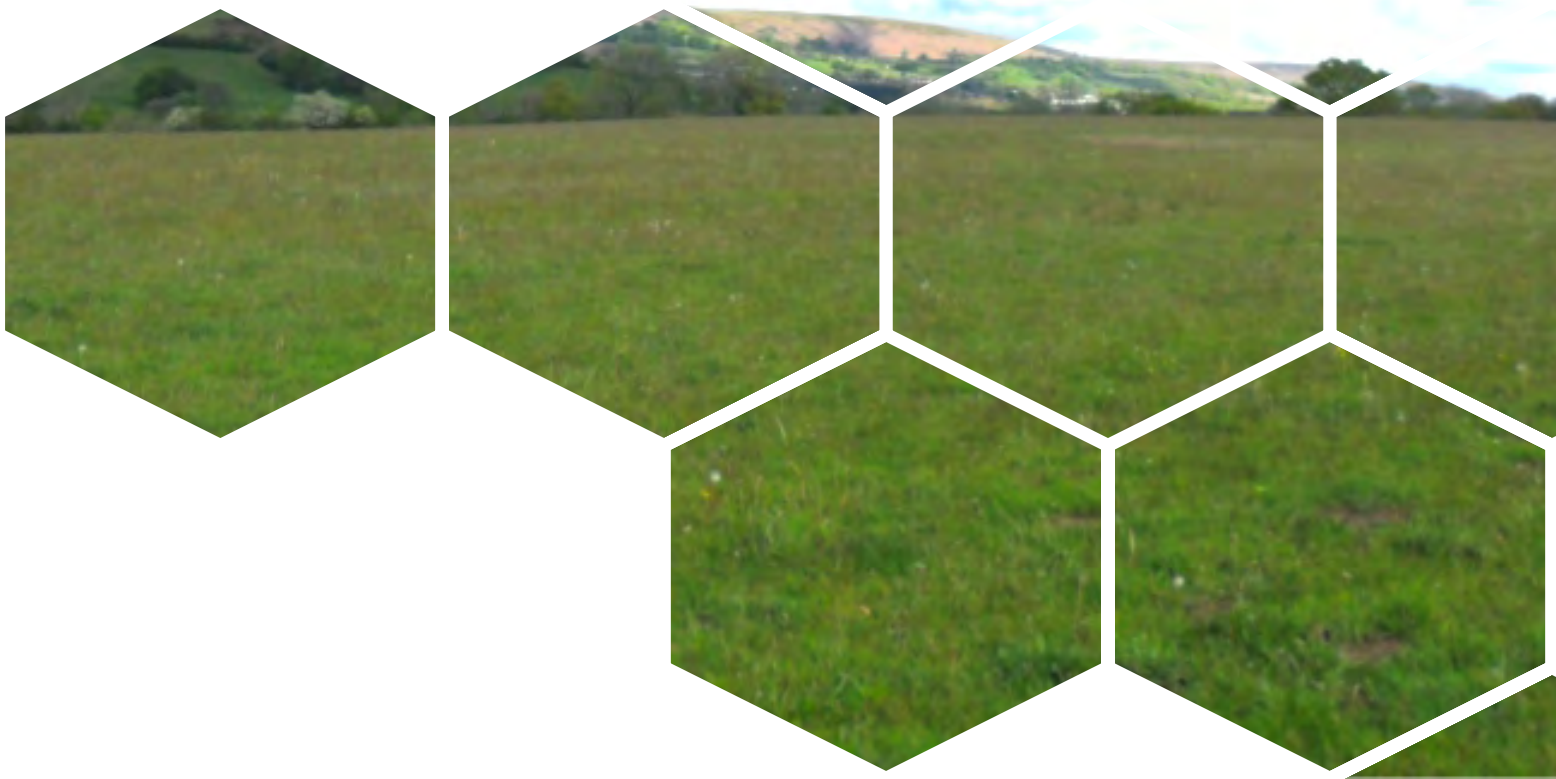


LAND AT PENTRE BACH,  
TORFAEN,  
WALES

## ARCHAEOLOGICAL IMPACT ASSESSMENT

ON BEHALF OF  
ELGIN ENERGY ESCO LTD

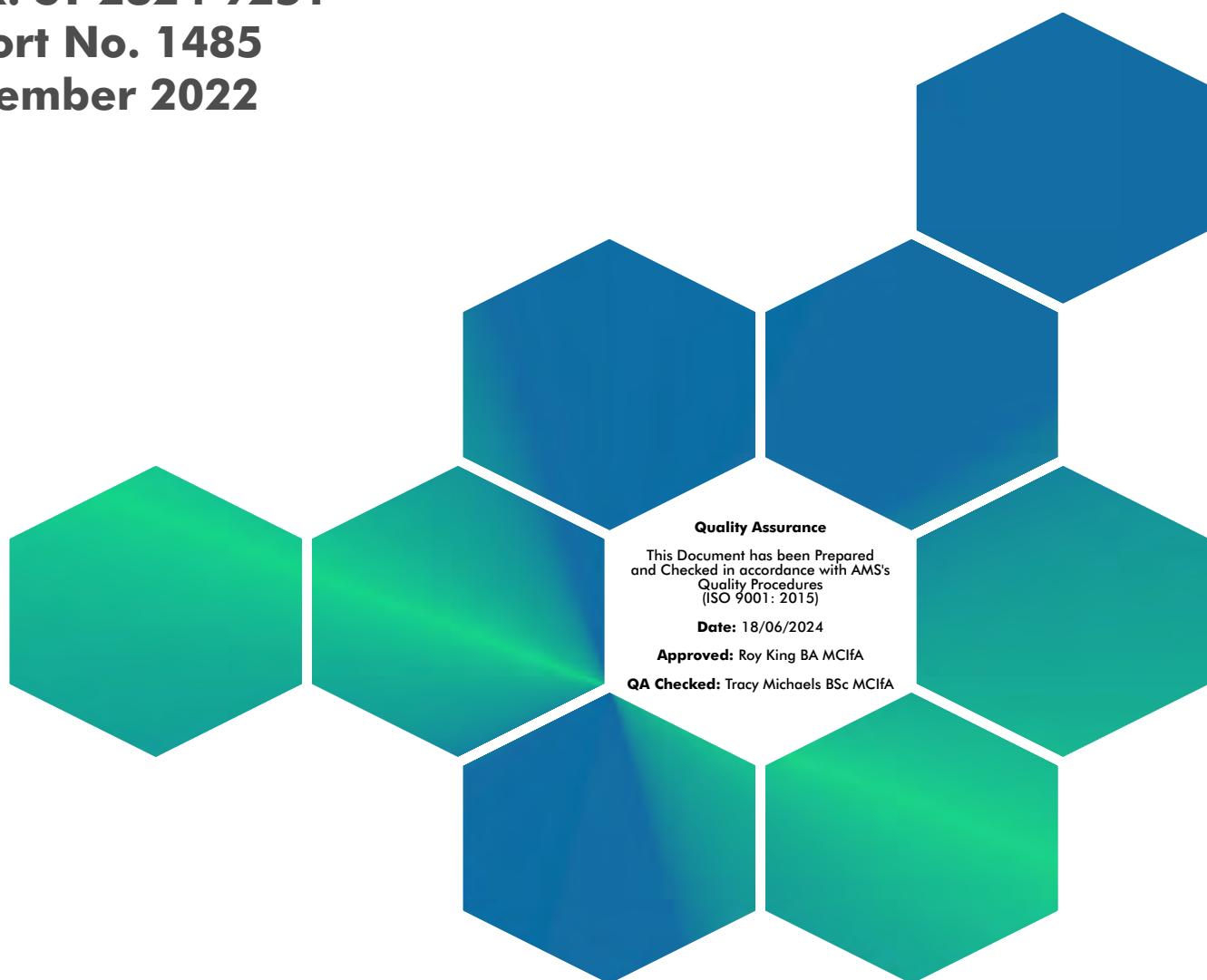


# FOUNDATIONS HERITAGE

A DIVISION OF ARCHAEOLOGICAL MANAGEMENT SERVICES LTD

**Land at Pentre Bach  
Torfaen,  
Wales**

**NGR: ST 2824 9251  
Report No. 1485  
November 2022**



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## GLOSSARY OF TERMS AND ABBREVIATIONS

### *Archaeology*

For the purposes of this project archaeology is taken to mean the study of past human societies through their material remains from prehistoric times through to the modern era. No rigid upper date limit has been set, but AD 1900 is used as a general cut off point.

### *HER*

Historic Environment Record.

### *HVIA*

Heritage and Visual Impact Assessment.

### *ICOMOS*

International Council on Monuments and Sites.

### *LVIA*

Landscape and Visual Impact Assessment.

### *Medieval*

The period between the Norman Conquest (AD 1066) and c. AD 1500.

### *Modern*

There is debate in archaeology about when the modern period commences, but 1900 is a useful start point.

### *Natural*

In archaeological terms this refers to the undisturbed natural geology of a site.

### *NGR*

National Grid Reference from the Ordnance Survey Grid.

### *NMP*

National Mapping Programme whereby possible archaeological features present on aerial photographs were mapped. Undertaken for certain counties, including Cornwall.

OD

Ordnance Datum; used to express a given height above sea level.

OS

Ordnance Survey.

OUV

Outstanding Universal Value.

*Post-Medieval*

Refers to the period from c. AD 1500 to AD 1900.

*Prehistoric*

In Britain this term is generally used for any of the traditionally defined periods such as Palaeolithic (c. 480,000-12,000 BC), Mesolithic (c. 12,000-4000 BC), Neolithic (c. 4,000-2,500), Bronze Age (c. 2500-600 BC) and Iron Age (c. 800 BC – AD 43).

*Romano-British*

Term used to describe the fusion of indigenous late Iron Age traditions with the invasive Roman culture. Traditionally dated between AD 43 and AD 410.

*Saxon or Early Medieval*

Term used to describe the period between the end of Roman Britain c. AD 410 and the Norman Conquest (AD 1066).

WHS

World Heritage Site.

ZTV

Zone of Theoretical Visibility.

## SUMMARY

This Baseline Archaeological Impact Assessment has been prepared by Roy King (BA, MCIfA) and Diana King (BA, MCIfA). Aerial photographic and Lidar assessment was undertaken by Tracy Michaels (BSc, MCIfA) and the site walkover by Andrew Hood (BSc, MCIfA). The illustrations for the report were prepared by Diana King. The project was commissioned by Sean Murphy of Elgin Energy Esco Ltd.

The HIA has considered the potential for a new photovoltaic development at Pentre Bach, Torfaen County Borough to affect known and potential heritage assets, as required by the National Planning Policy Wales, Edition 11 Chapter 6.

Heritage assets are present within the site in the form of a former Post-medieval quarry and spoil tips associated with a quarry immediately to the east of the redline. No adverse impact is currently anticipated in regard to the identified spoil-tips. The northern part of the site is included within an HER record relating to coppiced woodland associated with a Medieval grange to Llantarnum Abbey. The woodland was predominantly removed during the first half of the 20<sup>th</sup> century, but the site retains some legibility through the shape of the fields, although this will not be affected by the proposals.

The HIA has also considered the potential for heritage assets with an archaeological interest to be present on the site, based on the known archaeological remains that are presently recorded in the vicinity. The potential has been assessed as *negligible* or *negligible-low* for all periods, with the exception of possible Post-medieval field boundaries and quarrying; some evidence for the cleared woodland might survive as buried deposits but it is unlikely that associated heritage assets (e.g. evidence for charcoal burning) might have survived the subsequent change to agricultural land in the early 20<sup>th</sup> century. It is also considered unlikely that potential Medieval grange buildings extend into the proposed construction compound. If buried heritage assets were present, they most likely be of *negligible-low* significance, depending on their nature and ability to contribute to regional or national research frameworks. The presence of heritage assets of *moderate* or *high* significance cannot, however, be entirely ruled out. It is clearly apparent that there has been very limited archaeological fieldwork in the vicinity of the site and, although there seems little justification for site-wide evaluation trenching at this stage. It may, however, be appropriate to undertake a site-wide geophysical survey in the first instance supported by limited trenching in the area of the proposed compound.

The nature of the groundworks associated with the proposed development would result in a limited potential adverse impact on buried archaeological remains of any date, which survived within the site areas. The limited physical impact resulting from the insertion of piles and associated infrastructure is not considered to result in more than *negligible* harm to agricultural or industrial features, which by their nature are generally robust. Should buried heritage assets of a non-agricultural or industrial nature be identified, suitable archaeological mitigation, including preservation *in situ* through exclusion of sensitive areas or use of concrete shoes or preservation by record of suitable deposits would reduce any impact on the archaeological resource to *negligible*.

## 1 INTRODUCTION AND PROJECT BACKGROUND

- 1.1 This proportionate baseline Archaeological Impact Assessment has been prepared by Roy King (BA, MCIfA) and Diana King (BA, MCIfA). Aerial photographic and Lidar assessment was undertaken by Tracy Michaels (BSc, MCIfA) and the site walkover by Andrew Hood (BSc, MCIfA). A report was originally prepared in May 2021 and has been updated (November 2022) with a new HER search to ensure that it presents the most current level of knowledge.
- 1.2 The proposal is for the construction of a new ground mounted photovoltaic solar farm and energy storage facility, together with associated equipment, infrastructure and ancillary works photovoltaic at Pentre Bach, Torfaen, Wales. The scheme covers an area of approximately 47.65ha (Figures 1 and 4). The project was commissioned by Sean Murphy of Elgin Energy Esco Ltd.
- 1.3 This Archaeological Impact Assessment has been prepared in accordance with the requirements of the National Planning Policy Wales, Edition 11 and Local Planning Policy. This approach allows the assessment to study the potential of the site and the significance of the unknown archaeological resource, in relation to the likely impact of the proposed development on it and on any associated monuments. This study excludes the impact of the proposed development on any above ground heritage assets, including any effect on their settings, which is covered by a separate heritage report.

## 2 ASSESSMENT METHODOLOGY

- 2.1 Heritage assessment involves a desktop study of presently available archaeological, historical, aerial photographic and other relevant information. Government guidance on heritage (Planning Policy Wales Edition 11, 2021) encourages appropriate consideration of the significance of any known or potential heritage assets present within a site, and the effect of the proposed development upon that significance, where development is being considered, prior to formal planning applications being submitted. This allows an assessment of the implications of any development proposal. This informs the decision as to whether heritage assets with an archaeological interest are likely to be present, whether a field evaluation is considered necessary, and may contribute to the development of an appropriate mitigation strategy if required. This report represents the first stage of the pre-planning permission as recommended in Planning Policy Wales Chapter 6 and follows guidance set out in TAN 24.
- 2.2 This heritage assessment will therefore form the basis for any further works, archaeological or otherwise, which may be required to mitigate any adverse effects of the proposals on the significance of any known or potential heritage assets within and around to the site. The report will allow all parties associated with the project to consider the need for design mitigate and/or archaeological solutions to the potential effects and to ensure compliance with National and Local heritage policies.
- 2.3 This Archaeological Impact Assessment fulfils the general requirements of a desktop assessment as set out by the Chartered Institute for Archaeologist's *Standard and Guidance for Historic Environment Desk Based Assessments* (2014 rev 2020).
- 2.4 Given the nature of heritage assets, this assessment process involves a degree of subjective interpretation based on existing data sources and professional judgement.



This is particularly the case when assessing the potential presence and likely significance of buried archaeological deposits that may be present within a site. The assessment of the significance and the impact on heritage, including on its settings, similarly involves a degree of interpretation and professional judgement because different elements of an asset or its setting contribute differentially to its significance. How the significance of a heritage asset is likely to be affected by a set of development proposals will be contingent upon the nature of those proposals and professional judgement is required in order to gauge likely effects.

2.5 Largely, the actual archaeological resource, which may be present, is buried beneath the modern ground surface and the assessments of potential and significance are extrapolations from known data both within and around the study area.

2.6 In assessing the archaeological potential of the site, the criteria specified in Table 2.1 were used:

*Table 2.1: Table of Archaeological Potential and Assessment Criteria*

Potential	Criterion
Negligible	Archaeological features and finds are unlikely to be present.
Low	Archaeological features and finds may be present but are likely to be infrequent or rare.
Low-Moderate	Archaeological features and finds may be present but are likely to occur only infrequently and may have poor coherence.
Moderate	Archaeological features and finds are likely to be present and may include coherent groupings. .
Moderate-High	Archaeological features and finds are probable, with likely coherent groupings and possibly structures.
High	Archaeological features and finds are likely to be present, with features occurring frequently and having high coherence.
Very High	Archaeological features and finds are to be expected with finds predicted in quantity and with features that have very high coherence, highly likely. Structures are likely.

2.7 Where archaeological features are statutorily or non-statutorily designated, this can assist in the grading of their significance. For example, Scheduled Monuments are of a national importance, whilst locally designated archaeological sites are of local importance. However, not all archaeological features are designated. To assist in assessing the significance of these features, the following principles, as set out in the National Assembly for Wales's criteria for scheduling, provide useful guidance. These criteria comprise:

- Period
- Rarity
- Documentations
- Group value
- Survival/condition
- Fragility/Vulnerability
- Diversity
- Potential

2.8 The significance of above ground heritage is derived from the criteria for listing. Buildings are listed because they are of "special" architectural or historical interest

which warrants their preservation. Grade I and Grade II\* Listed Buildings are of the highest significance because they are of exceptional interest (Grade I) or are more than of special interest (Grade II\*). Grade II Listed Buildings are of special interest. Undesignated assets, which are not statutorily designated, but are documented in the Local Authority Historic Environment Record, are nevertheless still of heritage interest.

- 2.9 Assessing the impact of the development proposals on the significance of heritage assets employs a two-step process:
- Identification of the importance of known and potential heritage features; and
  - Identification of the magnitude of the effect.
- 2.10 Cadw has published *Principles for the Sustainable Management of the Historic Environment in Wales* (2011). To assist Cadw and others a section "Understanding Heritage Values and Assessing Significance" is included. This defines four heritage values which can be summarised as follows:
- *Evidential Value* - derives from the potential of a place to yield evidence about past human activity.
  - *Historical Value* – derives from the ways in which past people, events and aspects of life can be connected through a place to the present.
  - *Aesthetic Value* – derives from the ways in which people draw sensory and intellectual stimulation from a place.
  - *Communal Value* – derives from the meanings of a place for the people who relate to it, or for whom it figures in their collective experience or memory.
- 2.11 When the evidence for these values is gathered together and assessed for an individual historic asset or an area of historic landscape, it will provide the basis for making a statement of significance against which the effects of any proposed changes can be measured.
- 2.12 Having determined the significance of any known or potential heritage asset, the assessment of likely potential and effects of the development upon heritage assets can be undertaken using the following five-level scale of significance. Effects can either be [beneficial](#) or [adverse](#).
- 2.13 The Cadw guidance document *Conservation Principles for the Sustainable Management of the Historic Environment in Wales* (2011) states that "*Balanced and justifiable decisions about change to the historic environment depend upon understanding who values different historic assets and why they do so, leading to a clear statement of their significance and, with it, the ability to understand the impact of the proposed change on that significance. Every reasonable effort should be made to eliminate or minimize adverse impacts on historic assets. Ultimately, however, it may be necessary to balance the benefit of the proposed change against the harm to the asset. If so, the weight given to heritage values should be proportionate to the importance of the assets and the impact of the change upon them.*" The section of the document *Conservation Principles in Action* provides further guidance on making decisions about changes to significant historic assets. It defines harm as "*Change for the worse, here*

primarily referring to the effect of inappropriate interventions on the heritage values of an historic asset.”

2.14 *Conservation Principles in Action* does not provide further detail on this definition of harm, however the International Council on Monuments and Sites (ICOMOS) has produced guidance (*Guidance on Heritage Impact Assessments for Cultural World Heritage Properties 2011*), which along with *Conservation Principles*, has been used as a baseline to compile Table 2.2 and extended to apply to all heritage assets whether designated or non-designated. ICOMOS defines substantial impacts as affect assets to such a degree that they are ‘totally altered’.

Table 2.2: Table of Impacts Criteria

Impact	Archaeological Resource	Historic Buildings	Settings
Minor Beneficial	A change in land use or management to enhance the preservation of the identified archaeological resource.	The historic fabric of the building is slightly enhanced to restore original features or patterns of circulation.	The setting of any asset is slightly enhanced.
Neutral	No effects on known or predicted archaeological resources or their settings. No mitigation required.	No change to historic building elements.	No change to key historic landscape elements, parcels or components. No effect on the setting of any asset.
Negligible	No effects on known or predicted archaeological resources or their settings. Mitigation protects the resource from adverse effects.	Slight change to historic building elements that hardly affect it.	Very minor changes to key historic landscape elements, parcels or components; virtually unchanged visual effects. No appreciable effect on the setting of any asset.
Slight Adverse	Effects small areas of known or potential resources at a local level or where the archaeological resource is very truncated or fragmented. The removal of the resource would not affect future investigation and would increase archaeological knowledge.	Change to key historic building elements, such that the asset is slightly different.	Change to few historic landscape elements, parcels or components; slight visual changes to a few key aspects of historic landscape and the settings of any asset.
Moderate Adverse	Adverse effects would occur on archaeological resources at a local level by ground work that	Changes to many key historic building elements, such that the	Change to some key historic landscape elements, parcels or visual components;

	would have a detrimental impact on archaeological deposits but would leave some of the resource <i>in situ</i> .	resource is significantly modified.	visual change to key aspects of the historic landscape; resulting in moderate changes to historic landscape character.
Substantial Adverse	Adverse effects caused to areas of high archaeological potential, Archaeological Priority Areas, Scheduled Monuments, including their settings and to other archaeological sites of importance in breach of relevant planning policies.	Change to key historic building elements such that the resource is totally altered.	Change to most or all key historic landscape elements, parcels or components; extreme visual effects resulting in complete change to historic landscape character.

### 3 PLANNING BACKGROUND AND LEGISLATIVE FRAMEWORK

3.1 In considering a development proposal, the Local Planning Authority (LPA) will consider the policy framework set by government guidance. Relevant considerations are given below.

#### 3.2 Planning Policy Wales, Edition 11, Chapter 6

3.2.1 Planning Policy Wales, Chapter 6, sets out the policies with regards to the historic environment and planning. The policies also contain guidance for local authorities to consider when developing local plans, including the effect of re-use or new developments on historic areas and buildings. The policies outline the Welsh Government's objectives to protect, manage and conserve the historic environment and specifically to:

- Protect the Outstanding Universal Value of the World Heritage Sites in Wales
- Conserve the archaeological remains, both for their own and their role in education, leisure and the economy;
- Safeguard the character of historic buildings and manage change so that their special architectural and historic interest is preserved;
- Preserve or enhance the character or appearance of conservation areas, whilst at the same time helping them remain vibrant and prosperous
- Preserve the special interest of sites on the register of historic parks and gardens in Wales
- Protect areas on the register of historic landscapes in Wales

3.2.2 The following paragraphs are relevant to this study.

3.2.3 Paragraph 6.1.7: *It is important that the planning system looks to protect, conserve and enhance the significance of historic assets. This will include consideration of the setting of an historic asset which might extend beyond its curtilage. Any change that impacts on an historic asset or its setting should be managed in a sensitive and sustainable way.*

- 3.2.4 Paragraph 6.1.8: *It is the responsibility of all those with an interest in the planning system, including planning authorities, applicants, developers and communities, to appropriately care for the historic environment in their area. The protection, conservation and enhancement of historic assets is most effective when it is considered at the earliest stage of plan preparation or when designing proposals new proposals.*
- 3.2.4 Paragraph 6.1.9: *Any decisions made through the planning system must fully consider the impact on the historic environment and on the significance and heritage values of individual historic assets and their contribution to the character of place.*
- 3.2.5 Paragraph 6.1.10: *There should be a general presumption in favour of the preservation or enhancement of a listed building and its setting, which might extend beyond its curtilage. For any development proposal affecting a listed building or its setting, the primary material consideration is the statutory requirement to have special regard to the desirability of preserving the building, its setting or any features of special architectural or historic interest which it possesses.*
- 3.2.6 Paragraph 6.1.14: *There should be a general presumption in favour of the preservation or enhancement of the character or appearance of conservation areas or their settings. Positive management of conservation areas is necessary if their character or appearance are to be preserved or enhanced and their heritage value is to be fully realised. Planning authorities should establish their own criteria against which existing and/or new conservation areas and their boundaries should be reviewed.*
- 3.2.7 Paragraph 6.1.15: *There is a strong presumption against the granting of planning permission for developments, including advertisements, which damage the character or appearance of a conservation area or its setting to an unacceptable level. In exceptional cases, the presumption may be overridden in favour of development considered desirable on public interest grounds.*
- 3.2.8 Paragraph 6.1.16: *Preservation or enhancement of a conservation area can be achieved by a development which either makes a positive contribution to an area's character or appearance or leaves them unharmed. Mitigation measures can also be considered which could result in an overall neutral or positive impact of a proposed development in a conservation area.*
- 3.2.9 Paragraph 6.1.17: *Conservation area designation introduces control over the total or substantial demolition of unlisted buildings within these areas, but partial demolition does not require conservation area consent. Procedures are essentially the same as for listed building consent. When considering an application for conservation area consent, account should be taken of the wider effects of demolition on the building's surroundings and on the architectural, archaeological or historic interest of the conservation area as a whole. Consideration should also be given to replacement structures. Proposals should be tested against conservation area appraisals, where they are available.*
- 3.2.10 Paragraph 6.1.20: *The Welsh Government seeks to protect areas on the register of historic landscapes in Wales.*
- 3.2.11 Paragraph 6.1.21: *Planning authorities should protect those assets included on the register of historic landscapes in Wales. As above, the sharing and use of evidence and assessments undertaken for wider reasons, such as Green Infrastructure Assessments,*

*should be used to identify and better understand historic landscapes and ensure their qualities are protected and enhanced. The register should be taken into account in decision making when considering the implications of developments which meet the criteria for Environmental Impact Assessment or, if on call in, in the opinion of the Welsh Ministers, the development is of a sufficient scale to have more than a local impact on the historic landscape. An assessment of development on a historic landscape may be required if it is proposed within a registered historic landscape or its setting and there is potential for conflict with development plan policy.*

- 3.2.12 Paragraph 6.1.23: *The planning system recognises the need to conserve archaeological remains. The conservation of archaeological remains and their settings is a material consideration in determining planning applications, whether those remains are a scheduled monument or not.*
- 3.2.13 Paragraph 6.1.24: *Where nationally important archaeological remains and their settings are likely to be affected by proposed development, there should be a presumption in favour of their physical protection in situ. It will only be in exceptional circumstances that planning permission will be granted if development would result in an adverse impact on a scheduled monument (or an archaeological site shown to be of national importance) or has a demonstrably and unacceptably damaging effect upon its setting.*
- 3.2.14 Paragraph 6.1.25: *In cases involving less significant archaeological remains, planning authorities will need to weigh the relative importance of the archaeological remains and their settings against other factors, including the need for the proposed development.*
- 3.2.15 Paragraph 6.1.26: *Where archaeological remains are known to exist or there is a potential for them to survive, an application should be accompanied by sufficient information, through desk-based assessment and/or field evaluation, to allow a full understanding of the impact of the proposal on the significance of the remains. The needs of archaeology and development may be reconciled, and potential conflict very much reduced, through early discussion and assessment.*
- 3.2.16 Paragraph 6.1.27: *If the planning authority is minded to approve an application and where archaeological remains are affected by proposals that alter or destroy them, the planning authority must be satisfied that the developer has secured appropriate and satisfactory provision for their recording and investigation, followed by the analysis and publication of the results and the deposition of the resulting archive in an approved repository. On occasions, unforeseen archaeological remains may still be discovered during the course of a development. A written scheme of investigation should consider how to react to such circumstances or it can be covered through an appropriate condition for a watching brief. Where remains discovered are deemed to be of national importance, the Welsh Ministers have the power to schedule the site and in such circumstances scheduled monument consent must be required before works can continue.*
- 3.2.17 Paragraph 6.1.29: *Development plans should consider the inclusion of locally specific policies relevant to the historic environment. These must be distinctive and only cover those elements deemed as important considerations from a local planning perspective. They might include locally specific policies relating to:*

- Archaeological remains – unscheduled archaeological remains and their settings, may be identified in development plans as of local importance and worthy of conservation. Development plans should not include policies relating to the financing of archaeological works in return for the grant of planning permission. Planning permission for archaeologically damaging development should not be granted merely because it is proposed to record sites whose physical preservation in situ is both desirable (because of their level of importance) and feasible.
- Listed buildings and conservation areas – development plans may include locally specific policies for the conservation of the built historic environment, including the protection or enhancement of listed buildings and conservation areas and their settings. They may also include policies relating to re-use or new development that affect particular historic areas and/or buildings, which may assist in achieving urban and rural regeneration. Development plans should not include policies for the designation of new conservation areas or extensions to existing conservation areas, nor should they include detailed statements or proposals for existing conservation areas. The process of assessment, detailed definition or revision of boundaries and formulation of proposals for individual conservation areas should be pursued separately from the development plan.
- Historic assets of special local importance – planning authorities may develop lists of historic assets of special local interest, that do not have statutory protection, but that make an important contribution to local distinctiveness and have the potential to contribute to public knowledge. Where a planning authority chooses to identify historic assets of special local interest<sup>111</sup>, policies for the conservation and enhancement of those assets must be included in the development plan.

3.2.18 PPW is supported by a series of Technical Advice Notes (TAN). TAN 24: The Historic Environment, was issued in May 2017 provide guidance on how the planning system considers the historic environment.

### 3.3 [Historic Environment \(Wales\) Act 2016](#)

3.3.1 The Act gives more effective protection to listed buildings and scheduled monuments, improves the sustainable management of the historic environment; and introduces greater transparency and accountability into decisions taken on the historic environment. It also amends the Ancient Monuments and Archaeological Act 1979 and the Planning (Listed Buildings and Conservation Areas) Act 1990 that provide the main UK framework legislation for the management and protection of the historic environment.

### 3.4 [Ancient Monuments and Archaeological Areas Act, 1979 \(as amended 2016\)](#)

3.4.1 Scheduled Monuments are designated by the Welsh Ministers on the advice of CADW as selective examples of nationally important archaeological remains. Under the terms of the Ancient Monuments and Archaeological Areas Act 1979 it is an offence to damage, disturb or alter a Scheduled Monument either above or below ground without first obtaining permission from the Welsh Ministers. This Act does not allow for the protection of the setting of Scheduled Monuments.

### 3.5 [Planning \(Listed Buildings and Conservation Areas\) \(Wales\) Regulations 2012](#)

3.5.1 This Act outlines the provisions for designation, control of works and enforcement measures relating to Listed Buildings and Conservation Areas.

### 3.6 Local Planning Policy

3.6.1 The Local Authority responsible for planning policy is Torfaen County Borough Council. The Torfaen *Adopted Local Development Plan Strategic Policies 2006-2026 (2013)*, contains strategic policy SP7 (Conservation of the Built and Historic Environment) which states:

*Development proposals should seek to ensure the conservation and enhancement of the Natural, Built & Historic Environment of Torfaen, in particular:*

- a) Biodiversity resources;*
- b) Geodiversity resources;*
- c) Water environment;*
- d) Landscape setting;*
- e) Character of the built environment; and*
- f) Historic assets.*

## 4 SOURCES

4.1 The information available in the Historic Environment Record has been consulted within a 1.5km search radius of the site.

4.2 The Glamorgan Record Office and regional and national journals, where available, have been examined for relevant information, as well as unpublished reports of previous archaeological activity within the region.

4.3 The Aerial Photography Unit for the Welsh Assembly Government and the aerial photographic archive of the RCAHMW were both consulted. LiDAR data was available for this site from National Resources Wales.

4.4 Appropriate on-line resources, such as the British Geological Viewer, were consulted.

## 5 SITE LOCATION AND WALKOVER DESCRIPTION

5.1 The site comprises 10 fields, all of which were under pasture at the time of the site visit, along with an eleventh pasture field to the northeast of Pentre-Bach farm which is proposed as a temporary construction compound. A walkover survey was undertaken on 19<sup>th</sup> May 2021. Fields 1, 2 and 9 were wet under foot in places, with occasional patches of sedges and some linear sinuous depressions, which were probably related to sub-terranean watercourses. The overall topography was undulating with some relatively steep slopes.

5.2 A number of observations were made during the walkover (Figures 5 and 6):

- **A:** line of three grassed-over mounds at east of Field 1. The mounds extended for approximately 50m, north to south. They were sub-circular, to somewhat irregular



– between 10m to 20m in diameter, approximately 1m high. They are also visible on the 2001 Google Earth view and therefore pre-date Modern excavations (G) to the east. They are probably related to the 'Old Quarry' shown on the 1902 map.

- **B:** Sinuous hedge boundary.
- **C:** Very sinuous hedge boundary. Odd angles in line of hedge.
- **D:** Track (with collapsed wooden gate) heads east into woodland.
- **E:** Sinuous boundary follows line of issue/stream.
- **F:** Clump of trees and bushes located within deep-cut issues/sink. Issue channel extends to south corner of field.

5.3 According to the British Geology Viewer (<http://mapapps.bgs.ac.uk/geologyofbritain/home.html>) the site is located in a north-south band of bedrock geology comprising "St Maughans Formation - Sandstone. Sedimentary Bedrock formed approximately 393 to 419 million years ago in the Devonian Period. Local environment previously dominated by rivers". Extensive deposits of "St Maughans Formation - Argillaceous Rocks And [subequal/subordinate] Sandstone, Interbedded. Sedimentary Bedrock formed approximately 393 to 419 million years ago in the Devonian Period" are present to the east and west and may extend into the site area. No superficial deposits are recorded.

5.4 There is no borehole evidence from within, or immediately adjacent to the site area.

5.5 No further observations were made during the site walkover survey that were considered germane to this study.

## 6 AERIAL PHOTOGRAPHS AND LiDAR

6.1 Aerial photographs held by the Royal Commission on the Ancient and Historical Monuments of Wales (RCAHMW) and the Aerial Photographs Unit for the Welsh Government at Cardiff were consulted to support this assessment. A limited selection of images taken between 1945 and 2020 were examined at [www.earth.google.com](http://www.earth.google.com). The online Cambridge collection of aerial photographs (CUCAP) was also examined, along with the 'Britain from Above' and Lle websites.

6.2 All available timelines on Google Earth were examined and the 1945 timeline contained relatively clear images, but no crop or earthwork features were visible. The quality of the images for 1985 and 6/2018 was poor, though visibility was good for the remaining timelines, again no crop or earthwork features were visible.

6.3 Scans of available aerial photographs from the collection at the Aerial Photographs Unit, Cardiff were examined as part of this study. The photographs dated from 1947 to 1991, however no crop or earthwork features were visible on any of these scans.

6.4 Scans of available aerial photographs from the collection at the RCAHMW, Aberystwyth were subsequently made available and also examined as part of this study. The

photographs dated from 1946 to 2003. On photograph 589 RAF CPE/UK/1997 Frame 3043 dated 13/4/47, an east west aligned feature is visible in Field 10. The feature is pale in the centre with darker edges and is likely to be a trackway. The eastern end of the feature appears to stop at the site of the 'Old Quarry' and the western end turns south towards the north-south aligned footpath which leads to Cefn Adam. This probable trackway is not marked on any of the historical maps and therefore could be of some antiquity. No further crop or earthwork features were visible.

- 6.5 The available online tiles for historic aerial photography were also examined at <http://lle.gov.wales/services/tiles/apu/>. However, there was only coverage of the site for the 1969 photos, which did not appear to contain any crop or earthwork features.
- 6.6 No photographs of the study area were available to view online from either the CUCAP or the Britain From Above website.
- 6.7 A 50cm Digital Surface Model of the study area is available from the Lle website <http://lle.gov.wales/Catalogue/Item/LidarCompositeDataset/?lang=en>. The survey showed possible north-south aligned ridge and furrow, along with raised field boundaries in Field 10, traces of the previously identified probable trackway were also present. No further earthworks were visible, however, it was clear that there were a number of either former or seasonal streams present within the site.

## 7 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND AND MAP REGRESSION

- 7.1 The purpose of this section of the report is to provide background information to place the site in its broader archaeological and historical contexts. It is not meant to provide a comprehensive discussion of the historic resource within and around the site, but to provide sufficient information to allow the significance of any heritage assets, likely to be affected by the proposed development, to be described, as stipulated in the Planning Policy Wales Chapter 6.
- 7.2 The Gwent and Glamorgan Archaeological Trust (GGAT) Historic Environment Record lists 45 monuments and five events within the 1.5km search buffer. The HER was subsequently reconsulted for this revised report in May 2022 (ref. 6829); no new HER records were present. There are 11 Listed buildings within the study area and no Scheduled Monuments. The Listed buildings include three farmhouses or dwellings including the Grade II\* Listed Pentre Bach, adjacent to the southeast corner of the site area, and a number of structures associated with the Monmouthshire to Brecon Canal (700m to the west of the site area). There are also three Lime kilns, two of which lie just east of the study area. No Registered Battlefields or Registered Parks and Gardens occur within the study area. The HER data is tabulated in Appendix 1 and illustrated on Figure 2.
- 7.3 [Historic Landscape Characterisation](#)
- 7.3.1 No Historic Landscape Characterisation entry is available on the HER for the site area.
- 7.4 [Evidence for Prehistoric activity](#)

- 7.4.1 There are no records on the HER from the Prehistoric period within the study area. The nearest confirmed settlement of this date is a scheduled Iron Age hillfort at Twmbalwm approximately 3km to the west.
- 7.5 **Roman activity**
- 7.5.1 There is one record relating to Roman activity on the HER; a Roman tombstone (RIB 366) (GGAT 002856g) which is incorporated into the stonework of the chimney in the hall of Pentre Bach, a farmhouse adjacent to the southeast boundary of the site area. This is part of a sepulchral inscription erected to the memory of Vindutius a Roman soldier of the Second Augusta Legion, aged 45. This inscribed stone is likely to have been moved to this location from elsewhere, possibly the Roman town and fort at Caerleon which is located approximately 4.5km to the southeast. There have been no other finds of this date in the vicinity to suggest the presence of a Roman settlement closer to the site area.
- 7.6 **Evidence for Early Medieval activity**
- 7.6.1 There are no records from this period on the HER within the study area.
- 7.7 **Evidence for Medieval activity**
- 7.7.1 There are 10 records on the HER within the search area relating to the Medieval period, and one of these is located within the site area.
- 7.7.2 During the 12<sup>th</sup> century the Abbey of Llantarnam was founded approximately 2.5km northeast of the site area. This Cistercian Abbey, founded in 1179 as a daughter house of Strata Florida Abbey, had a large number of monastic granges associated with it where farms were set up. The site area formed part of the Cefn Mynach Grange belonging to the abbey, and there is evidence to suggest the existing house of Pentre Bach (directly adjacent to the southeast of the site boundary) may have originated as a farmstead associated with the Grange. Research has produced a number of theories on the origins and nature of settlement here. One suggestion is that the original abbey could have been sited in this area (Brook 1988, 79), and another is that a chapel was sited here. The documentary and topographic evidence is, at the very least, supportive of there being a Medieval Grange associated with the abbey.
- 7.7.3 A number of the records are therefore associated with Llantarnun Abbey and the associated Grange of Cefn Mynach (GGAT 12208g), possibly located in the area of the present house known as Pentre Bach (GGAT 00149g). The proposed construction compound lies immediately to the north of the HER polygon for Pentre Bach. The entire site area is thought to have formed part of this Grange, with the northern half having been an area of managed coppice woodland, divided into allotments (GGAT 12208g). This Medieval managed woodland known as Coed-cefin-y-parti wood formed part of the current site (Procter 2018) but was cleared in the 20<sup>th</sup> century. The focus of the Grange and any associated farmstead is thought to have been just south and southeast of the site area. It has been suggested that the Grange was subsequently developed by the Morgan family after the Dissolution of the monasteries, including the extant Tudor building of Pentre Bach.
- 7.7.4 The HER records also suggest that earthworks to the west and southwest of Pentre Bach house recorded during topographical research for a thesis (Procter 2018) were

described as possibly being fishponds or a moated site. This would support the presence of a Medieval monastic site such as a Grange being located here.

7.7.5 The presence of a Medieval settlement has been evidenced during excavations in 1983 at Llantarnan, outside the search area, approximately 1.5km east of the site area (GGAT E000698). Other sites of probable Medieval origin include the site of a Water mill 1.4km southwest of the site area at Melin (GGAT 00144g). The site a manor house known as Ty Coch, thought to have been on an earlier castle site, 1km to the northeast (GGAT 04515g). A farmstead known as Groes-Mawr recorded as a tenement was located approximately 1km southeast of the site area (GGAT 12209g). Topographic research suggests this could have originated as an out-farm of Cefn-mynach grange.

7.7.6 There are five further records which mainly relate to Llantarnum Abbey and associated land. A Medieval land boundary known as Clements Stream boundary runs approximately 1.2km to the southeast of the site area (GGAT 12216g). There is also a track known as the Heol-y forest track which has been noted as the road from Llantarnum Abbey via Pentre Bach and Henllys to common uplands (GGAT 12234g). A probable site of a Medieval farmstead and managed Medieval coppice woodland have been noted 1.2km northwest at Meyrick-moel (GGAT 12238g and GGAT 12239g). There is also a further Medieval boundary noted as Nant-y-milwr (GGAT 12242g).

## 7.8 Evidence for Post-medieval activity

7.8.1 There were a number of developments in the search area during the Post Medieval period, associated with the increasing development and industrialisation of the surrounding area from the late 18<sup>th</sup> century onwards.

7.8.2 There are 16 records on the HER within the search area relating to the Monmouthshire to Brecon Canal, which was constructed 700m east of the site area, and completed in 1799 (GGAT 03263.0g). Within the search area there are 10 canal locks and two former canal locks which have been converted into weirs. There are also two bridges, one aqueduct and a sluice.

7.8.3 The tithe map of 1846 (Figure 3.1) shows the site area as occupying 13 parcels of land:

	Farm Name	Field name	
722	LLantarnam Abbey	Coed Mawr	Coppice wood
723	Pentre Bach		Arable
724	Pentre Bach		Pasture
725	Pentre Bach		Arable
726	LLantarnam Abbey		Coppice wood
727	Pentre Bach		Brake
728	Pentre Bach		Pasture
729	Pentre Bach		Arable
730	Pentre Bach		Brake
731	Pentre Bach		Arable
732	Pentre Bach		Arable
733	Pentre Bach		Meadow
738	Pentre Bach		Arable

- 7.8.4 All of the plots of land were in the ownership of Edward Francis Blewitt, and the land is largely part of Pentre Bach Farm occupied by Thomas Anstie. Two of the land parcels, both Coppice wood, are however part of Llantarnam Abbey estate and occupied by Reginald James Hewitt. The other areas are largely utilised for arable and pasture. Many of the field boundaries around the edge and within the site as shown on the tithe plan are largely identical to those present today, although there are differences, with some boundaries having been removed to create larger fields. The complex of buildings at Pentre Bach farm just outside the southeast corner of the site area is clearly shown, surrounded by orchard with many buildings appearing similar to the present day. Some of the coppice woodland areas shown on the Tithe have been reduced substantially in size, although there is still an indication of where the woodlands created a large open semi-oval clearing, comprising agricultural land which occupies the northern part of the site area.
- 7.8.5 The Ordnance Survey map of 1882 (Figure 3.2) shows very limited changes to the northern part of the site area, while in the southern field the tithe-era field boundaries have been removed to create a large open field. Evidence for one former boundary does survive within this area in the form of a small linear section of wooded ground, which may be associated with the presence of a former quarry, as indicated on later mapping. A limekiln is illustrated to the immediate east of the site area, north of Pentre Bach farm. A Brick Works (GGAT 11401g) is shown on this OS map, approximately 700m east, with a Clay Pit on the 1883 map 1.4km north of the site area (GGAT 11402g). The Blaenavon to Newport Railway, which closed in 1962 is illustrated in the eastern side of the search area approximately 1.2km east of the site area (GGAT 03195g). A corn mill is shown at Holly Bush to the north on the 1879 OS map (GGAT 0956g).
- 7.8.6 Other records of Post-medieval date on the HER are a track (GGAT 07166g), and a public house at Coed Eva 1km north of the site area (GGAT 10299g).
- 7.9 **Evidence for Modern activity**
- 7.9.1 There are two records of Modern date on the HER within the search area. These are a bridge over the canal to the east (GGAT 11417g) and the Henllis Fire and Brick & Retort Works approximately 900m northeast (GGAT 10830g)
- 7.9.2 The 1902 Ordnance Survey plan (Figure 3.3) shows no significant changes to field boundaries within the site area, although an 'old quarry' is illustrated at the northern end of the remnant section of former field boundary within the southern field. It is likely that this quarry was in existence beforehand and may be the reason for the survival of this section of boundary in 1882. A second 'old quarry' is located immediately to the east of the site, north of the limekiln first shown in 1882. The eastern section of woodland within the site area has been renamed Limekiln Wood on this plan and further activity associated with limekilns may have been taking place here.
- 7.9.3 The 1922 Ordnance Survey plan (Figure 3.4) shows more significance changes to the southern part of the site area, with the loss of the greater part of Henllis Wood and its division into open fields, resulting in the removal of a wooded division between the fields in the north and south of the site. A watercourse with 'rises' is identified in the former area of woodland on the western side of the site.

7.9.4 No significant changes are visible on the 1938 Ordnance Survey plan (Figure 3.5), although by 1949 (Figure 3.6) the remaining large section of Henllys Wood on the east and the southern part of Limekiln Wood on the east have been cleared and are now illustrated as open fields. Field boundaries on the eastern side now appear to be marked by tree-lined watercourses and the wooded boundaries currently in existence are likely to have been in place at this time in the form of surviving former woodland trees.

7.9.5 There are no significant changes to the site area through to the present day from the mid-20th century.

## 7.10 Events

7.10.1 The HER records five archaeological investigations within the search area. These are a building survey of The Mill Tavern at Coed Eva in 2012 (GGAT E004419), a desk-based assessment produced for the canal regeneration project in 2007 (GGAT 005647) and a field visit to Melin in 2012 (GGAT 004207). There are also two pieces of archaeological fieldwork which both produced negative results. These are a watching brief in 2011 at Hollybush prior to cemetery expansion (GGAT 003400) and an evaluation at Ty Coch House during development of Lantarnam Industrial Estate (GGAT 002570).

## 8 ARCHAEOLOGICAL POTENTIAL AND SIGNIFICANCE

8.1 Using the sources of data described in the previous sections, this section of the report will offer an assessment of likely potential for archaeological remains to be present within the site for each of the archaeological periods. The assessment of potential is based upon the known archaeological resource of an area, coupled with any known landuse, which may have affected the archaeological resource. A lack of archaeological assets in an area may, of course, be due to a lack of previous investigation in the area, rather than be representative of a true absence; only two small pieces of intrusive fieldwork have taken place within the study area.

### 8.2 Baseline Conditions

8.2.1 Prior to the assessment of archaeological potential, an assessment of baseline conditions is necessary to help establish the likelihood of archaeological deposits surviving within the site.

### 8.3 Prehistoric

8.3.1 No Historic Environment Record entries for this period are recorded within the study area. It is possible that finds and features associated with this period are present within the site area although current evidence suggests that there is a *negligible* potential for structural remains or ceremonial/burial monuments to be present. On the evidence available at this point, it is considered that the overall potential for any finds or feature dating to this period is *negligible-low*. Given the nature of remains from this period in the surrounding area, the significance of any discoveries would be considered *moderate* where they retain sufficient value to contribute to regional research themes.

## 8.4 Roman Period

- 8.4.1 There is a single record in the form of a tombstone reused in the chimney at Pentre Bach farm, which was probably moved from close to the Roman fortress at Caerleon. On the evidence available at this point, it is considered that the potential for this period is *negligible-low*, although the site area may well have been in agricultural use in this period. The general lack of Roman evidence from the vicinity suggests that any finds or features may have the potential to contribute to regional research themes and would therefore be of *moderate* significance.

## 8.5 Early Medieval

- 8.5.1 The HER contains no records for this period within the study area. On the evidence available at this point, it is considered that the potential for this period is *negligible*. Given the general lack of remains from this period in the surrounding area, if remains from this period were found, the significance may be considered *moderate*, with the potential to contribute to regional research themes.

## 8.6 Medieval

- 8.6.1 There are 10 records from the Medieval period within the study area, only one of which lies within the site in the form of coppiced woodland associated with a grange of Llantarnum Abbey. The grange itself is considered likely to be located close to the existing Pentre Bach farm buildings to the southeast of the site boundary. The location of Medieval settlements is broadly well attested within the area, although isolated farms lost in the same way cannot be entirely ruled out. Nonetheless, it is considered very likely that the site area comprised woodland and farmland for the duration of the entire period and aerial photographic assessment has suggested the presence of remnant agricultural remains in the southern field (Field 10) that may be of Medieval origin. There is no current indication that any buildings associated with the grange or Pentre-Bach farm extended into the proposed construction compound. On the evidence available at this point, it is considered that the potential for this period is *negligible* for any features not associated with agricultural landuse; the condition of any such remains is likely to be poor with limited coherence of *negligible-low* significance; the main significance that survives is the association of the site with the abbey, which is still partially legible through the shape of the fields despite the loss of the coppiced woodland. Given the nature of remains from this period in the surrounding area, the significance of any non-agricultural features would be considered *moderate*, if structural remains were present that can contribute to regional research themes.

## 8.7 Post-medieval

- 8.7.1 There are no HER records associated with this period from within the site area; which is likely to have remained in similar landuse to the Medieval period throughout the period. A limekiln is illustrated close to the eastern boundary in 1882. The St. Maughans's Formation geology is a sandstone but contains deposits of calcretes which would have been suitable for lime burning. Limekilns are often found in association with coppiced woodland which provided a ready source of fuel. The recorded example appears to be of late 19<sup>th</sup> century date, but the presence of earlier kilns cannot be entirely ruled out. Some quarrying is likely to have taken place within the site area

during this period; an 'Old Quarry' is marked within a strip of surviving earlier field boundary, which may represent an enclosure era division, in 1902. A further 'old quarry' is marked to the east of the site boundary and spoil tips from this activity appear to survive within the site itself; again this activity is likely to date from the 19<sup>th</sup> century but may have earlier origins.

8.7.2 On the evidence available at this point, it is considered that the site area contains the potential for former quarries and lost field boundaries. There may be limited evidence for activity associated with limekilns such as charcoal burning areas, although the removal of the coppice woodland in the 20<sup>th</sup> century is likely to have resulted in the destruction of any evidence for this activity. The potential of the site to include evidence for former agricultural and industrial features such as quarrying is considered *moderate-high*; it is likely that infilled quarries in particular will survive as below ground features and spoil tips associated with this activity also survive. The significance of remains from this period is considered *negligible-low*, with limited scope to contribute to regional research themes.

## 8.8 Modern

8.8.1 There are no HER records associated with this period within the site area, with only two records in the overall study area; none of which have any relevance to the site. Historic mapping demonstrates the removal of the coppiced woodland in the first half of the 20<sup>th</sup> century. On the evidence available at this point, it is considered that the potential for non-agricultural features related to this period is *negligible*, with *negligible* significance.

## 10 IMPACT ASSESSMENT

10.1 The proposals for the site, as outlined in paragraph 1.1, are likely to involve some level of disturbance to the surface and sub-surface deposits. It is probable that the proposed development would extend only across the open flat areas of the site where there are no known features of archaeological interest and low potential for buried remains.

### 10.2 Standing Remains

11.0.1 The proposals have the potential to have a direct physical impact on surviving spoil tips probably relating to Post-medieval quarrying, but no other standing heritage assets have been identified for which a direct or indirect impact may be anticipated; the nature and layout of the proposed development, which will retain existing field boundaries, will not, therefore, affect the overall legibility of the site, particularly in relation to the monastic landscape through the landholdings of Llantarnum Abbey. In the event that harm can be demonstrated to these low-value assets, the impact might be reduced to a *negligible* effect through a programme of archaeological recording.

### 10.3 Buried Archaeological Remains

10.3.1 Any archaeological features have the potential to suffer a significant impact from groundworks and could be disturbed, altered, truncated or possibly removed entirely by groundworks undertaken to construct the photovoltaic scheme. The main impact across the site will be the insertion of mini-piles to support the arrays. These will be inserted in large numbers, but the overall impact footprint is very small; typically less



than 0.5% of the site area, including for deformation of surrounding deposits. Additional works will include excavation for cable runs, access roads, security measures and footings for substations and inverters. It is anticipated that the proposed construction compound will require a topsoil strip but that the access will follow an existing track and require no additional work.

- 10.3.2 Based on the state of current knowledge the potential of the site has been identified as *negligible* or *negligible-low* for non-agricultural features for all periods, with the exception of Post-medieval industrial activity in the form of small-scale quarrying and possible limekiln-associated activity. Evidence for agricultural activity may survive in the form of lost field boundaries and potential buried ridge-and-furrow type earthworks and there may be some buried evidence for the cleared coppice woodland. The nature of the proposals is likely to result in a *negligible* impact to the anticipated buried archaeological resource.
- 10.3.3 No non-agricultural/industrial features are anticipated within the site area. However, in the event that such features were present, there is potential for groundworks to cause between a *minor* and *medium* adverse effect to non-agricultural features and a *major* adverse effect to discrete highly sensitive features (e.g, cremations), should such features be present. Mitigation works could, however, potentially reduce all impact effects to *negligible* through design strategies and/or preservation by record and *in situ*.
- 10.3.4 Taking the potential and the likely physical impact into account, no site-wide archaeological evaluation is currently recommended at this stage, although consideration should be given to a programme of geophysical survey in the first instance. Depending on the nature and depth of the soil strip within the proposed compound area, some initial evaluation trenching may be advisable given the proximity to the putative Medieval grange location.

## 11 CONCLUSIONS

- 11.1 This proportionate Archaeological Impact Assessment has considered the potential for a new photovoltaic development on land at Pentre Bach, Torfaen, Wales to affect known and potential heritage assets, as required by the National Planning Policy Wales, Edition 11 Chapter 6.
- 11.2 Heritage assets are present within the site in the form of a former Post-medieval quarry and spoil tips associated with a quarry immediately to the east of the redline. No adverse impact is currently anticipated in regard to the identified spoil-tips. The northern part of the site is included within an HER record relating to coppiced woodland associated with a Medieval grange to Llantarnum Abbey. The woodland was predominantly removed during the first half of the 20<sup>th</sup> century, but the site retains some legibility through the shape of the fields, although this will not be affected by the proposals.
- 11.3 The HIA has also considered the potential for heritage assets with an archaeological interest to be present on the site, based on the known archaeological remains that are presently recorded in the vicinity. The potential has been assessed as *negligible* or *negligible-low* for all periods, with the exception of possible Post-medieval field boundaries and quarrying; some evidence for the cleared woodland might survive as

buried deposits but it is unlikely that associated heritage assets (e.g. evidence for charcoal burning) might have survived the subsequent change to agricultural land in the early 20<sup>th</sup> century. It is also considered unlikely that potential Medieval grange buildings extend into the proposed construction compound. If buried heritage assets were present, they most likely be of *negligible-low* significance, depending on their nature and ability to contribute to regional or national research frameworks. The presence of heritage assets of *moderate* or *high* significance cannot, however, be entirely ruled out. It is clearly apparent that there has been very limited archaeological fieldwork in the vicinity of the site and, although there seems little justification for site-wide evaluation trenching at this stage. It may, however, be appropriate to undertake a site-wide geophysical survey in the first instance supported by limited trenching in the area of the proposed compound.

- 11.4 The nature of the groundworks associated with the proposed development would result in a limited potential adverse impact on buried archaeological remains of any date, which survived within the site areas. The limited physical impact resulting from the insertion of piles and associated infrastructure is not considered to result in more than *negligible* harm to agricultural or industrial features, which by their nature are generally robust. Should buried heritage assets of a non-agricultural or industrial nature be identified, suitable archaeological mitigation, including preservation *in situ* through exclusion of sensitive areas or use of concrete shoes or preservation by record of suitable deposits would reduce any impact on the archaeological resource to *negligible*.

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## **APPENDIX 1:**

### **Gazetteer Historic Environment Information**

HER Table: Monuments

PRN	Name	Summary	NGR	Period	Type	Broadclass	Condition	Status
GGAT00142g	Cwrt Henllys Farmhouse, Henllys	Building forms the SW.wing to a modern farmhouse. It retains pointed doorways of freestone on G-floor & ceiling beams of the period ca.1550-1610.	ST2570921	Medieval	Farmhouse	Domestic	Restored	listed building
GGAT00143g	CASTELL-Y-BWCH	Original part forms the W.wing to a modern 2-storey house. The wing retains its ceiling beams & a stud- &-panel partition. It has modern doorways & windows.	ST2720925	POST MEDIEVAL	House	Domestic	Restored	-
GGAT00144g	MELIN	Comparatively modern 2-storeyed mill of stone rubble & brick. It is roofless & contains 2 modern millstones. The mill race has been filled in.	ST2695915	Medieval	Water mill	Industrial	Restored	-
GGAT00147g	GLAN-Y-NANT	Stone house of 1-storey & attic with dormer windows. Walls have been cement rendered & a porch on N.face & a lean-to at the E.end are modern additions.	ST2855940	POST MEDIEVAL	House	Domestic	Restored	listed building
GGAT00148g	Ty Coch Farmhouse, Llantarnam	Ty Coch is now a farmhouse, but was once a manor known as Redcastle. The manor house in 1622 is referred to as Tyr Castell Coch & in the occupation of Roger Jones	ST2973093	POST MEDIEVAL	Farmhouse	Domestic	Restored	listed building

HER Table: Monuments

GGAT00149g	Pentrebach Farmhouse, Llantarnam	Grade II listed farmhouse within the Grange of Llantarnam Abbey.	ST2854920	POST MEDIEVAL	Farmhouse	Domestic	Restored	listed building
GGAT00150g	PEN-TWYN	Regional style stone house on the 2-room plan with attic or semi-attic has projection for dairy & stairs ca.1550-1610.	ST2916912	POST MEDIEVAL	House	Domestic	Restored	-
GGAT00634g	Gwern y Defaid	Gwern-y-defaid was extant in 1707; a deed of allotment was drafted to partition the estates of Sir Edward Morgan. The property was listed under Llanvihangel and held by Edward Wm Philip which included lands, house and a barn (OS Record Card).	ST3093	POST MEDIEVAL	House	Domestic	Not known	-
GGAT02856g	TOMBSTONE RIB 366 PENTRE BACH GRANGE	On a free stone of the great chimney in the hall [of Pentrebach, also known as Cilsant, Llantarnam], is part of a sepulchral inscription, erected to the memory of Vindutius, a Roman soldier of the second Augusta legion, aged 45.	ST2854920	Roman	Inscribed stone	Religious, Ritual and Funerary	Not known	-

HER Table: Monuments

GGAT03195.0g	BLAENAVON-NEWPORT RAILWAY	FORMER D15: Dismantled railway (part mineral) running from Blaenavon to Pontypool (SO27900125), and from Cwmbran (ST29279485) to Newport. Blaenavon to Llantarnam was closed as a passenger line in 1962, Pontypool to Cwmbran shown as Mineral railway on OS	SO2527085	POST MEDIEVAL	Railway	Transport	Not known	-
GGAT03263.0g	MONMOUTHSHIRE TO BRECON CANAL	Originally two canals, the Monmouthshire Canal was completed in 1799 by Thomas Dadford with the Brecknock and Abergavenny Canal added to this in 1812.	ST3104088	POST MEDIEVAL	Canal	Water Supply and Drainage	Not known	-
GGAT03263.75g	TOP LOCK, TY COCH LOCKS,	lock on Monmouthshire and Brecon canal	ST2915935	POST MEDIEVAL	Canal lock	Transport	Not known	-
GGAT03263.76g	TOP LOCK BRIDGE, TY COCH	Bridge over the Monmouthshire and Brecon canal at the locks at Ty Coch.	ST2915935	POST MEDIEVAL	Canal bridge	Transport	Not known	listed building
GGAT03263.77g	TOP LOCK, TY COCH LOCKS,	lock on Monmouthshire and Brecon Canal	ST2921931	POST MEDIEVAL	Canal lock	Transport	Not known	-
GGAT03263.78g	MONMOUTHSHIRE AND BRECON AQUEDUCT, PONTYMOILE AQUEDUCT	bridge on monmouthshire and brecon canal	ST2935092	POST MEDIEVAL	Canal bridge	Transport	Near intact	listed building
GGAT03263.79g	TAMPLIN LOCK	lock on Monmouthshire and Brecon canal	ST2949092	POST MEDIEVAL	Canal lock	Transport	-	-
GGAT03263.80g	DRAPER'S LOCK	lock on Monmouthshire and Brecon canal	ST2944192	POST MEDIEVAL	Canal lock	Transport	-	-

HER Table: Monuments

GGAT03263.81g	TREDEGAR LOCK	lock on Monmouthshire and Brecon canal	ST2935092	POST MEDIEVAL	Canal lock	Transport	-	-
GGAT03263.82g	BOTTOM LOCK	lock on Monmouthshire and Brecon canal	ST2928992	POST MEDIEVAL	Canal lock	Transport	-	-
GGAT03263.83g	LOWER BRAKE LOCK	lock on Monmouthshire and Brecon canal	ST2926792	POST MEDIEVAL	Canal lock	Transport	-	-
GGAT03263.84g	SHOP LOCK	lock on Monmouthshire and Brecon canal	ST2924893	POST MEDIEVAL	Canal lock	Transport	-	-
GGAT03263.85g	BRAKE LOCK	lock on Monmouthshire and Brecon canal	ST2914993	POST MEDIEVAL	Canal lock	Transport	-	-
GGAT03263.86g	RACHELS LOCK	lock on Monmouthshire and Brecon canal	ST2914934	POST MEDIEVAL	Canal lock	Transport	-	-
GGAT03703g	Ty Coch	No information currently available.	ST2722915	POST MEDIEVAL	House	Domestic	Not known	-
GGAT04515g	RED CASTLE	Castle or manor house possibly on the site occupied by the 17th c house Ty Coch	ST2974933	Medieval	Castle	Defence	Not known	-
GGAT07166g	Track, Bettws	Embanked track located running S into spruce; continuing from lane. Track, max. c.4m w, extends c.60m into woodland.	ST2747391	POST MEDIEVAL	Hollow way	Transport	-	-
GGAT08324g	Cefn Mynach Grange	Grange of Llantarnam Abbey, possibly being the original site of the abbey itself. Also known from documentary sources as the site of a chapel.	ST2854920	Medieval	Grange	Agriculture and Subsistence	Not known	-
GGAT09596g	Holly Bush Mill, Cwmbran	A post-medieval corn mill called Holly bush. appears on the 1879 OS map.	ST2841940	POST MEDIEVAL, Modern	dwelling, corn mill	domestic, Agriculture and Subsistence	Converted	-



HER Table: Monuments

GGAT09650g	Cwrt-y-llaca, Henllys			-	-	-	-	-
GGAT10299g	The Mill Tavern, Coed Eva	Two storey stone built structure The first edition OS Map depicts the Mill Inn with a tramway south of the property.	ST2845394	POST MEDIEVAL	public house	commercial	Intact,Destroyed	-
GGAT10830g	Henllis Fire Brick and Retort Works, Cwmbran	A brick works in Cwmbran owned and operated as part of the Guest Keen and Nettlefold industrial concern.	ST2890693	MODERN	BRICKWORKS	industrial	NEAR DESTROYED	-
GGAT11399g	Sluice, nr Croes-y-mwyalch	A post-medieval sluice depicted on the 1st edition OS map of 1883. Identified as restored during a desk-based assessment for a Monmouthshire and Brecon Canal regeneration project	st2953919	POST MEDIEVAL	CANAL SLUICE	transport	RESTORED,INTACT	-
GGAT11400g	Brick Works, nr Croes-y-mwyalch	A post-medieval brick works depicted on the 1st edition OS map of 1883. Identified as destroyed during a desk-based assessment for a Monmouthshire and Brecon Canal regeneration project	st2951292	POST MEDIEVAL	BRICKWORKS	industrial	INTACT,DESTROYED	-
GGAT11401g	Brick Works, nr Pentre basket	A post-medieval brick works depicted on the 1st edition OS map of 1883. Identified as destroyed during a desk-based assessment for a Monmouthshire and Brecon Canal regeneration project	st2916293	POST MEDIEVAL	BRICKWORKS	industrial	INTACT,DESTROYED	-

HER Table: Monuments

GGAT11402g	Clay Pit, nr Pentre basket	A post-medieval clay pit depicted on the 1st edition OS map of 1883. Identified as destroyed during a desk-based assessment for a Monmouthshire and Brecon Canal regeneration project	st2917993	POST MEDIEVAL	CLAY PIT	industrial	INTACT,DESTROYED	-
GGAT11403g	Two Locks	A group of post-medieval locks depicted on the 1st edition OS map of 1883. Both locks have been converted into stepped weirs at the time of a desk-based assessment carried out for the regeneration of the Monmouthshire and Brecon Canal	st2909941	POST MEDIEVAL	CANAL LOCK	maritime	NEAR DESTROYED,INTACT	-
GGAT11415g	Bottom Lock Bridge	A post-medieval lock on the Monmouthshire and Brecon Canal, identified as damaged during a desk-based assessment for the regeneration of the Monmouthshire and Brecon Canal.	st2928892	POST MEDIEVAL	CANAL LOCK	maritime	DAMAGED	-
GGAT11417g	Bridge, nr Ty Coch	A masonry faced footbridge over the Monmouthshire and Brecon Canal, identified as intact during a desk-based assessment for the regeneration of the Monmouthshire and Brecon Canal	st2900993	MODERN	CANAL BRIDGE	transport	INTACT	-

HER Table: Monuments

GGAT12208g	Coed-cefin-y-perthi Wood	Extensive area of coppice woodland surrounding a large oval enclosure north of Cefn-mynach grange farm divided into allotments.	ST282929	MEDIEVAL	MANAGED WOODLAND	Agriculture and Subsistence	NOT KNOWN	-
GGAT12209g	Groes-Mawr Farmstead	Recorded as a tenement; perhaps an out-farm of Cefn-mynach grange, Llantarnum.	ST293917	MEDIEVAL	FARMSTEAD	Agriculture and Subsistence	NOT KNOWN	-
GGAT12216g	Clements Stream Boundary	Stream forming part of the Magna Porta manor boundary.	ST297916	MEDIEVAL	BOUNDARY	water supply and drainage	NOT KNOWN	-
GGAT12234g	Heol-y-forest Track	Road from Llantarnam Abbey via Pentre-bach and Henllys to common uplands of Mynydd Henllys and Llanderfel	ST278923	MEDIEVAL	TRACKWAY	transport	NOT KNOWN	-
GGAT12238g	Meyrick-moel Farmstead	Possible medieval farmstead.	ST276936	MEDIEVAL	FARMSTEAD	Agriculture and Subsistence	NOT KNOWN	-
GGAT12239g	Meyrick-moel Wood	Llantarnam Abbey coppice woodland.	ST274939	MEDIEVAL	MANAGED WOODLAND	Agriculture and Subsistence	NOT KNOWN	-
GGAT12242g	Nant-y-milwr Boundary Stream	Forms part of boundary of manor/ parish.	ST273928	MEDIEVAL	BOUNDARY	water supply and drainage	NOT KNOWN	-

HER Table: Events

PRN	Name	Summary	Event Type	Organisation	Year	NGR
GGATE004207	Field Visit to Melin	A field visit undertaken as part of the Cadw funded project assessing Mills and Water Power in Glamorgan and Gwent.	Field Visit	Glamorgan-Gwent Archaeological Trust (GGAT)	2012	ST26959153
GGATE004419	The Mill Tavern, Coed Eva SUR	APAC Ltd were commissioned to undertake a Level 2 building survey at The Mill Tavern, Coed Eva, Cwmbran. A series of 38 digital photos depicting the interior and exterior of the building are supplied along with two location plans (Phillips 2012).	Building Survey	Archaeological Perspectives Analysis Consultancy (APAC)	2012	ST2845394076
GGATE005647	Monmouthshire and Brecon Canal	The Glamorgan-Gwent Archaeological Trust was commissioned by Powell Dobson on behalf of Kier Weston to carry out an archaeological desk-based assessment in advance of canal regeneration including a proposed leisure trail. The NMR, regional SMR, Cadw data, cartographic and documentary sources were consulted in addition to site visits made and 122 sites of archaeology within 40 m of the canal and proposed leisure trail were identified. Sites included three SAM and 35 Listed Buildings. Mitigation recommendations included surveys and watching briefs for 19 specific areas with a note regarding obtaining relevant Listed Building Consent.	DESK BASED ASSESSMENT	Glamorgan-Gwent Archaeological Trust (GGAT)	2007	ST2199 9269

HER Table: Events

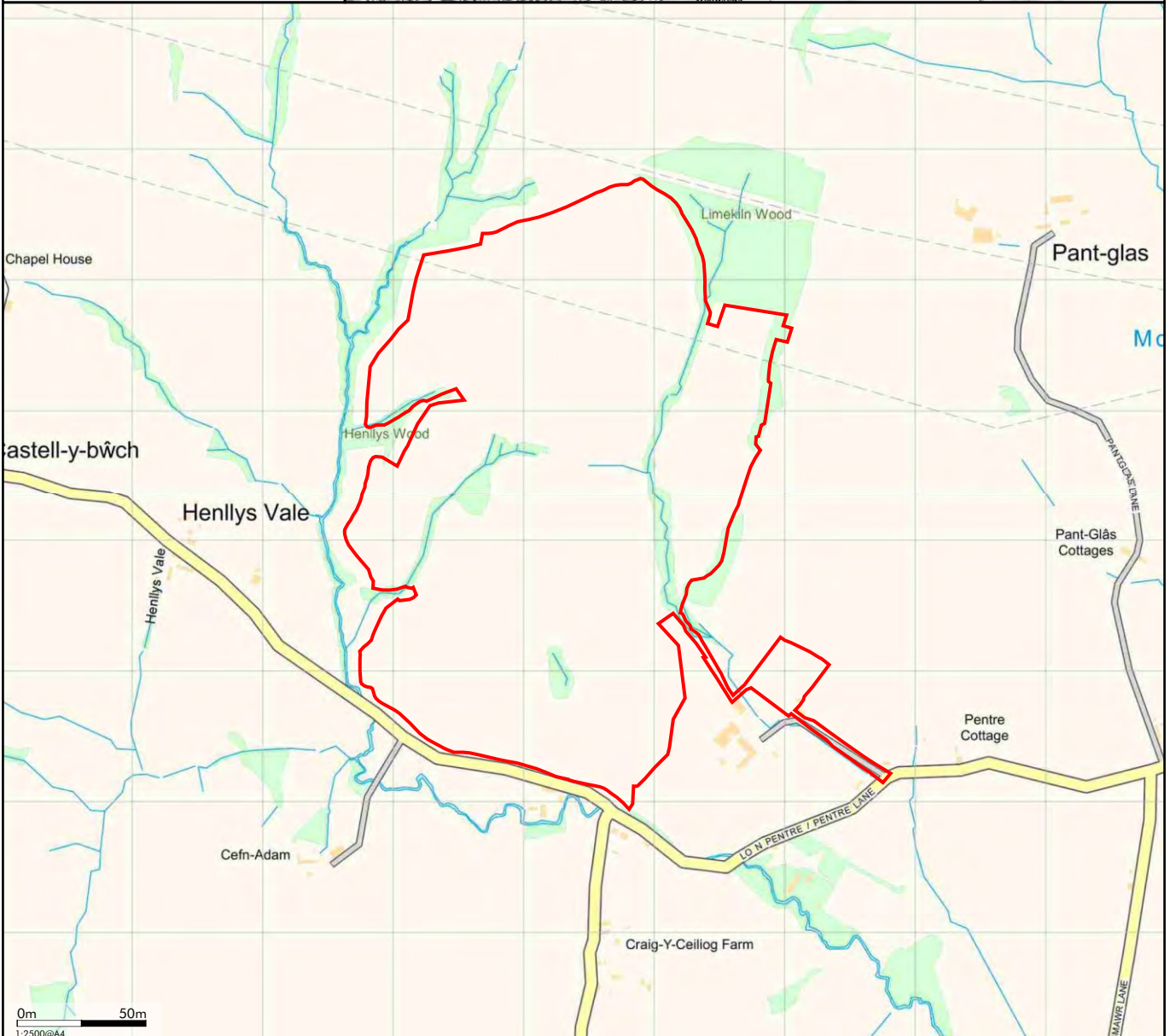
GGATE002401	Newport Landscapes - Landscape Strategy DBA/SUR	TACP, Environmental Consultants were commissioned by a client team, made up of Newport County Borough Council, the Welsh Development Agency and the Countryside Council for Wales (CCW), to do a landscape assessment, develop a landscape strategy and design guidelines for using CCW's LANDMAP. The aim of the report is to provide a landscape framework including sustainable preferences for the area, its economic regeneration and environmental improvement. There are many things that are needed to make sure the landscape strategy is implemented successfully. * All the different groups have to work together as each has a role in the strategy. * Building upon initiatives that have already begun. * The commercial investment in the landscape to complement other initiatives and strategies. (TACP 1998).	Management Plan Landscape	TACP, Environmental Consultants	1998	ST3122287958
GGATE001696	Uskmouth Pipeline Development DBA	RSK Environment Ltd undertook a desk-based assessment for two lengths of pipeline totalling c. 6km in length (Marshfield to the Uskmouth Power Site and Henllys to Rhiwdern,) incorporating a 1km study area. Potential impact to the archaeological resource was assessed and mitigation measures proposed (RSK Ltd 2007).	Desk Based Assessment	RSK Group	2007	ST28NE
GGATE001411	The Roman fortress of Caerleon and its environs: A framework for research	The Glamorgan-Gwent Archaeological Trust undertook a research frame for the Roman fortress of Caerleon and its environs.	Desk based assessment	Glamorgan-Gwent Archaeological Trust (GGAT)	2004	ST33909060
GGATE005096	Gwent Wildlife Trust reserve Croes Robert Wood Trellech	An investigation of 13 reserves for the Gwent Wildlife Trust to provide a historical and cultural dimension to the understanding of the reserves and to provide information on sensitive archaeological features: Croes Robert Wood near Trellech 14 hectares	Heritage Assessment		2005	ST2724494076

HER Table: Events

GGATE004431	The Mill Tavern, Coed Eva WB	APAC Ltd were commissioned to undertake an archaeological watching brief at The Mill Tavern, Coed Eva, Cwmbran in accordance with guidance from the GGAT Planning department to supplement a planning application to The proposed construction work will involve demolition of the present building, preparation of the encompassed land and excavation for building foundations, and utilities trenching in order to redevelop its underlying ground and curtilage for the construction of five dwellings (Phillips 2012).	Watching Brief	Archaeological Perspectives Analysis Consultancy (APAC)	2012	ST2845394076
GGATE005098	Gwent Wildlife Trust reserve Henllys Bog Cwmbran	An investigation of 13 reserves for the Gwent Wildlife Trust to provide a historical and cultural dimension to the understanding of the reserves and to provide information on sensitive archaeological features: Henllys Bog near Cwmbran 1 hectare	Heritage Assessment		2005	ST2651392467
GGATE003834	New Main, Pant-Yr-Eos, Henllys, Gwent	Dwr Cymru intended to construct a new main from Pant-yr-eos Reservoir to Garth Fach. GGAT was commissioned to undertake an appraisal of the archaeological impact of the proposal. It was recommended an intensive watching brief take place on construction adjacent to the church, with a watching brief on the rest of the site.	Desk Based Assessment	Glamorgan-Gwent Archaeological Trust (GGAT)	1994	ST2583491537
GGATE003834	New Main, Pant-Yr-Eos, Henllys, Gwent	Dwr Cymru intended to construct a new main from Pant-yr-eos Reservoir to Garth Fach. GGAT was commissioned to undertake an appraisal of the archaeological impact of the proposal. It was recommended an intensive watching brief take place on construction adjacent to the church, with a watching brief on the rest of the site.	Desk Based Assessment	Glamorgan-Gwent Archaeological Trust (GGAT)	1994	ST2792890562
GGATE003400	Llwyncelyn Cemetery, Hollybush, Cwmbran, Torfaen	GGAT Projects were commissioned by Torfaen County Borough Council to undertake a watching brief on intrusive groundworks during the construction phase of a proposed cemetery and associated infrastructure at Hollybush, Cwmbran.	Watching Brief	Glamorgan-Gwent Archaeological Trust (GGAT)	2011	ST28729365

HER Table: Events

GGATE002570	Ty Coch House, Llantarnam Industrial Park EVAL	Palmer Environmental commissioned G.A makepeace to undertake an archaeological evaluation on land near Ty Coch House, Llantarnam Industrial Estate, Cwmbriŷn after planning permission was sought to build and extend a current factory on the site, no archaeological evidence was found (Makepeace 2001).	Evaluation		2001	ST2972693256
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Site Outline

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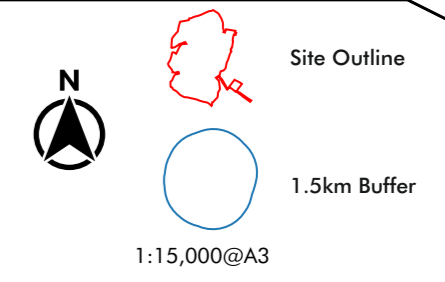
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**Figure 1:**  
Site Location



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 Approved By: RK  
 Date: 29/09/2022

**Figure 2.1:**  
 Map of Historic Environment Data, Monuments



**KEY**

- Roman
- Medieval
- Post-medieval
- Post-medieval to Modern
- Modern
- Conservation Area
- Rail and Tram lines
- Area around farmhouse and ?moat
- Mill buildings and water features
- ?Building

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**Figure 2.2:**  
 Map of Historic Environment Data, Events

N

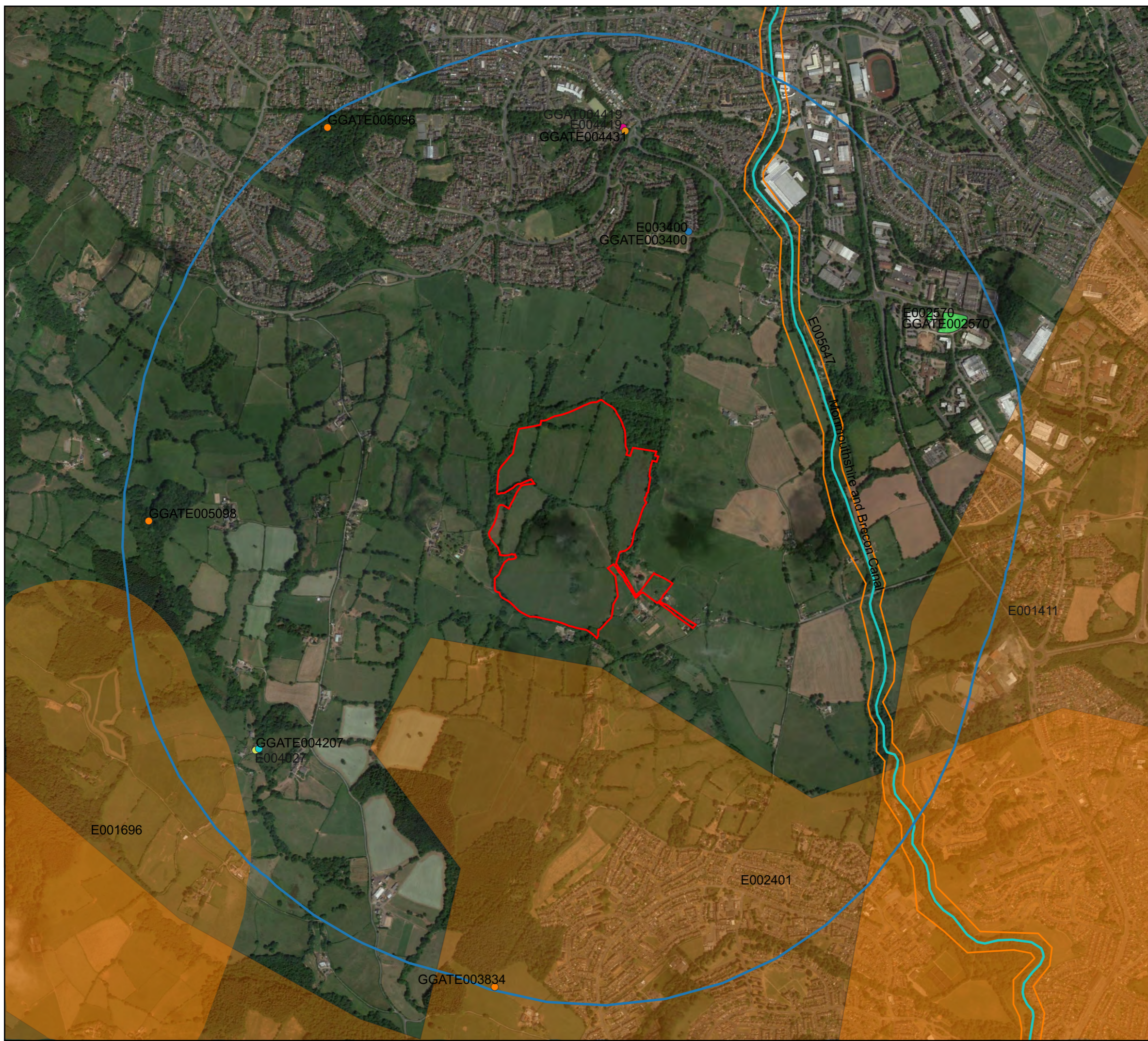
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1.5km Buffer

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**KEY**

- Desk-Based/Heritage Assessment
- Building Recording
- Field Visit
- Watching Brief
- Evaluation
- Canal



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Figure 3.1:  
Tithe Map, 1846



N

Site Outline

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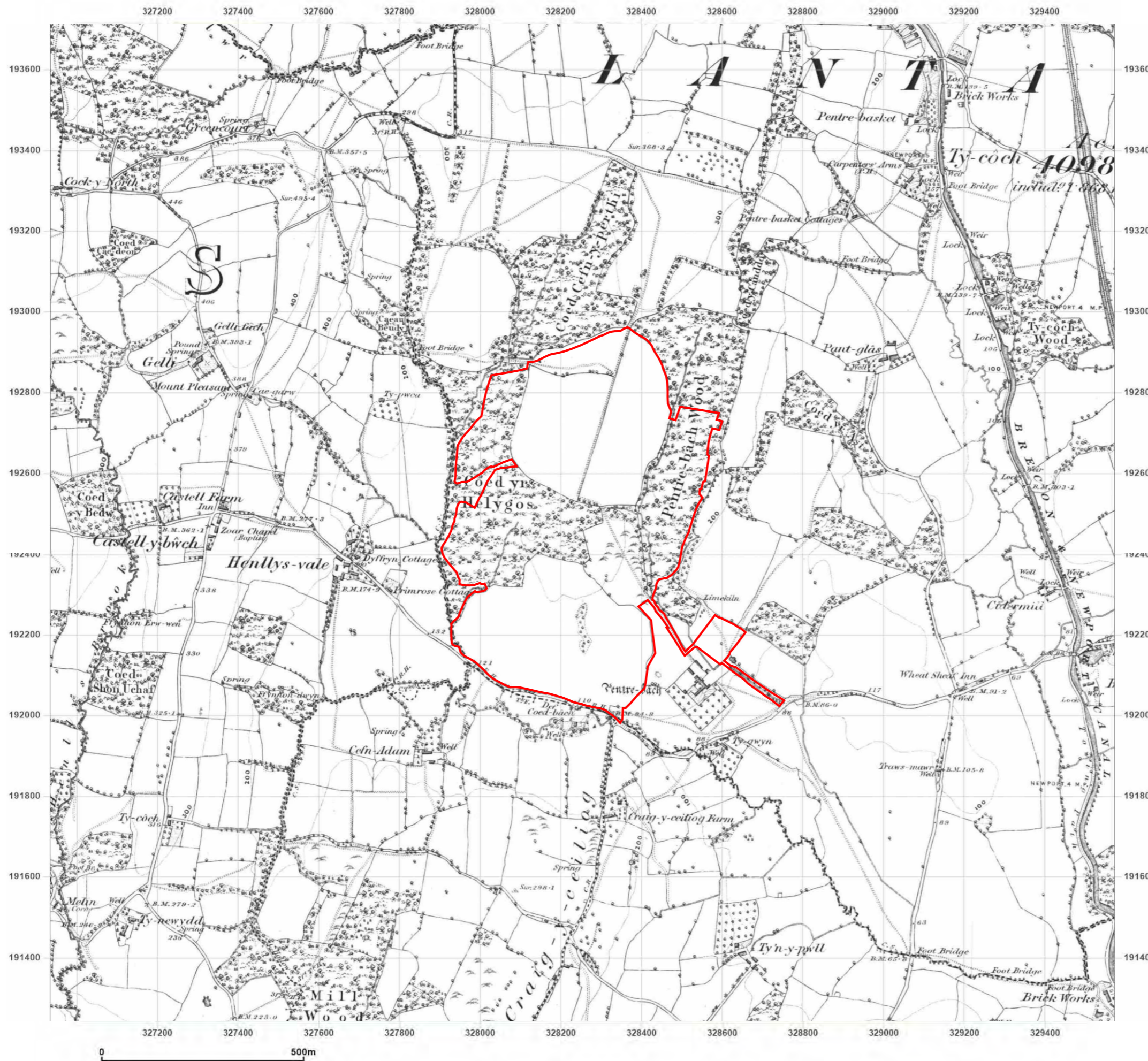
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Figure 3.2:  
 Ordnance Survey Map, 1882



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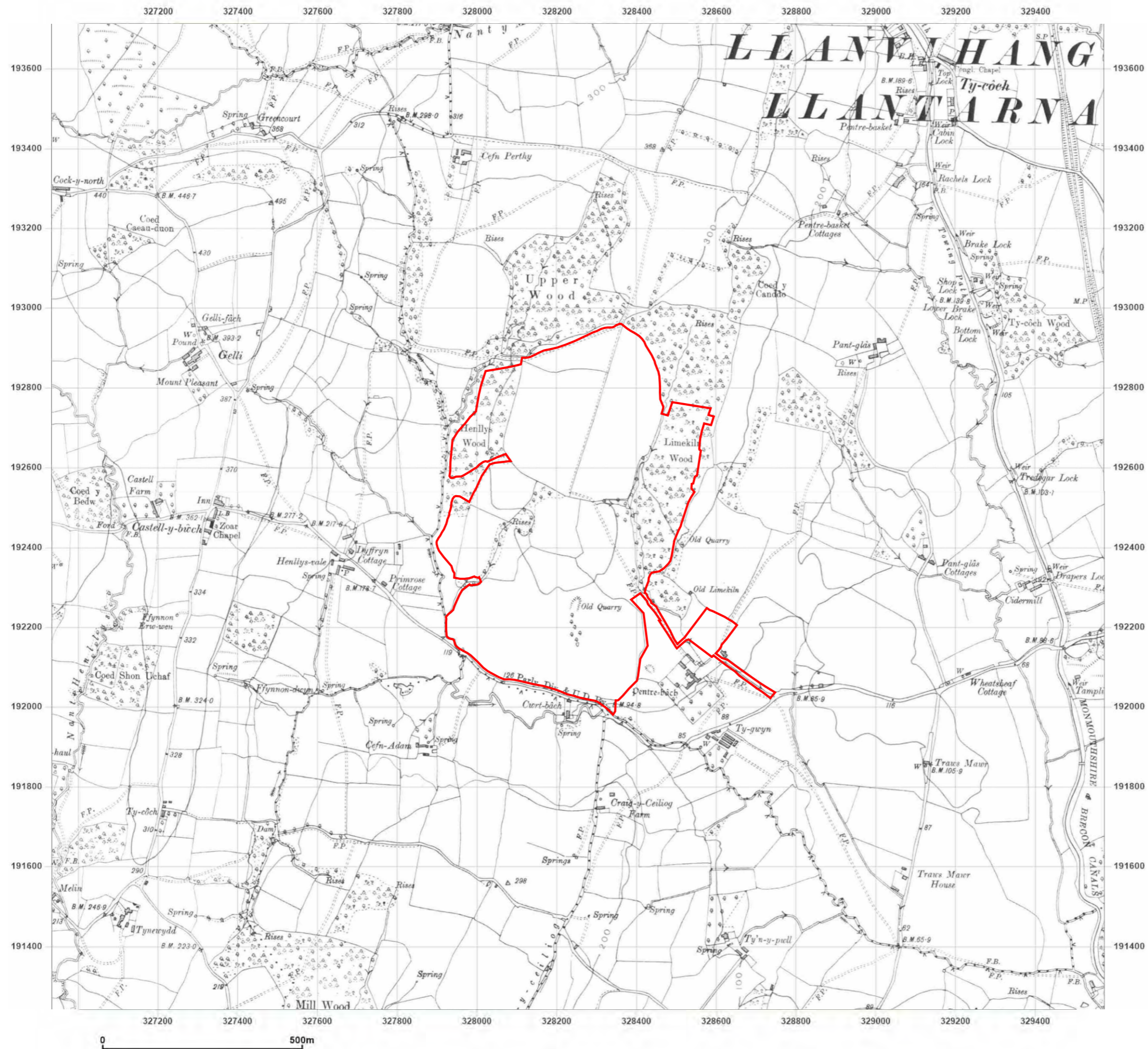
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Figure 3.4:  
 Ordnance Survey Map, 1922



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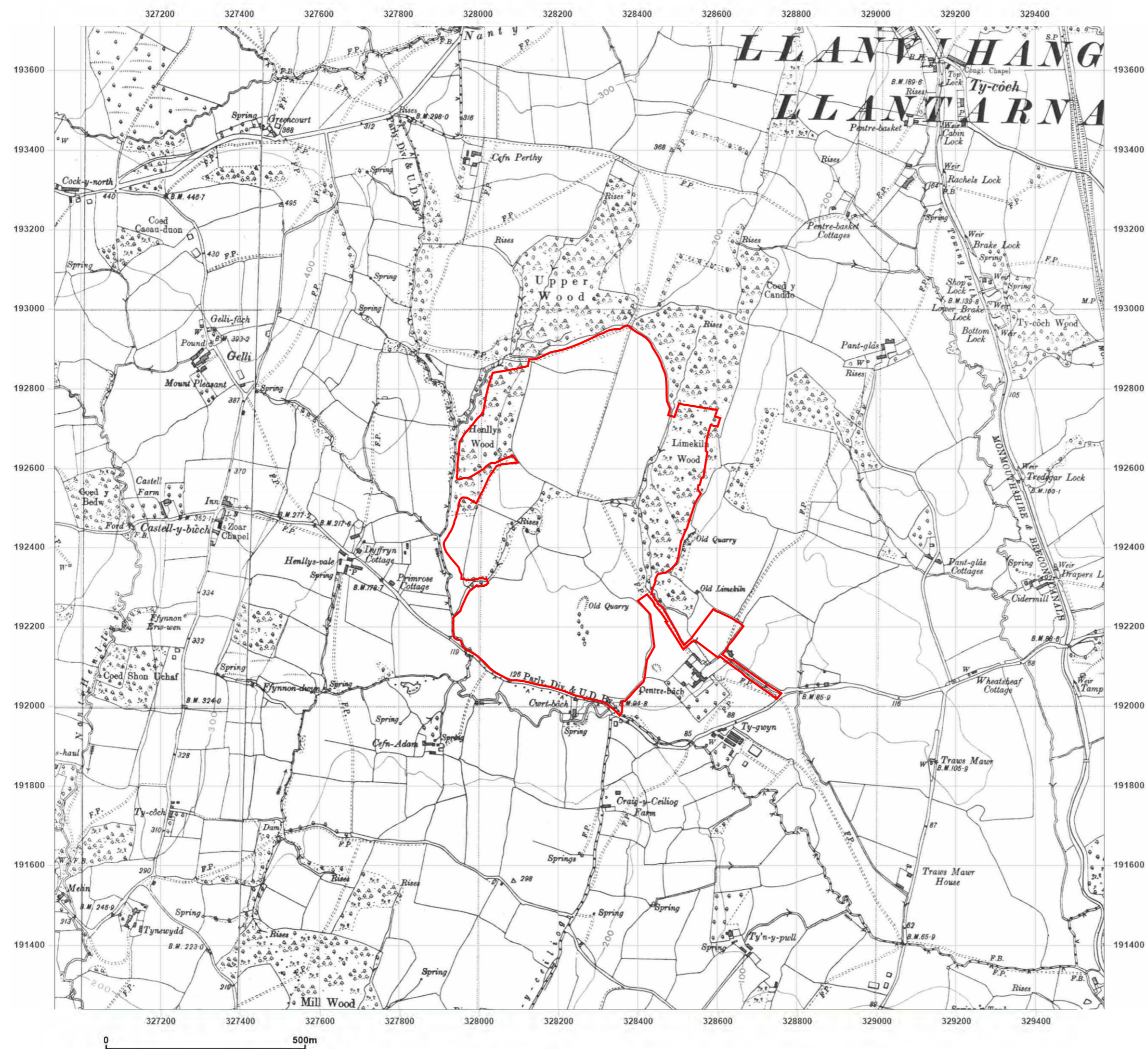
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Figure 3.5:  
 Ordnance Survey Map, 1938



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**Figure 3.6:**  
 Ordnance Survey Map, 1949

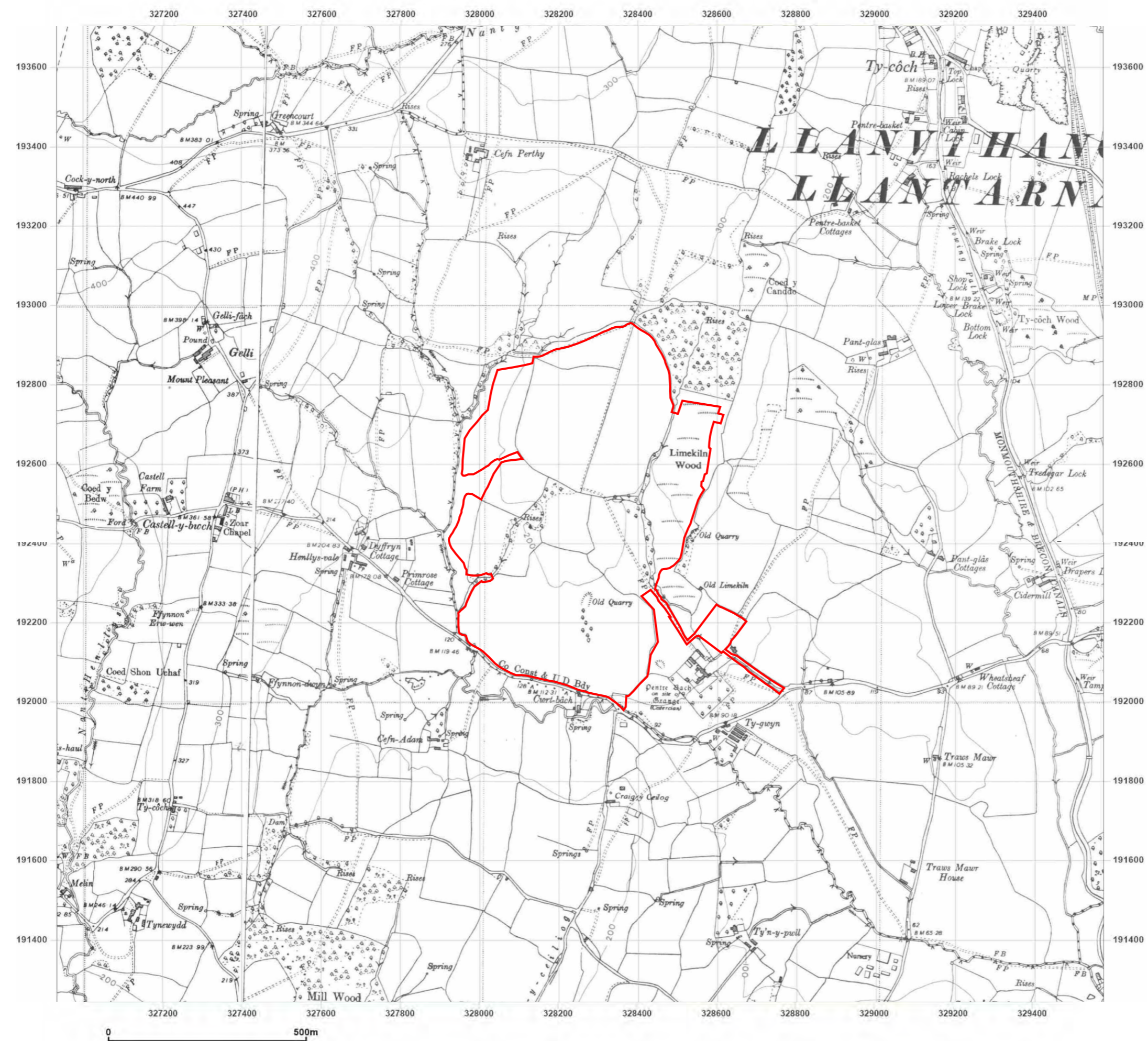
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Site Outline



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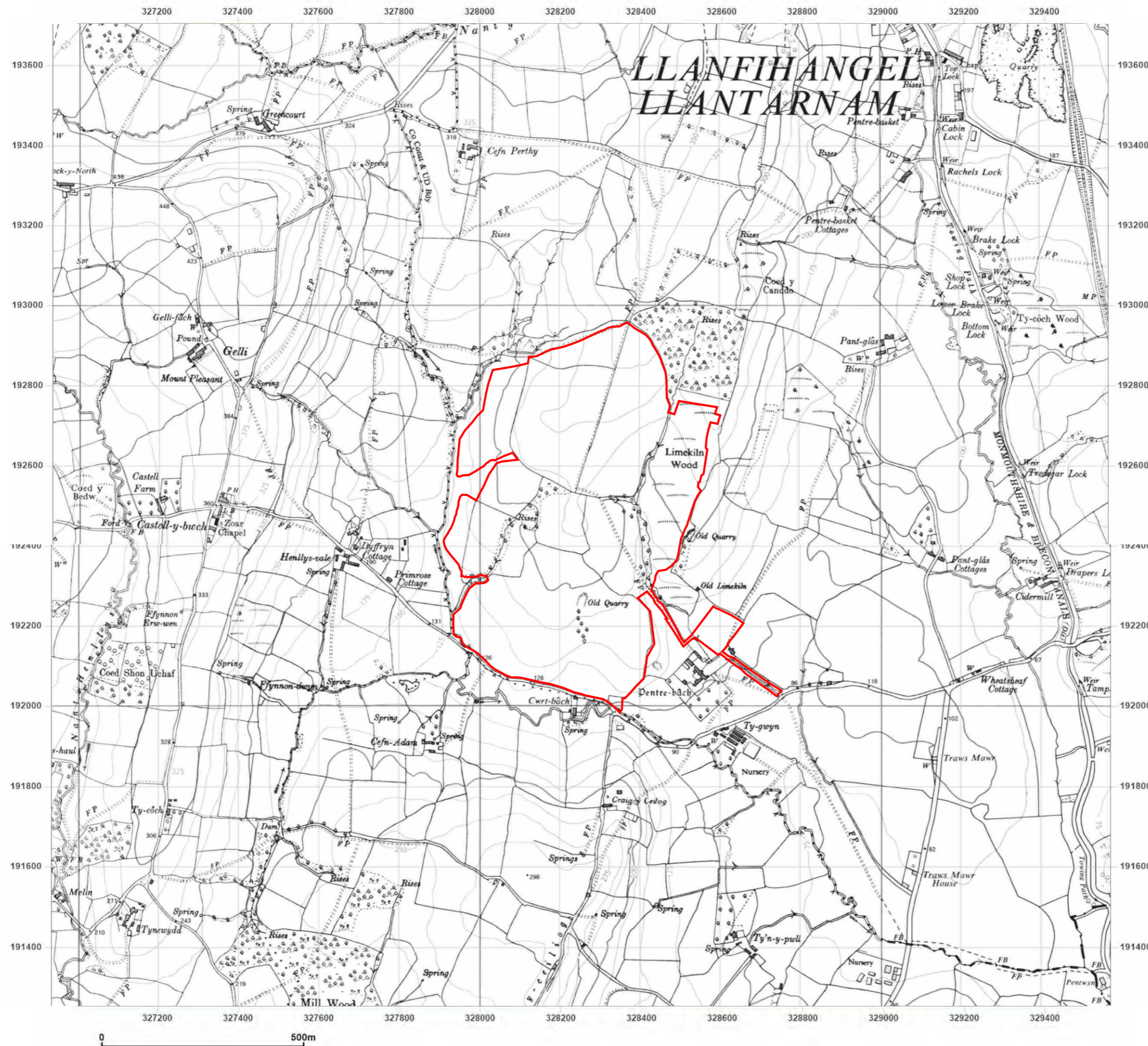
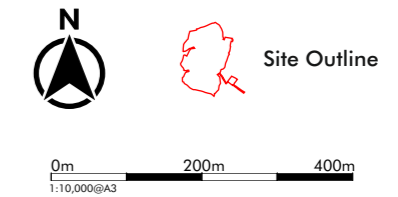
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**Figure 3.7:**  
 Ordnance Survey Map, 1964-65




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**Figure 3.8:**  
 Ordnance Survey Map, 1983

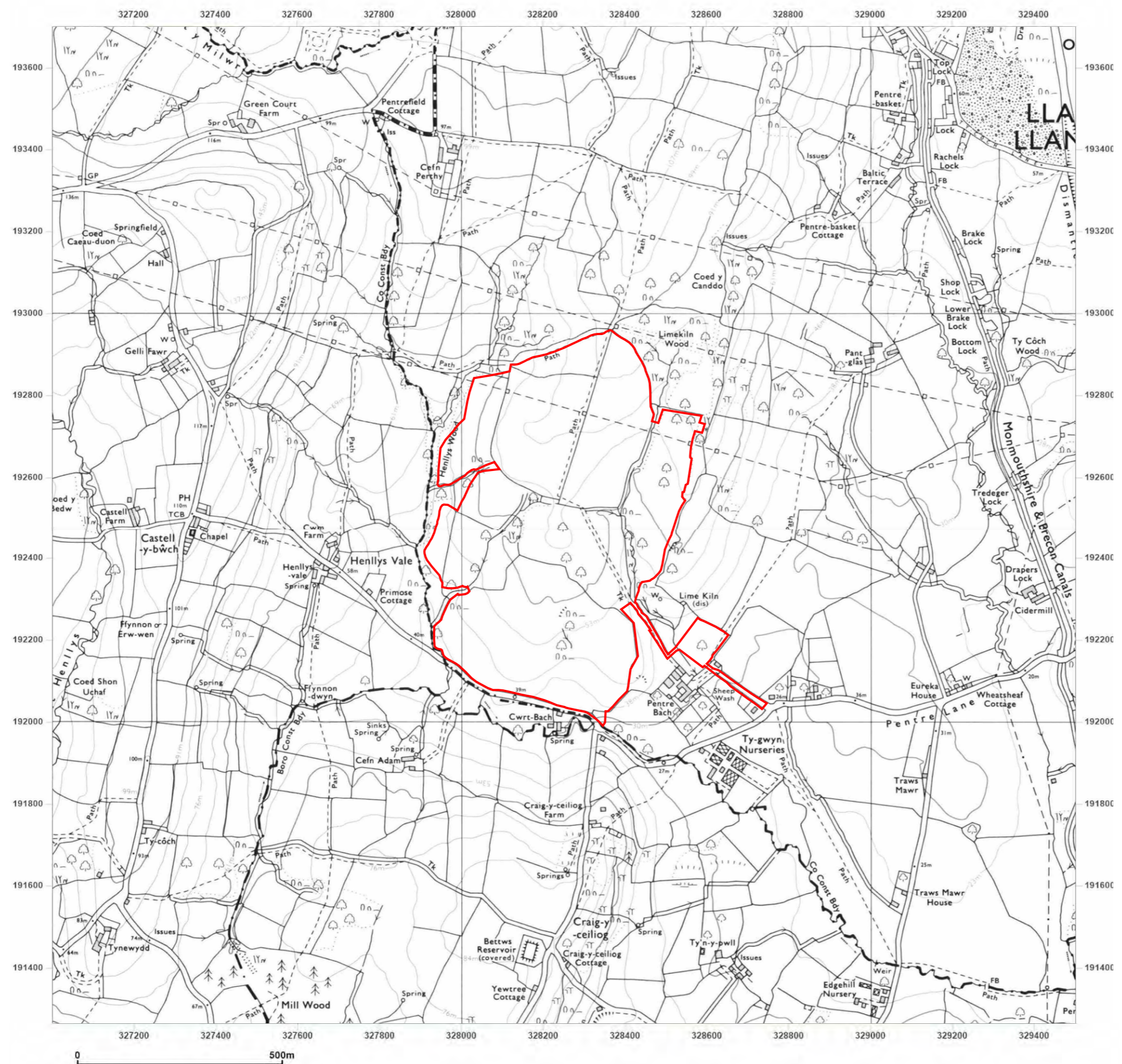
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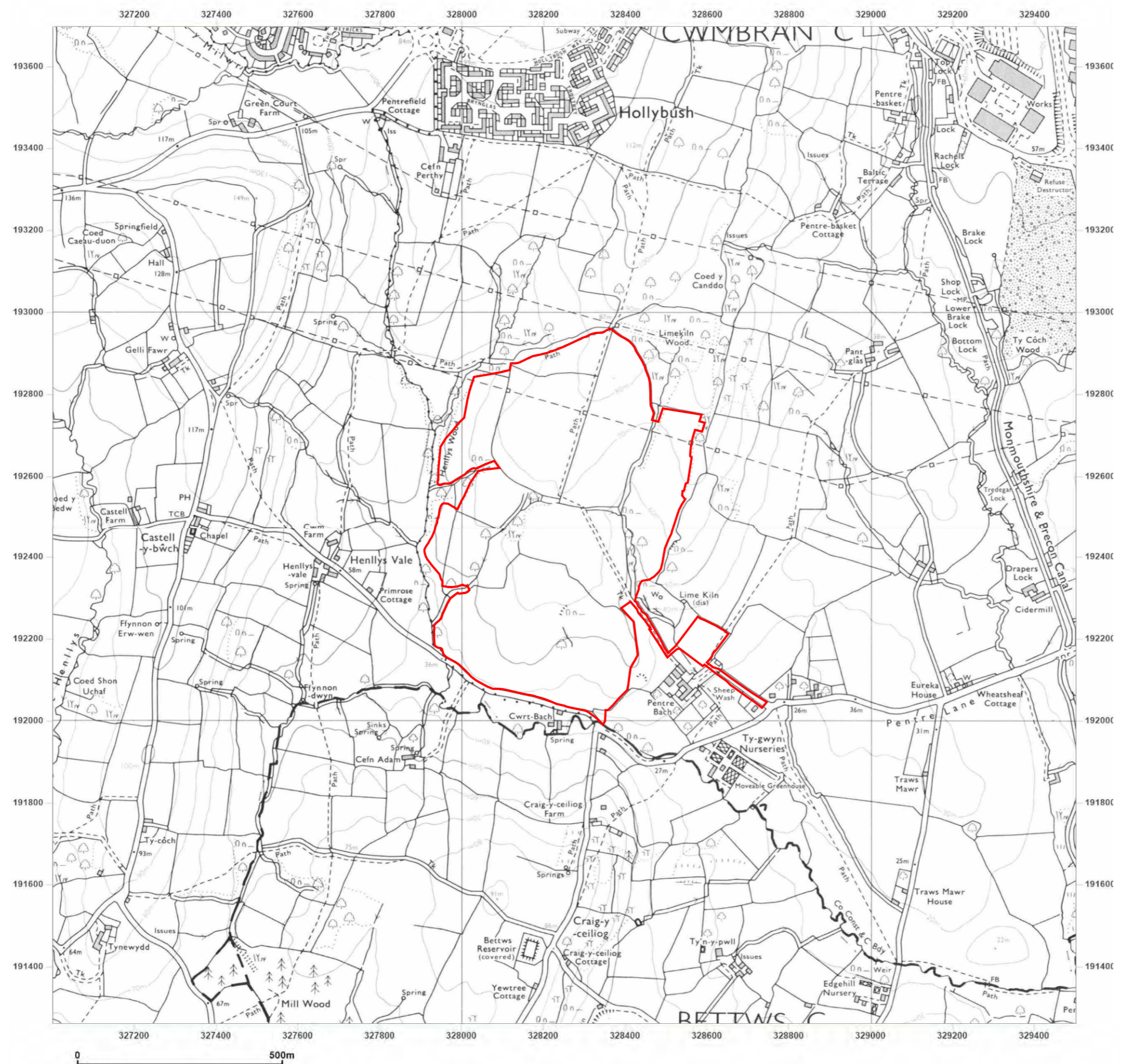


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**Figure 3.9:**  
 Ordnance Survey Map, 1983

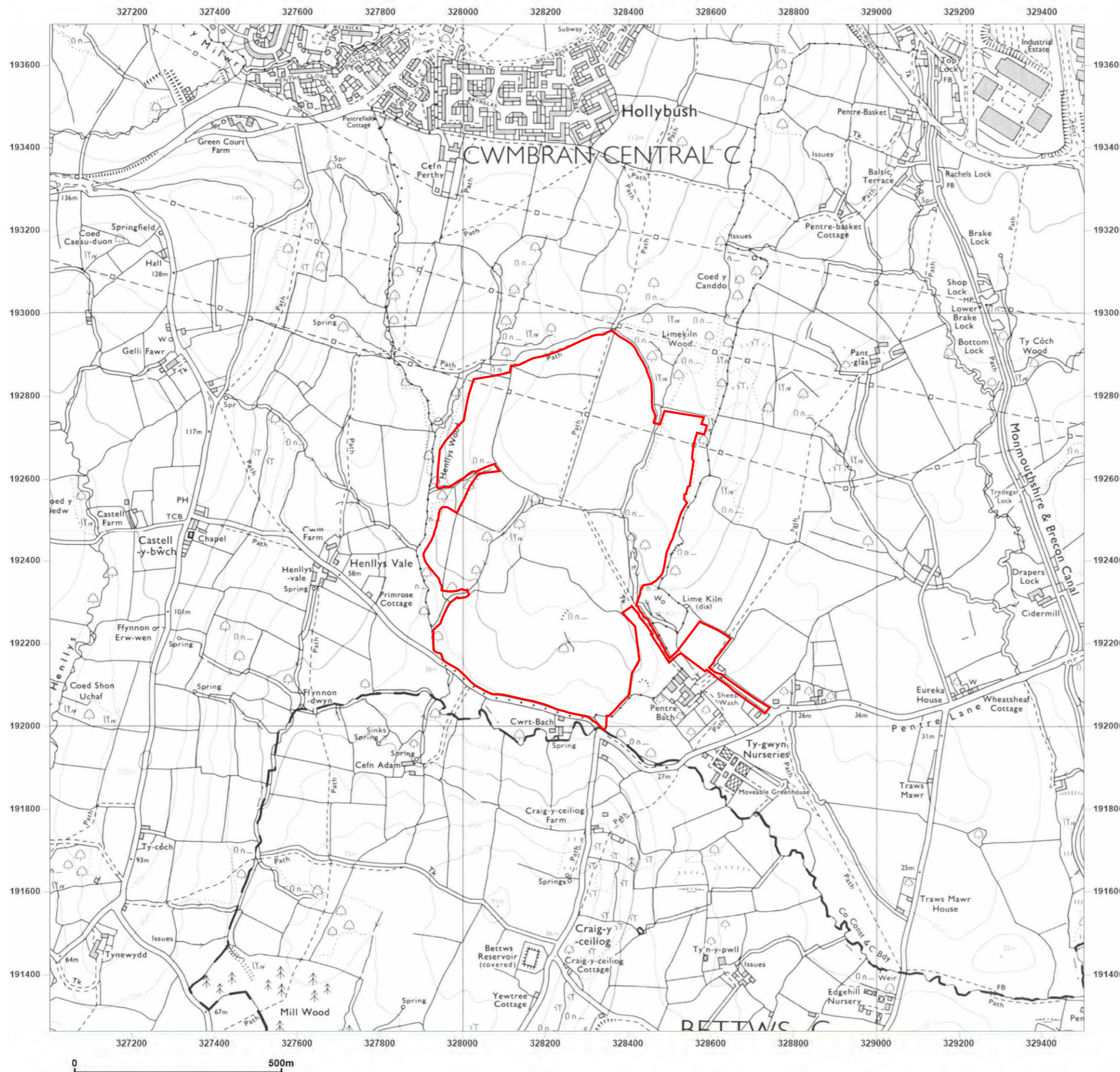
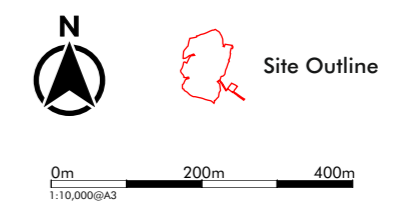


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**Figure 3.10:**  
 Ordnance Survey Map, 1992



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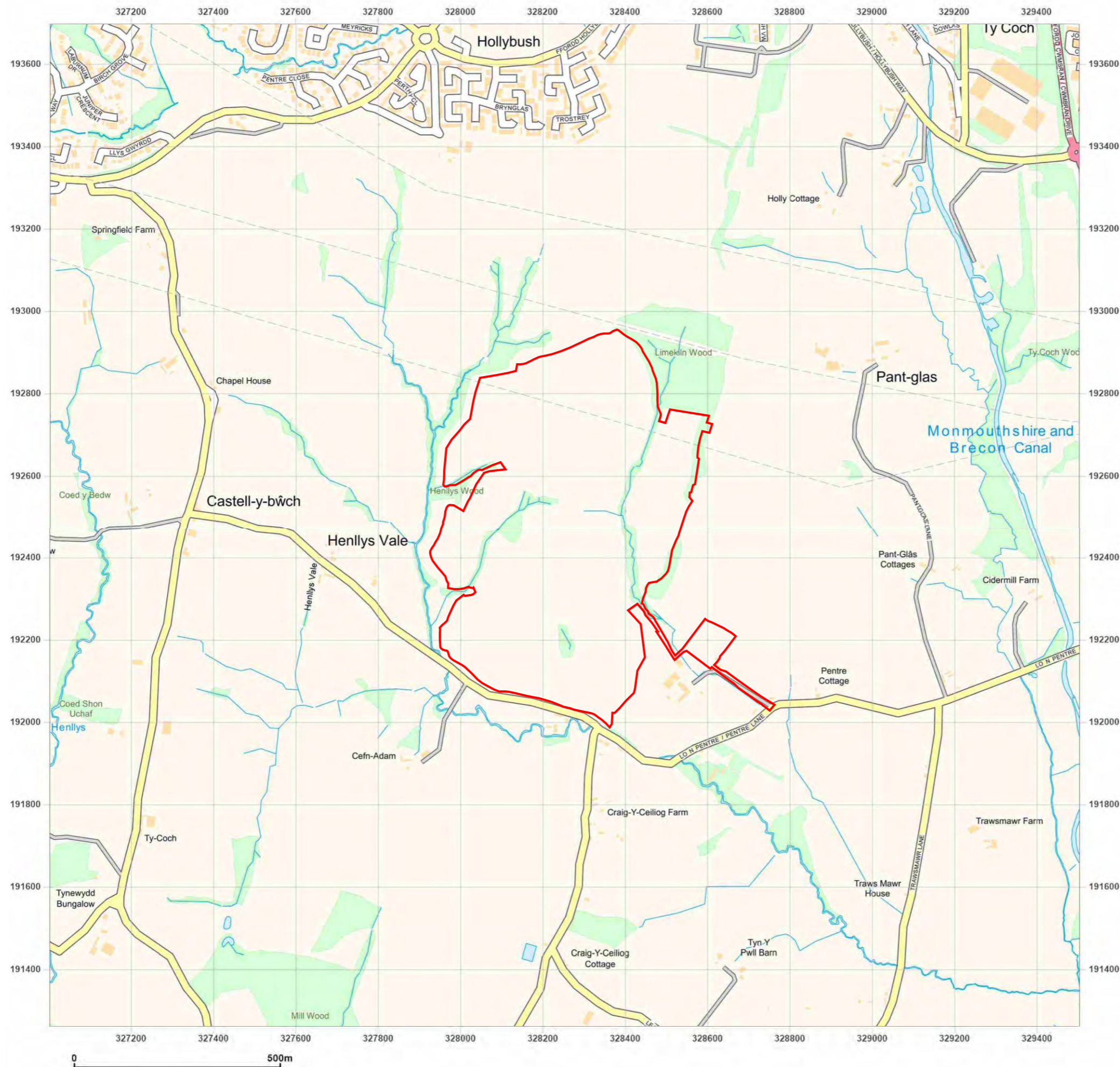
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Figure 3.11:  
Ordnance Survey Map, 2020

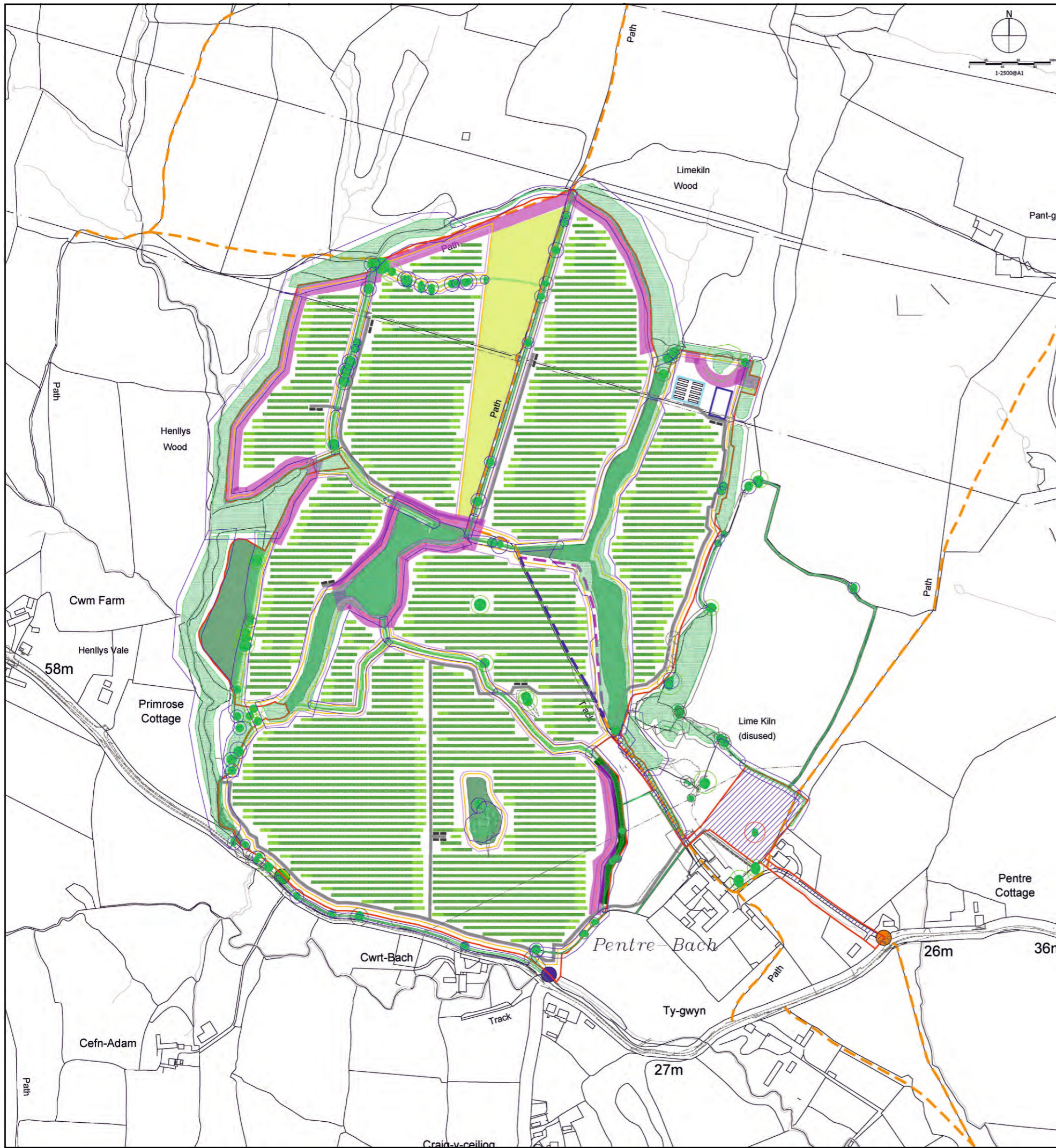


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The scaling of this drawing cannot be assured  
 Revision 1 Date 19.05.22 Dm Ckd  
 Layout updated in accordance with arboricultural survey KT TE

- Site Boundary
  - Access Point A
  - Access Point B
  - Access Point C
  - Energy Storage compound
  - Substation
  - 3.5m wide access track
  - Inverter Substations
  - Energy Storage Containers
  - Public Right of Way
  - Public Right of Way to be diverted
  - Proposed new route for Public Right of Way
  - Existing Hedgerow
  - Fence (5m ecological buffer)
  - 3m buffer from fence
  - 2x12 Typical Module Panel
  - 2x24 Typical Module Panel
  - Existing Vegetation Retained
  - Reinforce Existing Hedgerow - (To ensure no intervisibility between proposed panels and Pentre Bach Farmhouse)
  - Construction Area
  - 15m landscape buffer
  - Extended buffer to mitigate views from PRoW and long distance views from wider landscape to the west
- Trees are indicated by symbols below, colour coded to indicate their 'Retention Categories':
- Category U (defective, negligible or redundant trees)
  - Category A (high retention value)
  - Category B (moderate retention value)
  - Category C (low retention value)
  - APPROXIMATE crown spread of individual trees
- The nominal ROOT PROTECTION AREA (RPA) of each tree is indicated by a solid line using the colour coding above

- NOTES:**
- Final details all subject to final design. Arrangement of the panels shown is based on the following data:
- Typical panel size = 2.2 x 1.3 approx.
  - Panel typical inclination = 25 degrees and south facing.
  - Module length = Typical 15.6 run with 0.2m gaps supported on four post/frames.
  - The typical module section shows two panels in portrait orientation. Three Panels in portrait, four panels in landscape or six panels in landscape may also be required. Details are subject to final design.
  - For clear aisles distance between panels refer to section.
  - Panels at lowest point set at 0.8m above ground level increasing to 2.4m to 3m approximate.
  - Panels not located where land gradient exceeds 1 in 9.5 (6 degrees) due to excessive leg heights.
  - Minimum 5m ecology buffer allowed to all boundaries.
  - Access tracks to consist of clause 804 material where required i.e. areas of soft sport, final extent and design to be confirmed. Only permeable material to be used.
  - For extent and type of screening required refer to landscape and visual assessment report for proposals.
  - Number and location of inverter substations subject to final design.
  - Location of security fence subject to final design.
  - Where necessary, gaps approximately 10cm high will be created below the fencing for wildlife movement.
  - Existing hedgerow locations are indicative.
  - Existing hedgerows adjacent to the Site boundary are not shown but are assumed to lie within the Site boundary.
  - Footpath locations are indicative.
  - Diversion to be secured under a separate planning application under Section 257 of the Town and Country Planning 1990.

Project  
**Land at Pentre Farm Torfaen**  
 Drawing Title  
**Indicative Layout Plan**

Date	Scale	Drawn by	Check by
30.07.21	Various	KT	TE
Project No	Drawing No	Revision	
29522	9007	I	

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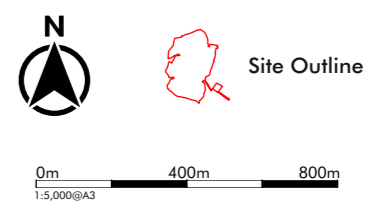
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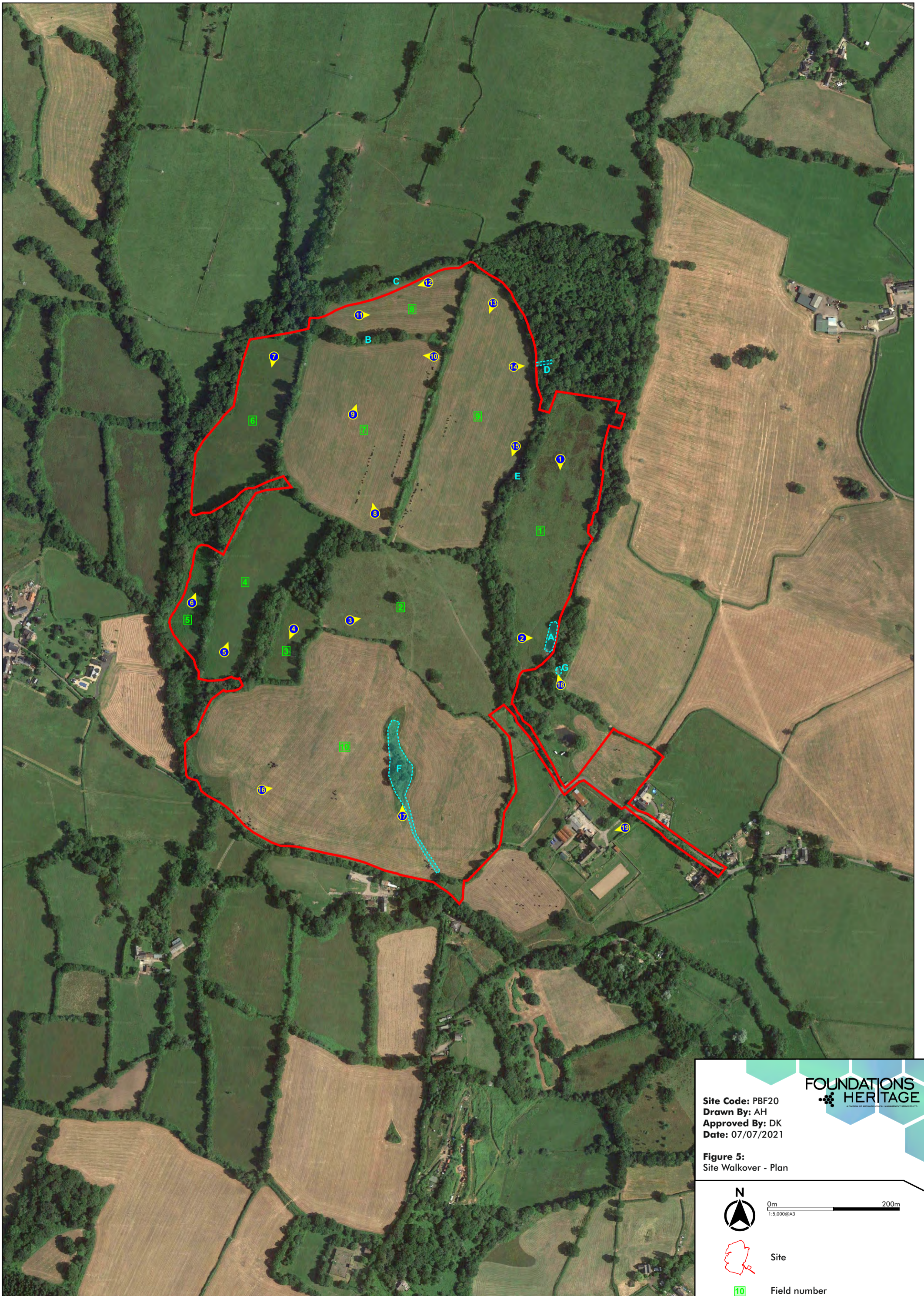
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 Figure 4:  
 Proposals



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**Figure 5:**  
 Site Walkover - Plan

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 Site  
 Field number  
 Photograph location and direction



PHOTOGRAPH 1



PHOTOGRAPH 2



PHOTOGRAPH 3



PHOTOGRAPH 4



PHOTOGRAPH 5



PHOTOGRAPH 6



PHOTOGRAPH 7



PHOTOGRAPH 8



PHOTOGRAPH 9



PHOTOGRAPH 10



PHOTOGRAPH 11



PHOTOGRAPH 12



PHOTOGRAPH 13



PHOTOGRAPH 14



PHOTOGRAPH 15



PHOTOGRAPH 16



PHOTOGRAPH 17



PHOTOGRAPH 18



PHOTOGRAPH 19

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**Figure 6:**  
 Site Walkover **Photographs 1 to 19**



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