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Heritage Impact Assessment:

Land North of Bronwylfa Road, Rhostyllen, Wrexham

October 2023



Report No. 2236 By Susan Stratton





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Prepared for Innova Renewables Developments

By

Susan Stratton PhD

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Version	Date	Sections Revised	Prepared/Revised by	Checked & Authorised by
1	16/10/23	Original	Susan Stratton PhD	John Davey PhD MCIfA
2	13/11/2023	Minor Alterations to text	Dan Moore MA	John Davey PhD MCIfA

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Summary

In September 2023 Archaeology Wales (henceforth – AW) was commissioned by Innova Renewables Developments to carry out a Heritage Impact Assessment (HIA) in relation to the proposed installation and operation of an Energy Storage System (ESS) including energy storage units, substation, site access, cable connection, landscaping and ancillary infrastructure on land north of Bronwylfa Road, Rhostyllen, Wrexham. The site is centred on Grid Ref. 53.030237 / -3.0371404. The development is in the pre-application planning phase.

During pre-application consultation, three listed buildings were identified as requiring a HIA to consider the impacts of the proposals on their character and setting. These three buildings, which lie within 500m to the south-east of the site, are: Croesfoel Farmhouse, LB16571; timber framed building in yard at Croesfoel Farm, LB16573; and Gate Piers at Hafod-y-Bwch Hall, LB16572. All three buildings are Grade II listed.

Two of the listed buildings, the timber framed building at Croesfoel Farm (LB16573) and Croesfoel Farmhouse (LB16571), are located on the former Croesfoel farmstead site. Both buildings are examples of vernacular agricultural architecture. Modern refurbishment, which was carried out when the farm buildings were converted to residential use, has impacted their evidential value. They have historic value from their location on the site of the former home and smithy of the Davies brothers, although the farmhouse post-dates the Davies' time there. The third listed building, Gate Piers at Hafod-y-Bwch Hall (LB16572), consists of two stone gate piers at the entrance to the driveway from the B5605 to Hafod-y-Bwch Hall, itself a Grade II* listed building with late medieval origins.

The buildings all lie outside the Site and will not be physically impacted by the development proposals. The development proposals include embedded mitigation to reduce the visual impacts of the development. Along the southern boundary of the Site this 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 its taller elements. In the case of LB16573, this impact is considered to have a Negligible impact on the building's heritage value, while for LB16571 and LB16572 it is considered Minor.

Crynodeb Annechnegol

Ym mis Medi 2023 comisiynwyd Archaeology Wales (AW o hyn ymlaen), gan Innova Renewables Development Limited i gario allan Asesiad Effaith Treftadaeth (AET) yn gysylltiedig â'r sefydliad a'r gweithrediad arfaethedig o System Storio Egni (SSE), yn cynnwys unedau storio egni, isbwerdy, mynediad safle, cysylltiadau ceblau, tirlunio ac isadeileddau ategol, ar Dir I'r Dwyrain o Legacy Substation, Rhostyllen, Wrecsam. Mae'r Safle wedi'i chanoli ar Gyfeirnod Grid . 53.030237 / -3.0371404. Mae'r datblygiad arfaethedig yn y cyfnod ddylunio cyn-cais.

Yn ystod yr ymgynghoriad cyn cais, dynododd tri adeilad Cofrestredig a oedd yn ymofyn am AET er mwyn ystyried yr effaith y cynigion ar ei chymeriad a'i lleoliad. Mae'r tri adeilad wedi'i lleoli o fewn 500m i'r De-ddwyrain o'r safle. Maen nhw'n cynnwys; Ffermdy Croesfoel, LB16571; adeilad ffrâm bren o fewn buarth Ffarm Croesfoel, LB16573; a Glanfa Gat yn Neuadd Hafon-y-Bwch, LB16572. Mae'r tri adeilad wedi'i chofrestru i Radd II.

Mae dau adeilad cofrestredig, yr adeilad ffrâm bren ar Ffarm Croesfoel (LB16573) a ffermdy Croesfoel (16571), wedi'i lleoli ar hen safle ffarm Croesfoel. Mae'r ddau adeilad yn esiampl o bensaernïaeth werin amaethyddol. Mae ailwampio fodern a ddigwyddodd pan gafodd yr adeiladau ei thrawsnewid ar gyfer defnydd preswyl, wedi effeithio ei werth tystiolaethol. Mae ganddynt werth hanesyddol yn ei lleoliad ar safle'r hen gartref a gefail o'r brodyr Davies, er bod y ffermdy yn hwyrach na'r amser y Davies' yna. Mae'r trydydd adeilad cofrestredig, Glanfa Gat yn Neuadd Hafod-y-Bwch (LB 16572), yn cynnwys dwy lanfa gatiau craig ar fynedfa'r dreif o'r B5605 I Neuadd Hofad-y-Bwch, sef yn adeilad cofrestredig gradd II* ei hun gyda gwreiddiau canoloesol hwyr.

Mae'r adeiladau i gyd wedi'i lleoli tŷ fas o'r safle a ni fyddent yn cael ei effeithio yn ffisegol gan y datblygiad arfaethedig. Mae'r datblygiad arfaethedig yn cynnwys lliniaru wedi'i mewnblannu er mwyn lleihau'r effaith weledol o'r datblygiad. Ar hyd y ffin De'r safle yn cynnwys mwyhad bwnd priddin a chlawdd wedi'i ddylunio i sgrinio golygfeydd y SSE. Mae mapio ZTV yn dangos fe fydd yna ryw effaith weledol ar yr adeiladau cofrestredig, yn benodol ei elfennau uwch. Mewn cais LB16573 mae'r effaith wedi ei ystyried i fod yn ddibwys ar werth treftadaeth yr adeilad, ac I LB16571 a LB16572 mae'n cael ei ystyried i fod yn fan.

1. Introduction

- 1.1.1. In September 2023 Archaeology Wales (henceforth AW) was commissioned by Innova Renewables Developments to carry out a Heritage Impact Assessment (HIA) in relation to the proposed installation and operation of an Energy Storage System (ESS) including energy storage units, substation, site access, cable connection, landscaping and ancillary infrastructure on land north of Bronwylfa Road, Rhostyllen, Wrexham. The site is centred on Grid Ref. 53.030237 / -3.0371404 (Figures 1 - 2). The development is in the pre-application planning phase.
- 1.1.2. The Site is broadly triangular in shape, comprising a single agricultural field parcel and 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 the mature vegetation) whilst the A483 lies to the east which is also elevated and bounded by mature established vegetation. The B5097 / Bronwylfa Road and Cadwgan Lane, a single-track toad, forms the western boundary.
- 1.1.3. An existing vehicular access is located at the main development site's southern boundary from the B5097.
- 1.1.4. The land to the west of Cadwgan Lane comprises an L-shaped agricultural field and extends to approximately 3.4ha. It is bounded by 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.
- 1.1.5. Agricultural land and uses form the site's predominant surroundings to the north, south and west with pockets of residential properties dispersed throughout. To the east of the site (approx. 500m), on the opposite side of the A483, is the village of Rhostyllen. The Legacy National Grid Substation which the proposals will connect to, is located approximately 750m west of the site.
- 1.1.6. Wrexham City Centre is located approximately 3km north-east.
- 1.1.7. During pre-application consultation, three listed buildings were identified as requiring a HIA to consider the impacts of the proposals on their character and setting in a letter from the Chief Officer, Economy and Planning, Wrexham County Borough Council, dated 12/07/2023. These three buildings, which lie within 500m to the south-east of the site, are: Croesfoel Farmhouse, LB16571; timber framed building in yard at Croesfoel Farm, LB16573; and, Gate Piers at Hafod-y-Bwch Hall, LB16572. All three buildings are Grade II listed.
- 1.1.8. This assessment has been undertaken in line with relative legislation and in accordance with the guidance set out in *Managing Heritage Impact Assessment in Wales* (Cadw, 2017)

2. Legislation and guidance

- 2.1.1. The Planning (Listed Buildings and Conservation Areas) Act 1990 is the primary legislative instrument addressing the treatment of listed buildings through the planning process in Wales. Section 66(1) of the Planning (Listed Buildings and Conservation Areas) Act 1990 sets out the statutory duty of the decision-maker, where proposed development would affect a listed building or its setting. This includes preserving the building, its setting or any special architectural and historical features that are of interest.
- 2.1.2. National planning policy concerning the treatment of archaeological remains, listed buildings, conservation areas, and the wider historic built environment in Wales, is detailed in Chapter 6 of Planning Policy Wales, Edition 11 (February 2021). Chapter 6 of the Planning Policy outlines the policy relating to Distinctive and Natural Places which includes the Historic Environment. Paragraph 6.1.7 states that:

"It is important that the planning system looks to protect, conserve and enhance the significance of historic assets. This will include consideration of the setting of an historic asset which might extend beyond its curtilage. Any change that impacts on an historic asset or its setting should be managed in a sensitive and sustainable way."

2.1.3. The policy regarding Listed Buildings is detailed in Chapters 6.1.10 to 6.1.13 and states that there should be a presumption in favour of preservation of the designated building. It goes on to state that:

"the aim should be to find the best way to protect and enhance their special qualities, retaining them in sustainable use."

- 2.1.4. Technical Advice Note 24 (TAN 24) states that planning proposals should fully consider the impact of the development on the historic environment.
- 2.1.5. Local planning policy is outlined in the Wrexham Unitary Development Plan 1996 2011. Policy EC9 relates to Listed Buildings, and states that:

"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."

- 2.1.6. The following guidance documents were consulted in the production of this report:
 - Managing Heritage Impact Assessment in Wales, Cadw, 2017;
 - Sustainable Management of the Historic Environment in Wales (Conservation Principles), Cadw, 2011; and,
 - Principles of Cultural Heritage Impact Assessment in the UK, IEMA, IHBC and CIFA, July 2021.

3. Methodology

- 3.1.1. The production of a HIA is intended to be an iterative process to understand and minimise the impact of development proposals on the significance of historic assets within the design process. This assessment has followed the methodology outlined in Cadw's *Heritage Impact Assessment in Wales* (2017). The guidance states that the assessment "should be proportionate both to the significance of the historic asset and to the degree of change proposed" (Cadw 2017).
- 3.1.2. The identification and assessment of significance for the various historic assets draws on the four heritage values defined by Cadw in *Conservation Principles* (Cadw, 2011). These values consist of the asset's:
 - Evidential value: the extent to which the physical fabric tells how and when the historic asset was made, how it was used and how it has changed over time. There may be buried, or obscured elements associated with the historic asset which may also be an important potential source of evidence.
 - Historical value: the historic asset may illustrate a particular past way of life or be associated with a specific person or event; there may be physical evidence for these connections which it could be important to retain.
 - Aesthetic value: the design, construction and craftsmanship of the historic asset. This can also include setting and views to and from the historic asset, which may have changed through time.
 - Communal value: the historic asset may have particular significance to people for its commemorative, symbolic or spiritual value, or for the part it has played in local cultural or public life. This will be particularly important in the case of buildings in public use or sites where public access must be maintained or improved.
- 3.1.3. Assessing the significance of the asset in this way will allow any potential impacts of the proposed development, both beneficial and harmful, on the asset and its setting to be identified. In order to identify and assess the significance of the asset, the assessment draws on the following sources:
 - Historic Environment Record (HER) held by Clwyd-Powys Archaeological Trust;
 - National Monuments Record of Wales (NMRW);
 - Cof Cymru National Historic Assets of Wales, Cadw data on designated heritage assets;
 - Historic mapping, including historic Ordnance Survey maps and tithe maps;
 - Aerial photography from the Central Registers of Aerial Photography Wales (CRAPW), Cambridge University Collection of Aerial Photography (CUCAP) and the Royal Commission on the Ancient and Historical Monuments of Wales

(RCAHMW); and satellite imagery via Google Earth; and,

- Site walkover.
- 3.1.4. The heritage value of the assets has been assessed using the assessment criteria based on those provided in ICOMOS 2011 Guidance on Heritage Impact Assessments for Cultural World Heritage Properties and Highways England 2007 Design Manual for Roads and Bridges. The values are defined as:
 - Very High Assets of international importance.
 - High Assets of national importance. Assets that contribute to regional research objectives.
 - Medium Assets of regional importance. Assets that contribute to regional research objectives. Assets with lower levels of preservation.
 - Low Assets of local importance. Includes locally listed buildings and assets of limited value or poor preservation.
 - Negligible Assets with little surviving archaeological, architectural, or historic interest.
- 3.1.5. The magnitude of the potential impact of the development proposals on assets is also assessed using criteria based on the same documents. Impacts are defined as:
 - Major Total loss or substantial harm to key elements of the heritage interest of the asset or features or characteristics of the baseline (pre-development) conditions such that the adverse impact seriously affects a key element of its special interest of the asset.
 - Moderate Partial loss or harm to one or more important elements or features or characteristics of the baseline (pre-development) conditions such that post development character or composition, or attributes of baseline will be significantly changed.
 - Minor Minor loss. Change arising from the loss or alteration will be discernible but underlying character or composition or attributes of the baseline condition will be similar to pre-development circumstances or patterns.
 - Negligible A slight loss of heritage interest through limited physical impact on the asset's value or a change within its setting that would be barely perceptible and the appreciation and understanding of the heritage asset would be largely unchanged.
 - None No loss or alteration.

4. Understanding the Significance of the Assets

4.1. Timber framed building in yard at Croesfoel Farm LB16573

- 4.1.1. The timber framed building at Croesfoel Farm is believed to predate the farmhouse (LB16571), which was built in 1781, although its exact age is not known. The building is a long, low, single storey structure orientated roughly north to south. The timber frame has small square panels which have red brick nogging to the sides and rubble stone to the southern gable end (Cadw full listed building report). The slate roof is gabled.
- 4.1.2. The farm building was converted to a residential property in the early 2000s as part of a redevelopment of the whole former farm site. This included adding modern uPVC windows to the walls, small Velux windows to the roof, and a stone-built porch to the east-facing elevation (Plate 1). It was not possible to access the building at the time of the site visit, but it appears that attic rooms were added during the alterations, and conversion to residential use will have inevitably significantly changed the appearance of the interior.

Evidential Value

- 4.1.3. The exterior of the building is a relatively well-preserved example of a vernacular post-medieval farm building. Modern alterations have impacted on the building's overall appearance (for example, inserting uPVC windows into the walls). As such, it is not a good example of the type, but the majority of the exterior fabric is preserved.
- 4.1.4. The interior of the building was not recorded on the Cadw listed building description when the building was listed in 1995. It was not possible to access the interior of the building on the site visit, but the conversion to residential use will have inevitably significantly altered its appearance.
- 4.1.5. The building was originally part of a farmstead, forming the east side of a square enclosed area with a building immediately to its north (Figure 3). The former buildings to the north side of the square were demolished in the second half of the 20th century. The conversion of the farmstead into several separate residential properties with property boundaries, including a large hedge to the west of the timber framed building, detracts from understanding the building as part of a large farm complex (Plate 2).
- 4.1.6. Construction of the A483 immediately to the east of the farm in 1967 isolated the farmstead from its former fields to the west, significantly altering the building's setting.

Historical Value

4.1.7. A large part of the building's significance is derived from its association with the Davies brothers, who lived and worked at Croesfoel in the late 17th and early 18th centuries. The brothers were smiths, known for their high quality, elaborate wrought

ironwork gates and screens. The Grade I listed Gates, Screen and Piers (LB1315) at Chirk Castle and the Grade II* Screen and gates closing the formal garden at Erddig (LB17859) are examples of their work.

4.1.8. It is not clear whether the current building was built when the brothers were working at Croesfoel. Their smithy, which was located to the south of the current building, was demolished in 1967 as part of a road widening scheme.

Aesthetic value

4.1.9. The building has been well restored, and the black square pattern contrasting with the red bricks makes it an attractive building. However, modern additions detract from this appearance. Modern additions around the building, including a boundary hedge to its west, detract from its appearance and appreciation of the building.

Communal value

4.1.10. The building lies on private property and is not easily visible from public rights of way, meaning there is little opportunity for communal value. However, there may be some awareness of the importance of the Croesfoel farm site and the Davies brothers in general.

4.1.11. Heritage value

4.1.12. Overall, the heritage value of the timber framed building at Croesfoel is considered **Medium**. Its heritage value is derived in large part from being located at the former home and smithy of the Davies brothers, and probably being contemporary or predating their time there. The physical structure and appearance of the exterior of the building also contribute to its heritage value, although this has been negatively impacted by modern alterations. The contribution of the asset's setting to its heritage value has been reduced by modern development, most notably the construction of the A483.

4.2. Croesfoel Farmhouse LB16571

- 4.2.1. Croesfoel Farmhouse was built in 1781 by William Lloyd. It is built in red brick with stone detailing, including a blind traceried fanlight in pedimented case on corbels over the central entrance. It is a three storey, three bay, gable roofed farmhouse orientated roughly east to west and facing south (Plate 3). To the rear are three two storey cross-gables. The brickwork on the east-facing elevation indicates that these were a later addition (Plate 4), although they appear to have already been built by the time of the production of the tithe map in 1839.
- 4.2.2. William Lloyd was the owner of the Plas Power estate, which had been left to him by Mary Myddleton when she died in 1747. William was the son of Mary's chaplain, the Rev. Thomas Lloyd, who was also the sitting tenant of the estate when Mary purchased it in 1732. Mary was the unmarried daughter of Sir Richard Myddleton, 3rd Baronet, of Chirk Castle, and already held significant land in estates inherited from

her mother. Croesfoel farm was part of the estate's landholdings in the area, with the seat of the estate being Plas Power Hall, now demolished, c. 1.9km to the northwest (Figure 4). William left the estate to his second son, also William. On his death it passed to his nephew, Thomas Fitzhugh, who is listed as the owner of Croesfoel on the 1839 tithe apportionment. The construction of Croesfoel Farmhouse by William Lloyd was probably part of improvements to the estate holdings.

4.2.3. The tithe lists the occupier of the farm at that time as John Jackson. The farm's land was concentrated between what are now the B5605 and the B5087, extending east to Rhostyllen, with the boundary being what is now Church Street, and west not quite as far as Pentrebychan Brook (Figure 5). Scattered fields lie outside this area, including the very east of the proposed development area, what is now Bersham Cricket Club, and fields south of the B5605 opposite the farmstead. These included apportionment 83, and orchard and building. The building was a long, rectangular building adjacent to the road. It was demolished in 1967 to make way for road widening as part of the construction of the A483 (Figure 6).

Evidential Value

- 4.2.4. The house was listed in 1995 as a good example of a Georgian vernacular farmhouse. Although there appear to have been alterations to the rear of the property, the façade largely survives in good condition.
- 4.2.5. It was not possible to view the interior of the property during the site visit. However, recent property listings with interior photographs show many original features survive despite modernisation, including an inglenook fireplace, wooden panelling, and exposed beams. The property therefore retains much original fabric, character, and appearance.
- 4.2.6. The construction of the A483 in 1967 significantly detracted from the ability to appreciate the building's original function as a farmhouse within an agricultural landscape. The road cut the building off from its former fields to the east, and the road and the large trees planted along it prevent views eastwards. The farmstead is now an island surrounded by roads, with the B5605 to the south and the B5098 to the west (Plate 5). Despite the agricultural fields to the north and west, it is difficult to understand the original setting of the building in an agricultural landscape.

Historical Value

4.2.7. The property has a historic association with the Davies brothers (see paragraphs 4.1.6 and 4.1.7) due to its location, despite being built after they lived on the site. It is also linked to the Plas Power estate, which was formerly influential in the area, and more distantly to the Myddleton family and Chirk Castle.

Aesthetic value

4.2.8. The building has a relatively simple façade with low architectural interest.

4.2.9. It is located on the edge of the busy B5605/Wrexham Road and B5098 and is surrounded by a stone wall and high modern, green-painted fence, which limits visibility and is not sympathetic to the character of the building.

Communal value

4.2.10. The building's communal value is largely limited to it being a local landmark. An information plaque about the Davies brothers is attached to the boundary wall along the B5098 to the west of the building (Plate 6).

4.2.11. Heritage value

4.2.12. Overall, the heritage value of Croesfoel Farmhouse is considered **High**. Its heritage value is derived primarily from its evidential value due to the good preservation of the building, both exterior and interior. It also has indirect historical associations with the Davies brothers. The contribution of the asset's setting to its heritage value, both as part of a group of farm buildings and as lying within an agricultural landscape, has been reduced by modern development, most notably the construction of the A483.

4.3. Gate Piers at Hafod-y-Bwch Hall LB16572

- 4.3.1. The Gate Piers at Hafod-y-Bwch Hall are situated on the south side of the B5605/Wrexham Road at the entrance to the driveway to Hafod -y-Bwch Hall (Plate 7). The Hall itself has late medieval origins and is Grade II* listed and an adjacent timber framed barn is Grade II listed. Hafod-y-Bwch was a small independent estate that was incorporated into the Plas Power holdings. On the 1839 tithe apportionment it is listed as being owned by Thomas Fitzhugh.
- 4.3.2. The gate piers are square columns of ashlar which have a projecting moulded cornice and capital with large ball finial (Plate 8). The locations of the former metal gate fittings are still visible.

Evidential Value

- 4.3.3. The gate piers are an example of ornamental gate piers to a small estate. The southwestern of the pair is in good condition other than some discolouration of the stone. The northeastern has damage to the cornice around the capital and there appears to have been repairs made to the column using cement.
- 4.3.4. The column of the northeastern pier does not extend fully to ground level, in contrast to the southwestern. Instead, it appears to sit on a base which may have been part of the adjoining wall. The column is not properly aligned with this base, and the lower section projects slightly. This suggests that the gate pier has been moved, possibly to widen the entrance or more likely due to the widening of the B5605 in 1967. Figure 6 shows how the modern road including a lay-by area expanded to the south. The pier's location is therefore not representative of the original gateway, although it is likely to be a minor change.

Historical Value

- 4.3.5. The gate piers are part of Hafod-y-Bwch, which was a small independent estate that was later incorporated into the Plas Power holdings. A large part of the gate piers' heritage value is derived from group value with the other estate buildings.
- 4.3.6. Hafod-y-Bwch Hall originated as a late medieval timber framed hall-house. A crosswing was added, probably in the late 16th century, and then two short parallel wings were added in the early 17th century (Cadw listed building description). The estate was not associated with any notable families.

Aesthetic value

- 4.3.7. The gate piers are simple but attractive stone structures. There has been some damage to the stonework, especially the northeastern, and there is also discolouration of the stone.
- 4.3.8. The gate piers are located in an unattractive setting, dominated by the busy B5605 and with poorly maintained verges and hedgerow to each side. Large trees behind the gate, which line the driveway to the Hall, overbear and detract from the gates.

Communal value

4.3.9. The gate piers have limited communal value as a local landmark.

4.3.10. Heritage value

4.3.11. Overall, the heritage value of the gate piers at Hafod-y-Bwch Hall is considered **Medium**. Its heritage value is largely derived from its group value as part of the Hafod-y-Bwch estate, and the physical structure of the piers themselves.

5. The Development Proposals and Their Impacts

5.1. Summary of Development Proposals

- 5.1.1. The proposed ESS will be based upon the latest energy storage 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.
- 5.1.2. TThe UK has a legally binding target to achieve Net Zero by 2050 and has committed to fully decarbonising the electricity network by 2035. As a result, many low carbon and renewable energy generation is needed across the UK. Renewable energy generation is however intermittent, and Energy Storage Systems are therefore required to provide a balancing service to the National Grid, facilitating the transition to renewable energy sources. These projects are therefore a crucial component of achieving Net Zero.
- 5.1.3. The Energy Storage units will be laid out in rows with intervening access areas. The

units will sit on concrete slabs or supporting feet. Internal access tracks will comprise crushed stone and the access road for the abnormal load will be asphalt. The Energy Storage units will use LFP (Lithium Iron Phosphate) technology 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.

- 5.1.4. The associated MV skids are sited alongside the Energy Storage units and connect in groups to 33kV transformer bays distributed evenly throughout the main site. The substation compound is proposed to be located on the north-western corner of the main site.
- 5.1.5. Remaining areas within the main site, outside of the fence line will be landscaped to create and enhance ecological habitat and enhance the visual quality of the area. Woodland planting will be provided on the western and southern boundaries and adjacent to the existing PRoW to help screen the proposals from the surroundings, as well as bunding along western/southern/eastern boundaries. An attenuation basin is included on the eastern part of the main site for sustainable drainage.
- 5.1.6. 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. 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.
- 5.1.7 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;
 - Access from the adopted highway;
 - Internal access road and crushed stone tracks;
 - Drainage infrastructure, landscape, and ecological planting; and
 - Security fencing and CCTV.

5.2 Impacts and mitigations

- 5.2.1. None of the three listed buildings lie within the proposed development area and there will be no physical impact on them or their curtilages.
- 5.2.2. The ZTV mapping (Figure 7) indicates that all three listed buildings could be visually

impacted by the proposed development.

Timber framed building in yard at Croesfoel Farm LB16573

- 5.2.3. The timber framed building at Croesfoel Farm (LB16573) is orientated roughly north south and faces west into the yard. A later brick farm building on the same orientation abuts the building to the north end and two further former barns lie north of this (Plate 9). A north-east south-west orientated barn, built in the second half of the 20th century, lies to the north-west, along the line of the B5098. All of the buildings are single storey with attics and were converted to residential use in the early 21st century.
- 5.2.4. The proposed development area lies between north and northwest of barn LB16573 and is consequently largely screened from view by the later buildings of Croesfoel Court. The ZTV mapping indicates that the aspect of the building that may be impacted is the west-facing roof. All three parts of the development may be visible, but it is most likely that there will be clear views of the GIS Hall. It was not possible to access the building on the site visit, but views from the north-western boundary of Croesfoel Court to the site could not be established, being blocked by the hedgerow along the B5098 (Plate 10).
- 5.2.5. Despite the likelihood of intervisibility between the listed building and the proposed development, the impact on the barn's heritage value is considered **Negligible**. The visibility is likely to be limited to the roof of the barn, meaning ground level views from or of the building will not be impacted.

Croesfoel Farmhouse LB16571

- 5.2.6. The site visit identified that at present the upper storey of Croesfoel Farmhouse is visible from much of the higher areas of the site, located to the centre and west (Plate 11). There is currently no visibility from the farmhouse to the site at ground level due to screening by the other farm buildings to the north. The height of some elements of the proposals would mean a greater part of the rear of the farmhouse would be impacted than is currently visible from the site, but the screening building would probably prevent views of the development from ground level.
- 5.2.7. The front of the farmhouse faces to the south, meaning the more significant views from the principal rooms will not be affected. However, views of the farmhouse from the south currently include the treeline along the rear boundary of the site in the background (see the treeline on the horizon to the left of shot, Plate 3). Parts of the proposed development will be clearly visible when viewing the building from this location, having a negative impact on its setting.
- 5.2.8. The design proposal includes embedded mitigation against visual views of the proposed development from the south. An earth bund will be constructed along the southern and western site boundary. Its highest part will be towards the west of the southern boundary, to help screen the tallest elements of the development in the western part of the site. In this area the bund will be about 3m high, while farther

east along the boundary it will be about 1m high. The bund should mean that only the taller elements on the site will be visible from the south, reducing the impact on the farmhouse's setting. Proposed hedgerow enhancement will help the site blend into the current fieldscape. With the inclusion of these mitigation measures the visual impacts on the asset are considered to be **Minor**.

Gate Piers at Hafod-y-Bwch Hall LB16572

- 5.2.9. There is currently no visibility of the site from the listed building due to a hedgerow and tall crops to the north of the B5605. However, photographs taken slightly to the east of Croesfoel Farmhouse, suggest that when there is no crop or lower crop in this field there would currently be views of the treeline along the rear of the site.
- 5.2.10. The ZTV mapping indicates that there will be visibility of some aspects of the proposed development. Views of the asset from the south, as are gained when travelling along the driveway to Hafod-y-Bwch to the main road, are likely to be negatively impacted by elements of the proposed development. The embedded mitigation described in Paragraph 5.2.8 also applies to these views, and the visual impacts are considered **Minor**.

6. Conclusions

- 6.1.1. This Heritage Impact Assessment has examined the impact of proposed installation and operation of an Energy Storage System (ESS) on Land north of Bronwylfa Road, Rhostyllen, Wrexham, on three nearby Grade II listed buildings: timber framed building at Croesfoel Farm (LB16573), Croesfoel Farmhouse (LB16571), and Gate Piers at Hafod-y-Bwch Hall (LB16572). All three buildings are located around 500m to the south/southeast of the proposed development area and will not be physically impacted.
- 6.1.2. Two of the listed buildings, the timber framed building at Croesfoel Farm (LB16573) and Croesfoel Farmhouse (LB16571), are located on the former Croesfoel farmstead site. Both buildings are examples of vernacular agricultural architecture. Modern refurbishment, which was carried out when the farm buildings were converted to residential use, has impacted their evidential value. They have historic value from their location on the site of the former home and smithy of the Davies brothers, although the farmhouse post-dates the Davies' time there. The third listed building, Gate Piers at Hafod-y-Bwch Hall (LB16572), consists of two stone gate piers at the entrance to the driveway from the B5605 to Hafod-y-Bwch Hall, itself a Grade II* listed building with late medieval origins.
- 6.1.3. The development proposals include embedded mitigation to reduce the visual impacts of the development. Along the southern boundary of the site this consists of an earthen bund, woodland planting 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 its taller elements. In the case of

LB16573, this impact is considered to have a **Negligible** impact on the building's heritage value, while for LB16571 and LB16572 it is considered **Minor**.

7. Sources

General

Cadw. 2011. Conservation Principles, Policies and Guidance for the Sustainable management of the Historic Environment in Wales.

Cadw. 2017. Heritage Impact Assessment in Wales.

Chartered Institute for Archaeologists, 2020. Principles of Cultural Heritage Impact Assessment in the UK.

Welsh Government. 2017. Technical Advice Note 24 The Historic Environment.

Welsh Government. 2021. Planning Policy Wales, Edition 11.

Websites

Cadw, https://cadw.gov.wales/advice-support/cof-cymru/search-cadw-records (accessed October 2023)

Welsh Tithe Maps, Llyfrgell Genedlaethol Cymru/National Library of Wales, https://places.library.wales/ (accessed 12.10.2023)

Maps consulted

Ordnance Survey Drawing, Cyrn y Brain, John C. Giles, 1835.

Map of the township of Eclusham Below in the parish of Wrexham and County of Denbigh, Henry Hughes, 1839.

Ordnance Survey Map, County Series, Denbighshire, 1872, 1:2,500

Ordnance Survey Map, County Series, Denbighshire, 1879, 1:10,560

Ordnance Survey Map, County Series, Denbighshire, 1898, 1:10,560

Ordnance Survey Map, County Series, Denbighshire Sheet XXVIII.SE, 1915, 1:10,560

Ordnance Survey Map, County Series, Denbighshire Sheet XXVII.SW, 1914, 1:10,560

Ordnance Survey Map, County Series, Denbighshire, 1948, 1:10,560



Figures







Figure 3. Detail of Ordnance Survey County Series, Denbighshire Sheet XXVII.SE, 1915, showing the buildings of Croesfoel farm

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Figure 4. OS Country Series Denbighshire Sheet XXVIII.SE, 1915, and Sheet XXVII.SW, 1914, showing Croesfoel in relation to the Plas Power estate

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Figure 5. Detail from the tithe map of the township of Eclusham Below in the parish of Wrexham and County of Denbigh, 1839, showing the fields of Croesfoel Farm in green.

Tithe maps held by Llyfrgell Genedlaethol Cymru/National Library of Wales.

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Figure 6. First Edition OS map of 1872 overlaid on current Google satellite imagery, showing the rerouting of the road including demolished buildings

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Plates



Plate 1: Timber framed building in yard at Croesfoel (LB16573), looking southwest.



Plate 2.View of timber framed building in yard at Croesfoel (LB16573) from B5098, looking east.



Plate 3. Croesfoel Farmhouse, LB16571, looking north-east.



Plate 4. West-facing elevation of Croesfoel Farmhouse, showing side of cross-gable addition to the left, view north-east.



Plate 5. View of Croesfoel Farmhouse on the junction of the B5605 and B5098, looking north-east.



Plate 6. Plaque commemorating the Davies brothers on boundary wall at Croesfoel, looking east.



Plate 7. Gate piers at Hafod-y-Bwch, LB16572, looking south.



Plate 8. Gate piers at Hafod-y-Bwch, LB16572, looking south-east.



Plate 9. Looking south from the entrance of Croesfoel Court on the B5098, showing the later buildings that screen views of the timber framed barn LB16573. The rear of Croesfoel Farmhouse is visible to the centre of shot.



Plate 10. View north from the northern boundary of Croesfoel Court towards the proposed development area.



Plate 11. View of the roof and upper storey of Croesfoel Farmhouse from the highest point of the development area, looking south-east.



Appendix I: Innova Renewables Developments Proposed Development Plans



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KEY:			
	Developr	nent Boundary	
	Landlord'	s Property	
	Cable Ro	oute A	
	Cable Rc	oute B	
	MV Skid		
	Energy St Containe	orage :r	
	400kV Sub	ostation	
	33kV Bay		
	Access Tr	rack	
	Access R	oad	
	PRoW		
	Bormissiu	Footpath	
	Bund	e roorpain	
	Attenuat	ion Basin	
	Construc	tion Compound	
	Biodiversi	ty Net Gain	
	10m Wide	e Woodland	
	Hedgero	w Enhancement	
	Fenceline	2	
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- PROPOSED MINOR CONTOURS (0.1m)
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P01 FIRST ISSUE		DF	DG	2023.08.23
Issued/Revision		Ву	Appd	YYYY.MM.DD
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