LAND TO THE NORTH OF BRONWYLFA ROAD, RHOSTYLLEN

ENERGY STORAGE SYSTEM

Planning, Design & Access Statement

November 2023

Prepared for:
Innova Renewables Developments

Prepared by:
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	Name	Position	Signature	Date
Prepared by:	L Horton-Taylor	Planner	LHT	03/11/23
Reviewed by:	C Hulbert	Associate Planner	CH	08/11/23
Approved by:	V Ryan	Director	VR	09/11/23
For and on behalf of Stantec UK Limited				

Revision	Date	Description	Prepared	Reviewed	Approved
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EXECUTIVE SUMMARY

This Planning Design and Access Statement has been prepared by Stantec on behalf of Innova Renewables Developments in support of full planning application for the installation and operation of an Energy Storage System (ESS) including energy storage units, substation, site access, cable connection, landscaping, and ancillary infrastructure at Land to the north of Bronwylfa Road, west of Rhostyllen.

There is a recognised need for energy developments of this nature to support Welsh Government's targets to reduce 95% of greenhouse gas emissions by 2050. To achieve this target, the energy market is undergoing major transformation both within Wales and further afield with a move to smarter, more connected energy systems, that integrate energy generation, storage, and energy efficiency measures.

Planning Policy sets out that Welsh Government's expectation that energy generation storage and management will play a role in supporting the regional economy in North Wales. The development proposed provides an opportunity for an ESS with a capacity of 400MW which would add a significant amount of energy storage available to the Electricity System Operator, thereby playing an important role in addressing the challenge that faces grid infrastructure and capacity to accommodate the growth in locally generated renewable energy, and the resulting security that this brings.

This Planning Design and Access Statement assesses the proposed development against the adopted and emerging development plan, national planning policy and guidance, and has regard to applicable material planning considerations. It is ultimately concluded that planning permission should be granted.

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1 INTRODUCTION

1.1 Overview of Application

1.1.1 Stantec UK Ltd (Stantec) is instructed by Innova Renewables Developments ('the applicant') to submit a full planning application to Wrexham County Borough Council ("WCBC" / "the Council") for the installation and operation of an Energy Storage System (ESS) including energy storage units, substation, site access, cable connection, landscaping, and ancillary infrastructure ('the proposed development') at land to the north of Bronwylfa Road, Rhostyllen ('the site').

1.1.2 This Planning, Design and Access Statement (PDAS) sets out the context of the proposed development and assesses it against the relevant planning policy framework. The report follows the following structure:

- Chapter 2: Site Description and Surrounding Context
- Chapter 3: Planning History and Pre-Application Engagement
- Chapter 4: The Proposed Development
- Chapter 5: Design and Access Considerations
- Chapter 6: Planning Policy Context
- Chapter 7: Planning Assessment
- Chapter 8: Summary and Conclusions

1.1.3 The submission comprises the following documents and plans as set out in Table 1.1 below:

Supporting Document	Produced By	Date
Planning Application Forms and Certificates	Stantec	N/A
Pre-Application Consultation Report	Stantec	*This will be prepared following the statutory PAC period.*

Site Selection Report	Stantec	November 2023
Tree Report and Arboricultural Impact Assessment	ArbServ	November 2023
Agricultural Land Classification Report	Land Research Associates	October 2023
Construction Traffic Management Plan	Stantec	November 2023
Transport Statement	Stantec	November 2023
Noise Survey and Acoustic Report	InAcoustic	November 2023
Landscape and Visual Impact Assessment	Pegasus	November 2023
Stage 1 Settings Assessment	Archaeology Wales	October 2023
Heritage Impact Assessment	Archaeology Wales	October 2023
Geophysical Survey Report	Archaeology Wales	May 2023
Archaeological Desk Based Assessment	Archaeology Wales	October 2023
Archaeological Trenched Evaluation Report	Archaeology Wales	November 2023
Flood Risk Statement	JBA Consulting	November 2023
Outline Surface Water Drainage Strategy	JBA Consulting	November 2023
Ecology Report	Etive Ecology	November 2023
Green Infrastructure Statement	Etive Ecology	November 2023
Cable Route PEA	Etive Ecology	October 2023
Cut and Fill Assessment	Stantec	November 2023

Operational Battery Safety Management Plan	Abbott Risk Consulting	November 2023
Drawing Name	Drawing Number	Revision
Site Location Plan	Location Plan	01
Site Layout Plan	Layout Plan	L11
Environmental Enhancement Area Plan	Biodiversity Enhancement Plan	1.2

Table 1.1 Submitted Plans and Documents

1.2 Need for the Development

1.2.1 The UK has a legally binding target to achieve Net Zero by 2050 and has committed to fully decarbonising the electricity network by 2035. The Welsh Government has already set an ambitious target for Wales to meet 70% of its electricity demand from Welsh renewable sources by 2030 and is consulting to push further to meet 100% of its electricity needs from renewable sources by 2035. This results in many low carbon and renewable developments being needed across the UK. Renewable energy generation is intermittent, and ESS's help to balance this by storing electricity at times of low demand and releasing it at peak demand. This allows us to make better use of our existing electricity supplies and for electricity generated from renewable energy sources to be fully and efficiently utilised.

1.2.2 There is a recognised need for the expansion of the renewable energy industry in both national and local planning policy. The promotion of energy efficiency is devolved to Wales; however, Welsh Government does not have the power to regulate on energy efficiency. Welsh Government has committed to continue to work with the UK Government in respect of regulatory measures and will also pressure UK Government to frame its energy efficiency measures for the benefit of the people, economy, and environment of Wales.

1.2.3 Despite its limited powers, Welsh Government is determined to realise its ambition to maximise the potential impact of energy efficiency actions. In 2016, Welsh Government

developed a new strategy for the next 10 years (2016-2026) for energy efficiency in Wales. The vision for a more energy efficient Wales by 2025 is as follows:

> *"We want to ensure that Wales is in the best possible position to realise its full energy efficiency potential and become a major exporter of energy efficiency technology and know-how."*[1]

1.2.4 The Welsh Government declared a climate emergency in 2019 and set a target to reduce 95% of greenhouse gas emissions by 2050 relative to 1990. To achieve this target, the energy market is undergoing major transformation both within Wales and further afield with a move to smarter, more connected energy systems, that integrate energy generation, storage, and energy efficiency measures.

1.2.5 Future Wales (Page 118) also sets out that Welsh Government's wish to see energy generation, storage and management play a role in supporting the regional economy in North Wales.

1.2.6 The North Wales Energy Strategy in 2021 (published by Welsh Government) sets out the following vision for North Wales:

> *"Delivering maximum local economic, social, ecological and wellbeing benefits from transitioning to a net zero economy and becoming a net exporter of low carbon electricity through cross-border and regional cooperation."*[2]

1.2.7 In terms of energy storage, the strategy notes that no large-scale batteries have been installed in North Wales to date (as at 2021). However, the deployment of electricity storage, alongside flexibility (such as demand side response provision or the creation of local energy markets), could support the decarbonisation of energy generation in North Wales by enabling more

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[1] Welsh Government. 2016. *Energy Efficiency in Wales*. energy-efficiency-strategy.pdf (gov.wales)
[2] Welsh Government. 2021. *North Wales Energy Strategy.* Strategaeth ynni gogledd Cymru /North Wales energy strategy (gov.wales)

renewables to connect to the network in constrained areas and supporting the business case of investing in renewables.

1.2.8 The Site Selection Report (prepared by Stantec) submitted to support this application provides further explanation of the need for energy storage solutions at a national, regional and local level.

1.3 Legacy Substation

1.3.1 The applicant is committed to developing, acquiring, and operating innovative renewable projects providing decentralised energy solutions and regeneration for the decarbonisation and sustainability of the environment and local communities.

1.3.2 Energy storage is becoming a key technology to achieve net-zero and therefore more energy storage needs to be connected to the electricity grid as soon as possible. In the Future Energy Scenarios [3], which represent a range of different, credible ways to decarbonise energy systems, the National Grid Electricity System Operator (NGESO) indicated that the UK will need more than 25GW of energy storage by 2050. Currently, the UK is behind schedule on delivering the amount of energy storage required to enable a net-zero future. The slower the build out of energy storage the more it will cost to balance the network, increasing cost to bill payers. The 400MW capacity ESS development being proposed would add a significant amount of energy storage available to the Electricity System Operator (ESO). Importantly this project can connect into the network in 2026 providing an early opportunity to deliver significant benefits to the network and renewable energy transition.

1.3.3 The intermittency of renewables means that the power flows across the network will be very volatile, at times of high winds the network will experience large power flows from North to South, and at times of low wind and high solar the network will experience large power flows from South to North. Traditional thermal power stations have large rotating masses which

[3] Future Energy Scenarios | ESO (nationalgrideso.com)

provide inertia and therefore stability to the electricity system. The majority of renewable generators use inverters with no moving parts and therefore do not provide inertia. As the proportion of electricity generated by renewables increases the stability of the network will decrease creating volatile swings in frequency and voltage on the network. Because of the location of the Legacy National Grid Substation ('Legacy Substation'), which is approximately 765m to the west of the site, the circuits around it will be subject to large swings in power flows, and therefore large fluctuations in voltage, due to changes in the intermittent renewable energy.

1.3.4 The proposed 400MW ESS will be able to provide significant reactive power, which supports the voltage of the network, and other stability services such as dynamic regulation to help enable a 100% renewable energy electricity network.

1.3.5 As part of the ESS proposed, a 400kV cable is required to connect the site to the Legacy Substation. The installation of a 400kV cable is expensive and complex, requires trenching works, therefore, to minimise the impact of the project on the local community and ensure the project is deliverable, the applicant has placed the development site as close to Legacy Substation as possible.

1.3.6 A site selection assessment was undertaken to assess a defined study area (2.5km from the Legacy Substation) to identify physical and planning policy constraints in order to find a suitable location for an ESS facility. In identifying potential sites, a two-stage approach was adopted. Firstly, a desk-based screening exercise was undertaken to establish sites that appear to have some potential for development (i.e., those sites which are not subject to statutory designations – such as Sites of Special Scientific Interest, Areas of Outstanding National Beauty, Special Areas of Conservation etc.) Any sites identified by this process (i.e., which avoid statutory designations) are then studied more closely as part of the second stage assessment for their merits against various environmental, planning, and technical criteria, including availability, in order to find an optimum location for the proposed development.

1.3.7 The Site Selection Report submitted to support this application sets out the findings of this assessment and identifies that the application site is considered an optimum location to accommodate the proposed development.

2 Site Description and Surrounding Context

2.1 Main Development Site

2.1.1 The site (as shown in Figure 1) is located to the north of Bronwylfa Road / B5097 and comprises two parcels of land: the main development site and the neighbouring field to the west which will provide access for abnormal loads only.

2.1.2 The main development site is broadly triangular in shape, comprising a single agricultural field parcel that extends to approximately 5.5 ha in area. The site's boundaries feature a broad tree belt to the north and east, with hedgerows to the south and west. A former railway line runs along the northern boundary (set at a higher level and bounded by mature vegetation) whilst the A483 lies to the east adjacent to mature vegetation at the site's eastern boundary. The B5097 / Bronwylfa Road forms the southern boundary and Cadwgan Lane, a single-track road, forms the western boundary.

2.1.3 An existing vehicular access is located at the main development site's southern boundary from the B5097.

2.1.4 The land to the west of Cadwgan Lane comprises an L-shaped agricultural field and extends to approximately 3.4ha. It is bounded a tree belt to the north, Bersham Cricket Club to the south west, and the B5097 / Bronwylfa Road to the south. An access track for abnormal loads extending to approximately 0.2ha is proposed on the southern part of this field.

2.1.5 Two potential cable route options are presented to connect the site back to the Legacy substation.

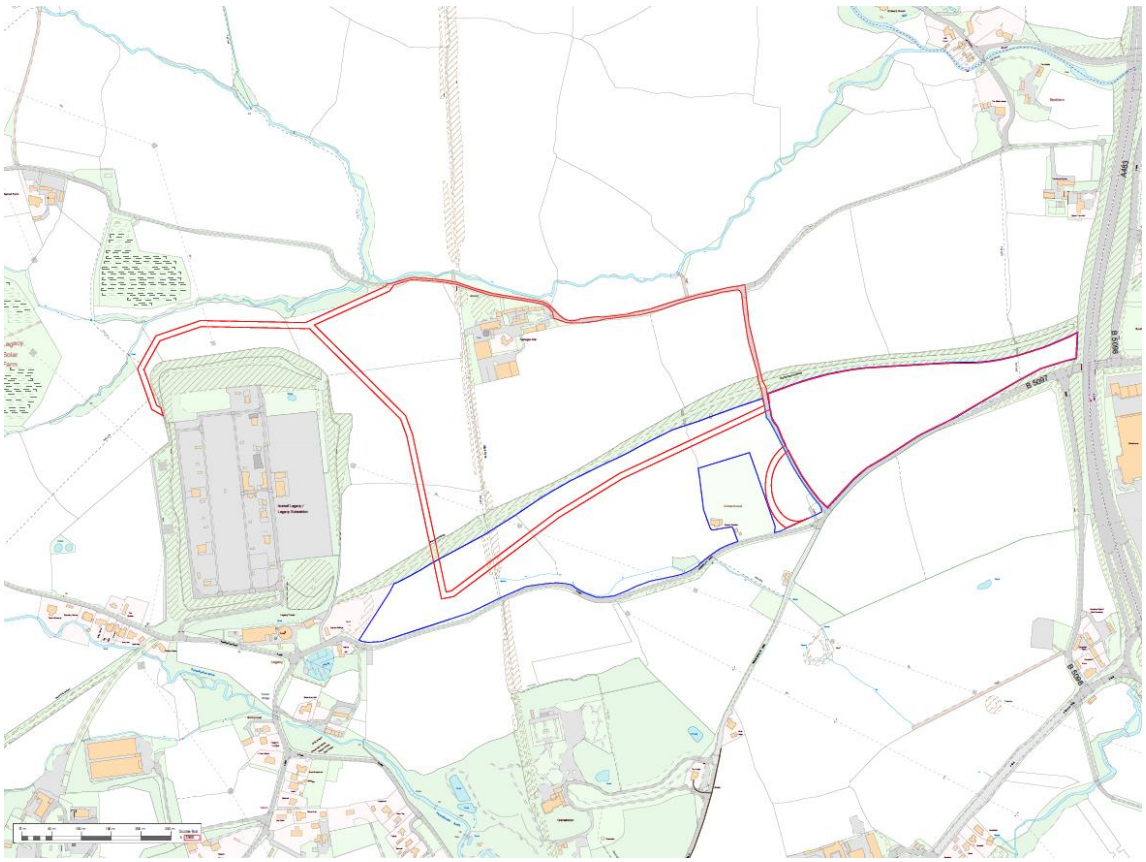

Figure 1: Site Location Plan

2.2 Surrounding Context

2.2.1 Agricultural land and uses form the site's predominant surroundings to the north, south and west with pockets of residential properties dispersed throughout.

2.2.2 The Legacy Substation, which the proposals will connect to, is located approximately 765m west of the site.

2.2.3 The nearest settlements to the site are Bersham (approx. 0.6km north), Rhostyllen (approx. 0.65km east) and Pentre Bychan (approx. 1km to south). The nearest residential property is located to the north of the Site at Bryntirion Hall approximately 300m to the north of the site.

2.2.4 Several commercial uses are located to the east of the site, as well as Esclusham Bowling Club and Rhostyllen Football Club, both adjacent to the A483. Beyond these uses residential

properties form the primary land use within Rhostyllen Village with a primary school, local shops, takeaways, pubs and community uses providing amenities for local residents. The A5152 (Wrexham Road) to the south of Rhostyllen provides a route linking the village to Wrexham.

2.2.5 Wrexham City Centre is located approximately 3km north-east of the site.

2.3 Site Considerations

2.3.1 The site is subject to the following environmental considerations:

Agricultural Land

2.3.2 An Agricultural Quality of Land survey, prepared by Land Research Associates, which accompanies this application, identifies that 5.5 ha (100%) of the site comprises Grade 2 agricultural land which is considered Best and Most Versatile (BMV).

2.3.3 To avoid development on BMV agricultural land, sites that are classed as being of lower agricultural land value are considered preferable for accommodating development.

2.3.4 The Site Selection Report submitted with the application identifies that the quality of agricultural land within the 2.5km study area comprises Grade 2, Grade 3a, Grade 3b and non-agricultural / urban. This report provides a full assessment of sites against a range of criteria within the study area and concludes that the chosen development site is most suitable to accommodate the proposed development, despite its classification as BMV agricultural land.

Flood Risk

2.3.5 Natural Resources Wales (NRW) Development Advice Map shows that the site is not at risk of flooding from surface water. It is wholly located in Flood Zone A and therefore is considered to be at little or no risk of fluvial or coastal / tidal flooding.

2.3.6 NRW's New Flood Map for Planning confirms that the majority of the site falls within Flood Zone 1 and is therefore at the lowest risk of flooding from ground water sources. A small section of the eastern part of the site is located within Flood Zones 2 and 3 for surface water and small watercourse flood risk.

Heritage

2.3.7 The Historic Settings Assessment submitted to support the application confirms that there are no heritage assets present within the site or in immediate proximity to it. The wider surrounding area features listed buildings, conservation areas and scheduled monuments.

2.3.8 Most notably, the Offa's Dyke scheduled monument is located approximately 500m west of the site and transverses north to south between the site and the Legacy Substation. Additionally, the Bersham Conservation Area is located to the north (approx. 0.65) of the site.

Special Landscape Area

2.3.9 The adopted Unitary Development Plan (UDP) proposals map shows that the site falls within the Ruabon Mountain Special Landscape Area. The UDP also recognises the presence of a defined walking/cycling route which runs along the northern boundary and intersects the eastern part of the site.

Minerals

2.3.10 The site is partially designated within an area for the Protection of Mineral Resources as identified on the adopted UDP proposals map.

3 PLANNING HISTORY AND ENGAGEMENT

3.1 Planning History

3.1.1 The below table sets out the planning history which is of relevance to the site and its surroundings, and to the development proposed:

Planning Ref.	Location	Description	Outcome / Date
P/2008/0046	Cable And Wireless Plc, Access Road to Legacy Substation, Legacy, Rhostyllen, Wrexham, LL14 4HY	Installation of 40 Kva Generator and Ancillary Equipment at Legacy Substation.	Granted, February 2008
P/2014/0263	Land East of Bronwylfa Reservoir, and North of Legacy Substation, Aberoer Road, Aberoer, Wrexham, LL14 4LG	Installation of Solar Panels and Associated Equipment to Enable Energy Generation and Connection to National Grid.	Granted, July 2014
P/2021/0441	Land to the north of National Grid Legacy Substation, Wrexham, LL14 4HY	Erection of battery storage facility and ancillary development	Granted, July 2021
P/2021/0676	Land North of Wales and West Utilities Access Roads to Maelor Gasworks, Cross Lanes, Wrexham, LL13 0UW	Erection of solar farm and battery storage facility.	Granted, November 2022
P/2022/0057	Land South of Bridge Road North, Wrexham Industrial Estate, Wrexham, LL13 9PS	Development of battery energy storage centre	Granted, December 2022
P/2022/1027	Legacy National Grid Substation, Bronwylfa Road, Talwrn, Wrexham, LL14 4HY	New grid connection for battery storage facility	Granted March 2023
P/2023/0175	Legacy National Grid Substation, Bronwylfa Road, Talwrn, Wrexham, LL14 4HY	Installation and operation of battery storage facility and ancillary development	Granted July 2023

3.2 Pre-Application Engagement

3.2.1 In March 2023 a pre-application enquiry was submitted to WCBC under ref. ENQ/2023/0063. A number of technical documents were provided with the enquiry to aid the planning officer in issuing the pre-application advice (Appendix A).

3.2.2 The pre-application advice received was generally supportive of the development proposals stating that, as submitted, the proposed development would, on balance, be considered to be acceptable in principle noting that national planning policy strongly supports the delivery of such energy storage facilities. The advice confirmed that the subject site is located wholly within the Ruabon Mountain SLA according to the adopted Wrexham UDP.

3.2.3 The officer confirmed that given the strong support within national policy and guidance for the development of such energy storage facilities, there is an overriding need for the development. The officer did conclude that additional information relating to highways, ecology, visual impact and trees would be required to be submitted with any application to demonstrate the acceptability of the proposed development in accordance with the adopted UDP.

3.2.4 As set out in Table 1.1 (above), a suite of technical documents has been provided with the submission in line with the pre-application advice received.

3.3 Non-Statutory Pre-Application Engagement

3.3.1 The applicant held an informal pre-application public exhibition on 11th May 2023 at Rhostyllen Parish Hall, Vicarage Hill Rhostyllen, Wrexham, LL14 4AR. The public exhibition ran from 1.30pm to 5.30pm and was attended by approximately 100 members of the community.

3.3.2 The feedback received in relation to the development option presented related largely to concerns that the scale of development was too large, safety concerns and fire risk. The development presented at that time utilised both the current site and the field to the immediate

south of the site. Residents felt that this would have effectively created a ‘tunnel’ of development along the B5097.

3.3.3 In response to the feedback received at the event and the subsequent comments made by local community groups and residents, the applicant has revised the scale of the proposals. This application seeks planning consent for the proposed development on the site to the north of Bronwylfa Road / B5097 only. The removal of the southern parcel has significantly reduced the scale of proposed development, by around 64%.

3.3.4 Full details of the pre-application engagement undertaken, the comments received and the applicant’s response to those comments, are set out in detail in the Pre-Application Consultation (PAC) report that accompanies the planning application. *[Please note that the PAC report is prepared after the formal PAC process and will accompany the final planning application submission]*

4 THE PROPOSED DEVELOPMENT

4.1 Description of Development

4.1.1 This PDAS supports a full planning application for the following summary description of the proposals:

> *Installation and operation of an Energy Storage System (ESS) including energy storage units, substation, site access, cable connection, landscaping, and ancillary infrastructure.*

4.2 Overview of Proposals

4.2.1 The energy storage units will use Lithium Iron Phosphate (LFP) technology. It will import and export large amounts of electricity with no time lag, storing surplus electricity from the grid and then providing a means of additional electricity supply at times of peak demand.

4.2.2 The benefits of the proposed development can be summarised as follows:

- Support the growth in renewable energy generation;
- Assist National Grid with the balancing market (balancing transmission requirements as large generation and consumption sources come on or off-line);
- Assist the energy market (by storing excess generation until it is needed); and
- Maintain the narrow frequency range around 50 Hz required for safe transmission network operation.
- Economic benefits to the local and wider population by improving energy security and the stability of local supply and reducing the volatility of being reliant on international energy markets by facilitating growth in renewable energy.
- Economic benefits through job creation during construction and associated investment in the various supply chain industries.

- Community benefit fund equating to £20,000 per annum for the development lifetime.
- Charitable fund totaling £8,000 per annum for the development lifetime.
- 4.54ha of ecological enhancement to the west of the Main site, resulting in net gains in biodiversity.

4.2.3 In total the site comprises approximately 19.9 acres / 8.04 hectares (inclusive of the potential cable connection routes), broken down as follows:

- Main development site: 5.5ha;
- Abnormal load access: 0.2ha;
- Southern cable route option: 1.56ha; and
- Northern cable route option: 0.98ha.

4.2.4 The chosen cable route is yet to be confirmed but it will be either the northern or southern cable route options, as shown on the plans submitted to support the application.

4.2.5 The main development site contains the principal structures associated with the facility, including the energy storage units themselves; 400kV substation compound with Gas Insulated Switchgear (GIS) building & associated transformers; 33kV transformer bays; and Medium Voltage (MV) skid platform containing inverters and transformers. In addition to the principal structures the scheme will include a highway connection, internal parking and manoeuvring areas, office, storage and water containers, drainage infrastructure, landscaping, including a bund, and ecological areas, and perimeter fencing with CCTV.

4.2.6 The energy storage units will be laid out in rows with intervening access areas. The units will sit on concrete slabs or supporting feet and measure approximately 2.9m in height. The GIS building in the substation area will measure approximately 14m in height and is therefore the tallest piece of equipment. Internal access tracks will comprise crushed stone and the access road for the abnormal load will be asphalt.

4.2.7 The associated MV skids are sited alongside the energy storage units and connect in groups to 33kV transformer bays distributed evenly throughout the site. The substation compound is proposed to be located on the north-western corner of the site.

4.2.8 Remaining areas within the main development site outside of the fence line will be landscaped to create and enhance ecological habitat and soften the visual impact of the development. Woodland planting will be provided on the western and southern boundaries and adjacent to the existing PRoW to help lessen the visual impact the proposals from the surroundings, as well as bunding along western/southern/eastern boundaries. An attenuation basin is proposed on the eastern part of the main development site for sustainable drainage.

4.2.9 Primary access to the main development site during construction and operation will be from the existing B5097 access. A new secondary access is proposed from Cadwgan Lane at the main site's western boundary.

4.2.10 A road for abnormal loads is proposed to intersect the southern part of the neighbouring field (to the west of Cadwgan Lane) from the B5097 / Bronwylfa Lane. This will connect to the main site's new western access to provide access for abnormal load vehicles. A temporary construction compound is proposed on the northern part of this field.

4.2.11 In summary, the proposed ESS development comprises:

- 400kV Substation with Gas Insulated Switchgear (GIS) building & Transformers;
- Energy storage containers;
- 33kV transformer bays;
- Medium Voltage (MV) Skid – Inverters & Transformers;
- Control buildings;
- Office, storage and water containers;
- Access from the adopted highway;
- Internal access road and crushed stone tracks;
- Drainage infrastructure, landscaping, and ecological planting; and

- Security fencing and CCTV; and
- 4 no. parking spaces.

5 DESIGN AND ACCESS CONSIDERATIONS

5.1 DAS Requirements

5.1.1 The Town and Country Planning (Development Management Procedure) (Wales) Order 2012 (as amended) requires that, as a minimum, a DAS must explain the design principles and concepts that have been applied to the development; and how issues relating to access to the development have been dealt with. This is supplemented by the Design and Access Statements in Wales (July 2017) national guidance document.

5.1.2 Section 5 of the guidance sets out a recommended structure for DAS submissions as follows:

a) Summary of the proposal

b) The brief and vision

c) Site and context analysis

d) Interpretation

e) Design development

f) The proposal

- i. Character
- ii. Access
- iii. Movement
- iv. Environmental Sustainability
- v. Community Safety
- vi. Response to planning policy

5.1.3 This chapter provides an overview of the design and access considerations relevant to the Site and the proposed development.

5.2 Site Context and Analysis

5.2.1 The existing character of the development site and surroundings is as described above in Section 2.0.

Settlements

5.2.2 The nearest settlements to the site are Bersham (approx. 0.6km north), Rhostyllen (approx. 0.65km east) and Pentre Bychan (approx. 1km to south).

5.2.3 The nearest dwellings and their proximity to the nearest edge of the site are as follows:

- Properties located at Bryntirion Hall (330m from the northern edge of the Site);
- Properties located at Croesfoel Farm (460m from the southern edge of the Site); and
- Properties located at Esclusham Farm (860m from the eastern corner of the Site).

Landscape

5.2.4 The site is not subject to any statutory landscape designations; however, as stated above, the site falls within the Ruabon Mountain SLA designated by the adopted UDP.

5.2.5 The site is approximately 1.8km to the west of the Clwydian Range and Dee Valley Area Outstanding Natural Beauty (AONB) at its closest point.

5.2.6 Parts of the Clwydian Range and Dee Valley AONB also are designated for their ecological qualities, including Ruabon / Llantysilio Mountains and Mineral Site of Special Scientific Interest (SSSI), approximately 3.3km to the west of the site, which is also overlapped by a Special Area of Conservation (SAC). Part of the AONB comprises registered common land (CRoW Access Land), including land approximately 3km west of the Site.

Biodiversity

5.2.7 The site is not subject to any ecological designations. There are two statutory sites for nature conservation located within 2km of the site:

- Stryt Las a'r Hafod Site of Special Scientific Interest (SSSI) – located 1.3km to the south of the centre of the Site. This SSSI is designated as a composite site supporting one of the largest known GCN breeding population in Great Britain.
- Johnstown Newt Sites Special Area of Conservation (SAC) – located 1.3km to the south of the centre of the Site. This SAC covers the same footprint at the Stryt Las SSSI and is designated for the same primary reason – its significant breeding population of GCN.

5.2.8 There are nine non-statutory nature conservation sites within 1km of the site. The nearest nature conservation site is W222 Crematorium Local Wildlife Site which is located 410m to the southwest of the site and designated for its herb-rich semi-improved grasslands, broadleaved woodland, and ponds.

5.2.9 There are no ancient woodlands recorded within 400m of the Site.

Historic Environment

5.2.10 There are no heritage assets within the site and directly adjacent.

5.2.11 The surrounding area features listed buildings, conservation areas and scheduled monuments.

5.2.12 Most notably, the scheduled monument, Offa's Dyke, is located approximately 500m west of the site which transverses north to south between the site and the Legacy Substation.

5.2.13 Additionally, Bersham Conservation Area is located to the north (approx. 0.3km to its nearest point) of the site.

5.2.14 The following historic assets are found in a 3km area surrounding the Site:

- Scheduled Monuments – There are 26 scheduled monuments including Offa's Dyke to the west of the site.
- Listed Buildings – A total of 147 listed buildings were identified within a 3KM radius of the site, 1 Grade I, 14 Grade II* and 132 Grade II listed buildings.
- Registered Parks and Gardens – There are two registered parks and gardens within 3km of the site which are Wrexham Cemetery and Erddig.
- Conservation Areas – A total of 5 conservation areas are identified, the closest of which is Bersham Conservation Area to the north of the site.

Public Rights of way

5.2.15 There are several Public Rights of Way (PRoW) located within the immediate and wider areas surrounding the site. The most notable of which is the Esculsham Below footpath (1) which intersects the eastern part of the site from north to south. This route will be retained as part of the proposed development.

5.3 Interpretation

5.3.1 The interpretation of the site's constraints specifically informed the design evolution (set out in section 5.4 below). A brief summary is set out below:

- Residential Amenity – the layout has been designed and amended to reduce the impact on local residents and visual receptors. The tallest parts of the development have been located in the least sensitive parts of the site, in terms of proximity and visually, and additional screening proposed to further reduce its visual impact, as well as reducing the site level in this part of the site.

- Landscape and Visual Impacts – an introduction of bunding is proposed along the western and southern boundary to reduce the visibility of the proposals from Bronwylfa Road. In addition to this bunding, woodland planting and hedgerow enhancements are proposed along the western, eastern and southern boundaries.

- Biodiversity – following extensive surveys the site has been determined to be of low ecological value however an area of ecological enhancement is proposed to the west of the site totaling approximately 4.54 hectares. Additionally, the attenuation basin proposed at the eastern part of the site will introduce a further area of biodiversity improvement.

- Historic Environment – the heritage assets and conservation area to the north of the site are considered to benefit from sufficient visual screening resulting from the maturely planted bund of the former railway line that forms the northern boundary of the site. The tallest equipment to be installed in the north western corner to ensure the impact on the setting of heritage assets to the south east are minimised as this is the lowest part of the site and furthest away from Bronwylfa Road.

- Existing Vegetation – whilst the site already benefits from boundary hedgerows along the western and southern boundaries, woodland planting will be provided at these boundaries and adjacent to the existing PRoW to help soften the visual impact of the proposals from the surroundings. Bunding is also proposed along the western, southern, and eastern boundaries.

- Public Rights of Way - the PRoW that intersects the site's eastern extent is being retained as part of the proposed development. A permissive footpath is also proposed which will be located adjacent to the site's northern boundary and will provide a safer pedestrian route from Rhostyllen to Bersham Cricket Club, a particular concern highlighted at the public consultation event.

5.3.2 Further detail on the points above is provided later in this report.

5.4 Design Development and Evolution

5.4.1 Following pre-application discussions with a range of statutory and non-statutory consultees, the proposed development submitted to WCBC is in a form that has gone through several

stages of evolution to respond to a range of technical and environmental considerations. The revised scheme is the result of a collaborative process with stakeholders, incorporating wherever possible requests from technical experts and members of the public.

Pre-Application Advice Request (March 2023)

5.4.2 A pre-application advice request was submitted to WCBC on 27th March 2023 and a written response was provided on 12th July 2023. The plan below (Figure 2) shows the proposed layout as originally presented at the time of the pre-application advice request:

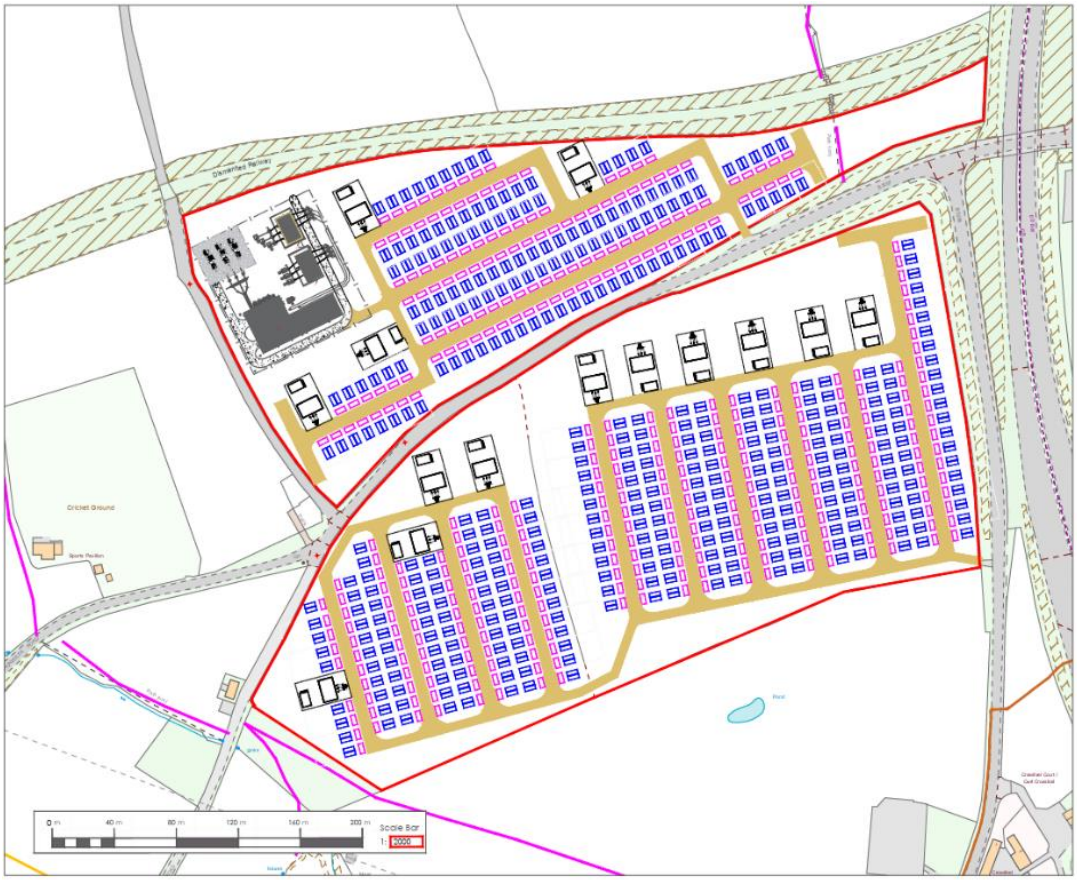

Figure 2: Previously Proposed Layout – Version 1 (March 2023)

5.4.3 The initial proposal presented to WCBC in the pre-application advice request included the delivery of an ESS with an operating capacity of circa 1GW. The pre-application advice request was supported by the following technical information:

- Site Location Plan;
- Initial Layout Plan;

- Site Selection Report;
- Agricultural Quality of Land Survey;
- Initial Landscape and Visual Considerations;
- Preliminary Landscape and Visual Appraisal; and
- Archaeological Desk Based Assessment.

Informal Community Consultation (May 2023)

5.4.4 Alongside the submission of a pre-application advice request, an informal consultation phase was launched to engage the wider community and stakeholders to seek feedback on the initial proposals. A leaflet drop was organised which sought to inform the wider community of the informal public exhibition being held on 11th May 2023.

5.4.5 During the public exhibition concerns were raised by members of the community regarding the scale of the proposals. Local residents expressed their concerns that the proposals presented would create a 'tunnel' of development along the B5097.

5.4.6 In response to the feedback received during the public exhibition, the applicant reduced the development scale by circa 64% (as shown below). This was a result of omitting the parcel of land to the south of the B5097 from the proposals.

5.4.7 In addition, the inclusion of a permissive footpath across the development Site has been provided to aid pedestrian access between Rhostyllen and Bersham cricket club. When the applicant met with the cricket club, they received the provision of the footpath well and welcomed the safer pedestrian environment created as a result.

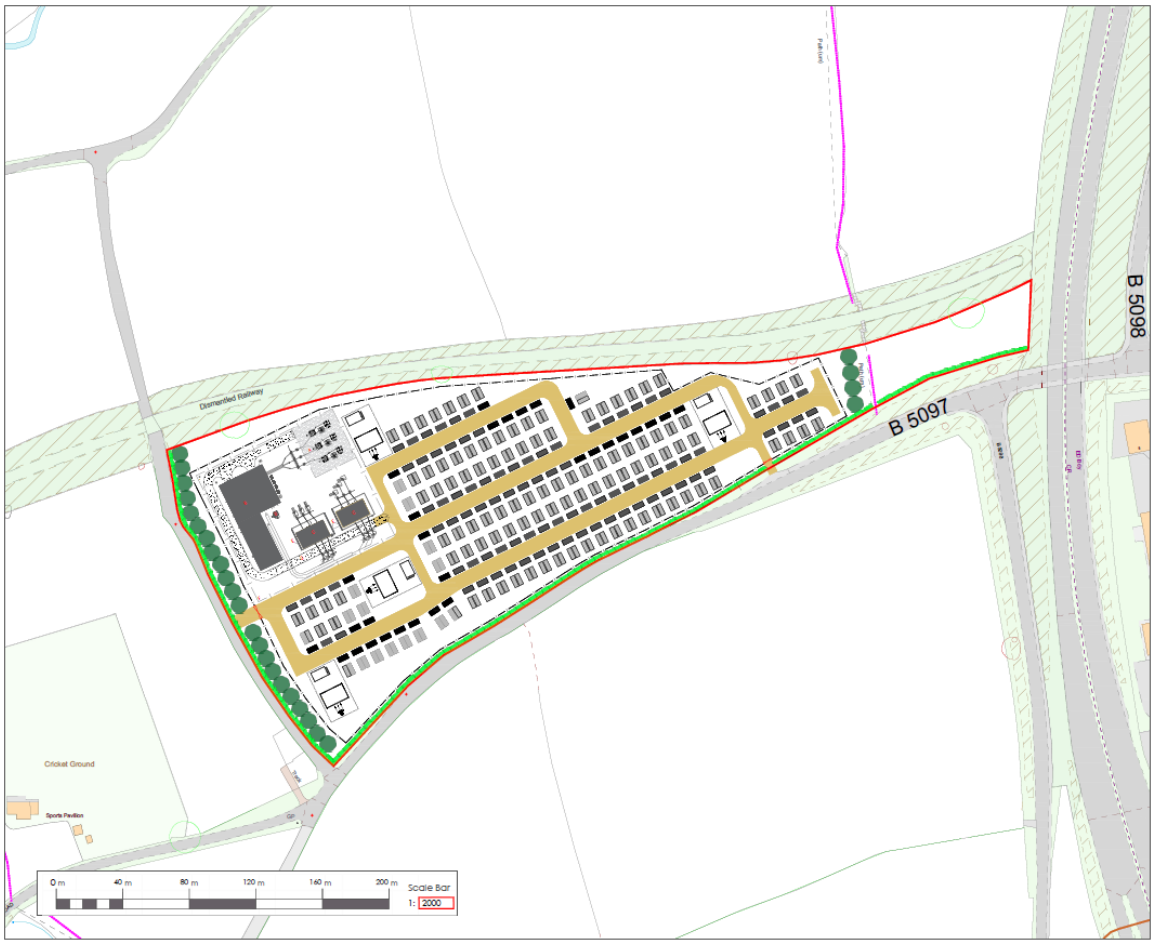

Figure 3: Proposed Layout – Version 7 (May 2023)

Response to Technical Studies (April – November 2023)

5.4.8 Following the consultation, and as further technical assessments were conducted, the design continued to evolve to reflect the findings of these assessments. This has resulted in the proposals shown in Figure 3 above.

5.4.9 The applicant wanted to achieve a neutral balance of material, so any cut is redistributed around the site by way of bunding. Whilst the landscape benefits of the bunding were not the main driver of their provision the height of the tallest equipment in the 400kV substation has been reduced and screening enhanced by proposed bunding. The enhanced screening will reduce visual impact of the proposals.

5.4.10 It was previously assumed the access for abnormal loads would be from the existing access from the B5097. Following further swept path analysis work and given the location of substation in north-west corner of the site, the applicant opted for the new access road for abnormal loads to be located to the west of the site. There is a potential need to replace transformers in the future without having to also remove the batteries; therefore, there is a need to allow abnormal load access to the site for the lifetime of the development (circa. 50 years) from the west.

5.4.11 In summary, as a result of feedback from the first round of consultation and findings of technical studies, the refined site layout presented for statutory Pre-application Consultation (PAC) incorporated several amendments including:

- Removal of the southern field parcel reducing the scale of development by circa 64%;
- Creation of an abnormal load access track;
- Introduction of the permissive footpath;
- Bunding proposed to reduce visual impact using material cut from the site;
- Woodland planting at the western and southern boundaries and along the PRoW to provide further screening;
- Provision of an off-site 4.54 ha ecological enhancement area; and
- Inclusion of an attenuation pond on the eastern part of the site for sustainable drainage.

5.4.12 The full site layout design presented for PAC is shown in Figure 4 below.

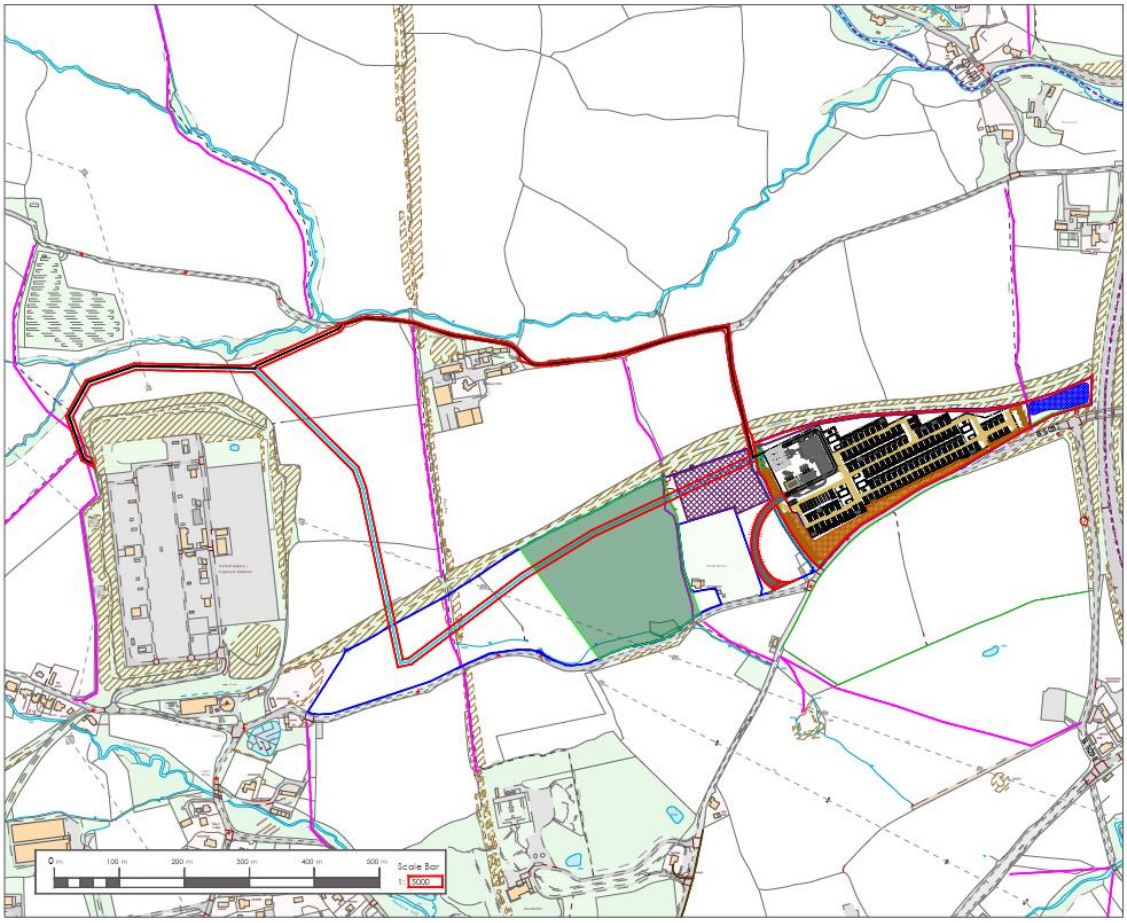

Figure 4: Proposed Layout – Version 11 (November 2023)

5.5 Design Criteria

Layout

5.5.1 A detailed site plan showing the layout of the proposed development is provided with the submitted plans. The layout of the site has been developed to respond to the constraints of the site and the proximity to the Legacy Substation, as summarised previously.

5.5.2 The energy storage units have been laid out across the site to make the best use of the land. The tallest element, which is the substation, is located in the north western corner of the site to ensure it is largely screened from the north by the dismantled railway and the existing dense vegetation. To further soften the visual impact of the building the proposed bunding works and

woodland planting along the western boundary will provide an improved level of screening in the long term when viewed from the west of the site.

5.5.3 At the eastern end of the site, owing to the site's topography, an attenuation basin is proposed. This SuDS feature has a dual purpose in that it will act as a drainage feature while also providing an area for ecological enhancement.

5.5.4 During construction a temporary construction compound will be required. This will be located on the land to the west of the main development site. It is proposed to be situated on the northern part of this land whilst the abnormal access road intersects the southern part. The total area of this temporary compound will be circa. 1 ha.

Scale and Appearance

5.5.5 The energy storage units themselves are approximately 2.9m in height and are similar in scale to a standard shipping container. The final colour of the units can be determined by an appropriately worded condition to ensure the proposed development can assimilate with its surroundings.

5.5.6 The substation will be located in the north-western corner of the site, closest to the point of connection at Legacy Substation. This building will be approximately 14m in height and is the largest piece of equipment proposed on the site. The building will be partially screened by the bunding proposed on the western boundary, which will be created using the materials cut from the site, and woodland planting.

Access & Movement

5.5.7 During the operational phase of development there are very few expected transport movements associated with the site, other than for maintenance / repair of the equipment. The construction phase of development will see higher levels of vehicle movement to and from the site. A Construction Traffic Management Plan has been submitted with the application to set out proposed procedures to manage construction traffic, as well as an Abnormal Loads Assessment.

5.5.8 Access to each energy storage container will be provided through a network of internal access tracks, which will accommodate the majority of construction movements as well as future maintenance requirements of proposals.

5.5.9 Primary access to the main development site during construction and operation will be from the existing B5097 access. A new secondary access is proposed from Cadwgan Lane at the main site's western boundary. This will act as the primary access point when the development is fully operational.

5.5.10 Some enabling works are required to facilitate delivery of the main substation building to the Site. An access road is required in the field immediately to the east of Bersham Cricket Club, to allow the delivery vehicle for the substation to access the substation location without tracking through the main Site area.

5.5.11 It will take approximately 24 months for the ESS to be constructed. This includes site preparation works, erection of security fencing, assembly, and installation of substation and cable works.

Landscaping

5.5.12 To reduce the visual impact of the proposals from the surroundings a variety of landscaping is proposed. Woodland planting is proposed at the western and eastern boundary (adjacent to the PRoW) of the site. Existing hedgerows are present at the southern and western borders of site and as part of the proposals, these hedgerows will be enhanced. At the western and southern boundaries, bunding is proposed utilising material cut from the site to further reduce the visual impact of the proposals.

5.5.13 The proposed development includes a range of habitat creation and enhancement measures as set out within the submitted Ecology Report and Environment Enhancement Area Plans. This includes an area of approximately 4 ha to the west of the site to benefit roosting/ foraging/ commuting bats, nesting/foraging birds, invertebrates, grassland habitat and riparian habitat.

The land will be brought into long-term conservation management which will ensure a sustainable future for this area and the flora/fauna that it supports.

5.5.14 The protection measures along the existing ditch, as well as the creation of scrapes, will deliver localised improvements to surface water drainage and management (relating to flood risk and pollution improvements). Invertebrates and pollinators will benefit from the creation of a greater diversity in vegetation structure and habitat types, as well as specific features such as grass heaps, refugia, south-facing banks and topographical variation.

Community safety

5.5.15 The proposals will provide a substantial source of stored renewable energy directly into the grid at times of high demand and low or intermittent supply. There are clear and substantial benefits presented by the development, primarily through the opportunity to provide a renewable source of clean energy. Furthermore, the operation of the ESS is not expected to present any risks in terms of hazardous materials, pollution, emissions, or any other operational hazards as set out within the submitted Outline Battery Safety Management Plan.

Community Benefits

5.5.16 In addition to this the operator offers a community benefit fund of £50 per MW installed, per year. The site will be installed with a capacity of 400MW, therefore this could equate to £20,000 per year, for the 50-year lifespan of the development. The applicant will work with community councils and local stakeholders to allocate the community benefit fund.

5.5.17 In addition to this contribution, Innova offers a charitable fund of £20 per MW installed, per year, which equates to £8,000 per year, again , for the 50-year lifespan of the development.

Decommissioning

5.5.18 The proposed development has been designed with an expected operational life of 50 years. At the end of the operational period, it would be decommissioned, and the storage units

dismantled and removed. Any alternative to this action would require a further consent from WCBC in accordance with the relevant legislation at the time of any such application.

6 PLANNING POLICY CONTEXT

6.1 Introduction

6.1.1 This chapter sets out the national planning policy context, the development plan policies and other material considerations, which are applicable to the determination of this application.

6.2 National Planning Policy

Future Wales: The National Plan 2040

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

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

6.2.2 Policy 17 of Future Wales relates to 'renewable and low carbon energy and associated infrastructure'. Policy 17 confirms that the Welsh Government strongly supports the principle of developing renewable and low carbon energy from all technologies and at all scales to meet our future energy needs, and that in determining planning applications for renewable and low carbon energy development, decision-makers must give significant weight to the need to meet Wales's international commitments and target to generate 70% of consumed electricity by renewable means by 2030, in order to combat the climate emergency.

6.2.3 Future Wales (Page 118) also notes that it is vital the North of Wales plays its role in decarbonising society and supports the realisation of renewable energy, stating that there is strong potential for wind, marine and solar energy generation and Strategic and Local Development Plans should provide a framework for generation and associated infrastructure. The Welsh Government also wishes to see energy generation, storage and management play a role in supporting the regional economy in the North.

Planning Policy Wales (Edition 11)

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

6.2.5 To support the theme of '*Productive and Enterprising Places'*, as set out in PPW (Page 75), one of the key issues identified to address includes embracing the challenge of decarbonising our energy and transport sectors including phasing out of fossil fuels and moving towards local, decentralised renewable energy systems, the increased use of energy storage to balance supply and demand and the challenge this creates on our distribution networks. PPW (Page 76) states that this will be addressed by encouraging policies and proposals which promote low carbon developments and sites for renewable energy, manufacturing, research, and development close to areas of deployment of renewable energy.

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

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

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

6.2.8 Paragraph 3.77 states that certain forms of development, including renewable and low carbon energy generation, may be appropriate in a green wedge provided they preserve its openness and do not conflict with the purpose of including land within it.

6.2.9 Chapter 6 of PPW was updated with immediate effect on 18th October 2023 following a consultation exercise in Spring 2023 which sought responses on green infrastructure, net benefit for biodiversity, the production afforded to Sites of Special Scientific Interest and trees and woodland. In response to comments received, the main changes to policy which are reflected in Chapter 6, PPW Edition 11, include:

- Green Infrastructure: stronger emphasis on taking a proactive approach to green infrastructure covering cross boundary considerations, identifying key outputs of green infrastructure assessments, the submission of proportionate green infrastructure statements with planning applications and signposting Building with Nature standards.

- Net Benefit for Biodiversity and the Step-wise Approach: further clarity is provided on securing net benefit for biodiversity through the application of the step-wise approach, including the acknowledgement of off-site compensation measures as a last resort, and, the need to consider enhancement and long-term management at each step. The use of the green infrastructure statement as a means of demonstrating the stepwise approach is made explicit. A simplified diagram of the policy approach has been developed (which will be further refined in the consolidated version of PPW12). The importance of strategic collaboration to identify and capture larger scale opportunities for securing a net benefit for biodiversity is recognised.

- Protection for Sites of Special Scientific Interest: strengthened approach to the protection of SSSIs, with increased clarity on the position for site management and exemptions for minor development necessary to maintain a 'living landscape'. Other development is considered unacceptable as a matter of principle. Exceptionally, a planned approach may be appropriate where necessary safeguards can be secured through a development plan.

- Trees and Woodlands: closer alignment with the stepwise approach, along with promoting new planting as part of development based on securing the right tree in the right place.

Technical Advice Notes

6.2.10 The following Technical Advice Notes (TANs) are also of relevance to the Proposed Development:

- Technical Advice Note 5: Nature Conservation & Planning
- Technical Advice Note 6: Planning for Sustainable Rural Communities

- Technical Advice Note 10: Tree Preservation Orders
- Technical Advice Note 11: Noise
- Technical Advice Note 12: Design
- Technical Advice Note 15: Development and Flood Risk
- Technical Advice Note 18: Transport
- Technical Advice Note 23: Economic Development
- Technical Advice Note 24: The Historic Environment

6.3 Local Planning Policy

Wrexham Unitary Development Plan (1996-2011)

6.3.1 Wrexham County Borough Council (WCBC) declared a Climate Emergency in September 2019. The Council has stated that it will '*commit to make Wrexham County Borough a net carbon free council by 2030'*.

6.3.2 The Council's adopted Unitary Development Plan ('UDP') shows that the site is wholly designated as 'countryside' and within a 'Special Landscape Area'. A public right of way cuts through the eastern part of the site. The surrounding area is also designated within a Special Landscape Area with areas further to the north and south of the Site designated as 'Green Barrier'. The settlement boundary for Rhostyllen is shown on the opposite side of the A483, to the east of the site.

6.3.3 The adopted UDP includes the following key policies which are deemed relevant and appropriate to the Proposed Development:

- **Policy PS1** - New development for housing, employment, and community services will be directed to within defined settlement limits/employment areas.
- **Policy PS2** - Development must not materially detrimentally affect countryside, landscape/townscape character, open space, or the quality of the natural environment.

- **Policy PS3** - Development should use previously developed brownfield land comprising vacant, derelict, or underused land in preference to the use of greenfield land, wherever possible, particularly so where greenfield land is of ecological, landscape or amenity value, or comprises agricultural land of grades 1, 2 or 3a quality.

- **Policy PS11** - Encouragement will be given to proposals which improve the biodiversity value of sites and to the establishment of local nature reserves where the nature conservation and landscape interest of the land will be protected and enhanced.

- **Policy PS12** - Proposals for the generation of energy from renewable sources will be supported provided that the wider environmental benefits are not outweighed by any detrimental impacts of the proposed development (including any electricity transmission facilities needed) on the landscape, public safety, and the local environment.

- **Policy EC2** - Development on agricultural land of grades 1, 2 or 3a will only be permitted if it does not lead to the irreversible loss of that land.

- **Policy EC4** - Development proposals should provide for the conservation and management of hedgerows, trees, orchards, woodland, wildlife and other natural landscape and water features, and include new planting in order to enhance the character of the landscape and townscape.

- **Policy EC5** - Within Special Landscape Areas, priority will be given to the conservation and enhancement of the landscape. Development, other than for agriculture, small-scale farm-based and other rural enterprises, and essential operational development by utility service providers, will be strictly controlled. Development will be required to conform to a high standard of design and landscaping, and special attention will be paid to minimising its visual impact both from nearby and distant viewpoints.

- **Policy EC6** - Development either within or close to sites of biodiversity interest will only be permitted where it can be clearly demonstrated that the need for the development outweighs the need to safeguard the intrinsic nature conservation value of the site.

- **Policy EC7** - Within, and in close proximity to, conservation areas, the priority will be to preserve and/ or enhance those buildings, structures, streets, trees, open spaces, archaeological remains, views, and other elements which contribute to the unique character of the area. New buildings and alterations or additions to existing buildings in conservation areas, whether listed as of special architectural or historic interest or not, must reflect the design and character of the area as a whole and the form, scale, detailing and materials of existing buildings.

- **Policy EC9** - Alterations or additions to, and development or redevelopment within the curtilage of, buildings or structures listed as of special architectural or historic interest must respect the setting and character of the listed buildings or structures.

- **Policy EC11** - Development which would adversely affect the site or setting of a Scheduled Ancient Monument or archaeological site of national significance will not be permitted.

- **Policy CLF6** - The existing pattern of public rights of way will be protected, maintained, and improved and any potential new routes will be identified and safeguarded.

- **Policy T9** - Development proposals will be required to provide walking and cycling routes, where feasible and appropriate, that link with existing or proposed walking and cycling routes and integrate with the public transport system. Opportunities for horse riding along these routes will be secured where appropriate.

Wrexham Local Development Plan 2 2013 to 2028

6.3.4 WCBC are currently in the process of preparing a replacement Local Development Plan (LDP2) which, once adopted, it will replace the UDP. Following examination, the LDP2 and its evidence base were found to satisfies the requirements of Section 64 (5) of the Planning and Compulsory Purchase Act 2004 and meets the tests of soundness set out in LDP Wales.

6.3.5 The Council have voted twice not to adopted the LPD2, the most recent being in April 2023. The Council's decision has been challenged and a Judicial Review hearing is due to take place on 29th November 2023. If successful, the Council will need to take another vote.

6.3.6 Considering the above and, as the UDP is significantly out of date, the LDP2 carries significant weight in decision making and therefore should be taken into consideration. The following draft policies from the LDP2 are considered pertinent to the proposals:

- **Policy SP2** – All development located outside of any defined settlement limit or employment area as shown on the Proposals Map is classed as development in the open and will be strictly controlled and limited in accordance with national planning policy.
- **Policy SP13** – All development will be required to be of a high quality, sustainable design which makes a positive contribution to the creation of locally distinctive places.
- **Policy SP15** – Development will only be supported where it protects, conserves and enhances the natural environment.
- **Policy SP16** – Development will only be supported where it conserves, protects and enhances listed buildings, conservation areas and scheduled ancient monuments.
- **Policy SP19** – To mitigate against the effects of climate change and adapt to its impacts, development proposals will need to demonstrate that they have taken into account a range of criteria, including promoting energy efficiency and increasing the supply of renewable energy.
- **Policy SP20** – Development will be required to maintain the extent, quality and connectivity of multi-functional green infrastructure.
- **Policy DM1** – Development proposals must meet a range of criteria including according with the character, local distinctiveness and appearance of the site, existing building(s) and surrounding landscape; not have an unacceptable effect on the amenity of the

occupiers of nearby properties/land; and take account of personal and community safety and security in its design and layout.

- **Policy NE3** – Development will only be permitted where it does not cause unacceptable harm to trees, woodlands and hedgerows of significant public amenity, natural or cultural heritage value.

- **Policy T1** – Proposals for new development will be supported where they do not compromise the safe, effective and efficient use of the highway network and do not have an adverse impact on highway safety or create unacceptable levels of traffic generation.

- **Policy MW2** – Development in the mineral buffer zones as identified on the Proposals Map will only be permitted where it can be demonstrated that it would not compromise current or planned mineral extraction.

- **Policy RE2** – Proposals to generate energy from renewable and low carbon sources will be supported. In assessing such proposals consideration will be given to the impacts of the development on the landscape, the number, scale, size, design and siting of renewable installations and associated infrastructure, alone, cumulatively and in combination.

7 PLANNING ASSESSMENT

7.1 Introduction

7.1.1 This section assesses the proposed development against the adopted planning policy framework as identified in the preceding chapter.

7.2 Principle of Development

7.2.1 National and local planning policies support the principle of renewable energy development.

7.2.2 Future Wales and PPW 11 both strongly support the expansion of Wales's renewable energy network as well as recognising the need for facilities as that proposed, to help facilitate the transition towards a net zero.

7.2.3 Future Wales acknowledges that it is vital that North Wales plays its role in decarbonizing society and supports the realisation of renewable energy. PPW 11 recognises that one of the key issues identified to address includes embracing the challenge of decarbonising our energy and transport sectors which includes the increased use of energy storage to balance supply and demand and the challenge this creates on our distribution networks.

7.2.4 Acknowledging the site's location within open countryside and a 'green wedge' as identified by the adopted UDP, PPW states that certain forms of development, including renewable and low carbon energy generation, may be appropriate in a green wedge provided they preserve its openness and do not conflict with the purpose of including land within it. PPW also notes that the identification of sites within open countryside must only be considered in exceptional circumstances and that the search process to identify suitable development land must be undertaken in a manner that fully complies with the requirements of national planning policy.

7.2.5 Considering the above, a robust site selection assessment was undertaken (as set out in the Site Selection Report accompanying the application) to identify the most optimum location for the proposed development.

7.2.6 The initial part of the site selection assessment was to understand the needs of the proposed development. This confirmed that there is a need for the site to be located in proximity to the Legacy Substation in order for a connection to be feasible. As such, to identify an optimum site a 2.5km study area from the Legacy Substation was considered acceptable, given the constraints present on sites beyond this extent, to accommodate the proposed development.

7.2.7 The Site Selection Report identifies that in total 29 locations could potentially accommodate the proposed development, and these were ranked on a red, amber and green (RAG) system based on their performance against a range of criteria. Out of the 29 locations three were ranked in the 'green' category which were then assessed in greater detail. The site was ultimately selected as the most suitable available location for the proposed development.

7.2.8 At a local level, adopted Policy PS12 of the UPD and draft Policy RE2 of the LDP2 supports the principle of renewable energy and related developments subject to environmental considerations. This chapter fully assesses the proposals against all environmental considerations applicable to the site. The findings of this assessment confirm that there are no environmental considerations that represent a fundamental constraint to the proposed development, subject to the inclusion of any required mitigation.

7.2.9 Considering the above, the principle of the ESS development on this site is therefore considered to be accepted in accordance with national and local planning policy.

7.3 Agricultural Land

7.3.1 The submitted Agricultural Quality of Land assessment produced by LRA confirms that the Main site comprises Grade 2 agricultural land, which is regarded as best and most versatile. Whilst the loss of higher-grade agricultural land is a consequence of the development, ESS

schemes have very specific locational requirements and the submitted Site Selection Report demonstrates that the Applicant has been through a detailed site selection process which concluded that such a loss is unavoidable.

7.3.2 The operational life of the development is predicted to be approximately 50 years, following which it is anticipated that the land would be returned back to its original condition. This would be agreed through an appropriately worded condition. Taken as a whole, it is considered that the benefits of the proposed development and necessity for its location, alongside its predicted lifespan and reversibility, justifies its location on higher-grade agricultural land.

7.4 Residential Amenity

7.4.1 Given the separation distance between the site and the nearest residential receptors, and the related lack of intervisibility, it is considered there is no potential for any adverse overbearing or overshadowing impact to arise.

7.4.2 Further, the submitted Noise Impact Assessment (produced by inacoustic) confirms that there will be no negative noise affects arising as part of the proposed development. The assessment identifies that the proposals will give rise to rating sound levels that do not exceed the measured background sound levels in the area, thus giving rise to a ‘low impact’. The assessment also identifies that no significant change in ambient sound level at the identified receptor locations will be engendered as a result of the proposal, in its proposed and assessed form, and that the amenity of residential receptors will not be compromised. As such the proposed development is aligned with adopted Policies GDP1 (criterion f) and PS2 of the UDP and draft Policy DM1 of the LDP2.

7.5 Highways and Transport

7.5.1 There is limited highway and traffic impact expected during the operational phase of the development, with only a small number of maintenance vehicles periodically accessing the site. The impacts of the proposals are likely to be more evident during the construction phase. To control any potential impacts as a result of traffic generated by the construction of the development a Construction Traffic Management Plan (CTMP) (prepared by Stantec) has been prepared to support the application.

7.5.2 The CTMP confirms that the impact of construction traffic will be for a limited period. It sets out measures that will be put in place to manage the safe arrival and departure of deliveries of plant and equipment to the site for the duration of the construction period, as well as construction workers travelling to/from the site.

7.5.3 It is forecast that a total of six abnormal load trips will be required to accommodate delivery of the substation to the site. The delivery of the substation will require an abnormal load vehicle with different access requirements to the majority of the construction traffic. To facilitate this vehicle type, a new access and haulage road is proposed to be provided in the land to the immediate west of the main development site. This will accommodate the delivery of the substation to the site. The details are set out within the Abnormal Load Assessment (prepared by Wynns – appended to the CTMP). This assessment demonstrates the route that the vehicles are anticipated to follow on their approach to the site can safely accommodate abnormal loads. Careful consideration of the impacts on the highway network have been considered in line with TAN 18: Transport, adopted Policy PS8 of the UDP and draft Policy T1 of the LDP2 as part of the proposed development.

7.6 Ecology and Biodiversity

7.6.1 The land within the application site boundary has been found to comprise low value habitats of low ecological value as set out within the supporting Ecology Report (prepared by Etive Ecology).

7.6.2 The site supports foraging bats and an assemblage of breeding birds of value at the local scale. The scheme will result in the loss of 4.5ha of improved grassland but will retain and enhance the more valuable habitats on site.

7.6.3 The proposals will also deliver a 4.5ha area of ecological enhancement land for long-term biodiversity gains. The ecological enhancement area delivers land for long-term biodiversity gains to the west of the site. The scheme of environmental enhancement is provided outside of the red-line boundary but is entirely within the ownership of the applicant. Therefore, the scheme and associated enhancement area is considered to provide a positive change in the ecological value of the site.

7.6.4 In accordance with the updated Chapter 6 of PPW, a green infrastructure statement (provided by Etive Ecology) has been prepared to support the application. This statement identifies that as a result of the ecological measures embedded within the proposed scheme, there will be a demonstrable net benefit for biodiversity. The site has been identified as being of relatively low value, with immediate on-site impacts adequately mitigated on-site and net gain being achieved primarily through off-site measures, on land immediately adjacent to the development.

7.6.5 The formal enhancements proposed, as well as the biodiversity enhancements associated with the implementation of the SuDS feature, ensure that the proposed development is aligned with Chapter 6 of PPW, Technical Advice Note 5: Nature Conservation & Planning and adopted Policy EC6 of the UDP and draft Policies SP15 and SP20 of the LDP2.

7.7 Trees and Landscape

7.7.1 An Arboricultural Impact Assessment (prepared by Arbserv) has been submitted with the application to demonstrate that the proposed development intends to retain the existing trees on the site and protect them. This will afford protection for the trees and their rooting environment.

7.7.2 Three sections of mixed species field boundary hedge are proposed for removal totalling 54m to facilitate the new site access. However, more than 100m of new hedgerow enhancement planting will be carried out to mitigate the loss both on the site and within an area of environmental enhancement to the west of the site.

7.7.3 The site is located within a Special Landscape Area (SLA) as defined in the adopted UDP with the relevant local policy stating that the visual impacts must be minimised for new developments. As such, a Landscape and Visual Impact Assessment (LVIA) has been submitted with this application to assess the visual impact of the proposals.

7.7.4 The LVIA identifies that the site falls gradually to the east towards the A483. Views of higher ground on this part of the site are evident from the PRoW and the cricket club to the west. As a result of this, the proposals are set back from the western boundary and a landscape buffer is provided to reduce visibility from the PRoW and the cricket club.

7.7.5 Furthermore, the LVIA identifies that this part of the site benefits from some visual enclosure when viewed from the north and east outside of the site's boundary because of the wooded dismantled railway embankment to the north and the existing roadside woodland to the east and south-east (which are raised above the site). This provides a visual and physical barrier along the northern, eastern, and south-eastern boundaries of the site.

7.7.6 From a landscape and visual perspective, any notable effects on landscape character and visual amenity as a result of the proposed development would be localised and would be reduced by proposed mounding and woodland planting, which would provide increased

filtering and screening of the proposed development overtime as planting matures. The enhancement works proposed, ensure that proposals would not have a harmful effect on the SLA. The works proposed have sought to minimise the visual impact both from nearby and distant viewpoints as a result of the proposed development. As such the proposals are in accordance with the aims of adopted Policies EC4 and EC5 of the UDP and draft Policies DM1 and NE3 of the LDP2.

7.8 Historic Environment

7.8.1 Whilst there are no listed buildings on the site, there is the potential for impacts on heritage assets to arise in delivering the development proposals. The submitted Heritage Impact Assessment (HIA), as prepared by Archaeology Wales, has examined the impact of the proposed development on the three nearest heritage assets. These are all Grade II listed buildings, including timber framed building at Creosol Farm, Croesfoel Farmhouse, and Gate Piers at Hafod-y-Bwch Hall. All three buildings are located approx. 500m to the south/southeast of the site and will not be physically impacted.

7.8.2 The landscape proposals provide mitigation to reduce the visual impacts of the proposed development. The southern boundary of the site consists of an earthen bund and hedgerow enhancement designed to screen views of the ESS. ZTV mapping indicates that there will still be some visual impacts on the listed buildings, particularly the taller elements. In the case of the Grade II listed timber framed building the impact calculated is considered to be 'negligible' on the building's heritage value, and for Croesfoel Farmhouse and the Gate Piers the impact is considered to be 'minor'. Considering the findings set out withing HIA, the proposed development complies with the requirements of polices EC7 and EC9 of the UDP and draft Policy SP16 of the LDP2.

7.8.3 The closest section of Offa's Dyke to the site may also require further assessment and scheduled monument consent if the southern cable route is chosen as the cable connection

route. These further works would ensure that the proposed development is in line with adopted Policy EC11 and draft Policy SP16.

7.9 Flood Risk and Drainage

7.9.1 NRW identifies that the majority of the site is located in an area at low risk of flooding from all sources. A small area in the east of the site is located within Flood Zones 2 and 3 as a result of the site's topography. The proposed development includes an attenuation basin in this location which will act as a SuDS feature.

7.9.2 The area in the east of the site shown to be at high risk of surface water flooding is a result of a localised depression in the site's topography. The development proposals do not result in a change in ground levels in this area of the site, and no built development is proposed for this area. Consequently, there shall be no change in risk as a result of the proposals.

7.9.3 Water falling on roofs, roads, and other hardstanding areas across the site will flow into filter drains and either infiltrate into ground or be conveyed easterly to the infiltration basin and then infiltrate to ground. The access road shall retain its own drainage system, whereby water falling onto the road flows into macro-permeable paving and then infiltrates into the ground.

7.9.4 As the site is wholly located in Flood Zone 1 (NRW's New Flood Map for Planning for rivers and seas) a full Flood Consequences Assessment is not required. However, a Flood Risk Statement has been prepared (by JBA Consulting) to comprehensively assess flood risk associated with the site, with the site assessed against the acceptability criteria of TAN15. The Justification Test is therefore not required.

7.9.5 As such, the submitted Flood Risk Statement and Outline Drainage Strategy demonstrate that the proposals do not increase the level of flood risk on the site or elsewhere and does not impact upon local water quality. The proposed development is therefore considered to be in line with adopted Policy EC12 of the UDP and TAN 15.

7.10 Design

7.10.1 The design has evolved throughout the initial stages of consultation and in response to the findings of technical studies.

7.10.2 The layout of the scheme has been designed to preserve the visual openness of the countryside and to respond sensitively to the site's designation within an SLA. A hedgerow enhancement scheme and landscape buffer are proposed to the southern and western boundaries of the site. The northern boundary benefits from existing screening with the presence of the heavily vegetated dismantled railway line.

7.10.3 In addition to this buffer, the proposals are set back by circa. 10m from the application boundary to further reduce the visual impacts of the proposals in line with adopted Policy EC5 of the UDP and draft Policy DM1 of the LDP2.

7.10.4 Further, the layout of the facility ensures the continuation of the PRoW which runs through the eastern part of the site, as well as the provision of a new permissive footpath (long the northern boundary) providing pedestrian access between Rhostyllen and Bersham Cricket Club. As such the scheme is considered to comply with adopted Policies CLF6 and T9 of the UDP which ensures that walking facilities are preserved and, in this case, enhanced within development proposals.

7.11 Access

7.11.1 The proposed development introduces a new access road to the west of the site. This is required to enable construction vehicles and abnormal load vehicles access to the Site. The CTMP and Abnormal Loads Report submitted to support the application provide details on how traffic will be managed throughout the construction period.

7.11.2 Outside of the construction phase there will be limited traffic movements associated with the operation of the site, other than servicing and maintenance vehicles.

7.11.3 The site will be secured and will be enclosed by a fence and will not be accessible to the public. The PRoW that exists on the site will be retained as part of the proposals. Access to these routes will remain via Bronwylfa Road and the new pedestrian route at the northern boundary will be retained to provide access from Cadwgan Lane to the eastern end of the site and the village of Rhostyllen beyond.

7.11.4 The proposed development is therefore considered to accord with Policy GDP1 of the UDP which requires safe and convenient pedestrian and vehicular access to and from development sites, both on site and in the nearby locality.

7.12 Safety

7.12.1 To support the application, an Outline Battery Safety Management Plan (OBSMP) (by Abbott Risk Consulting Limited) has been prepared.

7.12.2 The proposed ESS will be designed to meet relevant industry standards and legal requirements which contain specific safety requirements.

7.12.3 The OBSMP identifies a range of criteria, based on National Fire Chief Council (NFCC) requirements, to assess the proposed ESS against. This assessment identifies that the ESS's proposed design and layout is compliant with all criteria it was assessed against.

7.12.4 Using existing knowledge of ESS capability, the OBSMP identifies current foreseeable risks associated with the proposed equipment. These risks will be actively managed throughout the life of the installation and added to, as necessary, as the proposals for the scheme develop.

7.12.5 It is recommended that the ESS safety management and criteria, as defined in the OSBMP, is adhered to throughout the ESS project lifecycle to ensure that safety management is developed as the programme progresses and remains valid through the life of the ESS capability. To reduce the level of residual risk to meet the low 'tolerable' region, it is recommended that the identified control measures are assessed as the design mature.

Successful implementation of the proposed framework for safety management (as presented in the OBSMP) will provide supporting evidence to confirm that the levels of risk of accident, death or injury to personnel or other parties, and to the environment, due to ESS activities are to be broadly acceptable or tolerable and As Low As Reasonably Practicable.

7.12.6 Considering the above, the proposals are considered to accord with adopted Policy PS12 of the UDP and draft Policy DM1 of the LPD2 as, subject to the implementation of any requirements to align with the OBSMP, there will be no adverse impacts as a result of the proposed development on public safety.

8 SUMMARY AND CONCLUSIONS

8.1 Summary

8.1.1 This PDAS supports a planning application submitted on behalf of Innova Renewables Developments for the following development:

> *Installation and operation of an Energy Storage System (ESS) including energy storage units, substation, site access, cable connection, landscaping, and ancillary infrastructure.*

8.1.2 The proposed development comprises an ESS with an installed capacity of 400MW.

8.1.3 The proposed development has been assessed against the adopted and emerging development plan, national planning policy and guidance.

8.1.4 Future Wales is clear that decision-makers must give significant weight to the need in Wales to meet its international commitments, and its target of generating 70% of consumed electricity by renewable means by 2030. PPW also recognises that the increased use of energy storage to balance supply and demand will help address key issues of decarbonising our energy and transport sectors. At a local level, adopted and emerging policy also supports renewable energy and related development. Considering the support at a national and local policy level for energy storage development, alongside the robust site selection assessment which has been undertaken to justify the chosen development site in accordance with the requirements of PPW, the principle of the ESS is considered acceptable.

8.1.5 The assessment of the proposals impact on noise identifies that there is no significant change in ambient sound level at the identified receptor locations will be engendered as a result of the proposal, in its proposed and assessed form, and that the amenity of residential receptors will not be compromised. As such the proposed development is aligned with adopted Policies GDP1 (criterion f) and PS2 of the UDP and draft Policy DM1 of the LDP2.

8.1.6 Careful consideration of the impacts on the highway network during the construction and operational phase have been considered and are confirmed to be in accordance with TAN 18: Transport, adopted Policy PS8 of the UDP and draft Policy T1 of the LDP2.

8.1.7 The formal ecological enhancements proposed, as well as the biodiversity enhancements associated with the implementation of the SuDS feature, ensure that the proposed development is aligned with Chapter 6 of PPW, Technical Advice Note 5: Nature Conservation & Planning and adopted Policy EC6 of the UDP and draft Policies SP15 and SP20 of the LDP2.

8.1.8 From a landscape and visual perspective, any notable effects on landscape character and visual amenity as a result of the proposed development would be localised and would be reduced by proposed mounding and woodland planting, which would provide increased filtering and screening of the proposed development overtime as planting matures. The enhancement works proposed, ensure that proposals would not have a harmful effect on the SLA. The works proposed have sought to minimise the visual impact both from nearby and distant viewpoints as a result of the proposed development. As such the proposals are in accordance with the aims of adopted Policies EC4 and EC5 of the UDP and draft Policies DM1 and NE3 of the LDP2.

8.1.9 In terms of impact on heritage assets, the impact calculated is considered to be negligible or minor, as identified by the HIA. Considering the findings set out withing HIA, the proposed development complies with the requirements of polices EC7 and EC9 of the UDP and draft Policy SP16 of the LDP2.

8.1.10 The submitted Flood Risk Statement and Outline Drainage Strategy demonstrate that the proposals do not increase the level of flood risk on the site or elsewhere and does not impact upon local water quality. The proposed development is therefore considered to be in line with Policy EC12 of the UDP and TAN 15.

8.1.11 The scheme is considered to comply with Policies CLF6 and T9 of the UDP which ensures that walking facilities are preserved and, in this case, enhanced within development proposals. The proposals are also considered to accord with Policy GDP1 of the UDP which requires safe and convenient pedestrian and vehicular access to and from development sites, both on site and in the nearby locality.

8.1.12 From a safety perspective, the proposals are considered to accord with adopted Policy PS12 and draft Policy DM1 of the LLDP2 as, subject to the implementation of any requirements to align with the OBSMP, there will be no adverse impacts as a result of the proposed development on public safety.

8.1.13 In summary, the proposed Development is:

- in clear compliance with Policies 17 and of Future Wales and the LDP, together with PPW11, and national and local energy policy; and
- in accordance with the WCBC UDP and draft LDP2.

8.2 Conclusion

8.2.1 This PDAS has assessed the proposed development against the adopted and emerging development plan, national planning policy and guidance, and has regard to applicable material planning considerations. It is ultimately concluded that planning permission should be granted.

Appendix A Pre-Application Advice (ENQ/2023/0063)

Wrexham County Borough Council / Cyngor Bwrdeistref Sirol Wrecsam
Guildhall, Wrexham, LL11 1AY
Neuadd y Dref, Wrecsam, LL11 1AY
DX: 721924 - Wrexham 4
www.wrexham.gov.uk www.wrecsam.gov.uk

wrexham
COUNTY BOROUGH COUNCIL
CYNGOR BWRDEISTREF SIROL
wrecsam

Cerys Hulbert
Studio 117
The Creative Quarter
8a Morgan Arcade
Cardiff
CF10 1AF

Your Ref/Eich Cyf	
Our Ref/Ein Cyf	ENQ/2023/0063
Date/Dyddiad	12/07/2023
Ask for/Gofynner am	Gwyn Humphreys
Direct Dial/Rhif Union	01978 298782
E-mail/E-bost	gwyn.humphreys@wrexham.gov.uk

By email only to: cerys.hulbert@stantec.com

Dear Ms Hulbert,

Town and Country Planning Act 1990

ERECTION OF CONTAINERISED ENERGY STORE SYSTEM (ESS) SUBSTATION AND ANCILLARY INFRASTRUCTURE at:
LAND TO THE EAST OF LEGACY NATIONAL GRID, RHOSTYLLEN, WREXHAM

I refer to your pre-planning application enquiry submitted to the Local Planning Authority, dated 27th March 2023.

I can confirm that I have assessed the information submitted by you and that I have determined in accordance with the above detailed legislation that a formal application for planning permission will be required. The following advice is given on the basis of the planning policy framework applicable to the proposed development in this location, the details submitted, a desktop assessment of the application site, the discussions within our Teams Meeting held on 13th June 2023 and a site meeting held on 6th July 2023.

In the assessment of any future planning application, I would advise the following planning policy and guidance is likely to be of relevance:

National Planning Policy

- Future Wales: The National Plan 2040
- Planning Policy Wales (Edition 11)
- Technical Advice Note 5: Nature Conservation & Planning
- Technical Advice Note 6: Planning for Sustainable Rural Communities
- Technical Advice Note 10: Tree Preservation Orders
- Technical Advice Note 11: Noise
- Technical Advice Note 12: Design
- Technical Advice Note 15: Development and Flood Risk
- Technical Advice Note 18: Transport
- Technical Advice Note 23: Economic Development
- Technical Advice Note 24: The Historic Environment

Local Planning Policy

- Adopted Wrexham Unitary Development Plan (1996 – 2011):

  - PS1: Location of Development
  - PS2: Location of Development
  - PS3: Location of Development
  - PS4: Location of Development
  - PS8: Transport
  - PS11: Biodiversity
  - PS12: Renewable Energy
  - GDP1: Development Objectives
  - GDP2: Capacity of Infrastructure & Community Facilities
  - EC2: Agricultural Land
  - EC4: Hedgerows, Trees & Woodland
  - EC5: Special Landscape Areas
  - EC6: Biodiversity Conservation
  - EC9: Listed Buildings of Special Architectural or Historic Interest
  - EC11: Archaeology
  - EC13: Surface Water Run-off
  - CLF6: Informal Recreation
  - T1: Public Transport
  - T8: Parking
  - T9: Walking, Cycling and Horse Riding Routes

- Wrexham Local Planning Guidance Notes:

  - 07: Landscape and Development
  - 16: Parking Standards
  - 17: Trees and Development
  - 26: Landscape and Industrial Development
  - 30: Design
  - 32: Biodiversity and Development

- Draft Wrexham Local Development Plan (2013-2028):

  - SP2: Location of Development
  - SP5: Planning Obligations
  - SP6: Green Wedge
  - SP8: Economic Growth Employment and Enterprise
  - SP11: Transport and Accessibility
  - SP12: Design Principles and Masterplanning Framework
  - SP13: Health and Wellbeing
  - SP14: Natural Environment
  - SP15: Historic and Cultural Environment
  - SP16: Minerals Supply and Safeguarding
  - SP17: Sustainable Waste Management
  - SP18: Climate Change
  - SP19: Green Infrastructure
  - NE1: International and National Nature Conservation Designations
  - NE2: Local Designations for Nature Conservation and Geological Importance
  - NE3: Trees, Woodlands and Hedgerows
  - NE4: Area of Outstanding Natural Beauty
  - NE6: Waste Water Treatment and River Water Quality
  - DM1: Development Management Considerations
  - T1: Managing Transport Impacts
  - T2: Active Travel
  - T5: Safeguarding of Disused Railway Infrastructure

- MW1: Minerals Safeguarding
- MW5: Sustainable Waste Management

Relevant Planning History

From a review of the Council's records, the site appears to have the following planning history:

CB00808: Overhead lines; Decision: No Objections; Date: 04/01/1997.

Principal Planning Constraints

- River Dee and Bala Lake SAC Freshwater Catchment
- Ruabon Mountain Special Landscape Area
- Grade 2 BMV Land
- Clwydian Range and Dee Valley AONB
- Several Scheduled Monuments within vicinity
- Several Grade II Listed Buildings within vicinity
- Partially within Zones 2 & 3 of Flood Map for Planning [Surface Water & Small Watercourses]
- TPO No. 198 – Adjacent
- Partially within Green Wedge as per draft LDP
- Within mineral safeguarding area for sand and gravel, and clay

Validation Requirements

Any future planning application must be accompanied by the following information in order to be validated:

- Completed planning application form;
- Site location plan with the land subject of the application edged red 1:1250 / 1:2500 scale;
- Detailed existing and proposed site / block plans showing the proposals, drawn to a suitable scale;
- Proposed floor and elevation plans, drawn to a suitable scale (including all buildings/containers and means of enclosure);
- Planning application fee
- PAC Report
- Tree Report, including Arboricultural Impact Assessment
- Transport Assessment
- Noise Survey, including Acoustic Report and noise attenuation measures
- LVIA
- HIA
- Flood Consequences Assessment
- Ecology Survey
- Design & Access Statement

The Proposal

The proposed development relates to the construction of a containerised energy storage system (ESS) at the site, together with a new substation and associated ancillary infrastructure. It is noted the site (approximately 17 hectares in area) primarily comprises two agricultural field parcels lying to the north and south of the B5097 public highway. The A483 Trunk Road lies to the east of the

site, whilst the Legacy National Grid Substation, which the proposed development would connect to, lies approximately 750 metres to the west.

The proposal would store surplus electricity from the grid and would provide a means of additional electricity supply at times of peak demand with no time lag. The individual ESS units are expected to have a maximum height of approximately 3.5 metres whilst the proposed Gas Integrated Switchgear building would have a maximum height of 14 metres.

Officer Appraisal

Principle of Development

It is noted from the comprehensive supporting information submitted that the proposed ESS facility would be designed very much to support the delivery of new renewable energy projects and infrastructure; given that the UK's electricity network is undergoing a transformation, moving away from large centralised, power plants and instead to a network which sees increasing generation from more rural and dispersed areas by virtue of renewable generation projects. The proposed ESS would therefore help to achieve a more reliable energy supply; by storing excess energy generated by renewable sources and releasing it at times of peak demand. As a consequence, it is accepted that there is generally a need for such facilities, to facilitate the transition towards a net-zero economy.

Future Wales confirms that *"the UK's energy system is now undergoing significant change, with energy generation and delivery becoming more distributed in the communities and regions where the energy is used. 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 grid balancing".*

It is important to note that Future Wales identifies Wrexham and Deeside as a 'national growth area', being the main focus for investment and growth within North Wales.

Parts 5.7.8 – 5.7.12 of Planning Policy Wales provide more detailed national policy guidance on energy storage. It confirms that *"an effective electricity grid network is required to fulfil the Welsh Government's renewable and low carbon ambitions. An integrated approach should be adopted towards planning for energy developments and additional electricity grid network infrastructure. In certain circumstances, additional electricity grid network infrastructure will be needed to support the Pre-Assessed Areas in Future Wales, but also new energy generating developments more generally.*

Planning authorities should plan positively for grid infrastructure. Development plans should facilitate the grid infrastructure required to support the renewable and low carbon energy potential for the area, particularly areas identified for such development. Planning authorities should support appropriate grid developments, whether or not the developments to be connected are located within their authority.

Energy storage has an important part to play in managing the transition to a low carbon economy. The growth in energy generation from renewable sources requires the management of the resultant intermittency in supply, and energy storage can help balance supply and demand. Proposals for new storage facilities should be supported wherever possible".

It is therefore noted national planning policy strongly supports the delivery of such energy storage facilities in-principle.

The subject site is located wholly within the Ruabon Mountain SLA as per the adopted Wrexham UDP. However, within the draft Wrexham LDP, it is noted this designation is removed. It is possible that by the time a full planning application is submitted to the Local Planning Authority, the LDP may form the adopted development plan for the Wrexham LPA area.

Within the draft LDP, it is noted that the southern parcel of the site is included within a designated Green Wedge. Draft LDP Policy SP6 confirms that within designated green wedge areas, development will only be permitted which accords with national planning policy. Parts 3.64 – 3.78 of Planning Policy Wales emphasise the importance of maintaining the openness of the land within a Green Wedge, provide a presumption against inappropriate development and outline the very exceptional circumstances when other considerations outweigh the importance of protecting the openness of the land. Based upon the submitted information, it is considered the proposal would maintain the openness of the land in this instance, and thus no large-scale concerns are raised in terms of the southern part of the site lying within a Green Wedge.

The subject site currently comprises two agricultural field parcels, identified as Grade 2 Agricultural Land on the Welsh Government's Predictive Agricultural Land Classification Map. An ALC survey report (undertaken in December 2022) has been submitted as part of the enquiry, which confirms that the entirety of the site comprises best and most versatile (BMV) agricultural land. The report has been validated by the Welsh Government, and their comments are included under separate cover for your information.

Part 3.59 of Planning Policy Wales states that *"when considering the search sequence and in development plan policies and development management decisions considerable weight should be given to protecting such land from development, because of its special importance. Land in grades 1, 2 and 3a should only be developed if there is an overriding need for the development, and either previously developed land or land in lower agricultural grades is unavailable, or available lower grade land has an environmental value recognised by a landscape, wildlife, historic or archaeological designation which outweighs the agricultural considerations. If land in grades 1, 2 or 3a does need to be developed, and there is a choice between sites of different grades, development should be directed to land of the lowest grade"*.

The CPO letter dated 1st March 2022 provides further guidance, which although relating to solar array developments, the Local Planning Authority still considers is of relevance to the current proposal. It clarifies that in accordance with Planning Policy Wales, where BMV land is identified within a proposed solar PV array development, considerable weight should be given to protecting such land from development, because of its special importance, and unless other significant material considerations indicate otherwise it will be necessary to refuse permission. As noted, whilst this relates specifically to solar array developments, the LPA deem the reasoning to equally apply to the current proposals, especially as the ESS development is likely to have more permanence than an array development of a similar scale.

The enquiry has been accompanied by a comprehensive Site Selection Report, which details the reasoning behind the site's selection and the methodology used. Having reviewed the submitted report, I do consider it to be accurate and the methodology used is deemed to be appropriate. It is accepted that such an ESS development needs to be sited within close proximity to the National Grid Substation at Legacy in order for a connection to be feasible. It is noted that three potential sites were identified as potentially suitable to host the development, with the subject site being one of them. The only one of the three suitable sites which does not comprise BMV agricultural land lies a significant distance from the Legacy substation, on the other side of the A483 Trunk Road, in close proximity to a number of listed buildings. As things stand, and based upon the report submitted, it is therefore considered there would be no preferable sites which do not also comprise BMV land which could be viably developed for the ESS facility.

It is considered that given the strong support within national policy and guidance for the development of such energy storage facilities, there is an overriding need for the development.

Given that no suitable sites appear to exist which are of a lower ALC grade, it is considered likely the proposal complies with the requirements of Part 3.59 of Planning Policy Wales. I would recommend that a comprehensive assessment of the site's selection, and any other potentially suitable sites, is submitted as part of a future planning application. The specific reasons why other sites would not be suitable should also be thoroughly detailed in planning terms; including in terms of the development's viability.

In light of the above, whilst very much on balance, I would consider the principle of development in this location to be acceptable and compliant with planning policy.

Design, Scale & Landscape Visual Impact

UDP Policy PS2 states that development must not materially detrimentally affect countryside, landscape/townscape character, open space, or the quality of the natural environment. UDP Policy GDP1 (Criterion A) adds to this, and confirms that all new development should ensure that built development in its scale, design and layout, and in its use of materials and landscaping, accords with the character of the site and makes a positive contribution to the appearance of the nearby locality. Your attention is also drawn to Local Planning Guidance Notes 07, 26 and 30.

Notwithstanding the fact both field parcels benefit from moderate levels of existing screening provided by mature trees and hedgerows, given the network of public highways and public rights of way within close proximity to the subject site, it is noted the proposed development would be visible publicly.

The enquiry has been accompanied by a Preliminary Landscape and Visual Appraisal, which concludes that whilst there would be an impact upon the host landscape setting, effects would be largely localised, and with appropriate mitigation measures, there is the potential for any effects to be reduced over time. The report outlines recommended landscape mitigation measures, which are considered appropriate and should be built upon as part of any formal submission. A comprehensive hard and soft landscaping scheme should also accompany any future application.

It is noted that the submitted landscape appraisal is preliminary, and it would therefore be expected that a thorough, detailed, LVIA would accompany a subsequent application. In the absence of a detailed LVIA and comprehensive mitigation measures, I can confirm that concerns do exist regarding the visibility of the proposed development and its visual impact upon the host landscape. Ultimately, final views regarding the acceptability of the proposal in visual impact terms will be formed based upon the full LVIA.

In terms of landscape mitigation, it is considered there is potential for native species landscaping corridors to be formed along the site's western boundary and for existing screening along the site's eastern boundary (adjacent to the A483) to be bolstered. Similarly, whilst existing hedgerows lie along the site's boundaries with the B5097, it is considered that additional native species tree planting would be required in these locations to help fully assimilate the development into the open countryside.

As identified within the submission, the Clwydian Range and Dee Valley AONB is a constraint affecting the proposal. Whilst no consultation has been undertaken with the AONB as part of this pre-application enquiry, clearly the AONB Joint Committee would be consulted as part of any future planning application. You may wish to make your own pre-application enquiries to the AONB to identify any requirements or concerns prior to the submission of a formal application, at: Williams.David@denbighshire.gov.uk. Any landscape mitigation measures should therefore look to take into account the impacts of the development upon the AONB.

In terms of the proposed site layout, it is considered that an effort should be made to site the taller and more visually intrusive elements of the development within the less visible areas of the site, taking into account the site's topography and existing landscape features. It is understood from the

site meeting that the proposal would involve the use of both permeable and impermeable surfaces; with the access tracks within the site likely using permeable materials. This is supported and would help to lessen the impact upon the open countryside. The use of impermeable surfaces should be minimised as much as possible.

It was noted during discussions on-site that the container units themselves can be produced in various colours. On this occasion, it is considered an effort should be made for the units to be either green, brown or dark grey in colour, in order for them to visually assimilate into the surroundings of the site. Should white be proposed, it is likely significant concerns would be raised given that this would increase the visibility and prominence of the units within the host landscape. In-line with LPGN 26, any security fencing proposed should be dark green (or deep shades of other colours) polyester powder coated mesh, palisade or vertical bar fencing with posts to match, so as to help reduce its overall visual impact within the open countryside.

Based upon the information submitted, some concerns are expressed with regards to the potential landscape visual impact of the development, although much would depend upon the conclusions of the full LVIA which would need to be submitted as part of any formal application.

Residential Privacy & Amenity

Policy DM1 (Criterion B) of the draft LDP confirms that development proposals must not have an unacceptable effect on the amenity of the occupiers of nearby properties/land.

Given the separation distance between the application site and the nearest residential properties, it is considered there is no potential for any adverse overbearing or overshadowing impact to arise.

In terms of other potential impacts, the Public Protection Team have commented to advise that a noise survey will need to be undertaken, to include noise levels arising from day / night time activities in the vicinity of the proposed development site and the impact upon existing residential properties. The report should also look to outline a scheme of noise attenuation measures so designed to safeguard the amenity of the occupants of residential properties within the vicinity.

It has further been confirmed by Public Protection that conditions would likely be recommended as part of any future approval in relation to the submission of an Acoustic Report and a Dust Management Scheme. Standard conditions would also be recommended in terms of noise levels, construction hours and the burning of waste on-site.

Highway Safety & Parking

Wrexham Local Planning Guidance Note 16 sets-out the Authority's position with regard to parking provision. Policies GDP1 (Criterion D), T1 and T8 of the UDP, and Policies SP11, DM1, T1 and T2 of the LDP are also of relevance, as well as TAN 18.

Whilst the Local Highway Authority has been consulted as part of the enquiry, no response has been received at the time of writing. Should any future response be provided, I will ensure to pass this on for your information.

In addition, whilst not consulted as part of this pre-application enquiry, the Welsh Government Highways Directorate would be a statutory consultee as part of any future planning application, owing to the proximity of the A483 Trunk Road. You may wish to make your own enquires with the Welsh Government prior to the submission of a planning application, at: NorthandMidWalesDevelopmentControlMailbox@gov.wales.

It is noted that the site is well-located in highways terms, in close proximity to Junction 3 of the A483 Trunk Road. Full details of existing and proposed access arrangements would need to be submitted as part of any future application, and all access points onto the highway network would

need to achieve the necessary visibility, radii, gradient etc in line with Manual for Streets. Where existing access points are to be utilised, it is noted that significant improvement will be required. Notwithstanding this, given the location and nature of the site, it is considered that any overly-engineered accesses should be avoided so as not to unacceptably affect the rurality of the surroundings.

Given the amount of traffic likely to be generated during the construction of the development, a detailed Transport Assessment will need to be submitted as part of a future planning application. Details of the routing of any abnormal loads should be noted as part of the submission also.

It is expected that once the site would be operational, only limited movements would be associated with the site on a day-to-day basis, and thus any large-scale impacts are likely to be temporary in duration.

Ecology & Biodiversity

Policies PS11, GDP1 (Criterion H) and EC6 of the Wrexham UDP all seek to protect biodiversity and ecological interests within the County Borough, and also seek to improve the biodiversity value of sites and enhance their natural conservation interest and landscape quality. TAN 5 and Local Planning Guidance Note 32 also provide further detailed advice with regard to ecological matters.

The Authority's Ecology Officer has been consulted and has responded to confirm any future application must be accompanied by an Ecological Survey which contains a background data search and an appropriate survey based upon that. The officer also confirms that the subject site is within an area of known Great Crested Newt presence, so mitigation is likely required.

Furthermore, any future planning application would need to demonstrate 'biodiversity net-benefit'. As per the CPO letter dated 20/12/2022, this encourages proposals to pro-actively maintain and enhance biodiversity and ecosystems with a focus on avoidance, minimisation and mitigation of impacts within the context of the site with offsite mitigation seen as a last resort in considering the resilience of ecosystems, their diversity, extent, condition, connectivity and adaptability. This requirement is further re-enforced throughout Section 6 of Planning Policy Wales (Edition 11) and Policy 9 (Resilient Ecological Networks and Green Infrastructure) of Future Wales. In this instance, such measures could include the provision of wildlife corridors, wildflower grasslands, native species tree planting and the creation of wildlife ponds. Details of such measures should be included on the plans or elevation drawings submitted as part of a future application.

It should also be noted that the site lies wholly within the freshwater catchment of the River Dee and Bala Lake Special Area of Conservation (SAC). In January 2021, NRW introduced stringent standards on the discharge of phosphorus into the SAC. Proposed foul drainage arrangements have not been confirmed at this stage. I would advise attention be given to NRW's Planning Advice in relation to phosphate:

Natural Resources Wales / Advice to planning authorities for planning applications affecting phosphorus sensitive river Special Areas of Conservation.

It would be necessary for any proposal on-site to comply with NRW's advice, however, in the absence of further details (such as the proposed method of foul drainage, number of employees to be on-site etc) I am unable to confirm if the development would be acceptable in this regard currently. I therefore recommend that further information with regard to foul drainage arrangements and phosphates accompanies any formal application.

Trees

The subject site is bound to the north by a large Group Tree Preservation Order (No. 198). Any future application should therefore be accompanied by a Tree Survey and Arboricultural Impact Assessment, taking into account any impacts of the development upon the adjacent TPO trees.

It is further noted from the site meeting that a mature tree exists within the southern field parcel, which is currently proposed to be retained. Whilst not subject to a TPO, given the tree's attractive form and appearance, it is considered the tree should be retained if possible. The loss of the tree would be a material planning consideration, and if it is proposed to be felled to facilitate the proposals, compensatory tree planting should be proposed.

Historic Environment

Three Grade II Listed Buildings exist to the south of the subject site, and it is possible that the development could impact upon their setting. As such, I would advise that any future application is accompanied by a Heritage Impact Assessment (HIA), taking into account and assessing any likely impacts upon the character and setting of the listed buildings. The Authority's Conservation Officer would be consulted upon any subsequent planning application.

Furthermore, several Scheduled Monuments lie within the application site's vicinity, and the proposed connection between the site and Legacy Substation would need to directly cross Offa's Dyke Scheduled Monument. Both CADW and Clwyd-Powys Archaeological Trust (CPAT) would be consulted as part of a formal application, and it is possible that separate Scheduled Monument Consent would be required in addition to planning permission. You may wish to make preliminary enquiries with CADW and CPAT prior to the submission of a planning application to obtain further information.

SuDS

Given the scale of the proposed development, separate SuDS approval will also be required from the SAB prior to the commencement of any development on-site. Welsh Government guidance on this can be viewed here:

https://www.gov.wales/sites/default/files/publications/2019-06/statutory-guidance.pdf.

Surface Water Flooding

Part of the application site is located within Zones 2 and 3 of the Flood Map for Planning, for surface water and small watercourses. The Flood Map for Planning represents the most up-to-date data for flood risk in Wales and can be viewed here:

https://flood-map-for-planning.naturalresources.wales/.

Therefore, should any of the proposed built development be within or affecting the identified flood risk areas, I would advise that any future planning application should be accompanied by a Flood Consequences Assessment (FCA). In the absence of this information, I would be unable to offer any further advice in this regard at this stage. The Authority's Flood and Water Management Team would be consulted as part of any planning application on-site.

Major Applications

Article 1 of the Town and Country Planning (Development Management Procedure) (Wales) (Amendment) Order 2016 requires developers to undertake a pre-application consultation (PAC) exercise for all major development proposals (submitted in either full or outline). Major development is defined in Article 2 of the Town and Country Planning (Development Management Procedure) (Wales) Order 2012 as follows:

"Major development' ('datblygiad mawr') means development involving any one or more of the following—

(a) the winning and working of minerals or the use of land for mineral-working deposits;
(b) waste development;
(c) the provision of dwellinghouses where—
  i. the number of dwellinghouses to be provided is 10 or more; or
  ii. the development is to be carried out on a site having an area of 0.5 hectares or more and it is not known whether the development falls within sub-paragraph (c)(i);
(d) the provision of a building or buildings where the floor space to be created by the development is 1,000 square metres or more; or,
(e) development carried out on a site having an area of 1 hectare or more".

In light of the above, the proposal would be considered a 'Major Development' and a PAC would therefore need to be carried out prior to the submission of an application to the Local Planning Authority. A PAC report will also need to be submitted as part of any such application, and this is a validation requirement.

Conclusion

The proposal, as submitted, is likely to be viewed as acceptable in-principle in-line with the planning policy framework as outlined. However, much would depend upon the extent of other suitable sites within the vicinity of a lower ALC quality, the specific scale and visual impact upon the host landscape setting, and the impact upon trees and ecology. Also to be considered would be the highway safety implications of the development and the impact upon nearby historic assets. As such, given that additional information would need to be submitted as part of any future planning application, I am unable to confirm at this stage if the Local Planning Authority would be in a position to support the proposals.

I would ask that close attention is paid to the contents of this letter in-full prior to the submission of a planning application to the Local Planning Authority.

Please note that the above advice has been based upon the details submitted; if any details have been altered, left out or are inaccurate then it may affect the validity of this response. The views provided are made without prejudice to any formal decisions of the Local Planning Authority, and are the informal views of an Officer of the Council and do not commit the Council in the determination of a formal application that may be submitted.

If you have any queries or require any further assistance, please do not hesitate to contact the office at the above address or telephone number.

Yours Sincerely,

David Fitzsimon
Prif Swyddog Yr Economi a Chynllunio
Chief Officer Economy and Planning

Rydym yn croesawu gohebiaeth yn Gymraeg. Byddwn yn ymateb i unrhyw ohebiaeth yn Gymraeg ac ni fydd hyn yn arwain at unrhyw oedi.

We welcome correspondence in Welsh. We will respond to any correspondence in Welsh and this will not lead to any delay.

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