height

6.9 The ESS units are single storey to reduce visual impact and allow the proposed development to be sufficiently screened from views. The proposal would be predominantly at a height of 2.6m, with the associated infrastructure (132kV substation) reaching a maximum height of 6.7m. However, the substation only comprises a small portion of the Site, as shown in the submitted section drawing (FST025-SD-02 Rev 01).

Materials

6.10 In order to mitigate the visual appearance of the proposed development, it is proposed that the acoustic fence is rendered in a dark green finish.

6.11 The final specification and details are to be secured via planning condition.

Landscaping and appearance

6.12 Landscape and visual mitigation is proposed to help integrate the development into the local landscape and filter views to the Site.

6.13 The accompanying Landscape and Visual Impact Assessment (LVIA) sets out how the proposal has been located and developed to minimise landscape and visual impacts to the surrounding area:

- The cable connection is located below ground, so as to avoid any operational impacts;
- The Proposed Development would not be lit in operation, thereby avoiding any change to the character of the night-sky;
- Avoids impacts to trees where possible and offsetting the ESS compound from root protection areas;
- Avoids long term landscape and visual impacts by seeking temporary planning permission. Upon decommissioning the structures will be removed and the land restored to baseline conditions;
- The location of the ESS compound has been selected close to the existing Maes Bach Solar Farm and the consented Maes Mawr Solar Farm so it would be viewed within the context of these developments and not in isolation.

Access

6.14 The proposed development will be accessed from a new single-track lane which will connect to the Maes Mawr road adjacent to the single-track lane (Pound Farm Lane) that runs alongside the northern boundary of the Site. This track will run northwest to south of the Site, with the access point proposed at the northwest corner at the Site. An emergency access point is also proposed at the northeast corner of the Site.

6.15 This access point will be used for construction and decommissioning as well as for operational servicing throughout the lifetime of the development.

6.16 The ESS units will be transported to the Site individually, but multiple interface cabinets, inverters and twin skids can be transported together. Approximately 10

movements would be associated with the delivery of the substation. A container for storage and the Customer Switch Gear cabinet will be transported individually to the Site.

6.17 A front-end loader will also be required to transport equipment around the Site and distribute stone as necessary. This is a similar size to a tractor and will either be transported to the Site or be driven to the Site.

6.18 Once operational, it is anticipated that there would be approximately two maintenance visits per month. These would typically be made by LGV (van) or 4x4 type vehicle.

6.19 Further information is available within the accompanying Construction Traffic Management Plan (CTMP).

7.0 Planning policy context

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

7.2 The Site is located within the administrative area of Rhondda Cynon Taf (RCTCBC) where the Development Plan currently comprises:

- Rhonda Cynon Taf Local Development Plan (2006 – 2021);
- Future Wales: The National Plan 2040 (2021)

7.3 Other material considerations include Planning Policy Wales, Edition 12 alongside the policy and guidance set out in Section 4 of this statement.

7.4 Since the publication of Future Wales: The National Plan, Technical Advice Note (TAN) 8: Renewable Energy has been revoked, meaning there is no longer an energy specific TAN.

Rhondda Cynon Taf Local Development Plan (2006 – 2021)

7.5 The vision of the Local Plan includes objectives to protect the borough for future generations by managing the effects of climate change. This includes increasing the supply of renewable energy from a range of sources and focusing development away from areas that are vulnerable to flooding.

7.6 Paragraph 4.19 of the core strategy emphasises balancing the need for development with the need to protect the local environment and combat climate change, stating, “The strategy seeks to mitigate and adapt to the impacts of climate change by ensuring the efficient use of resources supporting renewable energy resources, protecting biodiversity, managing waste effectively, promoting development in accessible locations, focusing new housing away from areas of flood risk and improving energy efficiency in the design of new buildings.”

7.7 The policies and supporting text set out below are considered to be of particular relevance to the proposed development.

7.8 **AW2 Sustainable locations**: This policy emphasises the need for new developments to be located in areas that are well connected to existing infrastructure

and do not unacceptably conflict with surrounding uses AW5 New development: This policy states the new proposals will be supported where the scale, form and design of the development does not have an unacceptable impact on the surrounding landscape. Developments should also not have no significant impacts on the amenities of neighbouring occupiers and should be compatible with other uses in the locality.

7.9 **AW5 New development**: This policy states the new proposals will be supported where the scale, form and design of the development does not have an unacceptable impact on the surrounding landscape. Developments should also not have no significant impacts on the amenities of neighbouring occupiers and should be compatible with other uses in the locality.

7.10 **AW6 Design and placemaking**: This policy states that development proposals will be supported where they demonstrate consideration to the local context in terms of siting, appearance, scale, height, massing. Developments will also be expected to include good water management and retain and enhance biodiversity assets.

7.11 **AW8 Protection and enhancement of the natural environment**: This policy states that development proposals will only be permitted where, “There would be no unacceptable impact upon features of importance to landscape or nature conservation, including ecological networks, the quality of natural resources such as air, water and soil, and the natural drainage of surface water.”

7.12 **AW12 Renewable and non-renewable energy**: This policy supports the provision of renewable energy developments where there are no unacceptable effects on landscape importance, public health, nature conservation and residential amenity. The policy also states that proposals should be designed to minimise resource use during construction, operation and maintenance.

7.13 **SSA 23 Special Landscape Areas (SLA**): The Site is located within an SLA, specifically, The Efail Isaf, Garth and Nantgarw Western Slopes. As such, in order to protect the quality of the SLA, any development proposal within this area will be required to conform to the highest possible design standards.

Future Wales: The National Plan2020 (April 2021)

7.14 Adopted in April 2021, the document sets out a national framework for development up to 2040. It sets out a strategy to address key national priorities through the planning system. This includes achieving decarbonisation and climate resilience. The document emphasises the ambition for Wales to become a world leader in renewable energy technology and notes the potential for solar energy. It also commits to ensuring the planning system provides a strong lead for renewable energy development, support the renewable sector and reduce carbon emissions.

7.15 The Plan builds upon the seven goals as set out within the Well-being of Future Generations (Wales) Act 2015 (see Section 4 of this statement). The Plan seeks to embed the principles of the Act including five ways of working (long-term thinking, prevention, collaboration, integration and involvement).

7.16 Page 48 refers to renewable energy, stating that Wales can become a world leader in renewable technologies. It continues “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, means we are well placed to support the renewable sector, attract new investment and reduce carbon emissions.”.

7.17 **Policy 17 – Renewable and Low Carbon Energy and Associated Infrastructure**: expresses strong support for the principle of developing renewable and low carbon energy from all technologies and at all scales to meet our future energy needs. It also states that decision makers must give significant weight to the need to meet Wales’ international commitments and target to generate 70% of consumed electricity by renewable means by 2030 in order to combat the climate emergency when determining planning applications for renewable and low carbon energy development.

7.18 The supporting text continues, that generating renewable energy is a key part of Wales’ commitment to decarbonising and tackling climate emergency. It sets out the following targets:

- 70% of electricity consumption to be generated from renewable energy by 2023;

- 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.

7.19 Page 97 highlights the role the planning system plays in the provision of new renewable and low carbon energy by effecting the national targets, setting overall strategic framework and direction within which developers can propose new energy infrastructure projects. It also recognises that landscape areas across Wales which have intrinsic value should be protected. It states that sites in National Parks and Areas of Outstanding Natural Beauty are not considered suitable for large scale wind or solar developments but that outside of these areas, a positive policy framework exists.

7.20 Page 99 states “The Welsh Government will work with stakeholders, including national grid and distribution network operators, to transition to a multi-vector grid network and reduce the barriers to the implementation of any necessary new grid infrastructure.” It continues “The boundaries between systems are also becoming blurred with energy being converted into (and stored in) different forms to address a range of needs. There is also a need to consider large-scale energy storage as part of the energy system to provide gird balancing.”

7.21 Future Wales also establishes four regions, Rhondda Cynon Taf sites within the South East region within which, it is highlighted, that decarbonisation and responding to the threats of the climate emergency should be central to all regional planning.

Planning Policy Wales Edition 12 (2024)

7.22 National planning policy in Wales is set through Planning Policy Wales (PPW). Edition 12 is the most recent edition and was published in February 2024. It contains guidance for decision makers as well as sets out the Government’s planning policies for Wales and how these are expected to be applied.

7.23 Section 5.7 of the document relates to energy, with paragraph 5.7.1 explicitly stating that low carbon electricity must become the main source of electricity in Wales, with the future energy mix being dependent on a range of established and emerging technologies.

7.24 Paragraph 5.7.2 acknowledges that power demand is expected to increase as a result of growing electrification of transport and heat systems. It continues that in order to ensure future demand can be met, significant investment is needed in, energy generation, transmission and distribution infrastructure. It goes on that the system will need to integrate renewable generation with storage in order to minimise the need for new generation and grid system reinforcement.

7.25 Paragraph 5.7.7 states “the planning system should…optimise energy storage.”

7.26 Paragraph 5.7.12 states that energy storage has an important part to play in managing the transition to a low carbon economy and proposals for new storage facilities should be supported wherever possible.

7.27 Paragraph 5.7.15 states that 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 in buildings.

7.28 Section 5.9 covers the facilitation of renewable and low carbon energy and requires local authorities to ensure full potential for renewable and low carbon energy generation is maximised and renewable energy targets are achieved.

7.29 Paragraph 5.9.14 states that local planning authorities should support and guide renewable and low carbon energy development to ensure their area’s potential is maximised.

7.30 Paragraph 5.9.15 states that outside identified areas, planning applications for renewable and low carbon energy developments should be determined based on the merits of the individual proposals.

7.31 Prior to an application being submitted, developers for renewable and low carbon energy developments should, wherever possible, consider how to avoid, or otherwise minimise, adverse impacts through careful consideration of location, scale, design and other measures. Whatever the size of a scheme, developers should take an active role in engaging with the local community on renewable energy proposals. This should include pre-application discussion and provision of background information on the renewable energy technology that is proposed.

8.0 Planning appraisal

Principle of development

8.1 As set out earlier in this statement, following changes to the Energy Act in 2023, energy storage is considered to constitute energy generation and therefore policies relating to renewable energy are applicable.

8.2 National policy is strongly supportive of renewable energy as a means of meeting our increasing energy demands, tackling climate change and transitioning to a prosperous and low carbon sustainable economy.

8.3 The proposed development helps to address intermittency issues associated with renewables and will allow a reduction in the role that fossil fuels play in energy provision, enabling renewables to be the main energy source. The proposal helps to ensure energy security.

Design considerations

8.4 High quality design is a key consideration in all planning applications. Whilst the function of the proposal dictates its height, scale and massing, there are mitigation measures that have been explored, considered and put into place such as landscaping to help screen the proposals from views.

8.5 As per ‘Policy AW 6 - Design and Placemaking’ of the Local Plan, the proposal will seek to achieve high quality design as it respects the views and landscape character of the area through its appropriate siting and proposed mitigation.

8.6 This policy sets out the requirements for any developments to be “appropriate to the local context in terms of siting, appearance, scale, height, massing, elevational treatment, materials and detailing.” This proposal has been designed appropriately, ensuring all elements of its design are appropriate to the locational context of the Site.

8.7 Policy AW6 also explains that Development Proposals will be supported where “The development promotes energy efficiency and the use of renewable energy.” The ESS is designed to provide support to renewable energy storage and therefore complies with AW6.

Heritage

8.8 Local Plan Policy AW 7 Development proposals which impact upon sites of architectural and / or historical merit and sites of archaeological importance will only be permitted where it can be demonstrated that the proposal would preserve or enhance the character and appearance of the site.

8.9 An Archaeological and Heritage Desk-Based Assessment (DBA) has been prepared which examines the cultural heritage potential of the proposed development Site and the surrounding areas.

8.10 The DBA explores the Site and a wider study area of 1km to assess the nature of the surrounding cultural heritage sites and place the recorded sites within their context. Within this study area, there is one Scheduled Ancient Monument and two Grade II Listed Buildings.

8.11 The Scheduled Ancient Monument within the study area is Tomen y Clawdd. This is located 0.52km west of the route to the connection point, and approximately 1.38km northeast of the compound.

8.12 Treforest Textile Printers, a small factory, is one of the Grade II listed buildings. This lies 0.65km northeast of the main compound area of the Site.

8.13 The other Grade II listed building is Honeywell Power Tools Testing Division. This is another small factory and lies 0.75km northeast of the Site compound.

8.14 Natural Resources Wales records the Site compound as historic landscape CYNONHL994, which is characterised as an aspect area dominated by an irregular fieldscape, that encloses a series of isolated and dispersed post-medieval farmsteads.

8.15 The three assets as defined within the study area are not assessed to be impacted by the proposed development of the ESS Site.

8.16 The potential for unrecorded archaeological remains is low to moderate with a geophysical survey recommended to better understand any remains that are found.

Ecology

8.17 An Ecological Impact Assessment is submitted for consideration.

8.18 The area surrounding the Site is predominantly rural and is not within any ecologically sensitive areas. With regards to statutory designated sites, the closest sensitive area is Gwaun Gledyr SSSI, designated for its biological interest and located c.3.4 km to the northeast of the ESS Site and c.3.2 km to the east of the carriageway/cable route. There are no statutory or non-statutory designated sites within 2km of the proposed ESS Site

8.19 As found in a habitats assessment undertaken in September 2024, the Site is species-poor grassland, this consisting perennial ryegrass with yarrow and white clover.

8.20 The Site is uniformly sheep-grazed to a height of less than 10cm.

8.21 The soils on the Site are described as relatively damp, circum soils.

8.22 Both the northern and western boundaries of the Site are lined by a box-cut hedge. The hedges are species-rich including hawthorn, hazel, pedunculate oak, and sycamore. The ecological assessment found carpet ivy on the field layer of the hedge but no hedge-margin vegetation.

8.23 The southern edge of the Site consists of a line of mature trees including pedunculate oak, hawthorn, beech and alder.

8.24 Further ancient woodlands were found along the route of the cable. The planned work will be along the existing roadway and managed under an Arboricultural Impact Assessment; therefore, no impacts are anticipated.

8.25 There were no signs of badgers of other protected species evident during the field survey.

8.26 There were 14 records of bats within 2km of the Site however there is no habitat suitable for bats to roost within the development footprint.

8.27 There were 91 records of birds within 2km of the Site, 53 of which species are Priority Species. The hedges on the Site will be used by a range of species for foraging and nesting, however as the hedges are tightly cut this will be limited.

8.28 There are eight records of reptiles and amphibians within 2km of the Site, but no records of great crested newts.

8.29 There were 71 records of invertebrates within 2km of the Site, 12 of which are species of local importance. The Sites habitats are not likely to support any notable invertebrates.

8.30 There is one record of hazel dormouse within 2km of the Site but due to the Site's lack of woodland connection, the ESS Site is not expected to be a favourable location for dormice habitats.

8.31 The Ecological Impact Assessment recommends a stepwise approach to help mitigate any potential ecological impacts within the development including the following measures:

- Timing the hedge clearing works to occur outside of the nesting season to avoid potential impact on nesting birds.
- Improve the retained section of hedge and improve its diversity and ecological condition to minimise the ecological effect of the removing of a section of the hedge.
- Restore the line of trees along the southern edge of the Site to mitigate the loss of hedgerow.
- Create a new length of hedgerow along the eastern edge of the proposed ESS Site to compensate for the loss of existing hedgerow.
- No off-site compensation is deemed to be required if the above on-site mitigation steps are followed.

8.32 Planning permission is also not recommended to be refused from an ecological perspective in accordance with the rest of the stepwise approach.

Landscape impact

8.33 A Landscape and Visual Impact Assessment (LVIA) has been prepared and is submitted for consideration as part of this application.

8.34 The LVIA demonstrates that the proposed development would result in generally low tiers of landscape and visual effects due to its close proximity to the Maes Bach solar farm as ultimately this proposal will be visualised as an extension of this solar farm therefore having no further impact on the area.

8.35 The proposed development is within a designated Special Landscape Character Area (SLA). The LVIA concludes that the Site is not an integral part of the SLA on account of the fact it is located on a plateau rather than a sloping valley which is a characteristic of the SLA. The Site has no notable landscape features or high-quality vegetation that contribute to the SLA nor is it publicly accessible.

8.36 There are two other renewable energy sites located within the same SLA that the proposed Site is to be located, therefore, it is considered there would be no alteration to the character of the SLA and the ESS would be seen within the same context as the adjacent solar farms. This therefore complies with Policy SP5: Green Infrastructure and Open Space.

8.37 The proposed development includes the tonal rendering of equipment to suit the characteristics of the area. The development plan also intends to implement new planting to increase the vegetation cover and reduce the perception of the change in land use. Both of which element's support SSA 23: Special Landscape Areas. Thus, reducing any concerns for the proposed developments impact on the land.

Flood risk

8.38 A Flood Consequence Assessment (FCA) is submitted alongside the application for consideration.

8.39 The vast majority of the Site, including the area outlined for development, is predominantly categorised within Flood Zone A, which means the Site is at very low risk zone for flooding.

8.40 The Site is assessed to be at low risk of fluvial flooding alongside flooding from; groundwater, sewers and reservoirs. Due to the locational context of the Site, tidal flooding is also ruled out.

8.41 The application Site has no recorded flooding incidents and does not have any flood defences.

8.42 The Tonteg Road contains parts that are at slightly higher risk for flooding (Zone B and C1) however there are flood defences in place within the C1 Zone to mitigate any flood impacts. Furthermore, this area of the red line boundary is solely the cabling route within the existing highway. The Site is to be unmanned so therefore this

should not be a long-term concern for the development and the infrastructure in place mitigates any potential issues for transport during the construction process.

8.43 A surface water drainage solution for the Site has also been submitted for consideration. This strategy includes a combined solution of lined permeable paving and lined swales with 1:3 slopes. These options will be in sequence with flow control devices and will provide the necessary storage and treatment for up to the 1 in 100-year storm event including an allowance of 40% for climate change.

8.44 The FCA concludes that the Site is not at significant risk of flooding or increase the flood risk to others and therefore its proposals are consistent with the aims of the PPW and local planning policy.

Construction traffic impact

8.45 The proposed development, save for maintenance access, will be unmanned. Therefore, the main consideration in terms of traffic impact is in relation to construction traffic.

8.46 A Construction Traffic Management Plan (CTMP) has been prepared for consideration.

8.47 In terms of construction, the ESS units will be transported to the Site individually, but multiple interface cabinets, inverters and twin skids can be transported together. Approximately 10 movements would be associated with the delivery of the substation. A container for storage and the Customer Switch Gear cabinet will be transported individually to the Site.

8.48 A front-end loader will also be required to transport equipment around the Site, and to distribute stone as necessary. This is a similar size to a tractor and will either be transported to the Site or be driven to the Site.

8.49 Once operational, it is anticipated that there would be approximately two maintenance visits per month. These would typically be made by LGV (van) or 4x4 type vehicle.

8.50 With regards to access, it is proposed that all vehicular access will be construction and operational stages, it is proposed that the Site will be served by a single point of

vehicular access via the existing lane for the farm, from the north-western corner of the developable site, forming the minor arm with Maesmawr Road.

8.51 ACE Drawing Number 2405430-ACE-WD-00-DR-C-0501E displays that the access is designed to ensure that a typical HGV can manoeuvre without encroachment, with an area to the north required for construction vehicles only. or robustness. A visibility splay of 2.4m x 43m to the edge of the carriageway can be achieved in both directions of the Site access in accordance with the recorded speeds on Maesmawr Road. Banksman will be in place to monitor and assist with large vehicle manoeuvres to and from the existing Site access.

8.52 The ESS Site is located next to the Maes Bach Solar farm and replicates the access route utilised during the construction process of the solar farm. This indicates that the access rout and the Maes Mawr road which both sites are situated on is suitable for the construction transport as it was for the Maes Bach Solar Farm.

8.53 An envisaged construction duration of up to 12 months is anticipated, divided into three phases, with the proposed programme as follows:

- Phase 1: enabling works – 4 months duration (96 working days)
- Phase 2: construction – 4 months duration (96 working days)
- Phase 3: post construction – 4 months duration (96 working days)

8.54 General site working hours are envisaged to be as follows:

- Monday to Friday – 08:00 to 18:00
- Saturday – 08:00 to 13:00
- Sundays and Bank Holidays – no working to take place

8.55 However, no deliveries to and from the Site will be permitted before 09:00 and after 17:00.

8.56 All construction vehicles will travel along the A470, then enter the Gwaelod-Y-Garth Road, then travel onto the A435 north onto Pound Farm Lane towards Maesmawr Road.

8.57 Temporary signage will be erected in the vicinity of the Site access during the construction phase on the advice of a third party signage specialist.

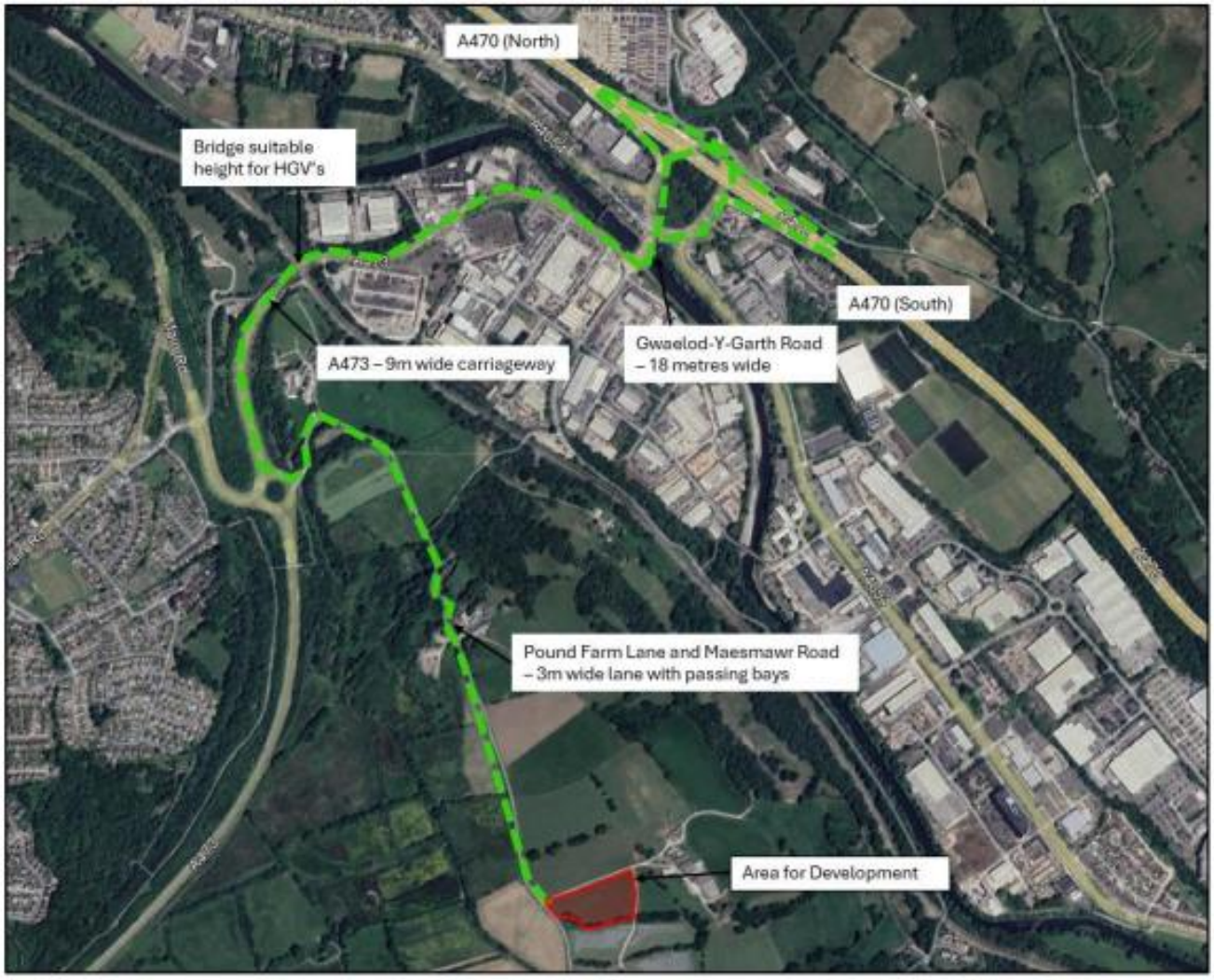


Figure 1: Proposed Routing Options

Arboricultural impact

8.58 An Arboricultural Impact Assessment (AIA) has been prepared and submitted for consideration.

8.59 The tree survey recorded 73 arboricultural features:

	Total	A – High quality	B – Moderate quality	C – Low quality	U – Very poor quality
Trees	**22**	7	15	-	-
Groups	**30**	7	18	5	-
Woodlands	**3**	3	-	-	-
Hedgerows	**18**	-	14	4	-
Total	**73**	**17**	**47**	**9**	**0**

8.60 A small section of hedgerows is required to be removed in order to create an access to the Site. The hedgerows are a mixture of category B and C and therefore the impact of this removal is not significant but will require compensation to mitigate the loss. Ground within exiting tree groups presents opportunities for this mitigation.

8.61 Ancient Semi-Natural Woodlands have been recorded along the proposed cable connecting route. However, the arboricultural survey concludes that the proposed development should have no impact on this due to the existing highway in place.

8.62 In conclusion, the arboricultural impacts of the proposed development are minimal with no impacts on the Site's trees and minimal impact to the hedgerows. Mitigation is proposed to minimise the impact of the loss of hedgerow.

Noise impact

8.63 A Noise Assessment has been prepared and is submitted as part of this application. The measured sound levels and the results of the noise model have been used to inform the operational noise assessment.

8.64 Initial assessment of the development presented a significant adverse impact in the absence of mitigation.

8.65 Mitigation is proposed in the form of 5m Acoustic Barriers, and localised 3m acoustic barriers. A combined 10 dB attenuation of the intake/extract fans for the battery cooling systems, and 15 dB attenuation on the inverters is included in the assessment.

8.66 With the proposed mitigation in place, operational noise from full load operation will result in a low impact at closest noise sensitive receptors, when assessed in accordance with BS 4142.

8.67 Therefore, the noise assessment demonstrates that the Site is suitable for the proposed development, subject to the recommendations included within the report.

9.0 Conclusion

9.1 The proposed development is for temporary planning permission for a period of 40 years for the erection of an ESS, together with associated infrastructure, site levelling works, site access, landscaping and ancillary works on land at Maes Bach at the southeastern edge of Pontypridd.

9.2 Changes to the Energy Act in 2023 mean that energy storage is considered to constitute energy generation and therefore policies relating to renewable energy are applicable. National and local planning policy is supportive of schemes of this type.

9.3 An ESS stores excess energy from both renewable energy developments and the grid when there is low demand for electricity. It then discharges the electricity at a later time when there is excess demand. ESS schemes therefore help provide energy security.

9.4 The proposed development would be located within a large compound split between a 132kV substation and an energy storage area populated by 66 units and associated infrastructure. The proposed development will also include:

- 1 sub-station;
- 18 inverters linked to 9 MV skid units;
- 18 interface units;
- 1 aux transformer;
- 1 storage container;
- 1 customer switchgear;
- 1 welfare office.
- A water hydrant and a water tank with a capacity of 180,000 litres;
- Security gates, security fencing and CCTV cameras;
- Parking spaces for maintenance visits; and
- An access track including an emergency access point.

9.5 Overall, the impacts of the development have been mitigated and the principle of development is considered to be acceptable, with strong support from both local and national planning policy. Moreover, the decision in respect of the Elgin Solar Farm application demonstrates that proposals such as this are considered acceptable in principal in this location.

Appendix 1: Decision notice DNS/3282038