

**Canolfan Awen, Coleg Plas Dwbl
Mynachlog-ddu, Clynderwen**

Archaeological Desk-Based Assessment



Prepared for

Steve Hole Architects

On behalf of

Ruskin Mill Trust



**- BLACK MOUNTAINS ARCHAEOLOGY -
- ARCHAEOLEG MYNYDD DU -**

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Crynodeb/Summary

Comisiynwyd Archeoleg Mynydd Du Cyf gan Steve Hole Architects o 7 Northfield Road, Arberth, Sir Benfro, SA67 7AA ar rhan Ruskin Mill Trust i lunio asesiad desg (AD) archeolegol cyn datblygiad arfaethedig yng Ngholeg Plas Dwbl, Mynachlog-ddu, Clunderwen, Sir Benfro, SA66 7SE. Bydd y datblygiad arfaethedig yn golygu codi canolfan menter gymdeithasol o'r enw Canolfan Awen, tua 440m i'r gogledd-orllewin o adeiladau presennol y coleg yn ogystal ag adleoli'r fynedfa ogleddol bresennol.

Mewn ymateb i ymholiad cyn ymgeisio (PA/20/0098) a gyflwynwyd gan Steve Hole Architects, argymhellodd cynghorwyr archeolegol Awdurdod Parc Cenedlaethol Arfordir Penfro (Ymddiriedolaeth Archeolegol Dyfed) y dylid AD cael ei ddarparu i gefnogi'r cais cynllunio. Bwriad yr AD hwn yw sicrhau bod yr adnodd archeolegol o fewn ardal y datblygiad arfaethedig yn cael ei ddeall yn llawn a bod mesurau lliniaru addas yn cael eu hystyried er mwyn gwarchod yr amgylchedd hanesyddol.

Mae'r AD wedi nodi effeithiau uniongyrchol ac anuniongyrchol posibl y datblygiad arfaethedig ac wedi gwerthuso gosodiad ac arwyddocâd asedau treftadaeth gwerth uchel. Mae'r asesiad wedi dod i'r casgliad y bydd y datblygiad yn effeithio'n uniongyrchol ar ddau ased treftadaeth – Fferm Plas Dwbl (ID1) a Thracffordd Fferm Plas Dwbl (ID2). Argymhellir yma y dylid gosod briff gwyllo archeolegol ar yr holl waith treiddio i'r ddaear mewn cysylltiad â'r datblygiad arfaethedig, a gynhelir yn unol â Safon a Chanllawiau ar gyfer Briff Gwyllo Archeolegol gan y Chartered Institute for Archaeologists (CIfA).

Paratowyd yr AD archeolegol wedi'i baratoi i safonau proffesiynol (a bwriedir iddo fodloni) safonau proffesiynol Safon a Chanllawiau ar gyfer Asesiad Archeolegol Desg gan CIfA.

Black Mountains Archaeology were commissioned by Steve Hole Architects LLP of 7 Northfield Road, Narberth, Pembrokeshire, SA67 7AA on behalf of Ruskin Mill Trust to compile an archaeological desk-based assessment (DBA) in advance of a proposed development at Coleg Plas Dwbl, Mynachlog-ddu, Clynderwen, Pembrokeshire, SA66 7SE. The proposed development involves the erection of a social enterprise centre, known as Canolfan Awen, approximately 440m northwest of the existing college buildings as well as the relocation of the existing northern access.

In response to a pre-application enquiry (PA/20/0098) submitted by Steve Hole Architects LLP, the archaeological advisers to the Pembrokeshire Coast National Park Authority (Dyfed Archaeological Trust) recommended that a DBA be provided in support of the planning application. This DBA is intended to ensure that the archaeological resource within the area of the proposed development is fully understood and that suitable mitigations are considered in order to protect the historic environment.

The DBA has identified the potential direct and indirect effects of the proposed development and has evaluated the setting and significance of high value heritage assets. The assessment has concluded that two heritage assets will be directly impacted by the development – Plas Dwbl Farm (ID1) and Plas Dwbl Farm Trackway (ID2).

It is recommended that an archaeological watching brief be applied to all ground penetrating works in connection with the proposed development, which will be conducted in accordance with the Chartered Institute for Archaeologists' (CIfA) Standard and Guidance for an Archaeological Watching Brief (published 2014, revised 2020). This DBA has been prepared to (and is intended to meet) the professional standards of CIfA's Standard and Guidance for an Archaeological Desk-based Assessment (published 2014, revised 2020).

Acknowledgement and Copyright

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List of Abbreviations

ASIDOHL2:	Assessment of the Significance of the Impact of Development on the Historic Landscape
CIfA:	Chartered Institute for Archaeologists
DAT:	Dyfed Archaeological Trust
DBA:	Desk-based Assessment
GIS:	Geographic Information System
HER:	Historic Environment Record (Held by DAT)
LiDAR:	Light Detection and Ranging
NMR:	National Monument Record (Held by RCAHMW)
OS:	Ordnance Survey
RCAHMW:	Royal Commission on the Ancient and Historical Monuments of Wales
TAN:	Technical Advice Note
WWI:	World War I
WWII:	World War II
ZTV:	Zone of Theoretical Visibility

1 Introduction

1.1 Project Background and Proposals

- 1.1.1 Black Mountains Archaeology/Archeoleg Mynydd Du Cyf were commissioned by Steve Hole Architects of 7 Northfield Road, Narberth, Pembrokeshire, SA67 7AA on behalf of Ruskin Mill Trust to compile an archaeological desk-based assessment (DBA) in advance of a proposed development at Coleg Plas Dwbl, Mynachlog-ddu, Clynderwen, Pembrokeshire, SA66 7SE (Figure 1). The proposed development involves the erection of a social enterprise centre, known as Canolfan Awen, approximately 440m northwest of the existing college buildings. In terms of form, Canolfan Awen will have a circular footprint, covering an area measuring approximately 40m in diameter. Towards the southeast edge of the building will be an arc shaped carpark area, which will be accessed via the existing trackway leading into Coleg Plas Dwbl from the north. Furthermore, the proposed development will involve the relocation of the existing main access route into the grounds of Coleg Plas Dwbl 32m southward, which will measure 5.5m in width. A pre-application enquiry was submitted by Steve Hole Architects to the Pembrokeshire Coast National Park Authority under the reference number PA/20/0098.
- 1.1.2 In response to the pre-application enquiry, the archaeological advisers to the Pembrokeshire Coast National Park Authority (DAT) recommended that a DBA be provided in support of the planning application. This DBA is intended to ensure that the archaeological resource within the area of the proposed development is fully understood and that suitable mitigations are considered in order to protect the historic environment. After consultation with both Zoe Bevans-Rice of Dyfed Archaeological Trust and Neil Maylan of Cadw, it was agreed that the study area for statutory designated sites would comprise a 3km radius surrounding the development area. Cadw (Neil Maylan) confirmed that whilst the proposed development is situated within the Preseli Registered Historic Landscape (HLW(D)7), an Assessment of the Significance of the Impact of Development on the Historic Landscape (ASIDOHL2) would not be required.
- 1.1.3 In preparation for the DBA, an archaeological specification (Morgan 2022) was submitted to the archaeological adviser to the Pembrokeshire Coast National Park (Zoe Bevans-Rice) on the 22nd February 2022.
- 1.1.4 The present report sets out the requirements for a DBA in accordance with the ClfA's *Standard and Guidance for Historic Environment Desk-based Assessment* (published 2014, updated 2017 and 2020).

1.2 Objectives

- 1.2.1 The purpose of an archaeological desk-based assessment (DBA) as set out by the Chartered Institute for Archaeologists' *Standard and Guidance for Historic Environment Desk-based Assessment* (published 2014, revised 2020) is to gain an understanding of the historic environment resource in order to formulate as required:

- an assessment of the potential for heritage assets to survive within the area of study.
- an assessment of the significance of the known or predicted heritage assets considering their archaeological, historic, architectural and artistic interests.
- strategies for further evaluation (whether intrusive or not), where the nature, extent or significance of the resource is not sufficiently well defined.
- an assessment of the impact of the proposed development or other land use changes on the significance of the heritage assets and their settings.
- strategies to conserve the significance of heritage assets, and their settings.
- design strategies to ensure that the new development makes a positive contribution to the character and local distinctiveness of the historic environment and local place-shaping.
- proposals for further archaeological investigation within a programme of research, whether undertaken in response to a threat or not.

1.2.2 To this we can further add that the objectives of desk-based assessment are:

- to assess the available information to determine the extent and character of heritage assets, in local, regional and national contexts.
- to assess the significance of heritage assets considering all of the cultural heritage values that people associate with it, or which prompt them to respond to it.
- to assess the impact (physical or visual) on heritage assets and their setting.
- To carefully consider and present mitigation recommendations aimed at reducing the impact of the new development on heritage assets and their settings.
- Finally, to present this information in a written report and the preparation and deposition of an archive of data generated by the assessment in line with professional standards.

1.3 Legislative Framework

1.3.1 Planning legislation is set out in the *Town and Country Planning Act 1990*. *Planning Policy Wales (PPW 11th Edition)* sets out the land use planning policies of the Welsh Government. Chapter 6 sets out the Welsh Government's policy towards the historic environment. It states "The planning system must take into account the Welsh Government's objectives to protect, conserve, promote and enhance the historic environment as a resource for the general well-being of present and future generations. The historic environment is a finite, non-renewable and shared resource and a vital and integral part of the historical and cultural identity of Wales. It contributes to economic vitality and culture, civic pride, local distinctiveness and the quality of Welsh life. The historic environment can only be maintained as a resource for future generations if the individual historic assets are protected and conserved. Cadw's published *Conservation Principles* highlights the need to base decisions on an

understanding of the impact a proposal may have on the significance of an historic asset.” (PPW 2021, 126).

- 1.3.2 Underpinning PPW are a series of legislative powers and Technical Advice Notes (TANs). The *Planning (Wales) Act 2015* sets out a series of legislative changes to deliver reform of the planning system in Wales, to ensure that it is fair, resilient and enables development. The 2015 Act also introduces a mandatory requirement to undertake pre-application consultation for certain types of development. The *Town and Country Planning (Development Management Procedure) (Wales) (Amendment) Order 2016* defines in *Schedule 4(I)* the parameters and definitions for the requirement of pre-application consultation by Welsh Ministers, particularly in response to the effect of statutory designated monuments, buildings, and parks and gardens.
- 1.3.3 Any works affecting an ancient monument and its setting are protected through implementation of the *Ancient Monument and Archaeological Areas Act 1979*. In Wales the 1979 Act has been strengthened by *The Historic Environment (Wales) Act 2016*. The 2016 Act makes important improvements for the protection and management of the Welsh historic environment. It also stands at the centre of an integrated package of secondary legislation (Annexes 1-6), new and updated planning policy and advice, and best-practice guidance on a wide range of topics (*TAN 24 Historic Environment*). Taken together, these support and promote the careful management of change in the historic environment in accordance with current conservation philosophy and practice.
- 1.3.4 Following adoption of the TAN 24 Historic Environment on 31st May 2017, Welsh Office Circulars 60/96 Planning and the Historic Environment: Archaeology; 61/96 Planning and the Historic Environment: Historic Buildings and Conservation Areas; and 1/98 Planning and the Historic Environment have been cancelled.
- 1.3.5 The *Ancient Monument and Archaeological Areas Act 1979* and *The Historic Environment (Wales) Act 2016* sets out a presumption in favour of preservation *in-situ* concerning sites and monuments of national importance (scheduled/listed), and there exists in the current *Planning Policy Wales (Chapter 6)* a presumption in favour of preservation *in-situ* of all types of heritage assets.
- 1.3.6 Cadw are the Welsh Government body responsible for determining applications for Scheduled Monument Consent (SMC) and is a statutory consultee for certain types of Developments affecting Scheduled Ancient Monuments, World Heritage Sites and Registered Historic Parks, Gardens and Landscapes, Strategic Environmental Assessments and scoping opinions for Environmental Impact Assessments (PPW 2016). Cadw published their *Conservation Principles for the Sustainable Management of the Historic Environment in Wales* in 2011. These principles provide the basis upon which Cadw discharges its statutory duties, makes decisions or offers advice about changes to historic assets. Cadw further advise that the *Conservation Principles* should also be used by others (including owners, developers and other public bodies) to assess the potential impacts of a development proposal on the significance of any

historic asset/assets and to assist in decision-making where the historic environment is affected by the planning process (PPW 2021).

- 1.3.7 Important or historic hedgerows (and boundaries) are protected under *The Environment Act 1995* (section 95). *The Hedgerow Regulations 1997* (under the 1995 Act) provides protection and guidance for those development/agricultural activities outside of planning. The regulations permit the removal of any hedgerow (including any length of hedgerow) for ‘carrying out Development for which planning permission has been granted’ provided the loss of the hedgerow has been properly assessed against the benefits of the proposed Development.
- 1.3.8 Following review in 1998, a simplified set of assessment criteria was proposed where all substantially complete boundaries (hedgerows) that predate 1845 were to be afforded consideration/protection. The Environment, Transport and Regional Affairs Committee’s Report ‘*The Protection of Field Boundaries*’ 1999 was acknowledged by the government, but no amendments were made to the 1997 regulations. Judicial Review of the application in 2002 of the regulations (Flintshire County Council v NAW and Mr J T Morris) has clarified the interpretation of some of the criteria (see *The Hedgerow Regulations 1997, Schedule 1, Part 2 Archaeology and History* and Section 1.5 below).

2 Methodology

2.1 Identifying Heritage Assets for Assessment

- 2.1.1 The assessment of the historic environment includes the interrogation of a number of sources (including, but not limited to):
- Statutory designated monuments, buildings and landscapes (including conservation areas, parks, gardens and battlefields).
 - Regional Historic Environment Record (HER).
 - National Monuments Record (NMR).
 - Aerial photographic archives.
 - Local and national archives.
 - Cartographic and documentary sources.
- 2.1.2 Information on statutory designated sites (World Heritage Sites, Scheduled Ancient Monuments, Listed Buildings, Conservation Areas, Registered Landscapes, Battlefields, Parks and Gardens) were obtained from Cadw on the 18th January 2022 and accessed through Cof Cymru - National Historic Assets of Wales (a Welsh Government online mapping resource). Information recorded on the National Monuments Record (NMR) were obtained from the RCAHMW on the 18th January 2022 and information recorded on the Regional Historic Environment Record were obtained from Dyfed Archaeological Trust on the 10th February 2022 (RCAHMW

License No RCPL2/3/88/002 and DAT Enquiry No 142). Cartographic and documentary sources were also consulted as would the national and local archives.

2.1.3 The assessment reviewed the existing information pertaining to the Historic Environment based on a primary study area comprising a 250m radius centred on National Grid Reference (NGR) SN 13754 29310 (the proposed location of Canolfen Awen). A selection of statutory designated sites were also assessed within a secondary study area comprising a 3km radius centred on the same NGR, in order to assess the impact of the proposed development on their settings. The 3km extent of this secondary study area was agreed after consultation with both Zoe Bevans-Rice of DAT and Neil Maylan of Cadw.

2.1.4 Important or historic hedgerows will be assessed according to current legislation that details the following criteria:

- The hedgerow marks the boundary, or part of the boundary, of at least one historic parish or township; and for this purpose, “historic” means existing before 1850.
- The hedgerow incorporates an archaeological feature which is (a) included in the schedule of monuments compiled by the Secretary of State under Section 1 (schedule of monuments) of the Ancient Monuments and Archaeological Areas Act 1979(7); or (b) recorded at the relevant date in a Historic Environment Record.
- The hedgerow (a) is situated wholly or partly within an archaeological site included or recorded as mentioned in paragraph 2 or on land adjacent to and associated with such a site; and (b) is associated with any monument or feature on that site.
- The hedgerow (a) marks the boundary of a pre-1600 AD estate or manor recorded at the relevant date in a Historic Environment Record or in a document held at that date at a Record Office; or (b) is visibly related to any building or other feature of such an estate or manor.
- The hedgerow (a) is recorded in a document held at the relevant date at a Record Office as an integral part of a field system pre-dating the Inclosure Acts; or (b) is part of, or visibly related to, any building or other feature associated with such a system, and that system (i) is substantially complete; or (ii) is of a pattern which is recorded in a document prepared before the relevant date by a local planning authority, within the meaning of the 1990 Act, for the purposes of development control within the authority’s area, as a key landscape characteristic.
- There are other criteria relating to rights of way and ecology.

2.2 Assessing the Value of Heritage Assets

2.2.1 Heritage assets are categorised according to the only values that are nationally agreed upon in the Department of Transport/Welsh Office/Scottish Office *Design Manual for Roads and Bridges Vol. 11 Section 3 Part 2 (HA 208/07 Cultural Heritage) 2007, amended 2009 (DMRB 2007), as amended January 2020 LA 106 Revision 1*. A cultural heritage asset is an individual archaeological site or building, a monument or group of

monuments, an historic building or group of buildings, an historic landscape etc., which, together with its setting, can be considered as a unit for assessment. Heritage assets are assessed according to the following criteria:

2.2.2 Understanding value is subjective beyond any statutory or registered designation and is based on the professional experience and knowledge of the assessor. Other factors do contribute to the overall assessment of value (and significance) of heritage assets and the assessment criteria below contributes to an overall robust assessment framework.

Value			Criteria
A*	Very High	International/National	World Heritage Sites (including nominated sites). Assets of acknowledged international importance. Assets that can contribute significantly to acknowledged international research objectives.
A	High	National	Scheduled Monuments (including proposed sites). Undesignated assets of schedulable quality and importance. Assets that can contribute significantly to acknowledged national research objectives.
B	Medium	Regional	Designated or undesignated assets that contribute to regional research objectives.
C	Low	Local	Designated and undesignated assets of local importance. Assets compromised by poor preservation and/or poor survival of contextual associations. Assets of limited value, but with potential to contribute to local research objectives.
D	Negligible	Local	Assets with very little or no surviving archaeological interest.
U	Unknown	Unknown	The importance of the resource has not been ascertained.

Table 1. Factors for assessing the value of heritage assets (after Table 5.1 DMRB 2009)

2.2.3 The criteria below are adapted from notes made in Annex 2 of the DMRB Vol. 11 Section 3 Part 2 (HA 208/07 Cultural Heritage) 2007 that refer to the Scheduling Criteria as set out by the *Ancient Monument and Archaeological Areas Act 1979* and The *Historic Environment (Wales) Act 2016* and finally Stage 4 Evaluating Relative Importance as set out in *ASIDOHL2, Guide to Good Practice on Using the Register of Landscapes of Historic Interest in Wales in the Planning and Development Process* (2nd Edition 2007). An ASIDOHL2 is a staged approach to assessing the significance of impact to historic landscapes (and constituent character areas) as characterised in the Register of Landscapes of Outstanding Historic Interest in Wales (Pt 2.1, 1998) and Register of Landscapes of Special Historic Interest in Wales (Pt 2.2, 2001) to the method set out in the *Guide to Good Practice on Using the Register of Landscapes of Historic Interest in Wales in the Planning and Development Process* (revised 2nd Edition 2007).

- 2.2.4 While comprehensive, the criteria should not be regarded as definitive, rather they are indicators which contribute to a wider judgement based on the professional experience of the assessor and the circumstance and context of the assessment and heritage asset.
- 2.2.5 **Rarity:** there are some monument categories, which in certain periods are so scarce that all surviving examples which still retain some archaeological potential should be preserved. This should be assessed in relation to what survives today, since elements of a once common type may now be rare. The criteria for assessment are:
- Very high: sole survivor of its type.
 - High: very few sites of this type are known.
 - Medium: the site is not unusual but cannot be considered common.
 - Low: the site is quite common.
- 2.2.6 **Documentation and association:** the significance of a heritage asset may be enhanced by the existence of records of previous investigations or, in the case of more recent monuments, by the supporting evidence of contemporary written records. Furthermore, any important historical associations relating to the heritage asset, such as institutions, cultural figures, movements or events, will enhance value. The survival of documentation and/or historic association that increases our understanding of a heritage asset will raise its importance, though this is difficult to quantify owing to the extremely varied nature of documentary and historical material. Therefore, a professional judgment is given based on the actual amount or importance of evidence and its academic value. The criteria for assessment are:
- Very High: a highly significant, authentic and nationally well-known association(s) and/or complete documentary record, or exceptionally important sources available.
 - High: a significant, authentic and regionally well-known association(s) and/or considerable quantity of relevant material, or highly important sources available.
 - Moderate: an authentic, but less significant, perhaps locally well-known association(s) and/or some relevant material, or moderately important sources available.
 - Low: unauthenticated or a little-known association(s) and/or little relevant material, or only modestly important sources available.
 - None: no known associations and/or relevant material available.
- 2.2.7 **Group Value:** relates to the diversity (or similarity) of elements including their structural and functional coherence. The value of a single monument (such as a field system) may be greatly enhanced by its association with related contemporary monuments (such as a settlement and cemetery) or with monuments of different periods. The criteria for assessment are:

- Very high: largely complete interconnected complex of heritage assets or landscapes (e.g UNESCO World Heritage Site).
- High: significant survival of an interconnected complex of heritage assets.
- Moderate: some surviving elements of an interconnected complex of heritage assets; some disintegration has occurred.
- Low: single or unconnected/unrelated groups of heritage assets.

2.2.8 **Survival/Condition:** the survival of a monument's archaeological potential both above and below ground is a particularly important consideration and should be assessed in relation to its present condition and surviving features. The Historic Environment Records (HERs) of the four Welsh Archaeological Trusts note the condition of sites according to the following criteria:

- Intact: the site is intact.
- Near intact: the site is nearly intact.
- Damaged: the site has been moderately damaged.
- Near Destroyed: the site has nearly been destroyed.
- Destroyed: the site has been destroyed.
- Restored: the site has been restored.
- Moved: the site has been moved (usually finds).
- Not known: the condition of the site is not known.

2.2.9 To these criteria, we can add the following assessment:

- Very Good: elements surviving in very good condition for their class.
- Good: elements surviving in good or above average condition for their class.
- Moderate: elements surviving in moderate or average condition for their class.
- Fair elements surviving in fair or below average condition for their class.
- Poor elements surviving in poor condition for their class.

2.3 Assessing Direct Impacts

2.3.1 **Direct Impacts** are outcomes resulting from an assessment of the impact of the proposed development on the heritage asset or landscape. The direct impact of a course of action (e.g. development) can only be assessed once the assessment criteria above has been completed and potential outcomes fully understood (as far as any development proposal or construction design is reasonably understood). The direct impact of the Proposed Scheme on heritage assets has been assessed using the following criteria:

- Very high: total loss of the integrity of the heritage asset(s).
- High: significant loss of integrity to the heritage asset(s), significant reduction of group and rarity values.
- Moderate: some loss of integrity to heritage asset(s) and reduction in value.
- Low: slight loss of integrity to heritage asset(s) and value.
- None: no perceived or identified effect, or loss in value.
- Beneficial: Development will protect, preserve or enhance the heritage asset resulting in an increase in value.

Effect	Category					
	A*	A	B	C	D	U
Very High	Very Significant	Very Significant	Very Significant	Significant	Significant	Unknown
High	Very Significant	Very Significant	Very Significant	Significant	Significant	Unknown
Moderate	Very Significant	Very Significant	Significant	Significant	Slight Significance	Unknown
Low	Very Significant	Significant	Significant	Slight Significance	Slight Significance	Unknown
None	None	None	None	None	None	None

Table 2. Significance of effect to heritage assets (matrix)

2.4 Assessing Indirect (Visual) Impacts

2.4.1 Assessing **Indirect (Visual) Impacts** to heritage assets is intrinsically linked to setting and significance (see section 1.6). The criteria below are adapted from standard EIA evaluation criteria and Stage 3 Assessment of Indirect Impacts of Development as set out in *ASIDOHL2, Guide to Good Practice on Using the Register of Landscapes of Historic Interest in Wales in the Planning and Development Process* (2nd Edition 2007). Assessment is confined to sites of International, National and in some cases Regional value.

- Very severe: the key views and/or essential lines of sight to and from the heritage asset are dominated or obscured by the Development resulting in severance of cultural heritage links.
- Severe: the key views and/or essential lines of sight to and from the heritage asset are interrupted by the Development resulting in partial severance of cultural heritage links.
- Considerable: the key views and/or essential lines of sight to and from the heritage asset are significantly visible resulting in limited severance of cultural heritage links.
- Moderate: the key views and/or essential lines of sight to and from the heritage asset are visible resulting in some severance of cultural heritage links.
- Slight: the key views and/or essential lines of sight to and from the heritage asset are noticeable resulting in diminished cultural heritage links.

- Very slight: the key views and/or essential lines of sight to and from the heritage asset are noticeable resulting in little discernible severance of cultural heritage links.
- None: the key views and/or essential lines of sight to and from the heritage asset are not noticeable resulting in no severance of cultural heritage links.

2.5 Assessing Impact to Setting and Significance

2.5.1 The *Setting of Historic Assets in Wales 2017 (The Historic Environment (Wales) Act 2016, Annex 6)* explains what **setting** is, how it contributes to the **significance** of a historic asset and why it is important. It also outlines the principles used to assess the potential impact of development or land management proposals on the settings of World Heritage Sites, Ancient Monuments (scheduled and unscheduled), Listed Buildings, Registered Historic Landscapes, Parks and Gardens, and Conservation Areas. These principles, however, are equally applicable to all individual historic assets, irrespective of their designation.

2.5.2 Certain major developments require pre-application consultation with the local planning authority and, where specialist advice is required, the Welsh Ministers through Cadw. Any development likely to directly or indirectly (visual) effect a statutory designated heritage asset or high value undesignated heritage asset and its setting will likely require 'consultation before grant of permission' under the *Town and Country Planning (Development Management Procedure) (Wales) (Amendment) Order 2016, schedule 4 (1)(i) and (ii)* if the proposed Development meets any of the following criteria:

- Development likely to affect the site of a registered historic park or garden or its setting.
- Development is within a registered historic landscape that requires an Environmental Impact Assessment and ASIDOHL2.
- Development likely to have an impact on the outstanding universal value of a World Heritage Site.
- Development is within a distance of 0.5 kilometres from any point of the perimeter of a scheduled monument.
- Development is within a distance of 1 kilometre from the perimeter of a scheduled monument and is 15 metres or more in height, or has an Area of 0.2 hectares or more.
- Development is within a distance of 2 kilometres from the perimeter of a scheduled monument and is 50 metres or more in height, or has an Area of 0.5 hectares or more.
- Development is within a distance of 3 kilometres from the perimeter of a scheduled monument and is 75 metres or more in height, or has an Area of 1 hectare or more.

- Development is within a distance of 5 kilometres from the perimeter of a scheduled monument and is 100 metres or more in height, or has an Area of 1 hectare or more.
- 2.5.3 An assessment of the impact of the proposed development on the setting of the statutory designated heritage asset or high value undesignated heritage asset will be required if any of the criteria in 1.5.2 above are met. The assessment of the setting of heritage assets follows the four-stage approach detailed in the *Setting of Historic Assets in Wales 2017 (The Historic Environment (Wales) Act 2016, Annex 6)*:
- Stage 1: Identify the historic assets that might be affected by a proposed change or development and their significance.
 - Stage 2: Define and analyse the settings to understand how they contribute to the ways in which the historic assets are understood, appreciated and experienced.
 - Stage 3: Evaluate the potential impact of a proposed change or Development on those settings.
 - Stage 4: Consider options to mitigate the potential impact of a proposed change or Development on those settings. The assessment of significance is intrinsically linked to the setting (see paragraphs 1.5.1 to 1.5.3 above) and value (see criteria in section 1.4 above) of a heritage asset/registered landscape, park and garden.
- 2.5.4 The significance of an historic asset embraces all of the cultural heritage values that people associate with it, or which prompt them to respond to it. These values tend to grow in strength and complexity over time, as understanding deepens and people's perceptions evolve (*Conservation Principles for the sustainable management of the historic environment in Wales 2011*, p10).
- 2.5.5 There are **four values** that need to be considered when assessing significance and these are set out in *Cadw's Conservation Principles for the sustainable management of the historic environment in Wales*:
- 2.5.6 **Evidential value:** relates to those elements of a heritage asset that can provide evidence about past human activity, including its physical remains or historic fabric. These may be visible and relatively easy to assess, or they may be buried below ground, under water or be hidden by later fabric. These remains provide the primary evidence for when and how a heritage asset was made or built, what it was used for and how it has changed over time. The unrecorded loss of historic fabric represents the destruction of the primary evidence. Additional evidential values can be gained from documentary sources, pictorial records and archaeological archives or museum collections. To assess the significance of this aspect of an asset, all this evidence needs to be gathered in a systematic way and any gaps in the evidence identified.
- 2.5.7 **Historical value:** a heritage asset might illustrate a particular aspect of past life or it might be associated with a notable family, person, event or movement. These illustrative or associative values of a heritage asset may be less tangible than its evidential value but will often connect past people, events and aspects of life with the

present. Of course, the functions of a heritage asset are likely to change over time and so the full range of changing historical values might not become clear until all the evidential values have been gathered together. Historical values are not so easily diminished by change as evidential values and are harmed only to the extent that adaptation has obliterated them or concealed them.

- 2.5.8 **Aesthetic value:** relates to the way in which people draw sensory and intellectual stimulation from a heritage asset. This might include the form of a heritage asset, its external appearance and how it lies within its setting. It can be the result of conscious design or it might be a seemingly fortuitous outcome of the way in which a heritage asset has evolved and been used over time, or it may be a combination of both. The form of an asset normally changes over time. Sometimes earlier pictorial records and written descriptions will be more powerful in many people's minds than what survives today. Some important viewpoints may be lost or screened, or access to them may be temporarily denied.
- 2.5.9 To assess this aspect of an asset, again the evidence of the present and past form must be gathered systematically. This needs to be complemented by a thorough appreciation on site of the external appearance of an asset in its setting. Inevitably understanding the aesthetic value of a heritage asset will be more subjective than the Study of its evidential and historical values. Much of it will involve trying to express the aesthetic qualities or the relative value of different parts of its form or design. It is important to seek the views of others with a knowledge and appreciation of the heritage asset on what they consider to be the significant aesthetic values.
- 2.5.10 **Communal value:** relates to the meanings that a heritage asset has for the people who relate to it, or for whom it figures in their collective experience or memory. It is closely linked to historical and aesthetic values but tends to have additional or specific aspects. Communal value might be commemorative or symbolic. For example, people might draw part of their identity or collective memory from a heritage asset, or have emotional links to it. Such values often change over time and they may be important for remembering both positive and uncomfortable events, attitudes or periods in Wales's history. Heritage assets can also have social value, acting as a source of social interaction, distinctiveness or coherence; economic value, providing a valuable source of income or employment; or they may have spiritual value, emanating from religious beliefs or modern perceptions of the spirit of a place.
- 2.5.11 The first stage of assessing significance is by understanding the value of the heritage asset by carefully considering its history, fabric and character and then comparing these values with other similarly designated or types of heritage asset locally, regionally or if necessary, nationally. The outcome of this process is a Statement of Significance, which is partly a subjective exercise based on the assessor's experience and knowledge.

3 Baseline

3.1 Location, Topography and Geology

- 3.1.1 The development area within which Canolfan Awen is to be erected is centred on NGR SN 13754 29310 and is situated 435m northwest of the main buildings of Coleg Plas Dwbl in Mynachlog-ddu, Clynderwen, Pembrokeshire (Figure 1; Plate 5 and 6). At present, the land is used for agricultural purposes and comprises a small series of arable fields straddling the southwest and northeast sides of the trackway leading from the main road running through Mynachlog-ddu towards Coleg Plas Dwbl. More specifically, the proposed development covers an area surrounding three polytunnels and an associated horticultural storage building, which are themselves bounded by NE/SW and NW/SE running hedgerows on their northern and western edges respectively. Approximately 370m northwest of the development area are the Ashera Pottery workshops and Trallwyn Holiday Cottages, while approximately 435m to the north are the buildings and fields of the Yberllan Rare Breeds business. The eastern boundary of the Gors Fawr Stone Circle Scheduled Monument (SMPe117) is, located 265m to the west on the eastern edge of the Gors Fawr marshlands, while bounding the eastern edge of the development area is the Cleddau Ddu river, which runs through the heart of Mynachlog-ddu. In addition to the erection of Canolfan Awen, the proposed development will involve the relocation of the existing main access into the ground of Coleg Plas Dwbl 32m southward, in an area now presently occupied by a large, irregularly shaped open pasture.
- 3.1.2 Clynderwen comprises a linear community with the N/S aligned A478 running through its centre. The local community is rural in character and covers an area occupied by a collection of small settlements, including the village centre of Clynderwen as well as smaller villages and parishes such as Llandissilio, Efailwen, Llangolman and Mynachlog-ddu. Topographically, Clynderwen covers a diverse landscape comprising uplands, which extend from the east side of Mynachlog-ddu towards Efailwen further south, as well as lower-lying meadows, moors, bogs, agricultural land (particularly improved pasture), and river valleys. The village of Mynachlog-ddu, including the proposed development area itself, is situated within a small basin at around 194mOD, which comprises the head of a broad moorland valley extending towards Gelli Hill to the southwest. This basin also includes the headwater of the Cleddau Ddu river. Mynachlog-ddu is overlooked from the north and west by the peaks and crests of the Preseli Hills, including those of Carn Menyn, Carn Bica, Carn Siân, Foel Feddau and, most notably, Foel Cwmcerwyn.
- 3.1.3 The proposed development area is situated within the Pembrokeshire Coast National Park. In terms of the overall characterisation of the National Park, the proposed development area occupies one of four distinct sections – the Preseli Hills – located to the north of the park. The other three sections include Caldey Island to the south, St Bride's Bay to the west, and the Daugleddau estuary at its heart, into which the Rivers Cleddau and Cleddau Ddu flow.

3.1.4 The superficial geological deposits within and around the proposed development area are relatively diverse. Primarily, these deposits comprise Malvern loams, which are well drained and stony in composition. Yet within the local river valleys are Wilcocks 1 loams, which are seasonally waterlogged, fine in texture and highly acidic if not treated with lime (SSEW 1983, 14 and 18). The underlying bedrock deposits comprise Tuffaceous mudstone of the Foel Tyrch Formation, which formed approximately 466–78 million years ago during the Ordovician period in a local environment dominated by open seas and pelagic sediment (BGS 2022).

3.2 Registered Landscapes, Parks and Gardens

3.2.1 Registered Historic Landscapes

3.2.2 The proposed development area is situated within the Preseli Landscape of Outstanding Historic Interest (HLW (D) 7), which covers an area in and around the Preseli Hills. Although this landscape is defined mainly by uplands it is also punctuated by lower-lying rivers, headwaters and valleys. Indeed, the proposed development area is located at the head of one such valley. In terms of elevation, the gradient of most of the Historic Landscape varies from 100mOD at valley bottom to between 150m–250mOD at foothill level. However, the gradient increases dramatically to the north and centre of the landscape, where the ridges of the Preseli Hill are located. The highest point in this area sits at 536mOD, on the summit of Foel Cwmcerwyn to the west of Mynachlog-ddu. Referring to the history and archaeology of Preseli, Cadw have stated that it “contains a palimpsest of prehistoric relict landscapes with monuments from the Neolithic through to the Iron Age and Romano-British periods” (1998, 33). Most notably, these monuments include upland ritual and funerary sites of Neolithic and Bronze Age date; Iron Age hillforts; and Romano-British farmsteads. Moreover, Preseli is defined by medieval ecclesiastical sites in addition to extensive medieval, Post-medieval and modern enclosures and dispersed settlements.

3.2.3 No further Registered Historic Landscapes were considered for assessment as they were deemed too distant. Beyond Preseli (HLW (D) 7), the nearest Registered Historic Landscape to the development area is Newport and Carningli (HLW (D) 15), the southeast border of which is located approximately 9.5km to the northwest.

3.2.4 Registered Parks and Gardens

3.2.5 No Registered Parks and Gardens were considered for assessment as they were deemed too distant. The nearest Registered Park and Garden to the development area is Nevern, St Brynach’s Churchyard (PGW (Dy) 67 (PEM)), the southern boundary of which is situated approximately 11.9km to the northwest.

3.3 Conservation Areas

3.3.1 No Conservations Areas were considered for assessment as they were deemed too distant. The nearest Conservation Area to the proposed development is New Moat (CA 144), the northeast boundary of which is situated approximately 8.5km to the southwest.

3.4 Scheduled Monuments and Listed Buildings

3.4.1 Scheduled Monuments

3.4.2 A total of fifteen Scheduled Monuments are situated within a 3km radius of the proposed development area, all of which were considered for assessment. These Scheduled Monuments will be described below in clockwise fashion, beginning with the northernmost.

- Gors Fawr Stone Circle (SMPe117, ID1), the eastern edge of which is located 265m to the west, monument comprises the remains of a stone circle, measuring 22m in diameter and consisting of sixteen surviving stones, together with an outlying pair of standing stones (Gors Fawr Standing Stones, ID2), of Neolithic or Bronze Age date. The curtilage of this monument falls just within the 250m study area.
- Rhos Fach Standing Stone Pair (SMPe497), the southern boundary of which is located 1.2km to the north, comprises a pair of standing stones of Bronze Age date contained within an enclosed pasture on the southern edge of the Preseli Hills.
- Waun Lwyd Standing Stones (SMPe116), the southwest boundary of which is located 2.8m to the northeast, again comprises a pair of standing stones of Bronze Age date.
- Standing Stone 600m East of Dolau-Newydd (SMPe523), the southwest boundary of which is located 2.8km to the northeast, comprises a large monolith of Bronze Age date.
- Carn Besi Burial Chamber (SMCm049), the northwest boundary of which is located 2.4km to the southeast, comprises the remains of chambered tomb of Neolithic date, identified by the presence of a slumped orthostat set within a small hand-dug platform.
- Castell Garw (SMCm245), the northwest boundary of which is located 2.5km to the southeast, comprises a henge of Late Neolithic and Early Bronze Age date, identified by the presence of an intact circular bank and internal ditch.
- Cairn Circle 585m Northeast of Meini Gwyr (SMCm050), the northwest boundary of which is located 2.4km to the southeast, comprises a circular cairn of Bronze Age date surrounded by a ring of nine stones.
- Meini Gwyr (SMCm051), the northern boundary of which is located 2.7km to the south, comprises a stone circle of Bronze Age date surrounded by an outer bank and stone revetment.
- Earthwork 125m Southwest of Meini Gwyr (SMCm247) which is located 2.8km to the south, comprises a D-shaped ring cairn of Bronze Age date.
- Tumulus North of Goodwins Row, Efailwen (SMCm246), the northern boundary of which is located 3km to the south, comprises an earthen and stone-built ring cairn of Bronze Age date.

- Yr Allor (SMCm052), the northern boundary of which is located 2.7km to the south, comprises a pair of standing stones of Early Bronze Age date associated with a quartz cobbled surface, pits, postholes and the remains of a possible timber screen.
- Castell Pen-Gawsai (SMPe289), the eastern boundary of which is located 2.9km to the southwest, comprises the remains of an earthen ringwork of possible medieval date; the precise function of this ringwork is unknown.
- Standing Stone 110m Northwest of Spring Gardens (SMPe406), the eastern boundary of which is located 2.5km to the west, comprises the remains of a monolith of Bronze Age date erected within an area of rough moorland.
- Gate Standing Stone (SMPe288), the southeast boundary of which is located 2.8km to the northwest, again comprises the remains of a monolith of Bronze Age date.
- Finally, Ty-Newydd Standing Stones (SMPe121), the southeast boundary of which is located 2.6km to the northwest, comprises a pair of standing stones of Bronze Age date.

3.4.3 Listed Buildings

3.4.4 No Listed Buildings are situated within the proposed development area. Moreover, no Listed Buildings are situated within a 250m radius of the development area.

3.4.5 A total of six Listed Buildings are situated within a 3km radius of the development area. These Listed Buildings include:

- Schoolroom at Bethel Baptist Chapel (LB22766), located 1.3km to the northeast.
- Bethel Chapel (LB22758), again located 1.3km to the northeast.
- Pont yr Haiarn (LB83192), located 0.9km to the southeast.
- Telephone Call-box outside Church of Saint Dogmael (LB83193), located 1.2km to the southwest.
- Church of Saint Dogmael (LB6083), again located 1.2km to the southwest.
- Rhosfach House (LB13075), located 2.6km to the southwest.

3.5 Undesignated Heritage Assets

3.5.1 There are no undesignated heritage assets within the proposed development area and only two identified within the 250m study area. Plas Dwbl Military Camp (DAT110402), which was constructed during WWII for the purposes of stationing American troops, is located c.170m S of the development area. Meanwhile Penrhos Enclosure (DAT1197) is located c.240m from the development area and falls within the curtilage of the Gors Fawr Stone Circle Scheduled Monument (SMPe117).

3.6 Archaeology and History

3.6.1 Mesolithic

3.6.2 Little is known of the history of the Preseli area prior to the Neolithic period, aside from the fact that the hills have been systematically quarried for metamorphosed mudstone from at least this time for the purpose of manufacturing tools and jewellery (Darvill and Wainwright 2014; Darvill and Wainwright 2016, 189). However, the earliest known Mesolithic site in Wales is located at Nab Head nearby, on the western coast of Pembrokeshire. The site, within which dense concentrations of evidence relating to tool and jewellery manufacture have been recorded, is situated on the Skomer Peninsula, nestled between St Bride's Bay to the south and Milford Haven to the north. Mesolithic artefacts have been collected within this broad area since the 19th century, most notably by the antiquarian Edward Laws, who recorded the presence of worked flints uncovered during a gale (1888, 241). Several decades later, during the early 20th century, the area witnessed its first systematic excavation, conducted by JP Gordon-Williams, who recorded significant scatters of flint tools and debitage, as well as additional coarse stone tools and shale beads, covering a so-called 'chipping floor' (1926). In and amongst these finds a phallic or Venus-like figurine was also collected, which Gordon-Williams interpreted at the time as representing a 'Duck Head'. The overall scale of the finds assemblage recovered from Nab Head has been highly significant and includes at least 690 shale beads (David 1989, 245) and scores of thousands of worked flint and coarse stone fragments. The production of the former belonged to a rather extensive trade network, as shale beads produced within the St Bride's Bay area have been discovered across the majority of South Wales (David 2007). Although problematic (see Nash 2012, 75; Tolen-Smith 2008, 146), two radiocarbon dates were obtained from Nab Head, which indicated that the site was in use from at least 8623–8283 or 8567–8021 cal BC.

3.6.3 Neolithic

3.6.4 The Gors Fawr Stone Circle Scheduled Monument (ID3 and ID4) has been assessed as subject to potential setting impacts by the proposed development, therefore a comprehensive assessment of the Neolithic and Bronze Age evidence has been included here. According to current understanding, the first agricultural communities to settle in the landscapes of Preseli, as well as Wales as a whole, did so at the beginning of the fourth millennium BC (see Whittle *et al* 2011, 521–53). Based on pollen analysis of peat deposits collected from the area, it is known that large tracts of West Wales underwent significant deforestation between 4000–3600 BC (Seymour 1985). Such deforestation occurred as a response to the growing need for open pastures, cultivated land, settlements and, most conspicuously, large-scale monuments. Within the context of agriculture, the region of Pembrokeshire offered a rather varied environment in terms of both geology and topography. As a result of the retreating ice sheets at the beginning of the Mesolithic period, large peat deposits developed in low-lying basins and depressions, particularly towards the coasts. These deposits were largely unsuitable for agriculture due to their acidity and could be

contrasted with the limestone and sandstone deposits to the south, which were far more suitable for arable farming (Darvill and Wainwright 2016, 63). Furthermore, Pembrokeshire witnessed the episodic spread of blanket bog between the fourth and first millennia BC, most notably within upland areas such as Preseli, which added further variety to the landscape. According to Moore (1973), this phenomenon can be attributed to waterlogging derived from mass deforestation.

3.6.5 Agriculture and Subsistence

3.6.6 Despite the fact that much is known about the Pembrokeshire environment during the Neolithic period, very little is known of the agricultural and subsistence practices that defined the area at this time. Recent stable isotope analysis has suggested that, during the Early Neolithic at least, farming communities in West Wales tended to avoid marine foods (Schulting 1998; Richards and Schulting 2006), most likely for cultural rather than economic or environmental reasons. Aside from this phenomenon, it may be assumed that agricultural and subsistence practices conformed to those found across the remainder of Wales, which revolved around a mixed economy of domesticated crops (e.g. emmer wheat) and animals (e.g. sheep and cattle) supplemented with foraged foods (e.g. berries and hazelnuts). In terms of ceramics, the pottery associated with the earliest Neolithic communities of West Wales is often seen as belonging to the 'Irish Sea ware' tradition (Peterson 2003), which mainly comprised undecorated, carinated bowls and pots. Ceramic finds conforming to this description have been uncovered at, for example, the tomb of Pentre Ifan in Nevern as well as further west in Clegyr Boia on the St Davids peninsula (Cummings and Whittle 2004, 3). Later in the Neolithic period, however, ceramic traditions in West Wales can be seen as conforming to those found across the remainder of Britain, with Peterborough ware and Grooved ware appearing in the Middle and Late Neolithic respectively.

3.6.7 Settlement

3.6.8 Although scant, the evidence relating to Neolithic settlement in Pembrokeshire and West Wales is better understood than that of Neolithic agriculture and subsistence. One of the largest settlements in the area is located at Rhos-y-clegyrn, Pencaer in the north of Pembrokeshire. This site witnessed extensive excavation throughout the 1960s by JM Lewis (1974), during which seven timber-built structures were recorded, with the likelihood that the original settlement included many more. Each of these structures was circular or oval in footprint and had walls supported by postholes. Some structures also included evidence of cobbled flooring. The artefactual evidence pertaining to these structures related primarily to flint knapping. Similar structures have been discovered at Clegyr Boia to the west (Williams 1953), which numbered three in total, although the artefactual evidence from this settlement was more varied, with sherds of Early and Middle Neolithic pottery being recorded as well as polished stone axeheads and animal bones. These structures were also associated with a large midden, indicating that the settlement witnessed a long period of occupation. Furthermore, the hilltop location within which the settlement was

constructed was surrounded by sizeable earthen ramparts. Most of these ramparts can be dated to the Iron Age, although there exists the possibility that some were dug during the Neolithic period (Vyner 2001, 82). A similar Neolithic enclosure, known as Banc Du (SMPe532), was more recently discovered on Foel Eryr, to the west of Mynachlog-ddu (Darvill *et al* 2007), although it remains unclear as to whether it surrounded a domestic settlement or not. The fact that the settlement at Clegyr Boia incorporated earthen enclosures of this kind may suggest that it was settled on a permanent basis, housing a small population that was wholly sedentary. However, it is important to mention that authors such as Alasdair Whittle (1997; Cummings and Whittle 2004, 3) have argued that full-scale sedentism did not arrive in Britain until the later Bronze Age and that local populations before this time are best seen as semi-nomadic.

3.6.9 Monumentality

3.6.10 Monumentality represents the most conspicuous Neolithic element of the Pembrokeshire landscape, primarily as it survives in a significantly greater state of preservation than others. Several types of Neolithic monument survive today including, most notably, tombs, causewayed enclosures, henges and standing stones. In general, the building of monuments across the whole of Neolithic Britain can be defined with reference to these basic types. However, it must not be assumed that monumentality represented an isolated element of Neolithic society and the potential overlaps between monuments, settlements and agriculture should be considered. The basic types of monuments outlined here should not, moreover, be treated as discrete, as significant overlaps exist between them.

3.6.11 Tombs

3.6.12 Tombs were constructed in a wide variety of different forms across Pembrokeshire, yet dolmens (also known as 'cromlechs'), passage graves, gallery graves and Cotswold-Severn tombs are the most numerous.

3.6.13 Dolmens are probably the earliest mortuary structures constructed in Wales, which comprise a single burial chamber defined by vertical stone supports holding an upper capstone in place. These stones would have originally been covered in an earthen mound and were therefore concealed from view. Some dolmens incorporated portals, generally consisting of an H-shaped setting of stones in conjunction with an additional capstone (Darvill and Wainwright 2016, 85), and are aptly known as 'portal dolmens'. Within the Preseli area a collection of simple dolmens has been recorded, including Crug Yr Hwch I in Mynachlog-ddu (DAT947), Lech Y Fleiddast in Crymych (DAT11701), Trefach in Nevern (DAT1475) and Lech y Dribedd, also in Nevern. Across the north of Pembrokeshire and Preseli, the simplest forms of dolmens appear to predominate (see Barker 1992). Yet portal dolmens have also been recorded in the area, including Pentre Ifan in Nevern (SMPe008), which is one of the best preserved of its kind in Wales.

- 3.6.14 Passage graves are characterised by the inclusion of one or more compartments, which generally include a central chamber leading into smaller side cells or antechambers. As the name indicates, the heart of the tomb was accessed via a long entrance passage. The tomb was also covered in an earthen mound, broadly circular in form. In terms of chronology, passage graves are understood to have been constructed across Northwest Europe between the early fourth and early third millennia BC. This tradition eventually culminated in the erection of exceedingly large tombs whose passages were aligned on solstitial axes, such as Newgrange in the Boyne Valley, Maeshowe in Orkney and Bryn Celli Ddu in Anglesey. Cerrig-y-Gof in Newport (SMPe050) is one of the better preserved and more complexly constructed passage graves in the Pembrokeshire area, which includes five concentrically aligned compartments enclosed within a round mound measuring 17m in diameter.
- 3.6.15 A gallery grave comprises a single, elongated central chamber (or gallery) accessed via either a laterally or longitudinally aligned entrance. Characteristically, these tombs lack entrance passages. Gallery graves are later than passage graves, although significant overlap exists between the two. In broad terms, gallery graves were constructed across Northwest Europe between the late fourth and late third millennium BC. These types of tombs are rare and only two have been identified within Pembrokeshire. These include Banc Llwydlos near Newport and Bedd yr Afanc (SMPe122) to the northwest of Mynachlog-ddu.
- 3.6.16 Finally, Cotswold-Severn tombs comprise long barrows within which a long entrance passage leads into a series of chambers and cells. In terms of internal arrangement, these tombs are relatively similar to passage graves, although they are generally larger and more complex. Moreover, their outward appearance is rectangular or trapezoidal rather than circular or oval. Although relatively common across Wales and the Southwest of England, Cotswold-Severn tombs are, much like gallery graves, rare in Pembrokeshire, with examples including Parc y Llyn in Ambleston and Penrhiw in Llandwnda. According to Tim Darvill (2004, 11–12), Cotswolds-Severn tombs appear in Wales and England in around 3700 BC and continue to be constructed until the end of the third millennium BC.
- 3.6.17 Causewayed Enclosures
- 3.6.18 Although the process of assigning a firm chronological sequence to causewayed enclosures is exceedingly difficult at present, these monuments are best understood as having been constructed between the beginning of the fourth and the middle of the third millennium BC. In form, these monuments comprise between one and four concentric ditches, each with an internal bank, encircling a central area. Entrances leading into the central area cross the circuits of banks and ditches at intervals. These entrances are merely gaps left in the banks and ditches during their construction or, more specifically, they constitute causeways. Traditionally, it was thought that the central area of the monument comprised a settlement, hence why these monuments were known throughout most of the 20th century as ‘causewayed camps’. Yet authors such as Peter Drewett (1977) questioned the idea that a singular function can be

ascribed to these monuments. As a result, we may envisage causewayed enclosures as having embodied a series of functions, including domestic, mortuary and commemorative. Previously, it was thought that no causewayed enclosures were constructed in Wales (Cummings and Whittle 2004, 5). However, more recently it has been acknowledged that numerous such sites exist in Wales including Banc Du (SMPe532), as mentioned above, Womaston, Powys and Caerau, Cardiff (Davis and Sharples 2017), with further examples in the Vale of Glamorgan including Ewenny (GGAT0404m), Corntown (SMGm585), Norton (GGAT0470m) and Fleminston (GGATHER0418s/NPRN404651) (Lewis and Huckfield 2009). Banc Du is situated approximately 7.3km to the west of the proposed development area and is therefore of most pertinence. The monument comprises a twin series of bank and ditch circuits enclosing a central area roughly oval in form. In terms of its position, the monument is situated on a south facing promontory of Foel Eryr. Determining the intended purpose of Banc Du is naturally difficult, although the presence of cultivated land and trackways within its immediate vicinity may suggest an agricultural or settlement function.

3.6.19 Henges

3.6.20 In comparison to causewayed enclosures, henges are far more numerous in Wales. However, like causewayed enclosures their intended function is elusive, and they likely housed a wide range of different activities. In terms of their basic form, henges and causewayed enclosures are notably similar, albeit for the fact that the former incorporates a bank on the exterior rather than interior of its outer ditch circuit (Wainwright 1969). Yet as Mike Pitts (2000, 28) has argued, henges display a wide variety of physical characteristics beyond this basic definition, so much so that they likely fail to embody a singularly definable phenomenon. In size, henges range dramatically, from around 5m in diameter to over 300m. In some instances, henges were linked via short avenues formed of the same bank and ditch circuits defining their outer boundaries. Together, these henges and avenues are known as ‘henge complexes’ and are most commonly found across England. Examples include those at Knowlton in Dorset and Thornborough in Yorkshire. Chronologically, it appears that classic henges began appearing at the beginning of the third millennium BC and continued well into the Bronze Age. However, simple and diminutive examples, known as ‘formative henges’, were being constructed from the early fourth millennium BC (Burrow 2010). From a comprehensive perspective, classic henges can be sub-divided into three basic types. These types include Class I (henges with a single entrance), Class II (henges with two entrances) and Class III (henges with four entrances). This typology should only be used advisedly, as many henges fail to readily conform to such neat categorisation. Moreover, significant overlap exists between henges on the one hand and stone circles on the other, as the latter were often erected within the confines of the former. This overlap is outlined in more detail below. Traditionally, it has been thought that very few henges were constructed within Pembrokeshire (Darvill and Wainwright 2016, 113), yet it is clear that several monuments exist across the county that can be described as at least henge-like in form. Nikki Cook has identified four

possible henges within the county (2004, 22), including Gwaun Terrace in Letterstone, Temple Druid Enclosure in Maenclochog, Knock Moor in Claberston and Ffynnon-Delyn in Crymych, immediately east of Mynachlog-ddu. Each of these potential monuments survives today in a poor state of preservation and are therefore difficult to interpret.

3.6.21 Standing Stones

3.6.22 Standing stones are found across the entirety of West Wales, yet chronologically they are little understood. Indeed, the process of determining whether these standing stones are of Neolithic or Bronze Age date often proves difficult. Most types of standing stone formations within Pembrokeshire are understood to be of Bronze Age date and these are outlined below. With regards to Neolithic standing stones, the most common formation is the stone circle which, as the name indicates, comprises a concentric formation of monoliths. It has often been thought that some individual monoliths (or menhirs) were erected during the Early Neolithic, although such a view is increasingly falling out of favour. These monoliths are now considered to be far later in date, most likely having been erected in the Bronze Age. The Preseli Hills represents an area in which a dense concentration of stone circles is present. In their studies of stone circles, both WF Grimes (1963) and Aubrey Burl (2000) identified Preseli and Pembrokeshire as forming one of the centres of this monument type in Britain. Again, the tradition of erecting stone circles extends well into the Bronze Age, yet it may be seen as beginning near the start of the third millennium BC in the Late Neolithic. In essence, this means that envisaging a definitive split between the Neolithic and Bronze Age within the context of monolithic or orthostatic monuments would be wholly misleading. Finally, the connection between stone circles and henges must be acknowledged, as many henges across Britain incorporate within them stone circles. Many of those authors who have ascribed a ritual function to henges have hypothesised that henges and stone circles were regionalised equivalents of one another and may have shared the same function on this basis (Burl 1976; Harding and Lee 1987; Barnatt 1989; see also Bradley 1998, 118); a function that was religious or ceremonial in nature. Yet this hypothesis fails to adequately explain the conjoining of henges and stone circles into singular monuments. The stone circles within and around the proposed development are mostly of Bronze Age date (see below), although the Gors Fawr Stone Circle (SMPe117) possibly has its origins in the Neolithic period.

3.6.23 Stonehenge Connections

3.6.24 Any discussion of Neolithic standing stones in Pembrokeshire would be incomplete without mentioning the potential connection that the region has with Stonehenge in the Salisbury Plain, Wiltshire. Towards the end of the Neolithic, in around 2600 BC, Stonehenge was rearranged into the form it embodies today, with a central setting of sarsen trilithons (composed of local sandstone) and a horseshoe formation of bluestones (composed of dolerite and foliated rhyolite) at its centre. It has long been acknowledged that the sarsens derived from quarries within the Marlborough Downs

of Wiltshire. Yet the igneous rocks from which the bluestones are made derive from the Preseli Hills, approximately 240km away, and determining the manner by which these rock types were transported to the Salisbury Plain has been a source of heated debate. Some have argued that the bluestones were transported to the Wiltshire area as glacial erratics at some point during the Upper Palaeolithic (John 2008; 2018; Thorpe *et al* 1991; Williams-Thorpe *et al* 2006). According to this hypothesis, the bluestones were hauled to the site of Stonehenge by local Neolithic builder from nearby. Yet another more widely accepted hypothesis states that the bluestones were transported by migrants directly from the Preseli Hills to the Salisbury Plain – a journey that would have taken staggering amounts of time and effort. The Stonehenge Riverside Project, conducted between 2004 and 2009 (Parker Pearson 2014), determined through excavations of the wider Stonehenge landscape that the bluestones were of higher significance than previously thought. More specifically, these excavations unearthed the remains of an additional stone circle to the southeast of Stonehenge, which survived as a series of backfilled stone sockets set within a henge. This monument became known as ‘Bluestonehenge’ (Parker Pearson 2012, 123), as the presence of foliated rhyolite chippings at the bases of several of its stone sockets indicated that they originally contained the same bluestones currently residing at Stonehenge, which were presumably cut to shape on site. There is, furthermore, evidence within the confines of Stonehenge itself to indicate that the bluestones were also placed along the internal edges of the monument, within the so-called ‘Aubrey Holes’ (Darvill *et al* 2012; Parker Pearson *et al* 2009). It has been hypothesised, therefore, that the bluestones were transported from the Preseli Hills to the Salisbury Plain and incorporated into Bluestonehenge before being dismantled and incorporated into the larger monument of Stonehenge to the northwest (Allen *et al* 2016). The incorporation of the bluestones into Stonehenge itself first involved their placement within the Aubrey Holes before being placed later at the heart of the monument. In this sense, both the renovation of Stonehenge into its present form and the rearranging of the wider landscape that it entailed were accomplished with reference to the bluestones.

- 3.6.25 Following the Stonehenge Riverside Project, the Stones of Stonehenge Project was initiated in order to trace the precise sources of both the sarsens and the bluestones. In particular, the project was set up in order to test the hypothesis that the bluestones at Stonehenge originally formed a stone circle in West Wales, and that these stones were dismantled and transported to the Salisbury Plain during a mass migration of people from the former area to the latter. The hypothesis also stated that the bluestones were ancestrally significant and that the reason that these migrants transported them was so that they could transfer their ancestral identity from one place to another (Parker Pearson *et al* 2021). During the Stones of Stonehenge project, several sites were identified across the Preseli Hills as having potentially held the bluestones in a circular formation. One of these sites was Waun Mawn (SMPe124) near Brynberian. Excavations of this site revealed that it once comprised a sizeable stone circle measuring 110m in diameter – the same diameter as the inner ditch circuit

at Stonehenge. Optically Stimulated Luminescence (OSL) dating of samples from the fills of the stone sockets at Waun Mawn also suggested the monument here was erected between 3400–3200 BC (Parker Pearson 2021, 91). This meant that the stone circle at Waun Mawn was erected several centuries prior to the rearrangement of Stonehenge into its current form and likely prior to the construction of Bluestonehenge as well. Finally, one of the stone sockets excavated at Waun Mawn (Stonehole 91) was remarkably similar in form and size to Stone 62 at Stonehenge, which is characteristically pentagonal in shape. Altogether, the evidence obtained from excavations at Waun Mawn is seen to indicate that this was the site of a stone circle that originally held the bluestones currently located within the confines of Stonehenge.

3.6.26 As part of the Stones of Stonehenge Project, the Neolithic quarry site of Craig Rhos-y-felin was also investigated, which is situated in Pont Saeson on the north side of the Preseli Hills. The site comprises an igneous outcrop of foliated rhyolite. It has been argued by Mike Parker Pearson *et al* (2015) that this is the potential quarry site from which the bluestone situated at Waun Mawn and later Bluestonehenge and Stonehenge derived. Two radiocarbon dates were obtained from carbonised hazelnuts shells found in an occupation deposit at Craig Rhos-y-felin, which yielded date ranged between 2500–3120 cal BC and 3620–3360 cal BC (Parker Pearson *et al* 2015, 1341). If Craig Rhos-y-felin is indeed the quarry from which the bluestones were extracted then it must be remembered that it likely constituted only one of several points of origin, as the bluestones comprise doleritic in addition to rhyolitic rock. Other potential quarries from which bluestones were extracted include Carn Goedog in Eglwysrw, Cerrygmarchogion and Craig Talfynydd to the west of Mynachlog-ddu, as well as Carn Breseb, Carn Gyfrwy, Carn Alw and Carn Ddafad-las to the north of Mynachlog-ddu (Bevins *et al* 2014).

3.6.27 **Bronze Age**

3.6.28 The transition from the Late Neolithic to the Early Bronze Age in Britain was not as clear cut as it may first seem and the process of defining this transition in any absolute terms is fraught with difficulty. The year 2500 BC is often provided by sources as marking the beginning of the Bronze Age, although some authors such as Richard Bradley believe that it can be pushed forward to as late as 2000 BC (2007, 183). Certainly, by the late third millennium BC Southern Britain had been overtaken by two distinct ceramic traditions defined by the Beaker culture in the west and the Corded ware culture in the east, with the former predominated in most regions (Needham 2005). Whether or not these cultures were situated in the Late Neolithic or Early Bronze Age is still up for debate (see Pryor 2004, 226). It must also be mentioned that the period between approximately 2500–2150 BC is viewed by some as constituting a British Chalcolithic (or Copper Age), as the manufacturing of tools and jewellery from native copper, primarily by the Beaker peoples, occurred during this time (Heath 2012). Much of this native copper was imported into Britain from Ireland.

3.6.29 By the beginning of the second millennium BC in Wales and the southwest of England, the Beaker tradition began to slowly be overtaken by one of manufacturing vessels known as collared urns and food vessels. Whereas beakers are found across the European continent, demonstrating the expansive nature of the tradition to which they belonged, collared urns and food vessels are not (Parker Pearson 1999, 109). In other words, the development from beakers to collared urns and food vessels is unique to Britain. The majority of these kinds of vessels that are known across Britain derive from mortuary contexts, as they were often used to hold the cremated remains of the dead. Although practiced during the Early Bronze Age, this particular cremation ritual became widespread during the second millennium BC (Parker Pearson 1993, 50) and evidence of it can be found across Pembrokeshire and West Wales. The round barrows surrounding Mynachlog-ddu have yielded evidence of cremation urns, such as Parc Maen (DAT48358) and Bryngolman (DAT954) near Maenclochog, as well as Croesfihangel (DAT936) in Crymych.

3.6.30 Bronze and Copper Artefacts

3.6.31 One of the more notable appearances within the archaeological record during the Bronze Age are bronze and copper artefacts. The earliest of these artefacts were weapons and tools, including axeheads, halberds and daggers. In Pembrokeshire, several such artefacts have been recorded. For example, isolated bronze axes have been discovered at Hayscastle near Haverford West (DAT2773), Blwch-gwynt in Crymych (DAT1088) and Pentre Ifan in Nevern (DAT957). Furthermore, copper axes have been found in areas such as Cwm Gwaun in Fishguard, while copper halberds have been recovered from Hundleton in Monkton and Carn-y-bont in Newport. Overall, bronze implements dating to the late third millennium BC are rare within Pembrokeshire, far more so than their earlier copper prototypes. Yet the introduction of bronze and copper into Britain failed to diminish the significance of flint as a material from which tools could be made. In fact, the Early Bronze Age is regarded as the pinnacle of flint knapping knowledge and technique, as exemplified by the barbed-and-tanged arrowhead or the thumbnail scraper, which were state of the art implements during the late third millennium BC. In Pembrokeshire and elsewhere, fragments of worked flint are often found within mortuary contexts. Again, this is particularly true with regards to those round barrows surrounding Mynachlog-ddu, such as Pen-yr-ardd in Llandissilio West (DAT917), as well as Parc Maen (DAT48358) and Bryngolman (DAT954).

3.6.32 Settlement

3.6.33 Much like those of the previous Neolithic period, Bronze Age settlements in Pembrokeshire are rare. However, according to current understanding the ones that do exist tend to cluster towards the south of the county from the beginning of the second millennium BC onwards (Darvill and Wainwright 2016, 123). Most notably, these include those discovered at South Hook in Milford Haven and Stackpole Warren (SMPe367) on the south coast. At South Hook, large amounts of evidence relating to grain processing, specifically wheat and barley, was discovered, which comprised a

notable variety of species including emmer wheat, club wheat and hulled barley. At Stackpole Warren, the remains of a rather extensive settlement were uncovered, which included timber structures, hearths and burnt mounds (Benson *et al* 1990). Excavations here also demonstrated that large-scale deforestation had occurred in advance of the construction of the settlement. Other settlements of slightly later date have also been recorded at, for example, Newton in Llanstawell and Dale Fort near Milford Haven. In the former settlement the remains of a sizeable timber roundhouse were uncovered, while the latter settlement comprised a domestic setting situated on a hilltop promontory, which was surrounded by defensive earthen ramparts. In many ways, the site at Dale Fort anticipates the construction of larger hillforts in the Iron Age.

3.6.34 Mortuary Practices

3.6.35 As has already been mentioned above, the practice of cremating human remains and placing them within ceramic vessels became widespread during the second millennium BC. During the Late Neolithic, human remains were almost always inhumed directly, either in articulated or disarticulated states. Cremations do occur towards the end of the Neolithic, particularly within the larger tombs (Thomas 2002, 153), although these are extremely rare. Direct inhumation does extend into the Early Bronze Age, as evidenced by the round barrows from this period, within which human corpses were placed at their centre, predominantly in crouched positions, within stone- or timber-lined cists (that were themselves covered with cairn material). Yet such inhumation stands in stark contrast to that practiced in the Neolithic, as during this time corpses were interred individually rather than in large groups. Furthermore, personalised grave goods are commonly found in association with the corpses in round barrows, such as at Corston Beacon (SMPe059) outside Hundleton, within which a bronze dagger was discovered (Fox and Grimes 1928). These kinds of Early Bronze Age round barrows are found across Pembrokeshire, with notable clusters being concentrated on the Preseli Hills and also towards the northern coast of the county. By the middle of the Bronze Age, large-scale cremation cemeteries begin appearing. These cemeteries, also known as 'cremation fields', were often situated in close proximity to Early Bronze Age round barrows and cremation urns are commonly found radiating around the barrow. Again, the round barrows at Parc Maen (DAT12031) and Bryngolmas (DAT954) are prime examples of such cemeteries. Furthermore, investigations of a round barrow at Pen Bont in St Davids indicated that the barrow had been dug into during the Middle Bronze Age in order to place cremations urns directly within the earthen mound (Murphy 2006). This form of practice was not isolated to Pembrokeshire and is relatively common across the rest of Britain (Parker Pearson 1993, 50). The Late Bronze Age is characterised by a notable absence of cremation cemeteries and fields, and it seems possible that the remains of the dead were scattered across key areas of the landscape as opposed to being placed within ceramic vessels.

3.6.36 Monumentality

3.6.37 As detailed above, many Middle and Late Neolithic monuments continued in use well into the Bronze Age. This is particularly true with regards to standing stones. It was also stated above that determining whether the sites of standing stones date to the Neolithic or Bronze is often very difficult. However, it may be assumed at present that most standing stone sites within the Pembrokeshire landscape are of Bronze Age date, even though some were demonstrably erected during the Late Neolithic. As Bronze Age standing stones come in a variety of different forms, these will be discussed individually below.

3.6.38 Monoliths

3.6.39 Monoliths (or menhirs) are standing stones that were erected in isolation and apparently fail to constitute part of a larger group. These kinds of standing stones are found frequently across Pembrokeshire, with concentrations on the Preseli Hills and towards the northern coast. These concentrations appear to broadly mirror those of Early Bronze Age round barrows, as detailed above. Several monoliths are situated within the vicinity of the proposed development area, including Gate Standing Stone (SMPe288), Yr Allor (SMCm052), as well as the one situated near Spring Gardens near Rhosfach (SMPe406). Each of these monoliths is situated within 3km of the development area.

3.6.40 Stone Pairs

3.6.41 In essence, stone pairs comprise two monoliths situated within close proximity to one another. Eleven such pairs have been definitively identified across Pembrokeshire, with a further two constituting possible stone pairs. Tim Darvill *et al* (2003, 3–4) has argued that stone pairs acted almost as gateways within the landscapes, which demarcated the separation between elevated dry areas and areas of lower wetland. Such an interpretation applies well to, for example, the stone pair at Gors Fawr (DAT928; DAT922) to the west of the proposed development area, which appear to separate discrete areas of lowland bog to the east and elevated slopes to the west. However, it must not be assumed that this hypothesis can be universally applied and the close proximity of the aforementioned stone pair to the Gors Fawr Stone Circle (SMPe117) must also be considered in determining its function or meaning. Including the Gors Fawr stone pair, others are situated within the vicinity of the development area, including those at Rhos Fach (SMPe497), Ty-Newydd (SMPe121) and Waun Llwyd (SMPe116), all of which are situated within a 3km radius.

3.6.42 Stone Circles

3.6.43 As mentioned above, stone circles constituted an important aspect of the Pembrokeshire and West Wales landscapes during the Late Neolithic. Yet it is apparent that most of the activities associated with these stone circles can be dated to the Bronze Age. The stone circle at Gors Fawr (SMPe3696) is of most pertinence, as it is situated immediately west of the proposed development area. The monument comprises at least sixteen standing stones enclosing an area measuring 22m in

diameter, with the five stones on its southern edge being larger than the rest, which stand at around 1m in height. It has been described as “a remarkable survivor and one of the best of its kind to be seen in Wales (Driver 2006). The stone circle is also situated within the vicinity of the a stone pair (DAT928; DAT922).

3.6.44 Stone Rows

3.6.45 As the name suggests, stone rows constitute linear arrangements of standing stones, which are generally found in pairs sharing a parallel alignment. Stone rows vary drastically in size, ranging from only several metres in length to, as is the case at Carnan in Brittany, several kilometres. The distribution of stone rows is concentrated to Britain, Ireland and Brittany, with over 200 examples covering this broad area. From at least the Early Bronze Age, stone rows were being constructed leading up to round barrows, perhaps suggesting that some functioned as avenues approaching sites of ancestral significance (Burl 1993, 19). However, a variety of different functions may be assumed for stone rows as a whole. Although rare, stone rows of this kind appear during the Late Neolithic, perhaps most famously at Avebury in Wiltshire, which form part of the West Kennet Avenue leading from the Avebury Stone Circle to the Sanctuary. In Pembrokeshire, stone rows are rare and only six examples are known throughout the county.

3.6.46 **Iron Age**

3.6.47 In Britain, the transition between the Bronze and Iron Ages is understood to have occurred at the beginning of the eighth century BC, with significant overlaps existing between the two on a region-by-region basis (Cunliffe 2005, 32). While it is evident that increasing social stratification marked the Late Bronze Age, which was likely exasperated by an increase in sedentism, it was during the beginning of the Iron Age that true tribal entities start emerging across Britain. After around 400 BC, these tribal entities solidified into distinct regional powers, leading to the division of Britain into separate (yet, on the whole, interrelated) groupings of people (Cunliffe 1995, 40). The Early and Middle Bronze Age tradition of inhuming the corpses of important individuals is resumed during the Iron Age and in many cases intensifies. This tradition continues through to the end of the Iron Age. In 2018, a chariot burial dating to the end of the Iron Age was excavated in an undisclosed location in Pembrokeshire. This was the first Iron Age chariot burial to be positively identified not only in Wales but also in Southern Britain – most other sites of this kind are mostly confined to the north of England.

3.6.48 Hillforts

3.6.49 In Pembrokeshire, one of the more noticeable elements of the Iron Age that survives today are the hillforts. As was indicated in above, Iron Age hillforts have their roots in the Bronze Age, when settlements began to be enclosed and defended by sizeable earthen ramparts. Thousands of hillforts or at least potential hillforts have been identified across Britain, with most clustering in specific regions, such as Southwest England, the Anglo-Welsh borders and the Anglo-Scottish borders (Forde-Johnston

1976, 1). Previously, it was thought that hillforts represented centres of military power akin to medieval castles. However, in the wake of work conducted by authors such as Sharples (1991), this view has fallen out of favour and instead hillforts are understood as constituting defended domestic settlements with little in the way of military character. Nevertheless, it must be remembered that hillforts occupy prominent, upland locations within the landscape in much the same way that defended military installations would. Yet the positioning of hillforts can be explained in terms of their occupants' need to display their power and to be seen and possibly envied from miles around. In size and function, hillforts can be differentiated from *oppida* – a term used by Julius Caesar during his invasion of Gaul to differentiate centres of major tribal power from smaller hillforts (Barker 1985, 156). In Pembrokeshire, several hillforts are known, with more being located in the north of the county than in the south. This preference for the north was undoubtedly due to the position of the Preseli Hills in this region, which offered more commanding settings than did the lowlands further south. One of the most well understood hillfort in the Pembrokeshire area is Castell Henllys (SMPe175), which has been periodically excavated since the 1980s (Mytum 1987; 1992). The hillfort is surrounded by numerous ramparts and excavations revealed the presence of several roundhouses within its confines, ranging between the fifth and first centuries BC in date. Within the vicinity of the proposed development area, three hillforts are positioned, which overlook Mynachlog-ddu from the north. These include Foel Drygarn Camp (SMPe010), Carn Alw (SMPe375) and the smaller Carn Alw V (DAT11538), situated below and to the north of Carn Alw. On the outskirts of Mynachlog-ddu there are, furthermore, four Iron Age settlements, including two on Craig Talfynydd to the west (DAT32877; DAT11579), one on Carn Menyn to the north (DAT11513) and one in Llainbanal (DAT62210) in Crymych.

3.6.50 Roman

3.6.51 At the end of the Iron Age the areas covered by present-day Pembrokeshire and Carmarthenshire fell under the authority of the *Demetae* tribe. The capital of this region was represented by the oppidum of Moridunum (modern Carmarthen), above the remains of which an early Roman fort may have been constructed during the governorship of Quintus Veranius in the decades following the Roman conquest of Britain in 43 AD (Webster 1981, 38). More specifically, Roman forces conquered the area in around 74 AD and began constructing military installations from this time onwards. Later, *Moridunum* was converted into a civitas, which included a grid of streets, a forum, basilica, public bath house, amphitheatre and possible *mansio*. The civitas was attached to an auxiliary fort (also known as Moridunum), constructed on the slopes of the Towy Valley (Symons 2009, 84).

3.6.52 Once a firm Roman presence had been established, roads would have been constructed across Pembrokeshire, linking the forts and other military installations across the county. However, very little is known about these roads, and few have been definitively identified. One of the more famous roads in the literature of Roman Pembrokeshire was the Via Julia, which was said to have run from *Moridunum* to *Ad*

Menapiam (present-day St Davids) in the west via the conjectured military installation of Ad Vigesium towards the north coast (Bertram 1809, 144). Yet the existence of both this road and the aforementioned military installation were based on forged documents produced in the mid-18th century by the discredited antiquarian Charles Bertram. Several sections of Roman road are known across Pembrokeshire, although the exact courses they followed (and sometimes their destinations) remain elusive. A stretch of road was discovered south of Wolfscastle towards the centre of the county (DAT46493), which may have been connected to the site of a villa further north. Another stretch of road was recorded at Letterston nearby, which was noted on the 1st and 2nd Edition OS maps of the area (*Pembrokeshire Sheet XVI.NE*) (see Murphy and Page 2009, 51). The most notable stretch of Roman road in Pembrokeshire, however, is the one 300m east of Bryn Farm in Llanddewi Velfrey (SMPe472). This road appears to have extended westward towards the auxiliary fort at Wiston.

3.6.53 *Moridunum* was of high industrial significance to the Romans as the Dolaucothi gold mines were located on its eastern outskirts. Today, these mines are situated outside Pumsaint in Carmarthenshire. Gold prospecting began in the area in the late 1st century AD, which relied heavily on hushing – a process by which large tracts of land are stripped of topsoil via the release of torrents of water from upslope, therefore exposing the mineral veins beneath. This hushing process was accomplished through the construction of aqueducts, such as the one erected on the eastern slopes of Allt Cwmhenog (Burnham *et al* 2004, 328). These aqueducts allowed water diverted from nearby streams to collect within large tanks, which could then be released for the purposes of hushing. Once prospecting had been completed, opencast mining was initiated, and gold was extracted from the Dolaucothi on an industrial scale.

3.6.54 Within the vicinity of the proposed development area, several Roman sites are known. Immediately west of Mynachlog-ddu on the slopes of Cors Tewgyll are the remains of a Roman building (DAT32877), the original function of which is unknown. At Carn Goedog to the northwest are a pair of Roman settlements, one unenclosed (DAT8403) and the other enclosed (DAT9944), while a further pair of settlements are located on Carn Alw, which are again unenclosed (DAT8404) and enclosed (DAT11538).

3.6.55 **Early-medieval**

3.6.56 During the period immediately following the end of Roman rule in Britain in 410 AD Pembrokeshire is thought to have been settled by the Déisi – a powerful Irish tribe who, as well as West Wales, went on to colonise parts of North Wales and Cornwall. Little is known about the Déisi, although it is understood that they originally came from present-day Munster and Leinster in the south and east of Ireland (Cunliffe 2013, 434). In Early-medieval Ireland, the Déisi comprised a rather wide range of different peoples who fell under the authority of the Eoganachta confederacy, although the Déisi Maman, who derived specifically from Munster, are said to have been the group that colonised West Wales (Thornton 2003, 121). Allegedly, the Déisi Maman assimilating into the existing society of West Wales quickly and by the end of the fifth century AD this led to the establishment of the petty kingdom of Dyfed. A mythical

Irish narrative from this time known as *The Expulsion of the Déisi* describes the establishment of Dyfed, in which a figure known as Eochaid Allmuir ('Eochaid the Foreigner') is identified as the first Irish settler of West Wales. In Welsh tradition, the mythical Triffyn Farfog is considered to be the founder king of Dyfed, who was ascribed Irish ancestry and genealogical ties to Eochaid Allmuir (Sims-Williams 2011, 181). In Wales, the period between the fifth and seventh centuries AD is often known as the 'Age of the Saints', as it was during this time that major monastic settlements were established across the region. These included those in Llandaff, Llantwit Major and Ceredigion, which were founded by St Teilo, Illtud and Padarn respectively. The most famous of these settlements, however, is situated on the west coast of Pembrokeshire and was founded by its namesake, St David. At the beginning the ninth century AD, Hywel Dda, the prince of the petty kingdom of Seisyllwg in West Wales, married Elen, the daughter of the then king of Dyfed – Llywarch ap Hyfaidd. This led to the merging of the two kingdoms and the establishment of the Deheubarth. Each kingdom was subdivided into smaller cantrefs with the present study area being located within the cantref of Cemaes.

3.6.57 Medieval

3.6.58 Following the defeat of Harold Godwinson by William the Conqueror in 1066, the Normans, with the aid of Fleming forces, swiftly invaded Wales, before erecting Pembroke Castle (SMPe005; LB6314) in around 1093. The castle was established by Roger de Montgomery, 1st Earl of Shrewsbury, in an area formerly occupied by the Cantref of Penfro and was initially of typical motte-and-bailey construction. Shortly after its erection Pembroke castle was attacked by Welsh rebels, who came close to overwhelming the Norman forces garrisoned there. Yet the Normans prevailed after Gerald de Windsor, the constable of the castle, sent a letter to Roger de Montgomery falsely claiming that the castle had more than enough provisions to withstand a Welsh siege. This information was leaked to the Welsh rebels, who retreated as a result (Pettifer 2000, 167). From 1189, the process of transforming Pembroke Castle into a stone-built structure began and by the 13th century the castle was one of the most impressive and dominating features in the landscape of West Wales.

3.6.59 Pembrokeshire, along with the remainder of Wales, is notable for the numbers of medieval castles dotted around its landscapes. Pembroke Castle (SMPe005; LB6314) serves as a fine example, as detailed above. Other examples include Picton Castle (SMPe277; LB6043) near Haverford West, as well as those at Carew (SMPe001; LB5937), Llawhaden (SMPe023; LB6065), Manorbier (SMPe004; LB5976) and Cilgerran (SMPe002; LB14491). With the exception of Picton Castle, which dates to the late 13th century, all of these castles were constructed relatively shortly after the Norman takeover of Wales, between the late 11th and early 12th centuries.

3.6.60 Also at this time the cantref of Cemaes was taken under the control of the Fitzmartins who held it from their seat in Newport until they were succeeded in the 13th century.

3.6.61 Throughout the Early-medieval period and on through the Norman Conquest, the monastic community of St David had become renowned as an important centre of

Christian worship and intellectual thought. As a result, William the Conqueror (now William I) visited the community in 1081 to pray and immediately appreciated its holy status. Shortly afterwards, and primarily as a result of the writings of the Welsh scholar Rhygyfarch, who wrote *Vita S. David* ('The Life of St David'), St David began to be venerated as an almost cult-like figure. In turn, this heightened the perceived significance of the monastic community of St David. The precise date in which Rhygyfarch's text was written is not known, although Nora Chadwick suggested that it was compiled in 1081 specifically in preparation for the visit of William I (1958, 174–6). A few decades later, in 1115, St Davids Cathedral (LB12537) was constructed on the site of the monastic community. By 1123, a papal privilege was granted by Pope Calixtus II to St Davids, therefore transforming it into one of the most important centres of pilgrimage in Christian Europe. It has often been thought that Pope Calixtus II also canonised St David during this time, although there is little historical evidence for this (Sharpe 2007, 102). Throughout the 12th century, and in response to the growing status of St Davids as a holy place of worship, the cathedral here was reconstructed twice, in 1131 and 1171.

3.6.62 Mynachlog-ddu

3.6.63 Mynachlog-ddu has its origins in a medieval grange (DAT12601) referred to as '*Capella Nigra Grangia*' in 1291, which was granted as an upland estate to the Abbey of St Dogmael (SMPe073), near Cardigan, following the foundation of the abbey by Robert Fitzmartin in circa AD 1113-1115. 'Mynachlog-Ddu' is a direct Welsh translation of '*Nigra Grangia*' or 'Black Monastery'. The foundation at *Nigra Grangia* consisted of 'a grange, farms and at least one chapel-of-ease' (Hall and Sambrook 2012) and is recorded to have been established within a pre-existing manor that comprised Llandre-isaf, Llandre-uchaf and Cwm-isaf (Lewis 1969, 30), located over 2km south of the present settlement of Mynachlog-ddu. The grange landholding was large, comprising of five carucates worth £815s6d in 1535, but it is believed to have comprised predominantly of unenclosed moorland pasture (DAT 2022). The extant Church of St Dogmael (LB6028) formed part of the grange complex as a chapel-of-ease, and comprises building fabric predominantly dating to the 14th century.

3.6.64 The Act of Supremacy of 1534, which resulted in the dissolution of monasteries and other religious institutions across England and Wales, led to the disposal of those lands previously owned by the Abbey of St Dogmael, including Mynachlog-ddu, to John Bradshaw, the Member of Parliament for Ludlow. The grange chapel (LB6028) was converted into a parish church to serve the parish of Mynachlog-ddu. Records dating to 1538-9 indicate that following the Dissolution the lands of the former grange were divided into individual 'tenements' including farmsteads at 'Pantyrhug', 'Plasdwbwl', 'Cwm Cerwyn' and 'Pentre Ithel', which are understood to have been gentry houses of some status (*ibid*). Records dating to the 17th century indicate that the Plasdwbwl was then known as 'Plas-pant y Rege (Plasyparte Roger)' (Pritchard 1907, 108–11) which translates to 'hall (or estate) in the hollow of the King' (see Section 3.8). No evidence of medieval settlement survives in the vicinity of the extant Church of St

Dogmael (LB6028) save for Pont-Mynachlog-ddu bridge, recorded in 1600, which continues to preserve the placename association on historic maps, and into the present day.

- 3.6.65 A further ecclesiastical site lies in Capel Cawy (now Fferm-y-capel) (DAT1119), a farm located 1.3km east of the development area that it is a proposed site for Capel Cewydd; an important place of pilgrimage dedicated to Saint Cewydd, a 6th century Welsh 'Rain Saint' akin to St Gildas and St Swithun. The precise date during which the chapel was constructed is unknown, although there is no evidence for an early medieval date. The earliest reference to it was made by the Welsh antiquarian George Owen in around 1600 (see Owen 1897, 509; Charles 1973, 170). The chapel was demolished sometime prior to the early 19th century and the location in which it was erected can only be inferred.
- 3.6.66 Immediately to the west of present day Mynachlog-ddu on the slopes of Cors Tewgyll are the remains of a medieval settlement (DAT32898; DAT32877; DAT32896; DAT32897; DAT32899) comprising a series of rectangular and circular structures. It will be recalled that this area has been occupied since at least the Roman period (and possible even the Iron Age), demonstrating that Cors Tewgyll possesses a markedly long history of habitation, especially in consideration of its rural location. These kinds of hillslope settlements are common during the Late medieval period and into the early Post-medieval period – a time during which the onset of the Little Ice Age led to inclement farming conditions in lowland areas. In many areas of Britain, the climactic degradation caused by the Little Ice Age led to large degrees of malnourishment and even social depredation (Addison 2006, 218). A series of rectangular huts were also positioned on the hillslope of Craig Talfynydd (DAT42971; DAT11577) to the west of Cors Tewgyll. As mentioned above, this area has been inhabited since the Iron Age.
- 3.6.67 Several medieval commons are located within the vicinity of the proposed development area, including, most notably, Mynachlog-ddu Common (DAT13865) on the west side of the village, Gors Fawr Common (DAT12862) to the south and Crugiau Dwy Common (DAT13864) to the east. Perhaps the most enigmatic medieval feature within the vicinity of the development area is Castell Pen-Gawsai (SMPe289), which comprises the remains of a large earthen ringwork. Although this feature has yet to witnessed systematic investigation, it is thought to represent the remains of an enclosed settlement dating between the late 11th and late 15th centuries.
- 3.6.68 Throughout the medieval period the areas in and around the Preseli Hills possessed a distinctive agricultural and ecclesiastical character. However, some industrial activity marked the landscape in the form of quarrying, with ET Lewis noting that several abandoned medieval quarries exist within the area (1969, 15). The precise location of many of these quarries is unknown, although the series of earthen features immediately west of the development area at Gors Fawr may be one example. These features are discussed below and have been noted as a new heritage asset in Appendix IV.

3.6.69 **Post-medieval**

3.6.70 Beyond the later medieval period the areas surrounding the proposed development area retained their agricultural and ecclesiastical character. The same pattern also applied to the wider county of Pembrokeshire, although by the early 18th century the county was marked by a significant increase in population. Moreover, five market towns had been established by this time. Yet despite this, the abbey retained some pasture rights in the area until as late as the mid-19th century (Lewis 1969, 31). The parish quickly rose in importance during the middle of this century when it was made responsible for the administration of the local highways. In terms of population, the parish of Mynachlog-ddu remained relatively small in size. In 1881, the parish had a population of 481 and by 1891 it had reduced slightly to 414 (Lewis 1969, 80).

3.6.71 Agriculture

3.6.72 The Post-medieval economy of Mynachlog-ddu parish revolved primarily around agriculture, yet local farming practices remained rudimentary. For example, in the 16th and 17th centuries, the ploughing of fields was performed almost exclusively by ox. It was only in the 18th century that the use of horses for ploughing began to slowly overtake the use of ox. The soils across Mynachlog-ddu and much of the Preseli Hills were not, on the whole, ideal for growing crops, as the loam deposits defining the area are notably acidic. As a response to this problem, lime was spread across the soils, whose alkalinity nullified their natural acidity. Yet the presence of lime kilns within the wider area is diminutive, and because of this local farmers tended to make use of imported lime. ET Lewis noted that port records from the south of Pembrokeshire indicate that in 1856 five individuals from the parish of Mynachlog-ddu were regularly purchasing supplies of lime here. The common lands established in and around the parish of Mynachlog-ddu during the medieval period continued in use until the introduction of enclosure in the 17th and 19th centuries. By the late 19th century the parish had witnessed an intensification of its agriculture, as well as its population, evidenced by the establishment of several new farmsteads, including Ty-canol (DAT118756), Pen-y-bont (DAT118755) and Bryn-melin (DAT21541). The present village labelled as Mynachlog-ddu on modern maps appears to have developed at the first fordable point of the Eastern Cleddau river, making it an ideal strategic location for the construction of a new school (DAT18966), and Bethel Chapel (LB22758; DAT59721) with attached Sunday School room (LB22766), to service the growing local population.

3.6.73 The proposed development area is situated in the curtilage of what was known in the mid-19th century as Plasdwbl Farm (ID1). The earliest mention of this farm is noted by Emily Pritchard in her history of the Abbey of St Dogmael (1907, 108–11), which derives from rent records dating to the 17th century. These records show that the farm was formerly owned by the abbey and was at this time known as ‘Plas-pant y Rege (Plasyparte Roger)’. Moreover, the records indicate that the farm was either owned or being occupied in the 17th century by one Owen ap Howell. Further evidence of habitation in the vicinity of the proposed development area exist in the

form of the site of a well near Coleg Plas Dwbl (DAT52391) and a small cottage, Llwyn Piod, to the east (DAT23170).

3.6.74 Religion

3.6.75 Between the 18th and 20th centuries, but particularly during the 19th, the Nonconformist movement exploded in Wales. The rise in Nonconformity coincided with an increase in published materials and literacy across Wales, as the spread of this movement was largely predicated on the dissemination of texts (White 2013, 131). This movement was characterised by several denominations, although in Pembrokeshire the Baptists had the strongest influence (Lewis 1969, 64). The first Baptist chapel to be established in the local area was at Rhydwylym in Llandissilio, which dates to 1794. This chapel was later converted into an elementary school in the late 19th century. Later, Bethel Chapel (DAT59721) was constructed in the present village of Mynachlog-ddu, which eventually became a Baptist church in 1841. At this time, the ministers at Rhydwylym held pastoral charge of the church, along with several others in the area.

3.6.76 **Modern**

3.6.77 During the 20th century, Pembrokeshire witnessed the installation of many military sites and features, primarily as a response to WWI and WWII. Strategically, Pembrokeshire and the remainder of West Wales was of high significance due to its westerly coastal position. During WWI, the areas around the Irish Sea and St George's Channel saw a large German presence, particularly in the form of U-boat activity. In response to this threat a naval base was constructed at Milford Haven, which at this time fell under the command of Captain Charles Holcombe Dare. The naval base here also served as a point of departure for convoys travelling to Gibraltar. During WWI, the parish of Mynachlog-ddu was notable for having sustained no deaths or casualties. Throughout WWII, Milford Haven served as a base for allied American troops and as many as a thousand of these troops were stationed here. At this time, the Preseli Hills became an important location for military training, leading to the establishment of several airfields within the area. A military camp from this period was established near the proposed development area (ID20) in 1944, within which American troops were stationed during their training on the Preseli Hills. As mentioned above, this military camp no longer survives.

3.6.78 The population of Mynachlog-ddu remained small (and even decreased in size) into the 20th century. By 1911, the local population numbered 386. However, the population at this time was slightly more diverse, as only 217 individuals were born in the parish itself, with 136 individuals being born within 10 miles of the parish, 26 in the remainder of Wales, five in the remainder of Britain and two in New Zealand and America (Lewis 1969, 82). During the early 20th century, Bethel Church retained its importance. A prayer book dating to 1919 shows that at this time the church was connected to the Temperance movement.

3.6.79 The proposed development area formed part of Plas Dwbl Farm throughout the 20th century. The main farmhouse of Plas Dwbl was situated to the south of the development area. By at least 2011, this farmhouse was converted into the main buildings of Coleg Plas Dwbl.

3.7 Cartographic Evidence

3.7.1 The 1846 Tithe map of the local area (*Plan of the Parish of Mynachlogddu in the County of Pembroke*) (Figure 6) demonstrates that at this time the area within which Canolfan Awen is to be erected comprised Land Parcel 233. According to the apportionment attached to this map, Land Parcel 233 was known as 'Parc maen llwyd bach', was owned by Morris Morris, Griffith Morris and Morris Williams and was being occupied by Stephen Davies, who was using it for pasture. The area to the east of here is shown on the Tithe map as comprising Land Parcel 234, which is at this time known as 'Pantyrhîg bach'. This land parcel was owned and occupied by the same individuals as Land Parcel 233 and was being used for pasture. The area within which the new access to the footpath is to be located is shown on the Tithe map as comprising Land Parcel 230, which is known as 'Lan issa fach' and share the same landowners, occupier and function as Land Parcels 233 and 243. Finally, the location of the present-day college buildings is shown on the Tithe map as being occupied by Land Parcel 257, which encompasses a farmhouse accessed via a trackway leading north-westward towards the main road, as well as a sizeable field to the north and east. The footprint of the farmhouse is shown as being rectangular, with a broadly ENE/WSW alignment. This serves as an indication that the farmhouse has by now been incorporated into the southern side of Coleg Plas Dwbl and is therefore still standing. The farmhouse within Land Parcel 257 is known at this time as 'Homestead' and it shares the same landowners and occupier as Land Parcels 233 and 243. The occupier, Stephen Davies, is therefore an important figure within the immediate area, as during the mid-19th century he occupied Plasdwbl Farm (as it was in 1846) as well the collection of arable fields, pastures and meadows surrounding it.

3.7.2 Immediately opposite both the main access to present-day Coleg Plas Dwbl and the proposed area of its relocation, the 1846 Tithe map shows the presence of a chain of land parcels running along the western edge of the main road running into the heart of Mynachlog-ddu. Land Parcel 166, which is situated in the vicinity of the accessway's relocation, is shown as being attached to Plasdwbl Farm, is known as 'Slang' and is being used for pasture. Immediately north of Land Parcel 166 is Land Parcel 228, which comprises a linear pasture running in a broadly ENE/WSW direction. This land parcel is also known as 'Slang' and is shown as being owned by the Reverend James James and occupied by David Thomas, who is using it for pasture. The land parcel, furthermore, is at this time attached to Llandre issa Farm. Towards its eastern half, Land Parcel 228 is also shown as transecting three fields attached to Plasdwbl Farm. The westernmost of these fields is Land Parcel 230 – a pasture. This field is wholly transected although not split into separate land parcels. The centremost of these fields is again wholly transected yet is shown as being divided into a pair of land

parcels, comprising Land Parcels 227 to the north and 229 to the south. Both of these land parcels are arable fields sharing the same name ('Park y Llain'), indicating that they were once united, prior to the establishment of the Llandre issa pasture. The easternmost of these fields is only partly transected on its western side and was therefore not divided in two. This field, which is shown as comprising Land Parcel 235, is known as 'Pantyrhîg peas' and is being used for pasture. Immediately opposite the current access into Coleg Plas Dwbl the Tithe map indicates the location of (from south to north) Land Parcels 167, 168 and 169, which are known as, in respective order, 'Park llan issa fach', 'Homestead' and 'Park bach'. Park llan issa fach comprises a pasture owned by Caleb Evans and occupied by Evan David. Land Parcel 168 comprises the curtilage of a farmhouse owned by Morris Morris, Griffith Morris and Morris Williams and occupied by Benjamin James. This farmhouse is shown as being rectangular in form with an E/W alignment. Park bach, which is also occupied by Benjamin James (who is using it as an arable field), encloses the farmhouse curtilage on its northern and eastern sides. Immediately northwest of here is Land Parcel 171, within which a further two buildings are situated. The southernmost of these buildings comprises a farmhouse, rectangular in form with an ENE/WSW alignment. The northernmost comprises an ancillary building, square in form. Land Parcel 171 is at this time owned by Thomas Adams and is occupied by Daniel Adams, who is using it as an arable field.

- 3.7.3 Finally, the 1846 Tithe map demonstrates that, aside from its northern access, the trackway now leading into Coleg Plas Dwbl did not exist at this time, as this area was being occupied by Land Parcels 230, 228, 233 and 253 (discussed above) as well as Land Parcel 244 situated in between. The main trackway leading into the curtilage of the Plasdwbl farmhouse (situated within Land Parcel 257) is shown as occupying a strip of land further east of the present-day trackway. The northern extremity of this trackway as well as its access point does, however, form part of the present-day trackway.
- 3.7.4 The 1889 1st Edition OS map (*Pembrokeshire Sheet XVIII.NE*) (Figure 7) of the local area shows the position of the farmhouse situated within Land Parcel 257 on the 1846 Tithe map, which at this time is known as 'Plas-dwbl'. The footprint of the farmhouse appears unchanged, although by this time a small ancillary building (possibly a lean-to) has been erected along the north-facing wall of the building, the eastern wall of which is more or less parallel with the western gable wall of the farmhouse. Another development from 1846 is the inclusion of an enclosed yard surrounding the northern end of the farmhouse. The 1889 OS map also shows that while the trackway leading from the main road into Mynachlog-ddu towards the Plas-dwbl farmhouse was retained (as well as the long and narrow field), an additional, trackway has been established, which broadly shares the same position and alignment as the trackway currently leading into Coleg Plas Dwbl. This trackway is shown as forming a western branch leading from the northern access of the previous trackway. The linear Land Parcel 228 no longer exists by 1889. Furthermore, it appears that the Benjamin James farmhouse to its west has been demolished. However, the Daniel Adams farmhouse is still standing, albeit without the square ancillary building to its north. In its stead, a

pair of rectangular ancillary buildings have been erected on its southern side, both sharing a NNW/SSE parallel alignment. At this time, these buildings form part of Trallwyn-isaf Farm.

- 3.7.5 The 1907 2nd Edition OS map (Figure 8) shows that by this time the lean-to attached to the northeast corner of the Plas-dwbl farmhouse has been converted into a full extension, forming an eastern wing. This wing has today been incorporated into Coleg Plas Dwbl. The trackway established between 1846 and 1889 on the western edge of the original trackway leading into the farm has not been recorded, implying that it no longer existed by 1907. The original trackway has, however, been retained. Moreover, the Trallwyn-isaf farmhouse is still standing at this time, although the pair of ancillary buildings to its south are not. The 1953 4th Edition OS map (Figure 9) shows that, although the Plas-dwbl farmhouse has retained its L-shaped form, an additional ancillary building has been constructed towards its northern façade. Today, this ancillary buildings forms a full extension attached to the original farmhouse and has again been incorporated into Coleg Plas Dwbl. The secondary trackway established between 1846 and 1888 has been re-established by 1953. It may be assumed, therefore, that this trackway is the same one that leads into Coleg Plas Dwbl today. Aside from these two additions, little had changed within the area since 1947. Finally, the 1964 5th Edition OS map (Figure 10) demonstrates that little had had changed within the area of the proposed development since 1953. The only noticeable change is represented by original trackway leading from the main road towards the farmhouse, which is back in use. Yet the reestablishment of the original trackway was not accompanied by the dismantlement of the second one, as both, at this time, are in use. This situation still applies today, as while the former comprises the main route into Coleg Plas Dwbl, the latter is now a public footpath (Plate 7). The trackway in its entirety has been included in Appendix IV as a new heritage asset. Here, both the original and current trackway are grouped together, forming part of a heritage asset known as ‘Plas Dwbl Trackway’, with the original track forming an easterly branch and the current track forming a westerly branch. These features have been grouped together in this manner as, for much of their existence, they were connected, forming separate branches of what can broadly be described as the same trackway.

3.8 Placename Evidence

- 3.8.1 The name ‘Mynachlog-ddu’ is composed of two words. These include the common noun ‘Mynachlog’, meaning ‘monastery’, or more specifically ‘monastic grange’, and the adjective ‘ddu’, meaning ‘black’. The name ‘Mynachlog-ddu’ therefore translates literally to ‘Black Monastic Grange’. The grange (DAT12601) in question was attached to St Dogmaels Abbey in the north (SMPe073). The name ‘Mynachlog-ddu’ is also a direct translation of the Latin name of this grange – Nigra Grangia. Throughout the Post-medieval and modern periods, the name ‘Mynachlog-ddu’ has had several derivatives. The most common of these is ‘Mynachlogddu’ (in which the hyphen is dropped). Perhaps the most mutated derivative belongs to the 16th century lay subsidy register of the area, which reads ‘Manoghogdee’ (Lewis 1969, 46–8). This

derivative is clearly an Anglicised version of the Welsh name. Historically, English speakers (particularly those in charge of conducting censuses and general administration) often confused the names 'Mynachlog-ddu' and 'Maenclochog' (which is situated to the southwest). This may have led to these two parishes being confused during the Post-medieval period.

- 3.8.2 The present-day Coleg Plas Dwbl takes its name from the farm that occupied the area in the 19th and 20th centuries. This name is formed of two words – the noun 'Plas', meaning 'hall', and the adjective 'Dwbl', meaning 'double'. Alternatively, the word 'Plas' could also mean 'estate'. This name pre-dates the publication of the 1846 Tithe map and its origin is unknown. However, as mentioned above, it is known that this name is no earlier than the 17th century, during which time the farm was known as 'Plas-pant y Rege (Plasyparte Roger)' (Pritchard 1907). The parenthesised portion of this name (which represents the farm's alternative name) is difficult to translate, although it appears at least partly French, perhaps suggestive of a Norman origin. Indeed, the name 'Roger' is also of Norman origin. The primary name of the farm at this time comprises four words – the noun 'Plas' (again meaning 'hall' or 'estate'); the suffix 'pant', meaning 'hollow'; the article 'y', meaning 'the'; and the Latin noun 'Rege', meaning 'King'. The original name of the farm, therefore, was a mixture of Welsh and Latin and translated to 'hall (or estate) in the hollow of the King'.

3.9 Aerial Photographic Evidence

- 3.9.1 The earliest aerial photograph of the proposed development and its immediate surroundings dates to 1980 (Plate 1). In this photograph, the position of Plas Dwbl farmhouse can be seen. The footprint of the farmhouse marries well with that described with reference to the 4th Edition OS map, on which the farmhouse is shown as an L-shaped building with an ancillary building towards its northern façade. In the 1980 aerial photograph, however, this ancillary building appears to form a full extension to the farmhouse and is therefore in line with the present form of the building, which was incorporated into Coleg Plas Dwbl by 2011. The photograph also demonstrates that the trackway presently leading into Coleg Plas Dwbl was in use in 1980 and that its form was identical to that seen today. Immediately to the east of this trackway, the photograph shows the faint outlines of the older trackway detailed above. There remains no doubt that this older trackway was covered over at this time as it is demonstrably transected by at least two hedgerows. The position of the Trallwyn-isaf farmhouse, as mentioned above, is today obscured by woodland. Yet the 1980 aerial photograph demonstrates that at this time no such woodland existed, and the footprint of the building can be observed. Finally, on the aerial photograph the topography of the Gors Fawr marshland immediately west of the development area (which straddles the base of Carn Siân to the north) is remarkably clear, and at least nine ring-shaped features can be distinguished. The area within which these features are situated was examined during the walkover survey, during which time the features could not be distinguished. These features are difficult to interpret, although it is suggested here that they could represent a medieval quarry site. This interpretation

is partly supported by the fact that, as detailed above, the local area sustained much quarrying during the medieval period. Alternatively, these features may be of prehistoric origin, perhaps representing hengiform features associated with the Gors Fawr Stone Circle (SMPe117), situated on the same stretch of marsh.

- 3.9.2 The 1983 aerial photograph of the local area (Plate 2) demonstrates that the proposed development area witnessed little change since 1980. The Gors Fawr marshland is again visible on this photograph and although the possible medieval quarry mentioned above are visible, they are far less distinguishable, with many blending into the brown foliage of the marsh. Again, the 1988 aerial photograph (Plate 3) shows little change in the area of the proposed development, yet the presence of the possible quarry to the west is much clearer. The latest available aerial photograph of the local area dates to 2000 (Plate 4). Although the Plas Dwbl farmhouse is out of view in this photograph, the Gors Fawr marshland to the west is markedly clear and the photograph demonstrates that some of the ring-shaped features sprawled across its expanse overlap one another. This aerial photograph also shows that by 2000, the centremost of the three polytunnels now situated in the development area had been erected. However, the horticultural storage building had not been built at this time.

3.10 Previous Investigations

- 3.10.1 A field survey was conducted by Cambria Archaeology (now Dyfed Archaeological Trust) between 1996 and 1997 of the Carnigli region (DAT Event 32844). The present development area was covered during this survey, which was situated on the southeast edge of the study area.
- 3.10.2 A geophysical survey was conducted in and around the Gors Fawr Stone Circle Scheduled Monument (SMPe117) in 2002 by Cambria Archaeology (now Dyfed Archaeological Trust) as part of the Strumble-Preseli Ancient Communities and Environment Study (SPACES) project (DAT Event 47278).
- 3.10.3 A field survey was conducted in and around the Gors Fawr Stone Circle Scheduled Monument (SMPe117) in 2006 by Cambria Archaeology (now Dyfed Archaeological Trust) (DAT Event 56591).

3.11 Site Visit

- 3.11.1 A walkover survey was conducted on the 23rd February 2022. This survey was conducted for the purposes of determining the effect of the proposed development on the historic environment by gathering evidence within the field. More specifically, this survey was conducted to establish, firstly, the likelihood of the development having a direct effect on heritage assets (both known and unknown). Secondly, the survey assessed the potential indirect visual effects of the development on all heritage assets within a 250m radius of the development and statutory designated sites within a 3km radius. The data collected during the walkover survey came primarily in the form of a photographic record, with key views to and from the development area and heritage assets being recorded. The walkover survey was conducted in overcast conditions of varied precipitation.

4 Assessment of Heritage Assets

4.1 Identified Heritage Assets

- 4.1.1 In total two heritage assets were identified within the proposed development area (Tables 3 and 4). These heritage assets include Plas Dwbl Farm (ID1) and Plas Dwbl Farm Trackway (ID2).
- 4.1.2 Plas Dwbl is presently recorded in the historic environment records as an extant Post-medieval farmstead (DAT52393; DAT121154) that appears on the 1846 Tithe map of Mynachlog-ddu (Figure 6), and which now forms part of the main building of Coleg Plas Dwbl. However this study has shown that the Plas Dwbl Farm landholding (ID1) can be dated back to 1538 when the lands of Mynachlog-ddu Grange were carved into numerous tenements featuring gentry farmsteads of some status. Prior to it being bestowed with the name 'Plas Dwbl' (or any other variation such as 'Plasdwbwl'), the farm was known as 'Plas-pant y Rege (Plasyparte Roger)'. The bounds of this medieval tenement are unknown, however the 1846 tithe map and apportionment (see above) indicate that the proposed development area falls within the Post-medieval landholding of Plas Dwbl, and therefore almost certainly falls within the Medieval tenement.
- 4.1.3 Plas Dwbl Farm Trackway (ID2) is again shown on the 1846 Tithe map and is of at least mid-19th date, being associated with Plas Dwbl Farm in both its Post-medieval and modern form. Although this heritage asset was periodically altered throughout its use, for most of its existence it has exhibited a forked or branching form, where a single track runs southward from the main road to the north for around 145m, before forking into easterly and westerly branches. It is suggested here that the easterly branch is the oldest of the two, with the westerly branch possibly representing a later addition to the trackway.
- 4.1.4 Within the primary study area, which comprised a 250m radius of the proposed development, two heritage assets have been identified. These two heritage assets, which comprise Plas Dwbl Military Camp (ID20) located c.170m S of the development area, and Penrhos Enclosure (ID21) located c.240m from the development area, within the curtilage of the Gors Fawr Stone Circle Scheduled Monument (SMPe117). The walkover survey revealed that both sites were in such a highly ruinous state that identifying them proved very difficult (see Plate 12 and 13).
- 4.1.5 Plas Dwbl Military Camp (ID20), which was constructed during WWII for the purposes of stationing American troops, survives as a subterranean feature only and is not visible within the landscape (Plate 13).
- 4.1.6 The same can also be said of Penrhos Enclosure (ID21), although a limited stretch of its outer bank was detected, which was markedly shallow (Plate 12). Penrhos Enclosure is difficult to interpret; it is possibly either a prehistoric enclosure associated with the Gors Fawr Stone Circle within its immediate vicinity, or it represents the remains of an agricultural enclosure of medieval or Post-medieval date. As this feature

fails to appear on the 1846 Tithe map, either a prehistoric or medieval date for its construction is more realistic. The assessment for the Gors Fawr Stone Circle Scheduled Monument (SMPe117) as a whole is described below.

- 4.1.7 For the purposes of assessing the setting and significance of statutory designated heritage assets, a secondary 3km radius study area was applied. Within this secondary study area, 23 heritage assets have been identified (Tables 3 and 4), all of which have been considered for assessment below. Aside from Parc Maen Complex (ID19), all of these heritage assets constitute Scheduled Monuments or Listed Buildings.
- 4.1.8 Fourteen of these heritage assets are likely of Bronze Age date. These include the Gors Fawr Stone Circle (ID3); Gors Fawr Standing Stones (ID4); Rhos Fach Standing Stone Pair (ID5); Ty-Newydd Standing Stones (ID6); Gate Standing Stone (ID7); Waun Llwyn Standing Stones (ID8); Standing Stone 600m East of Dolau-Newydd (ID9); Cairn Circle 585m Northeast of Meini Gwyr (ID12); Meini Gwyr (ID13); Earthwork 125m Southwest of Meini Gwyr (ID14); Yr Allor (ID15); Tumulus North of Goodwins Row, Efailwen (ID16); Standing Stone 110m Northwest of Spring Gardens (ID18); and Parc Maen Complex (ID19). Furthermore, the Gors Fawr Stone Circle (ID3) and Castell Garw (ID11) are either of Neolithic or Bronze Age date, while Carn Besi Burial Chamber (ID10) is of Neolithic date. The medieval site of Castell Pen-Gawsai (ID17) is the only scheduled Monument within the secondary study area that is not of prehistoric date.
- 4.1.9 Six Listed Buildings were included in the assessment as they are situated within the Preseli Registered Historic Landscape. These include Schoolroom at Bethel Baptist Chapel (LB22766), Bethel Chapel (LB22758), Pont yr Haiarn (LB83192), Telephone Call-box outside Church of Saint Dogmael (LB83193), Church of Saint Dogmael (LB6083) and Rhosfach House (LB13075).

Fig ID	ID	Name	NGR	Period	Type	Designation	Designation ID	Value
Within Development Area								
ID1	None	Plas Dwbl Farm (landholding)	SN 13764 29307	Medieval/ Post-medieval	Farm	None	n/a	C
ID2	None	Plas Dwbl Farm Trackway	SN 13772 29324	Post-medieval	Trackway	None	n/a	D
Within Primary Study Area (250m Radius)								
ID20	DAT11040 2	Plas Dwbl Military Camp	SN 13850 29150	Modern	Military Camp	None	n/a	D
ID21	DAT1197	Penrhos Enclosure	SN 13500 29400	unknown	Enclosure	None	n/a	C
Within Secondary Study Area (3km Radius)								

Fig ID	ID	Name	NGR	Period	Type	Designation	Designation ID	Value
ID3	SMPe117; DAT922; NPRN300 422	Gors Fawr Stone Circle	SN 13465 29374	Neolithic/ Bronze Age	Stone Circle	Scheduled Monument	SMPe117	A
ID4	SMPe117; DAT928; NPRN304 281	Gors Fawr Standing Stones	SN 13510 29500	Bronze Age	Standing Stone Pair	Scheduled Monument	SMPe117	A
ID5	SMPe497	Rhos Fach Standing Stone Pair	SN 13429 30492	Bronze Age	Standing Stone Pair	Scheduled Monument	SMPe497	A
ID6	SMPe121	Ty-Newydd Standing Stones	SN 11819 31022	Bronze Age	Standing Stone Pair?	Scheduled Monument	SMPe121	A
ID7	SMPe288; DAT1003	Gate Standing Stone	SN 11138 30331	Bronze Age	Standing Stone	Scheduled Monument	SMPe288	A
ID8	SMPe116	Waun Lwyd Standing Stones	SN 15779 31262	Bronze Age	Standing Stone Pair?	Scheduled Monument	SMPe116	A
ID9	SMPe523	Standing Stone 600m East of Dolau-Newydd	SN 16221 30631	Bronze Age	Standing Stone	Scheduled Monument	SMPe523	A
ID10	SMCm049 ; DAT1135	Carn Besi Burial Chamber	SN 15626 27685	Neolithic	Dolmen	Scheduled Monument	SMCm049	A
ID11	SMCm245 ; DAT1024	Castell Garw	SN 14718 26905	Neolithic/ Bronze Age	Henge	Scheduled Monument	SMCm245	A
ID12	SMCm050 ; DAT1013	Cairn Circle 585m Northeast of Meini Gwyr	SN 14571 27025	Bronze Age	Round Barrow	Scheduled Monument	SMCm050	A
ID13	SMCm051 ; DAT990	Meini Gwyr	SN 14156 26602	Bronze Age	Henge	Scheduled Monument	SMCm051	A
ID14	SMCm247 ; DAT1051	Earthwork 125m Southwest of Meini Gwyr	SN 14096 26484	Bronze Age	Ring Cairn	Scheduled Monument	SMCm247	A
ID15	SMCm052 ; DAT1000	Yr Allor	SN 13951 26610	Bronze Age	Standing Stone	Scheduled Monument	SMCm052	A
ID16	SMCm246	Tumulus North of Goodwins Row, Efailwen	SN 13985 26259	Bronze Age	Ring Cairn	Scheduled Monument	SMCm246	A
ID17	SMPe289; DAT982	Castell Pen- Gawsai	SN 11027 28050	Medieval	Earthwork	Scheduled Monument	SMPe289	A

Fig ID	ID	Name	NGR	Period	Type	Designation	Designation ID	Value
ID18	SMPe406	Standing Stone 110m Northwest of Spring Gardens	SN 11386 28339	Bronze Age	Standing Stone	Scheduled Monument	SMPe406	A
ID19	DAT48360	Parc Maen Complex	SN 11139 30330	Bronze Age	Monument Complex	None	n/a	A
ID20	LB22766	Schoolroom at Bethel Baptist Chapel	SN 14525 30395	Post- medieval	Chapel/ schoolroom	Grade II Listed Building	LB22766	B
ID21	LB22758	Bethel Chapel	SN 14530 30374	Post- medieval	Chapel	Grade II Listed Building	LB22758	B
ID22	LB83192	Pont yr Haiarn	SN 14342 28604	Post- medieval	Bridge	Grade II Listed Building	LB83192	B
ID23	LB83193	Telephone Call- box outside Church of Saint Dogmael	SN 13208 28261	Modern	Telephone box	Grade II Listed Building	LB83193	B
ID24	LB6083	Church of Saint Dogmael	SN 13186 28251	Medieval	Church	Grade II Listed Building	LB6083	B
ID25	LB13075	Rhosfach House	SN 11430 28184	Post- medieval	House	Grade II Listed Building	LB13075	B

Table 3. Identified heritage assets

4.2 Potential Direct Impacts on Heritage Assets

4.2.1 The potential direct impact of the proposed development on heritage assets is confined to two sites: Plas Dwbl Farm (ID1) and Plas Dwbl Farm Trackway (ID2).

4.2.2 Plas Dwbl Farm (ID1)

4.2.3 The potential direct effect of the proposed development on Plas Dwbl Farm (ID1) has been assessed as **Low** means that the proposed development has potential to lead to only a slight loss of integrity for the heritage asset. The Post-medieval Plas Dwbl farmhouse (DAT121146; 52392), which now forms part of Coleg Plas Dwbl, falls outside of the study area and will not be directly affected. However, the proposed development involves construction and associated groundwork within a delimited area of the farm landholding, which records show dates back to a medieval tenement farm carved out of the lands held by the monastic grange *Nigra Grangia/ Mynyddlog-Ddu* following the dissolution of the monasteries. The affected area has been identified as Land Parcel 233 on the 1846 Tithe map (Figure 6). There is the possibility that buried features, deposits or artefacts connected with Plas Dwbl Farm survive underground which may include, but will not be limited to, ridge and furrow,

enclosures, hedgerows or structural foundations association with agricultural buildings that may date between the medieval period and the 20th century.

4.2.4 The assessment notes that whilst the footprint of Canolfan Awen encompasses only a small area, associated groundworks will almost certainly spread beyond its confines. This effect may come in the form of, for example, the movement of heavy plant machinery across the wider area or the excavation of service trenches.

4.2.5 The assessment also notes that the present land use of the site in the form of polytunnels and horticulture will have significantly disturbed shallow deposits (c.0.5m), however deeper deposits are likely to remain *intact*.

4.2.6 **Plas Dwbl Farm Trackway (ID2)**

4.2.7 The potential direct effect of the proposed development on Plas Dwbl Farm Trackway (ID2) has been assessed as being **Low**. The trackway separates into an eastern and western branch approximately 41m north of the proposed development area, with the former currently functioning as a public footpath and the latter comprising the main route into Coleg Plas Dwbl. The shortest distance between the eastern branch and the proposed development is around 18m meaning that there will be no direct impact on this branch. However, according to Figure 1, the proposed footprint of Canolfan Awen will encroach directly onto the western branch of the present trackway which will necessitate this section of trackway to be relocated approximately 4m to the east. This procedure will involve alterations (and potentially physical disturbance) to the existing trackway. Further, the remainder of the western branch of the trackway in this area may be directly affected by the movement of heavy plant machinery, therefore disturbing its physical integrity.

4.2.8 Additional disturbance to the Plas Dwbl Trackway (ID2) will occur as a result of the relocation of the main access into the site 32m southwards. This northernmost stretch of the trackway extends for approximately 145m before separating into the eastern and western branches. The procedure will have a direct physical impact on a small 41m long portion of this stretch, which will be put out of use as a result of the proposed plans. In addition, a new section of track will be constructed between the new access and the present track, replacing the small portion of track that will be put out of use and altering the alignment of this heritage asset. Any ground works associated with this new section of track has the potential to disturb buried features, deposits or artefacts connected with Plas Dwbl Farm as outlined above.

4.2.9 **Unknown buried prehistoric deposits**

4.2.10 Any groundworks associated with the proposed new access at the northern end of the trackway, as described above, also has potential to disturb buried prehistoric landscapes, features and deposits associated with the Gors Fawr Stone Circle Scheduled Monument (ID3), the curtilage of which is located only c.130m to the west.

4.3 Potential Indirect Visual Impacts on Heritage Assets

- 4.3.1 For the purposes of assessing the indirect (visual) impacts of the proposed development, all heritage assets within a primary study area (comprising a 250m radius surrounding the development area) were assessed. Furthermore, all statutory designated or otherwise Value A heritage assets falling within the secondary study area (comprising a 3km radius surrounding the development area) were assessed.
- 4.3.2 The indirect effect of the proposed development on those heritage assets were assessed via, on the one hand, field observations derived from walkover survey and, on the other, ZTV analysis (Figure 5). ZTV analysis implements LiDAR data to determine lines of sight to and from a set of pre-determined viewpoints within the landscape using a GIS intervisibility algorithm. These viewpoints were set up along the boundary of the proposed development. In total, eight viewpoints were created surrounding the development area, which is broadly circular in form. Four of these viewpoints were aligned with the four cardinal points, while another four were positioned in between. In this way, the visual effects of the proposed development could be assessed from all sides. Furthermore, the proposed height of the development, which was obtained from elevation drawings of Canolfan Awen (Figure 2), was incorporated into the GIS intervisibility algorithm. As a result, the ZTV analysis was able to take into consideration the three-dimensional form of the development. The maximum proposed height of Canolfan Awen, which represented a measurement from ground level to the crest of its roof, was determined to be 2.85m. By combining ZTV analysis with observations made in the field, the theoretical data provided by the former could be confirmed via ground truthing during the latter.
- 4.3.3 Two heritage assets were considered for assessment within 250m of the proposed development area. Plas Dwbl Military Camp (ID20) was located c.170m S of the development area, was found to have no surface remains and therefore no indirect visual impact. Penrhos Enclosure (ID21) was located c.240m from the development area, within the curtilage of the Gors Fawr Stone Circle Scheduled Monument (ID3). This site also had very little visible remains save for a limited stretch of its outer bank was detected, which was markedly shallow, and was therefore assessed as being subject to no indirect visual impact.
- 4.3.4 Of those statutory designated heritage assets identified within a 3km radius of the development area, it was deemed that two have potential to be indirectly affected by the proposed development. These include the Gors Fawr Stone Circle (ID3) and Gors Fawr Standing Stones (ID4), both of which form part of Scheduled Monument (SMPe117). The identification and assessment of these heritage assets was based on a combination of ZTV analysis and physical examination in the field, with the latter informing the findings of the former. Although the ZTV analysis results outlined in Figure 5 suggest that these heritage assets lie marginally outside the proposed development's field of view, observations conducted in the field indicated that some lines of sight nonetheless exist (Plate 9 and 11).

4.3.5 **Gors Fawr Stone Circle (ID3)**

4.3.6 It has been assessed that the indirect (visual) effect of the proposed development on the Gors Fawr Stone Circle (ID3) will be **Very Slight**. This assessment has been made in consideration of the fact that the lines of sight to and from the development area are obscured by a combination of partial tree cover and undulations in the landscape (Plate 9). These undulations are partly caused by a split level between the lowland area in which the proposed development is located and the upper marshland on which the heritage asset is positioned. However, the tree cover situated in between the development area and the heritage asset is intermittent, meaning that some intervisibility between the two will likely exist once Canolfan Awen has been erected.

4.3.7 **Gors Fawr Standing Stones (ID4)**

4.3.8 It has been assessed here that the indirect (visual) effect of the proposed development on the Gors Fawr Standing Stones (ID4) will be **Very Slight**. This assessment has been made for the same reasons outlined above with regards to the visual relationship between the proposed development and the Gors Fawr Stone Circle (ID3). This shared reasoning is due to the fact that both the Gors Fawr Standing Stones (ID4) and the Gors Fawr Stone Circle (ID3) are both situated within the curtilage of Scheduled Monument (SMPe117).

4.3.9 With regards the remaining heritage assets considered for assessment within a 3km radius of the development area, ZTV analysis indicated that that no intervisibility exists between the former and the latter. Moreover, observations conducted in the field supported these findings. Again, a combination of tree and hedgerow cover, together with undulations in the local landscape, impeded intervisibility between the development area and the remaining heritage assets.

4.3.10 The last column "Setting Effects Y/N" identifies those heritage assets that may have indirect visual impacts to the setting of the monument (Stage 1 as set out in *Setting of Historic Assets in Wales 2017 (The Historic Environment (Wales) Act 2016, Annex 6)*).

Fig ID	ID	Name	NGR	Period	Type	Designation	Designation ID	Value	Rarity	Documentation / Association	Group Value	Survival/Condition	Direct Effect	Significance of Direct Effect	Indirect Effect	Setting Effect Yes/No
Within Development Area																
ID1	None	Plas Dwbl Farm (landholding)	SN 13764 29307	Medieval/ Post-medieval	Farm	None	n/a	C	Low	Moderate	Moderate	Damaged/Moderate	Yes	Low	None	No
ID2	None	Plas Dwbl Farm Trackway	SN 13772 29324	Post-medieval	Trackway	None	n/a	C	Low	Low	Moderate	Near Intact/Good	Yes	Low	None	No
Within 250m																
ID20	DAT110402	Plas Dwbl Military Camp	SN 13850 29150	Modern	Military Camp	None	n/a	D	Low	Moderate	Moderate	Destroyed	No	n/a	None	No
ID21	DAT1197	Penrhos Enclosure	SN 13500 29400	unknown	Enclosure	None (falls within curtilage of SMPe117)	n/a	C	Medium	None	High	Nearly destroyed/Poor	NO	n/a	None	No
Within 3km																
Value A Heritage Assets (and Grade II LBs within HLCAs)																
ID3	SMPe117; DAT922; NPRN300422	Gors Fawr Stone Circle	SN 13465 29374	Neolithic/ Bronze Age	Stone Circle	Scheduled Monument	SMPe117	A	Medium	Low	High	Intact/Good	No	n/a	Very Slight	Yes
ID4	SMPe117; DAT928; NPRN304281	Gors Fawr Standing Stones	SN 13510 29500	Bronze Age	Standing Stone Pair	Scheduled Monument	SMPe117	A	Medium	Low	High	Intact/Good	No	n/a	Very Slight	Yes
ID5	SMPe497	Rhos Fach Standing Stone Pair	SN 13429 30492	Bronze Age	Standing Stone Pair	Scheduled Monument	SMPe497	A	Medium	Low	High	Intact/Good	No	n/a	None	No
ID6	SMPe121	Ty-Newydd Standing Stones	SN 11819 31022	Bronze Age	Standing Stone Pair?	Scheduled Monument	SMPe121	A	Medium	Low	High	Intact/Good	No	n/a	None	No
ID7	SMPe288; DAT1003	Gate Standing Stone	SN 11138 30331	Bronze Age	Standing Stone	Scheduled Monument	SMPe288	A	Medium	Low	High	Intact/Good	No	n/a	None	No
ID8	SMPe116	Waun Lwyd Standing Stones	SN 15779 31262	Bronze Age	Standing Stone Pair?	Scheduled Monument	SMPe116	A	Medium	Low	High	Intact/Good	No	n/a	None	No
ID9	SMPe523	Standing Stone 600m East of Dolau-Newydd	SN 16221 30631	Bronze Age	Standing Stone	Scheduled Monument	SMPe523	A	Medium	Low	High	Intact/Good	No	n/a	None	No
ID10	SMCm049; DAT1135	Carn Besi Burial Chamber	SN 15626 27685	Neolithic	Dolmen	Scheduled Monument	SMCm049	A	Medium	Low	High	Damaged/Moderate	No	n/a	None	No
ID11	SMCm245; DAT1024	Castell Garw	SN 14718 26905	Neolithic/ Bronze Age	Henge	Scheduled Monument	SMCm245	A	Medium	Low	High	Damaged/Moderate	No	n/a	None	No

Fig ID	ID	Name	NGR	Period	Type	Designation	Designation ID	Value	Rarity	Documentation / Association	Group Value	Survival/Condition	Direct Effect	Significance of Direct Effect	Indirect Effect	Setting Effect Yes/No
ID12	SMCm050; DAT1013	Cairn Circle 585m Northeast of Meini Gwyr	SN 14571 27025	Bronze Age	Round Barrow	Scheduled Monument	SMCm050	A	Medium	Low	High	Damaged/Poor	No	n/a	None	No
ID13	SMCm051; DAT990	Meini Gwyr	SN 14156 26602	Bronze Age	Henge	Scheduled Monument	SMCm051	A	Medium	Low	High	Damaged/Poor	No	n/a	None	No
ID14	SMCm247; DAT1051	Earthwork 125m Southwest of Meini Gwyr	SN 14096 26484	Bronze Age	Ring Cairn	Scheduled Monument	SMCm247	A	Medium	Low	High	Damaged/Poor	No	n/a	None	No
ID15	SMCm052; DAT1000	Yr Allor	SN 13951 26610	Bronze Age	Standing Stone	Scheduled Monument	SMCm052	A	Medium	Low	High	Near Destroyed/Poor	No	n/a	None	No
ID16	SMCm246	Tumulus North of Goodwins Row, Efailwen	SN 13985 26259	Bronze Age	Ring Cairn	Scheduled Monument	SMCm246	A	Medium	Low	High	Near Destroyed/Poor	No	n/a	None	No
ID17	SMPe289; DAT982	Castell Pen- Gawsai	SN 11027 28050	Medieval	Earthwork	Scheduled Monument	SMPe289	A	Medium	Low	Moderate	Damaged/ Good	No	n/a	None	No
ID18	SMPe406	Standing Stone 110m Northwest of Spring Gardens	SN 11386 28339	Bronze Age	Standing Stone	Scheduled Monument	SMPe406	A	Medium	Low	High	Near Intact/Good	No	n/a	None	No
ID19	DAT48360	Parc Maen Complex	SN 11139 30330	Bronze Age	Monument Complex	None	n/a	A	Medium	Low	High	Damaged/Moderate	No	n/a	None	No
ID20	LB22766	Schoolroom at Bethel Baptist Chapel	SN 14525 30395	Post- medieval	Chapel/ schoolroom	Grade II Listed Building	LB22766	B	Low	Medium	High	unknown	No	n/a	None	No
ID21	LB22758	Bethel Chapel	SN 14530 30374	Post- medieval	Chapel	Grade II Listed Building	LB22758	B	Low	Medium	High	unknown	No	n/a	None	No
ID22	LB83192	Pont yr Haiarn	SN 14342 28604	Post- medieval	Bridge	Grade II Listed Building	LB83192	B	Low	Medium	Low	Intact/ Good	No	n/a	None	No
ID23	LB83193	Telephone Call- box outside Church of Saint Dogmael	SN 13208 28261	Modern	Telephone box	Grade II Listed Building	LB83193	B	Low	Medium	High	unknown	No	n/a	None	No
ID24	LB6083	Church of Saint Dogmael	SN 13186 28251	Medieval	Church	Grade II Listed Building	LB6083	B	Low	High	Medium	Intact/ Good	No	n/a	None	No
ID25	LB13075	Rhosfach House	SN 11430 28184	Post- medieval	House	Grade II Listed Building	LB13075	B	Low	Medium	Medium	Unknown	No	n/a	None	No

Table 4. Assessment of heritage assets

4.4 Potential Impacts on Setting and Significance – Stage 1

- 4.4.1 The assessment of the potential impact of the proposed development on the setting and significance of heritage assets are confined to International and National value heritage assets (A* and A class). These include Scheduled Monuments, Registered Landscapes, Parks and Gardens and Grade I and sometimes Grade II* Listed Buildings. Grade II Listed Buildings are also considered if their setting includes or is included with a Registered Landscape or Park and Garden.
- 4.4.2 It has been concluded that the proposed development has the potential to affect the setting and significance of two heritage assets (see Table 5); Gors Fawr Stone Circle (ID3) and Gors Fawr Standing Stones (ID4). Both are situated within a 3km radius of the proposed development area.

4.5 Defining and evaluating the Setting and Significance of Heritage Assets – Stage 2 and 3

- 4.5.1 Sections 3 and 4 above set out the context and extent of these heritage assets, which contribute to the Stage 1 and 2 assessment of setting and significance. Section 3 sets out the value and Section 4.1 and 4.2 the direct and indirect effects, which also contribute to the overall understanding of heritage assets and their setting (Stage 2 assessment of setting and significance).
- 4.5.2 The assessment of the Cumulative Visual Effect is the culmination of the assessment of value, degree of change and corresponding effects. This is partly a subjective exercise based on the assessor’s experience and knowledge.

Fig ID	ID	Name	Value	Evidential Value	Historical Value	Aesthetic Value	Communal Value	Type of visual effect/change	Magnitude of Effect	Significance of Effect	Cumulative Visual Effect
ID3	SMPe117; DAT922; NPRN300422	Gors Fawr Stone Circle	A	High	High	High	Moderate	Very Slight Interruption	Low	Significant	Very Slight
ID4	SMPe117; DAT928; NPRN304281	Gors Fawr Standing Stones	A	High	High	High	Moderate	Very Slight Interruption	Low	Significant	Very Slight

Table 5. Assessing value and significance of indirect visual effects on the setting of heritage assets

4.5.3 Summary of Impact to Setting and Significance

4.5.4 *Gors Fawr Stone Circle (ID3)*

4.5.5 The proposed development will have a **Very Slight** cumulative effect on the setting and significance of the Gors Fawr Stone Circle (ID3). As was detailed above, although the key views and/or essential lines of sight between the proposed development and this heritage asset are noticeable (resulting in little discernible severance of cultural heritage links) they are nonetheless obscured by a mixture of tree cover and landscape undulation. Furthermore, the proposed development will have no impact on the key views and/or essential lines of sight between this heritage asset and those other contemporary monuments nearby that contribute to its setting and significance. In particular, these other monuments include the Gors Fawr Standing Stones (ID4) approximately 143m to the north and the Rhos Fach Standing Stone Pair (ID5) approximately 1.1km to the north.

4.5.6 *Gors Fawr Standing Stones (ID4)*

4.5.7 The proposed development will have a **Very Slight** cumulative effect on the setting and significance of the Gors Fawr Standing Stones (ID4). The reasons that the assessment has drawn this conclusion are identical to those outlined above with reference to the Gors Fawr Stone Circle (ID3). The key views and/or essential lines of sight between the proposed development and this heritage asset are noticeable (resulting in little discernible severance of cultural heritage links) and are presently obscured by a mixture of tree cover and landscape undulation. The proposed development will not, moreover, obscure key views and/or essential lines of sight between the heritage asset and the nearby contemporary monuments to the north.

5 Mitigation Recommendations

5.1.1 This assessment has concluded that two heritage assets have the potential to be directly impacted by the proposed development. These heritage assets are Plas Dwbl Farm (ID1) and Plas Dwbl Farm Trackway (ID2) both of which may be subject to a **Low** direct impact.

5.1.2 Ground penetrating works conducted in advance of, or during, the construction of Canolfan Awen and the proposed new access route have the potential to encounter buried archaeological remains (in the form of features, deposits or artefacts) associated with the farm and trackway, ranging from medieval to modern date.

5.1.3 In addition, any ground penetrating works associated with the proposed new access route has potential to reveal prehistoric deposits related to the Gors Fawr Stone Circle Scheduled Monument (SMPe117), the curtilage of which is located only c.130m to the west.

5.1.4 It is noted that the present land use of the development area is polytunnels and horticulture and that this is likely to have disturbed shallow deposits (c.0.5m) however any archaeological deposits below this depth are likely to remain *intact*. Whilst an

auger survey may offer a greater understanding of the nature and extent of deposit depths in this location, this is deemed uneconomical for the small scale of development.

- 5.1.5 It is therefore recommended that an archaeological watching brief be conducted during all ground penetrating works carried out in association with the proposed development, including the new access route. The watching brief should be conducted in accordance with the Chartered Institute for Archaeologists' *Standard and Guidance for an Archaeological Watching Brief* (published 2014, revised 2020).

5.2 Assessment of Residual Impact

- 5.2.1 Provided that the mitigation measures noted above are followed the potential direct impact of the proposed development on buried archaeological remains associated with the identified heritage assets will be reduced to **None**.
- 5.2.2 Finally, the assessment has concluded that all potential indirect effects caused by the proposed development will remain unchanged for the lifetime of the proposed development.

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7 Appendices

7.1 Appendix I – Figures

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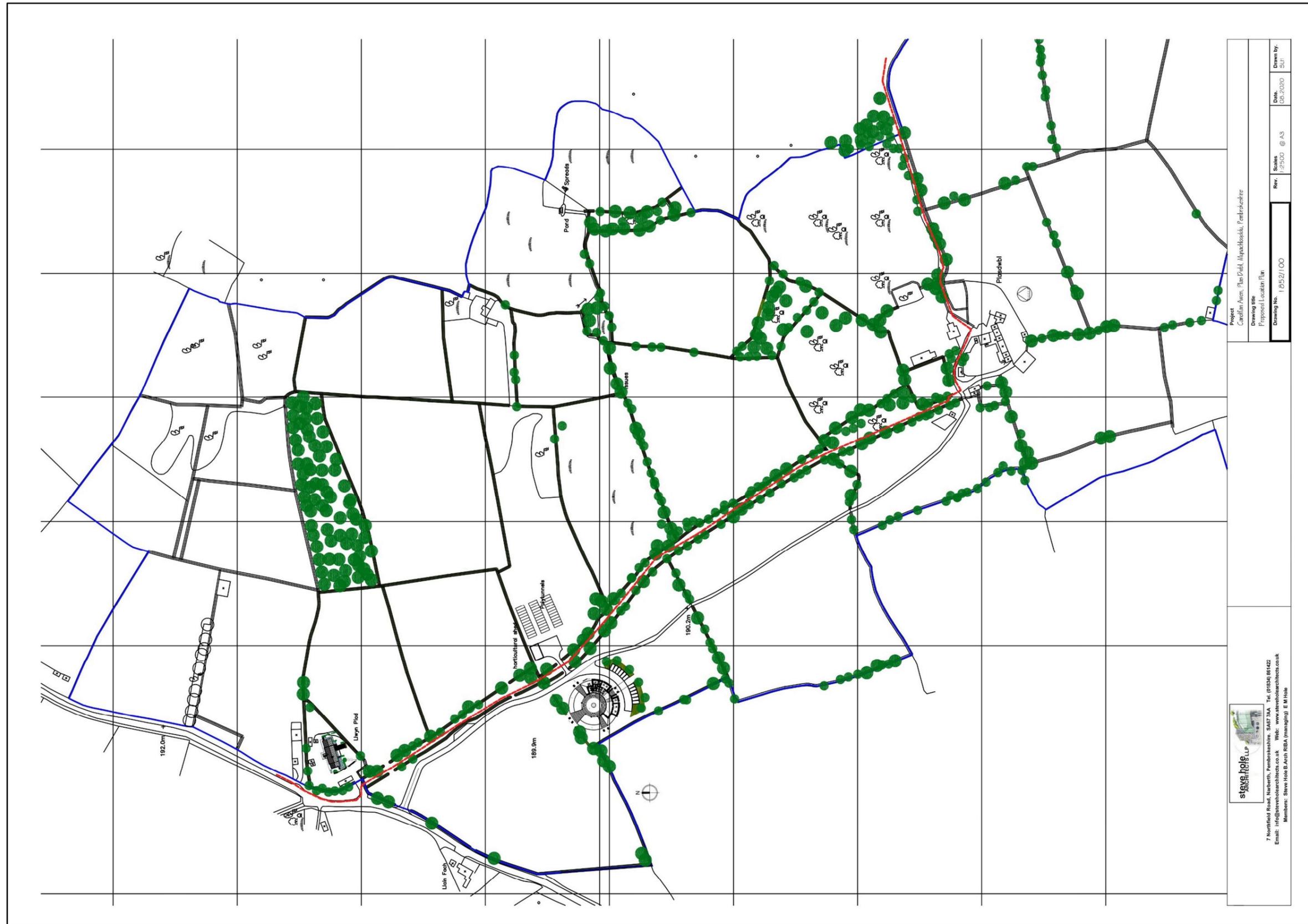


Figure 1. Location plan of proposed development (provided by Steve Hole Architects)

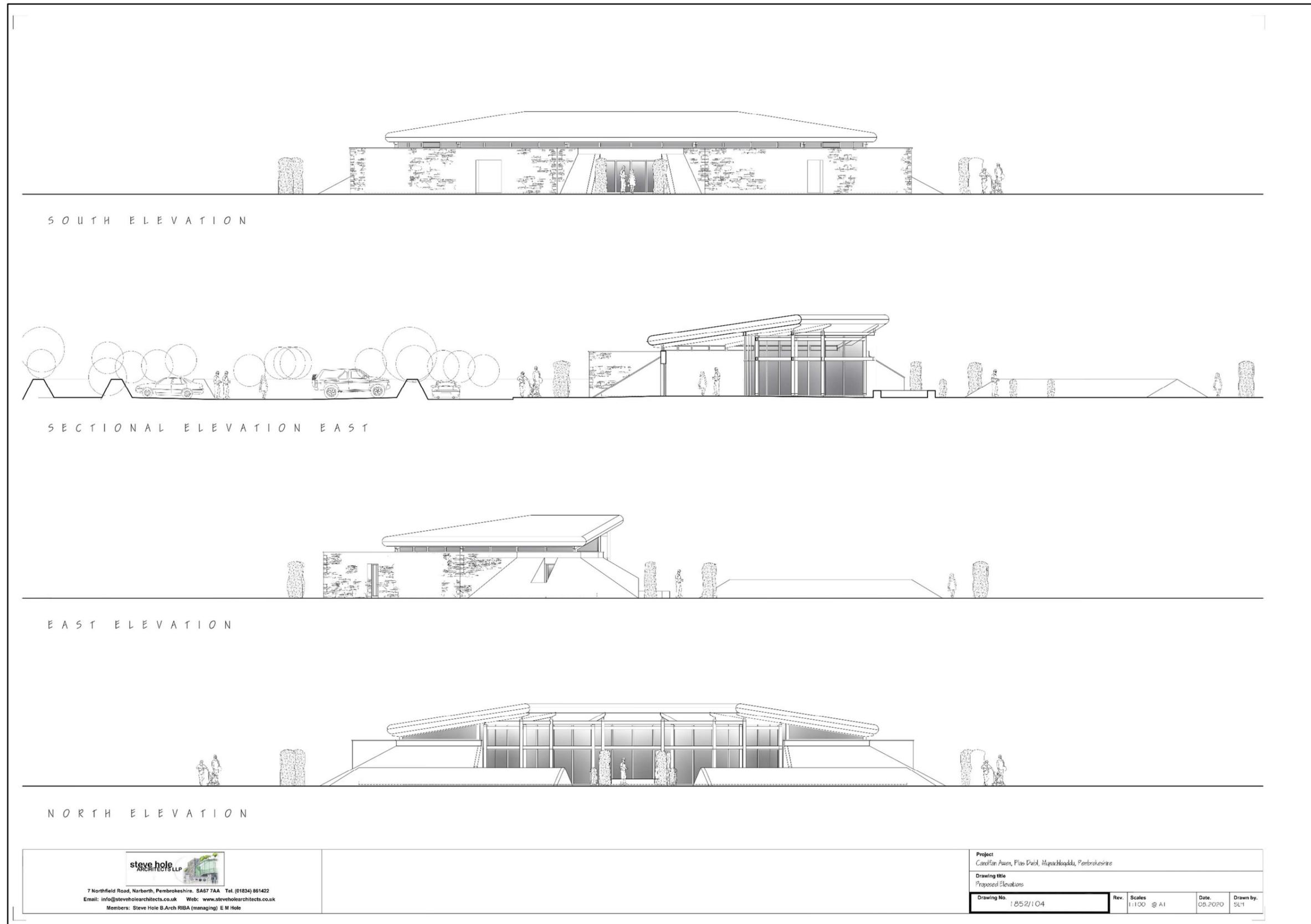


Figure 2. Proposed elevation drawings of Canolfan Awen (provided by Steve Hole Architects)

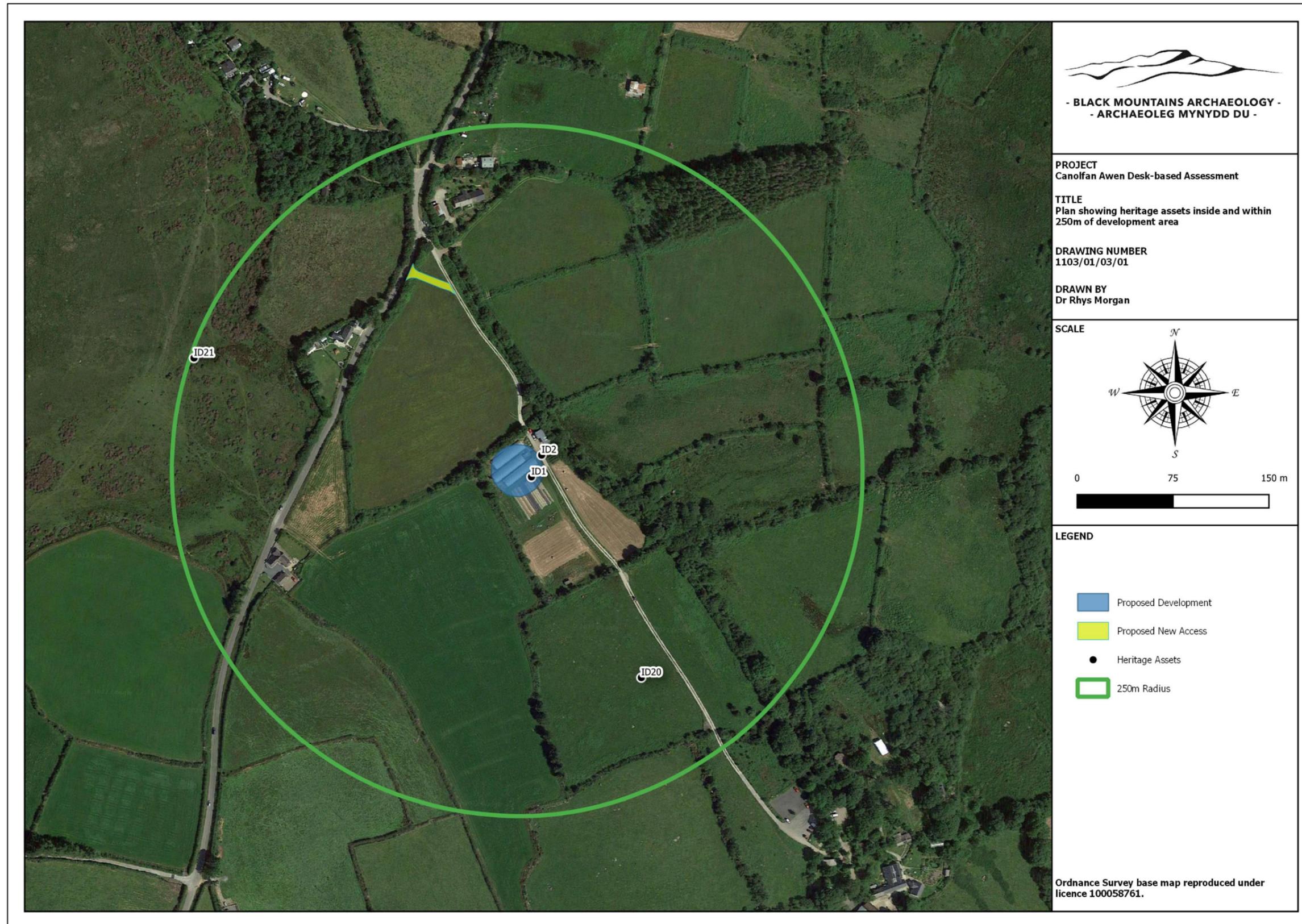


Figure 3. Plan showing heritage assets directly inside and within 250m of development area (© Bluesky, Infoterra Ltd & COWI A/S, CNES/Airbus, Getmapping plc and Maxar Technologies)

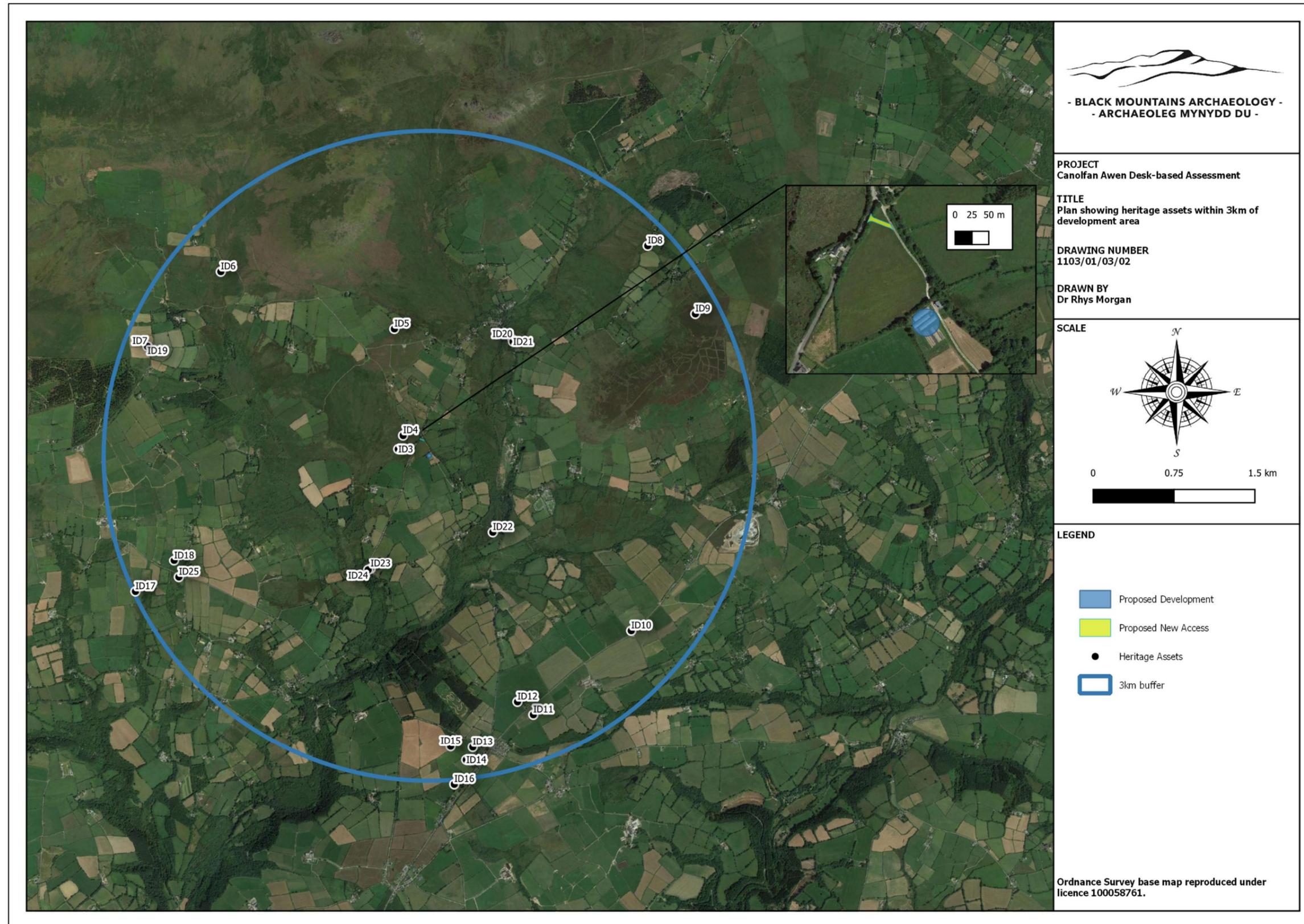


Figure 4. Plan showing heritage assets within 3km of development area (© Bluesky, Infoterra Ltd & COWI A/S, CNES/Airbus, Getmapping plc and Maxar Technologies)

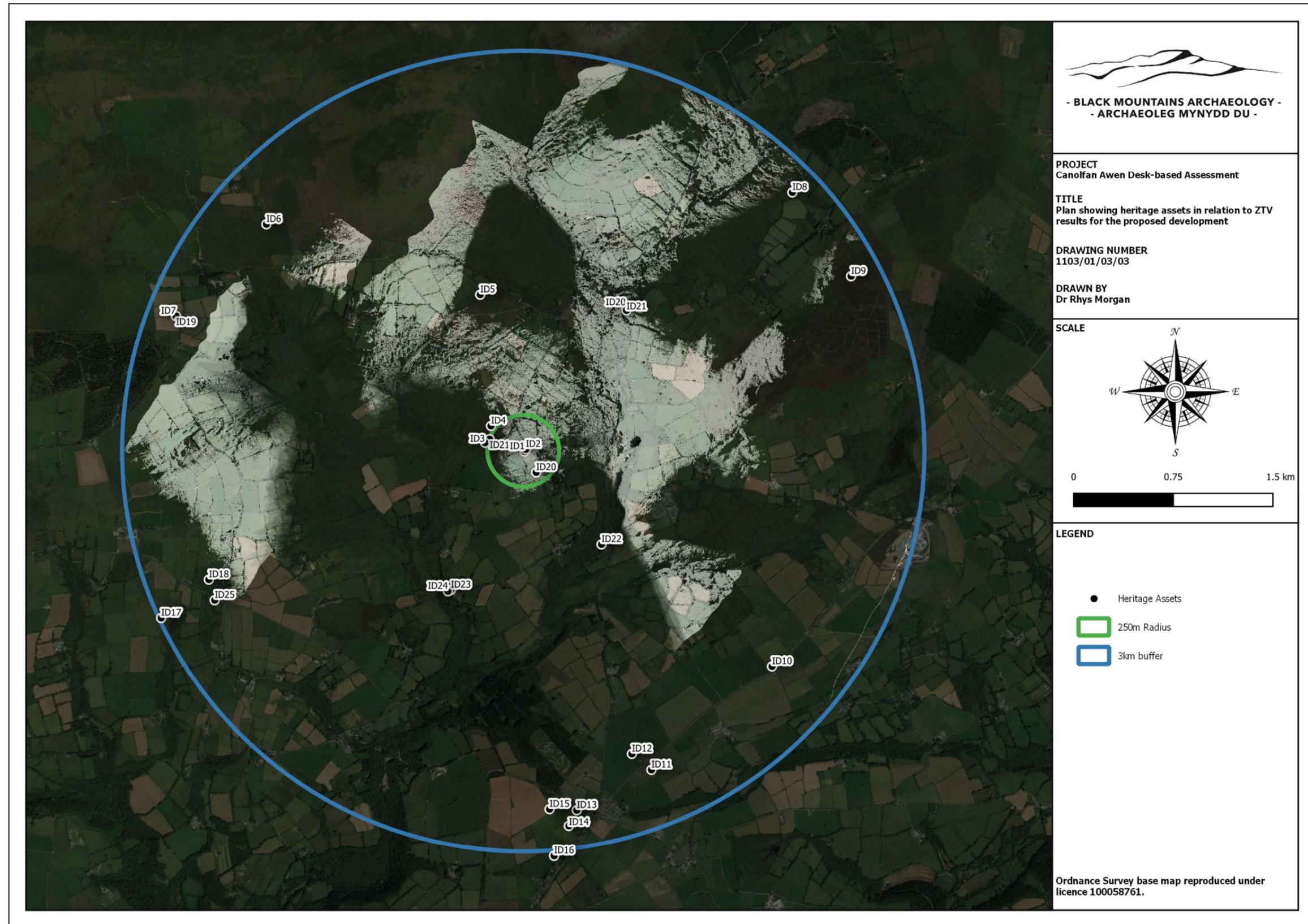


Figure 5. ZTV analysis results demonstrating intervisibility to/from proposed development and heritage assets using DTM LiDAR results (© Bluesky, Infoterra Ltd & COWI A/S, CNES/Airbus, Getmapping plc and Maxar Technologies)

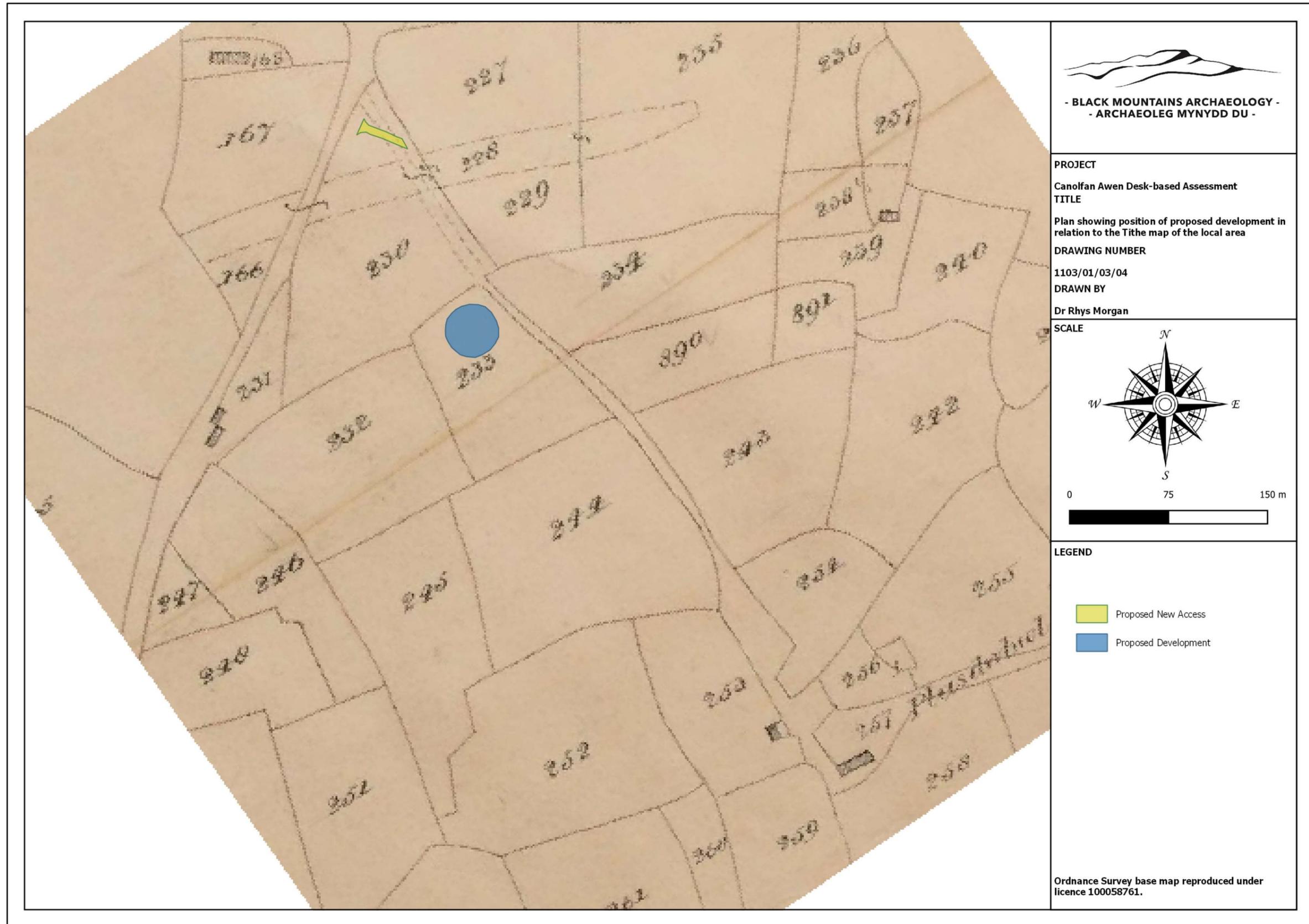


Figure 6. Plan demonstrating position of development area in relation to the 1846 Tithe map (*Plan of the Parish of Mynachlog-ddu in the County of Pembroke*) (© National Library of Wales)

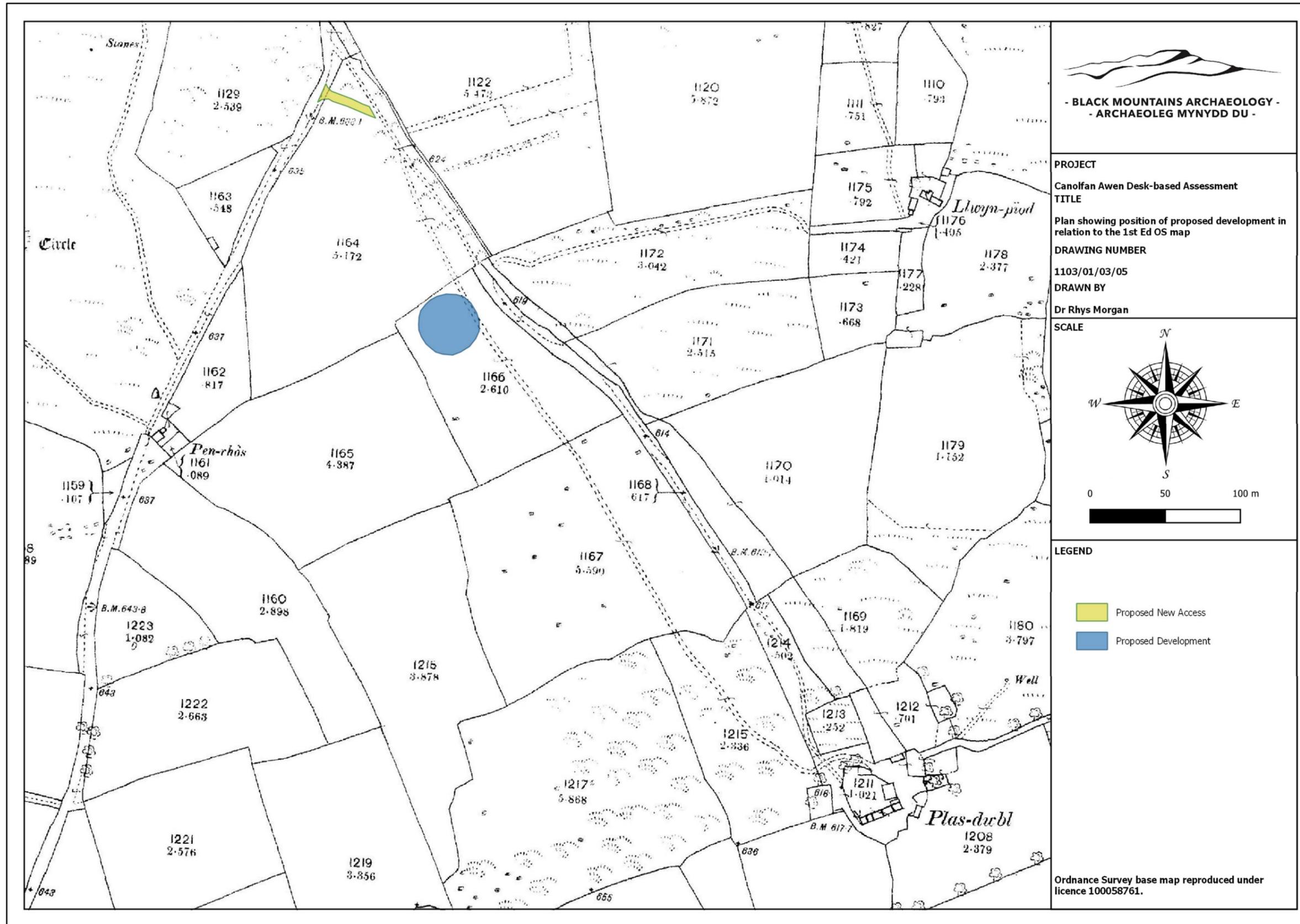


Figure 7. Plan demonstrating position of development area in relation to the 1889 1st Edition OS map (Pembrokeshire Sheet XVI.NE) (© Landmark Information Group)

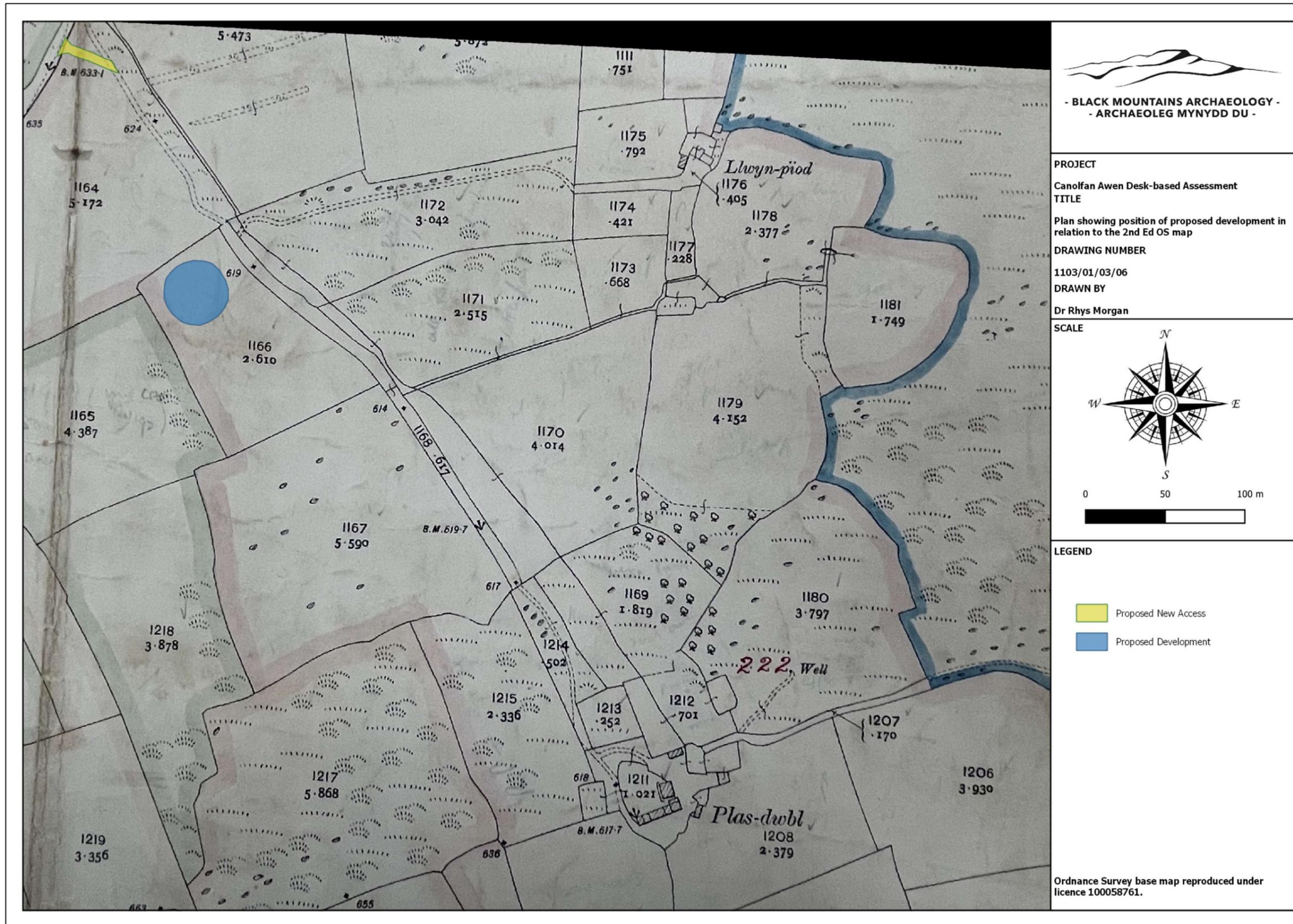


Figure 8. Plan demonstrating position of development area in relation to the 1907 2nd Edition OS map (Pembrokeshire Sheet XVI.NE) (© Pembroke Archives)

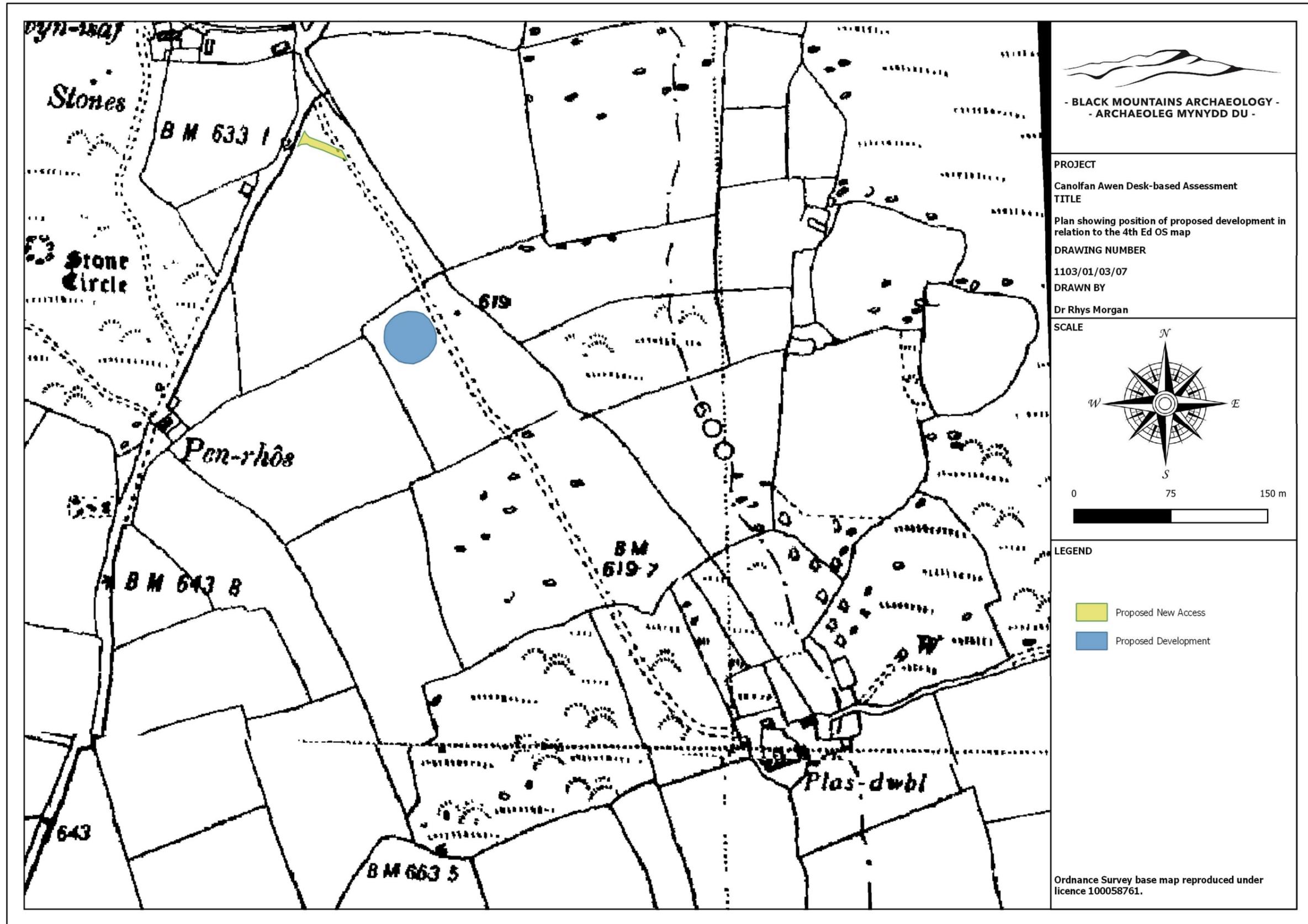


Figure 9. Plan demonstrating position of development area in relation to the 1953 Edition OS map (Pembrokeshire Sheet XVI.NE) (© Landmark Information Group)

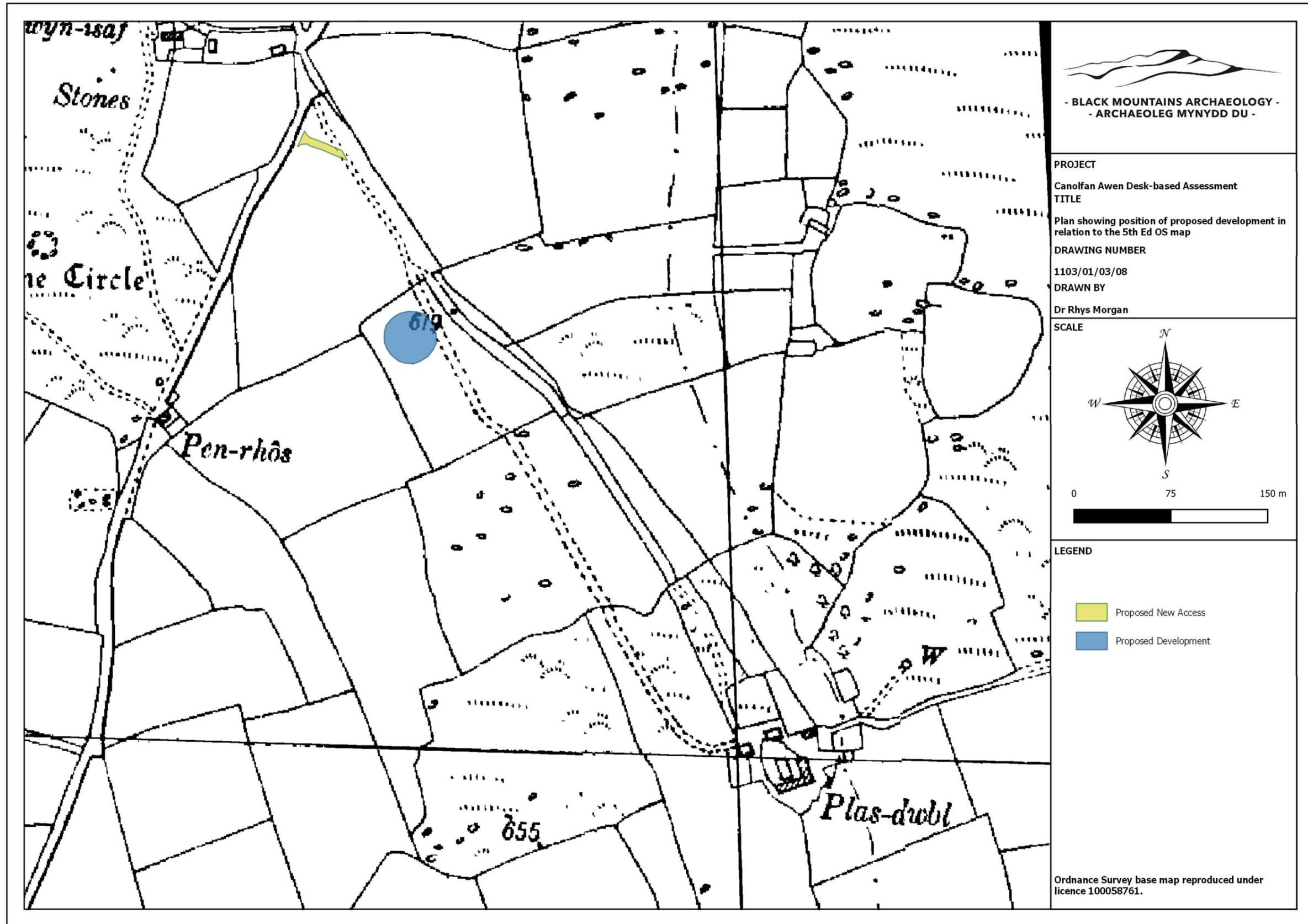


Figure 10. Plan demonstrating position of development area in relation to the 1964 5th Edition OS map (Pembrokeshire Sheet XVI.NE) (© Landmark Information Group)

7.2 Appendix II – Plates

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Plate 1. 1980 aerial photograph of the development area and its immediate surroundings (© Air Photo Wales)



Plate 2. 1983 aerial photograph of the development area and its immediate surroundings (© Air Photo Wales)



Plate 3. 1988 aerial photograph of the development area and its immediate surroundings (© Air Photo Wales)

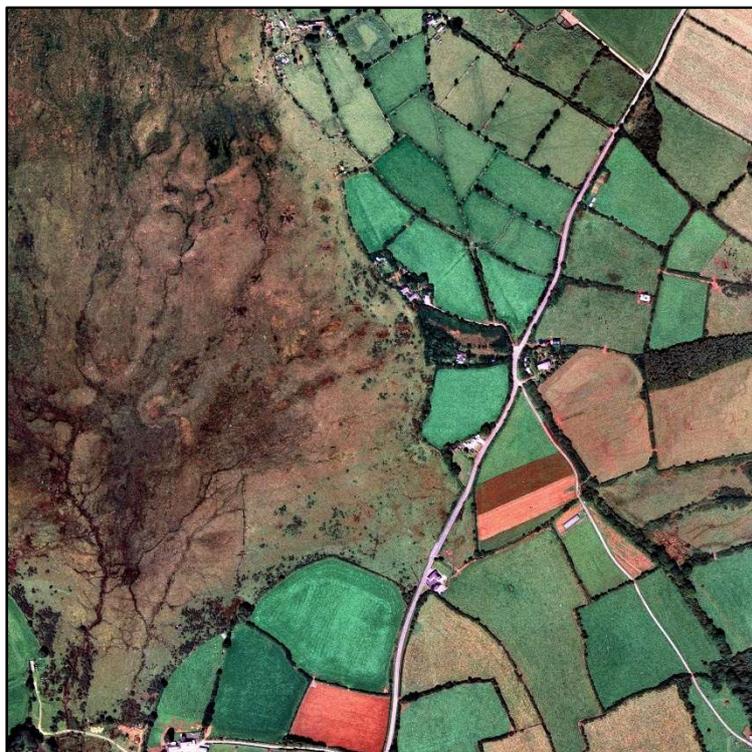


Plate 4. 2000 aerial photograph of the development area and its immediate surroundings (© Air Photo Wales)



Plate 5. Photograph of field in which proposed development area is situated (view northwest)



Plate 6. Photograph of proposed development area, which is currently occupied by polytunnels (view northwest)



Plate 7. Photograph of the eastern branch of the Plas Dwbl Trackway (ID2) (view southeast)



Plate 8. Photograph of the Gors Fawr Stone Circle (ID3) (view north)



Plate 9. Northeast view from the Gors Fawr Stone Circle (ID3) towards the proposed development area



Plate 10. Photograph of the Gors Fawr Standing Stones (ID4) (view north)



Plate 11. East view from the Gors Fawr Standing Stones (ID4) towards the proposed development area



Plate 12. Surviving bank associated with the Penrhos Enclosure (DAT1197) (view north)



Plate 13. Photograph of field in which the Plas Dwbl Military Camp (DAT110402 is situated (view northwest)

7.3 Appendix III – Tithe Apportionment

7.3.1 1846 Tithe Map (*Plan of the Parish of Mynachlogddu in the County of Pembroke*)

Parcel Number	Landowners	Occupiers	Name and Description of Lands and Premises	State of Cultivation	Quantities in Statute Measure			Amount of Rent-charge apportioned upon the several Lands, and to whom payable		
					A.	P.	R.	£	s.	d.
166	Morris Morris, Griffith Morris and Morris Williams	Stephen Davies	Slang	Pasture	1	"	16			2
167	Caleb Evans	David Evans	Park llan issa fach	Pasture	2	2	11			8
168	Morris Morris, Griffith Morris and Morris Williams	Benjamin James	Homestead	/		1	10			5
169	Morris Morris, Griffith Morris and Morris Williams	Benjamin James	Park bach	Arable	1	1	4			10
171	Thomas Adams	Daniel Adams	Homestead	Arable		1	37			2
227	Morris Morris, Griffith Morris and Morris Williams	Stephen Davies	Park y Llain	Arable	2	3	14			8
228	Revd James James	David Thomas	Slang	Pasture	1	1	8			4
229	Morris Morris, Griffith Morris and Morris Williams	Stephen Davies	Park y Llain	Arable	1	3	14			6
230	Morris Morris, Griffith Morris and Morris Williams	Stephen Davies	Lan issa fach	Pasture	5	1	4		1	5
233	Morris Morris, Griffith Morris and Morris Williams	Stephen Davies	Park maen llywd bach	Pasture	2	3	16			8
234	Morris Morris, Griffith Morris	Stephen Davies	Pantyrhig bach	Pasture	2	3	32			6

Parcel Number	Landowners	Occupiers	Name and Description of Lands and Premises	State of Cultivation	Quantities in Statute Measure			Amount of Rent-charge apportioned upon the several Lands, and to whom payable		
					A.	P.	R.	£	s.	d.
	and Morris Williams									
235	Morris Morris, Griffith Morris and Morris Williams	Stephen Davies	Pantyrhîg peas	Pasture	6				1	3
244	Morris Morris, Griffith Morris and Morris Williams	Stephen Davies	Park maenllwyd mawr	Pasture	5	2	23		1	6
257	Morris Morris, Griffith Morris and Morris Williams	Stephen Davies	Homestead	Pasture	1		14		1	3

Note. Quantities and Measures are listed in Acres, Roods and Perches (A.R.P.). An acre is 4,840 square yards. A rood is a rectangular area one furlong (10 chains or 40 rods/perches) long by one rod wide. There are 40 perches to a rood, and 160 perches to an acre. The amount (£) due is listed in Pounds, Shillings and Pence (£sd).

7.4 Appendix IV - Aerial Photograph Inventory

WO no	Sortie No	Date	Ph type
073	8003 MAL11/80	1980	B&W
103	8003 MAL11/80	1980	B&W
144	8301 JAS3583	1983	Colour
127	8301 JAS3583	1983	Colour
004	8804 ADAS383	1988	B&W
133	9203 Geonex 5792	1992	Colour
-	Get mapping	2000	Colour

Table 6. Aerial Photograph Inventory

7.5 Appendix V – Gazetteer of New Heritage Assets

ID: 1	Enw: Plas-pant y Rege (Plasyparte Roger)		
NGR: SN 13764 29307	Math: Fferm	Statws: Dim	Cyfnod: Canoloesol
Disgrifiad:			
<p>Fferm yn dyddio o ddiwedd y cyfnod canoloesol o leiaf. Yn ystod y cyfnod hwn, roedd yn eiddo i Abaty Llandudoch. Ar ôl Deddf Goruchafiaeth 1534, ildiodd yr abaty berchnogaeth y fferm. Dengys cofnodion rhent o'r ail ganrif ar bymtheg mai Owen ap Howell oedd perchennog y fferm erbyn hynny. Ar ryw adeg cyn cyhoeddi map Degwm 1846, daeth y fferm i gael ei hadnabod fel 'Fferm Plasdwbl' (gweler DAT52392).</p>			

ID: 1	Name: Plas-pant y Rege (Plasyparte Roger)		
NGR: SN 13764 29307	Type: Farm	Status: None	Period: Medieval
Description:			
<p>Farm dating to at least the Late-medieval period. Prior to the Act of Supremacy in 1534, the land formed part of the monastic grange <i>Nigra Grangia/ Mynyddlog-Ddu</i> owned by the Abbey of St Dogmael. Records dating to 1538-9 indicated that following Dissolution the lands, which were in then in the hands of John Bradshaw, the Member of Parliament for Ludlow, were divided into individual 'tenements' including the farm at Plasdwbl. Rent records from the 17th century indicate that by this time the farm was owned by Owen ap Howell and known as Plas-pant y Rege (Plasyparte Roger) (Pritchard 1907). At some point prior to the publication of the 1846 Tithe map, the farm became known as 'Plasdwbl Farm' (see DAT52392).</p>			

ID: 2	Enw: Plas Dwbl Farm Trackway		
NGR: SN 13772 29324	Math: Tracffordd	Statws: Dim	Cyfnod: Ôl-ganoloesol
Disgrifiad:			
<p>Tracffordd yn arwain tuag at brif ffermdy Fferm Plas Dwbl (Coleg Plas Dwbl erbyn hyn) o'r brif ffordd yn y gogledd. Mae'r tracffordd hwn yn rhannu'n gangen ddwyreiniol a gorllewinol, gyda'r gyntaf ar hyn o bryd yn cynnwys y brif ffordd sy'n arwain i Goleg Plas Dwbl a'r olaf ar hyn o bryd yn llwybr cyhoeddus. O ran cronoleg, mae'r cofnod cynharaf o'r tracffordd hwn yn deillio o fap Degwm 1846.</p>			

ID: 2	Name: Plas Dwbl Farm Trackway		
NGR: SN 13772 29324	Type: Trackway	Status: None	Period: Post-medieval
Description:			
<p>Trackway leading towards the main farmhouse of Plas Dwbl Farm (now Coleg Plas Dwbl) from the main road in the northwest. This trackway splits into an eastern and western branch, with the former currently comprising the main road leading into Coleg Plas Dwbl and the latter currently constituting a public footpath. In terms of chronology, the earliest record of this trackway derives from the 1846 Tithe map.</p>			

ID: Dim **Enw:** Gwrthgloddiau Gors Fawr
NGR: SN 13158 29696 **Math:** Chwarel? **Status:** Dim **Cyfnod:** Anhysbys

Disgrifiad:

Cyfes o gloddiau crwn/hirgrwn sy'n gorgyffwrdd i bob golwg yn gorchuddio corysdd Gors Fawr. . Wedi'i arsylwi ar awyrluniau hanesyddol o'r ardal. Er bod mapiau hanesyddol yn methu ag adnabod y cloddiau hyn, mae serch hynny'n dangos bod chwareli segur (o'r cyfnod canoloesol) wedi'u lleoli gerllaw, sy'n awgrymu efallai bod y cloddiau hyn hefyd yn cynrychioli chwarel segur. Fel arall, mae posibilrwydd bod y gwrthgloddiau hyn yn dyddio o gyfnod cynhanesyddol – awgrym a gefnogir gan leoliad Cylch Maen Gors Fawr (SMPe117) a Phâr o Feini Hirion Gors Fawr (DAT928) gerllaw.

ID: None **Name:** Gors Fawr Earthworks
NGR: SN 13158 29696 **Type:** Quarry? **Status:** None **Period:** Unknown

Description:

Series of apparently overlapping circular/oval earthworks covering the Gors Fawr marshlands. Observed on historic aerial photographs of the area. Although historic mapping fails to identify these earthworks, it nonetheless demonstrates that abandoned quarries (of medieval date) are situated nearby, perhaps suggesting that these earthworks also represent an abandoned quarry. Alternatively, there exists the possibility that these earthworks are of prehistoric date – a suggestion supported by the placement of the Gors Fawr Stone Circle (SMPe117) and Gors Fawr Standing Stone Pair (DAT928) nearby.



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