



**Afon Gennog Hydro Scheme,
Nant Peris, Gwynedd.
October 2014
V 1.0**

aeon archaeology



Detailed Archaeological Record and Watching Brief
Project Code: A0039.2
Report no. 0047



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Detailed Archaeological Record and Watching Brief

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Project Code: A0039.2

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1.0 NON-TECHNICAL SUMMARY

The archaeological watching brief during the reduction and demolition of Bryn Goleu (feature 1) and during the breaching of field boundary walls (features 5 and 6) did not produce any buried archaeological remains.

The structure of Bryn Goleu occupied an area of high ground in what would otherwise have been a marshy river valley with extremely steep mountain slopes that were unsuitable to early habitation. It is possible that the promontory occupied by Bryn Goleu had in fact been utilised as a habitation site in the medieval or even earlier periods, however the watching brief showed that prior to the construction of Bryn Goleu the site had been reduced on to the natural glacial substrata with glacial erratic boulders removed. This would almost certainly have destroyed any earlier remains at the site.

The excavation of the hydro pipe trench within 10.0m proximity of Bryn Goleu was found to be entirely devoid of archaeological remains. This is not particularly surprising as the structure of Bryn Goleu occupies the majority of the high ground, and once you move away from it you immediately encounter low-lying marshy ground that would have been unsuitable for early habitation.

The watching brief during the breaching of field boundary walls (features 5 and 6) showed that for the most part these two walls were constructed directly on to the existing ground surface and were not built within a foundation cut. Moreover, both walls utilised large glacial erratic stones within their construction. The results of the watching brief is by no means dismissive of an early origin for the field walls, perhaps in the medieval period or prehistoric era, but merely showed there was a lack of structural or artefactual evidence to provide a conclusive origin for the walls' construction.

2.0 INTRODUCTION

Aeon Archaeology was commissioned by Greenearth Hydro Ltd to carry out a photographic survey and measured plan of Bryn-Goleu, as well as a watching brief during the breaching of two field boundary walls and during the excavation of a pipe trench through, and in 10.0m proximity of, Bryn-Goleu.

The archaeological work was undertaken as part of mitigatory works for the installation of a new hydro-electric scheme located on the western bank of the Afon Gennog, a tributary of the Afon Nant Peris and approximately 2.3km southeast of the village of Nant Peris, Gwynedd and within the Snowdonia National Park Authority (SNPA).

The scheme consisted of an intake weir located at **NGR SH 62109 56648** and a c.375.0m long buried penstock (buried pipe) running northwards to a turbine house located at **NGR SH 62171 56942** and which was installed within the ruined remains of Bryn Goleu (figure 1). The hydro scheme then emptied back into the Afon Gennog via a c94.0m long buried outfall pipe running east from the turbine house. In addition a buried new power cable ran northwest from the turbine house for approximately 27.0m to a new transformer that was installed on the existing pole. The existing trackway and bridge from the A4086 were used to transport materials to site and construction access between the intake site and turbine house was along the penstock route, which was temporarily cleared of boulders which were reinstated upon the completion of works.

A mitigation brief was not prepared for this work by The Snowdonia National Park Authority (SNPA) Archaeologist, but the following statement was made a condition of full planning permission:

Prior to any work commencing (including any ground disturbance works or ground clearance) pursuant to this permission the applicant/developer shall submit to and receive written approval from the Local Planning Authority for an archaeological specification for a programme of works which must meet all relevant archaeological standards. The development shall subsequently be carried out in strict accordance with the approved programme of works unless otherwise agreed to in writing by the Local Planning Authority (condition 6, planning application NP3/15/216).

The reason for this condition was:

To ensure the implementation of an appropriate programme of archaeological mitigation in accordance with the requirements of Planning Policy Wales 2010 and Welsh Office Circular 60/96 Planning and the Historic Environment: Archaeology.

An archaeological desk-based assessment was carried out by Aeon Archaeology in June 2014 (Aeon report 0040) that identified nine sites of archaeological interest within close proximity to the pipeline corridor, these sites are depicted on figure 2.

The work undertaken adhered to the guidelines specified in Standard and Guidance for Archaeological Watching Brief (Institute for Archaeologists, 1994, rev. 2001 and 2008).

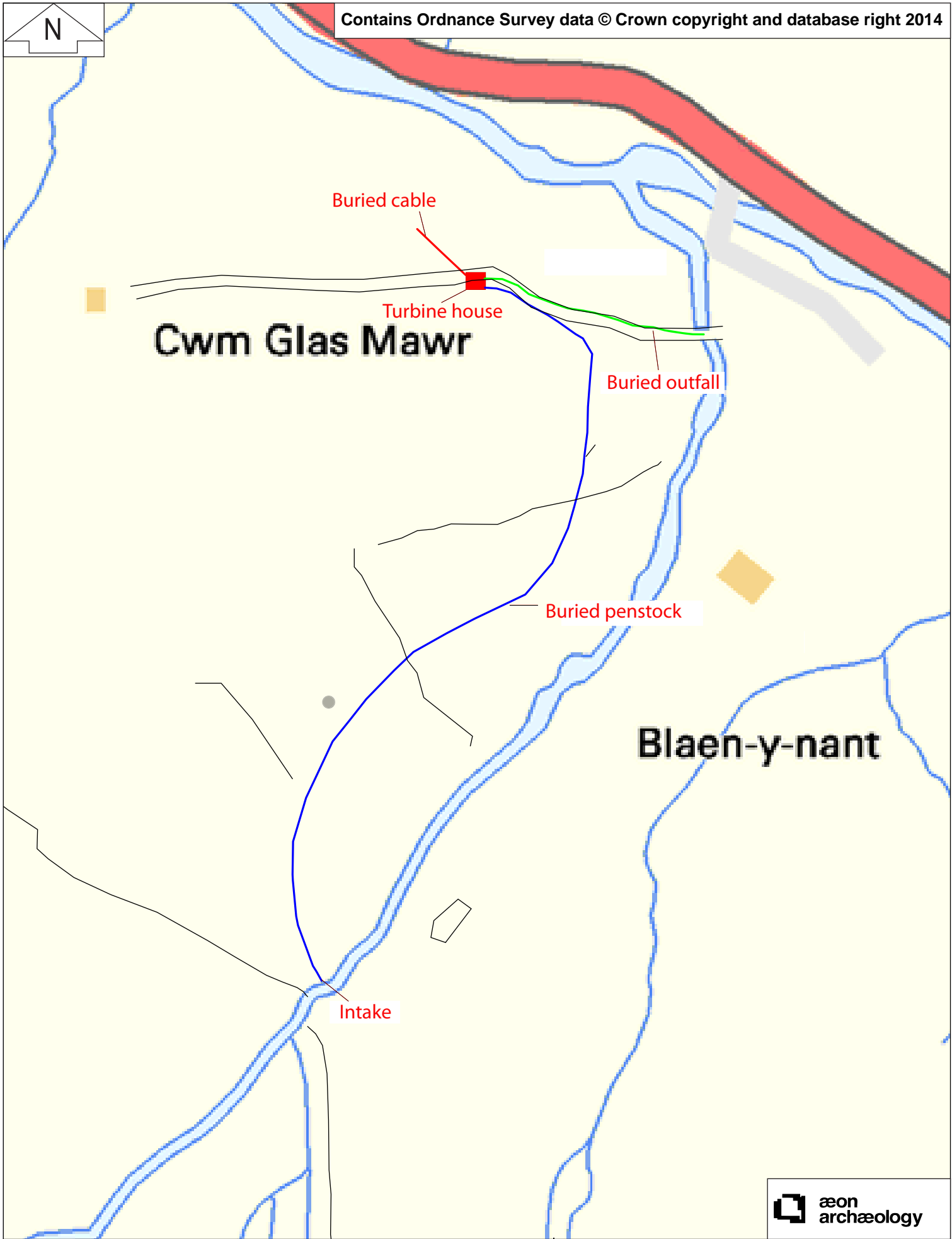


Figure 01: Location of the Afon Gennog Hydro Scheme, Nant Peris, Gwynedd. Scale 1:2,000 at A4.

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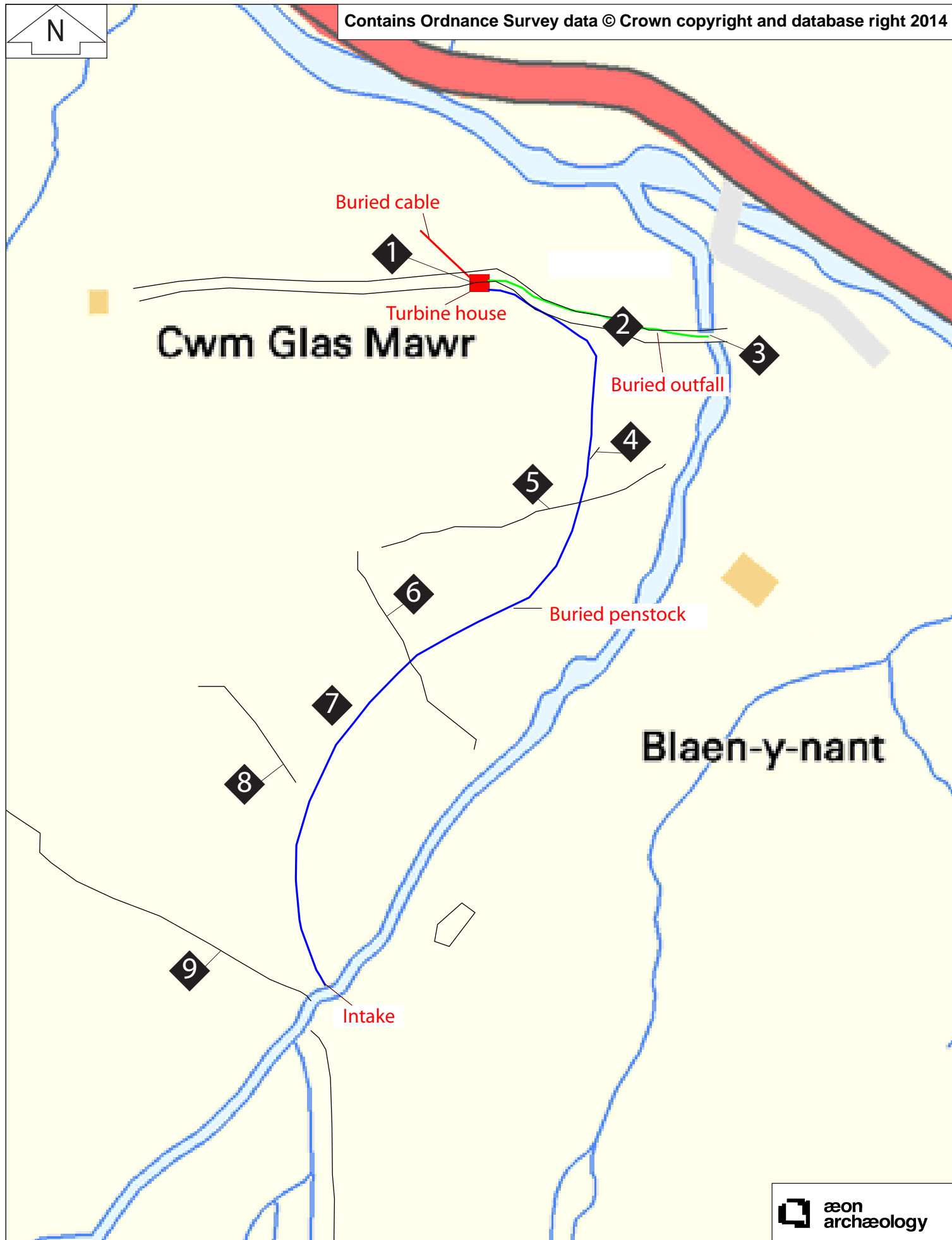


Figure 02: Location of archaeological sites identified in the archaeological assessment (black diamonds). Scale 1:2,000 at A4.

3.0 PROJECT AIMS

The aim of the watching brief works was to characterise the known, or potential, archaeological remains uncovered during the breaching of the two field boundary walls (features 5 and 6) and during the demolition of Bryn Goleu and the excavation of the pipe trench within 10.0m of Bryn Goleu.

The broad aims of the archaeological watching brief were to:

- To determine, as far as is reasonably possible, the location, extent, date, character, condition, significance and quality of any surviving archaeological remains on the site, the integrity of which may be threatened by development at the site.
- To establish the nature and extent of existing disturbance and intrusion to sub-surface deposits and, where the data allows, assess the degree of archaeological survival of buried deposits of archaeological significance.
- To allow the Snowdonia National Park Authority Archaeologist to make an informed decision on the need for and scope of any further archaeological works that may be required on future projects within proximity to the scheme.

The detailed objectives of the archaeological watching brief were to:

- Insofar as possible within methodological constraints, to explain any temporal, spatial or functional relationships between the structures/remains identified, and any relationships between these and the archaeological and historic elements of the wider landscape.
- Where the data allows, identify the research implications of the site with reference to the regional research agenda and recent work in Gwynedd.

An Archaeological Written Scheme of Investigation (WSI) was written by Aeon Archaeology and submitted to Greenerth Hydro Ltd and the Snowdonia National Park Authority in June 2014. This formed the basis of a method statement submitted for the work. The detailed archaeological record and watching brief were executed in accordance with this WSI.

The management of this project has followed the procedures laid out in the standard professional guidance *Management of Archaeological Projects* (English Heritage, 1991), *Management of Research Projects in the Historic Environment Project Manager's Guide* (English Heritage 2006), and in the Institute for Archaeologists *Archaeological Evaluation* (Institute for Archaeologists, 1994, rev. 2001 & 2008). Five stages are specified:

Phase 1: project planning

Phase 2: fieldwork

Phase 3: assessment of potential for analysis and revised project design

Phase 4: analysis and report preparation

Phase 5: dissemination

The current document reports on the phase 4 analysis and states the means to be used to disseminate the results. The purpose of this phase is to carry out the analysis identified in phase 3 (the assessment of potential phase), to amalgamate the results of the specialist studies, if required, with the detailed site narrative and provide both specific and overall interpretations. The site is to be set in its landscape context so that its full character and importance can be understood. All the information is to be presented in a report that will be held by the Gwynedd Historic Environment Record (HER) so that it

can be accessible to the public and future researchers. This phase of work also includes archiving the material and documentary records from the project.

4.0 METHODOLOGY – DETAILED ARCHAEOLOGICAL RECORD

The requirements were for a photographic record of all elevations of Bryn-Goleu as well as a measured plan prior to the commencement of works on site. Should observations suggest the potential for significant features to be encountered during the ground work, the archaeological contractor should make arrangements to undertake any appropriate supplementary recording work during the development.

Both the exterior and the interior of Bryn-Goleu was photographed and a measured plan undertaken for inclusion within the report alongside the results of the archaeological watching brief.

The detailed photographic record consisted of English Heritage '*Understanding Historic Buildings: a guide to good recording practice*' (2006) elements:

- written account: 1-3
- photographs: 1,2,4
- drawings: 1

4.1 Written Account

The written account included:

- The building's precise location as a National Grid Reference and address form;
- A note of any statutory designation and non-statutory designation;
- The date of the record, name(s) of the recorder(s) and archive location.

4.2 Photographs

The photographic record included:

- A general view or views of the building;
- The building's external appearance. Typically a series of oblique views will show all external elevations of the building and give an impression of its size and shape;
- The overall appearance of the principal rooms and circulation areas.

A Digital SLR (Canon 550D) set to maximum resolution was used throughout.

4.3 Drawings

The drawn record included:

- A measured site plan showing the location and orientation of photographs. This will label all room spaces and indicate any architectural features of note.

5.0 METHODOLOGY – ARCHAEOLOGICAL WATCHING BRIEF

5.1 Watching Brief

The Institute for Archaeologists (IfA) defines an archaeological watching brief as:

‘A formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons. This will be within a specified area or site on land, inter-tidal zone or underwater, where there is a possibility that archaeological deposits may be disturbed or destroyed.’ (IfA 1994, rev. 2008)

The Snowdonia National Park Authority Archaeologist requested (pers. comm) that an **intensive** watching brief be maintained during the breaching of field boundary walls (features 5 and 6), during the demolition of Bryn Goleu (feature 1), and during the excavation of the hydro pipe trench within 10.0m proximity of Bryn Goleu (feature 1). This level of watching brief entailed that an appropriately qualified archaeologist was present during all associated ground disturbance.

All soil removal was undertaken using a mechanical excavator fitted with a toothless ditching bucket except for where a large quantity of stone required removal whereby a toothed bucket was used. A photographic record was maintained throughout, using a digital SLR camera (Canon 550D) set to maximum resolution and any subsurface remains were to be recorded photographically, with detailed notations and measured drawings being undertaken if required.

In the event of archaeological discovery features were to be excavated by hand and fully recorded using Aeon Archaeology pro-formas, digital photographs, and plan and section drawings taken at a suitable scale (usually 1:20 for plan drawings and 1:10 for section drawings).

The archive produced is held at Aeon Archaeology under the project code **A0039.2**.

5.2 Data Collection from Site Records

A database of the site photographs was produced to enable active long-term curation of the photographs and easy searching. The site records were checked and cross-referenced and photographs were cross-referenced to contexts. These records were used to write the site narrative and the field drawings and survey data were used to produce an outline plan of the site.

All paper field records were scanned to provide a backup digital copy. The photographs were organised and precisely cross-referenced to the digital photographic record so that the Gwynedd Historic Environment Record (HER) can curate them in their active digital storage facility.

5.3 Artefact Methodology

All artefacts were to be collected and processed including those found within spoil tips. They would be bagged and labelled as well any preliminary identification taking place on site. After processing, all artefacts would be cleaned and examined in-house at Aeon Archaeology. If required artefacts would be sent to a relevant specialist for conservation and analysis.

The recovery policy for archaeological finds was kept under review throughout the archaeological watching brief. Any changes in recovery priorities would be made under guidance from an

appropriate specialist and agreed with the Client and Snowdonia National Park Authority Archaeologist. There was a presumption against the disposal of archaeological finds regardless of their apparent age or condition.

5.4 Environmental Samples Methodology

The sampling strategy and requirement for bulk soil samples was related to the perceived character, interpretational importance and chronological significance of the strata under investigation. This ensured that only significant features would be sampled. The aim of the sampling strategy was to recover carbonised macroscopic plant remains, small artefacts particularly knapping debris and evidence for metalworking.

Advice and guidance regarding environmental samples and their suitability for radiocarbon dating, as well as the analysis of macrofossils (charcoal and wood), pollen, animal bones and molluscs would be obtained from Oxford Archaeology if required.

5.5 Report and dissemination

A full archive including plans, photographs, written material and any other material resulting from the project was prepared. All plans, photographs and descriptions were labelled, and cross-referenced, and will be lodged within a suitable repository to be agreed with the archaeological curator within six months of the completion of the project.

A draft copy of the report has been sent to the client and upon written approval from them paper and digital copies of the report will be sent to the regional HER (x1) (Gwynedd Archaeological Trust, Craig Beuno, Garth Road, Bangor, LL57 2RT), the Snowdonia National Park Authority (SNPA) Archaeologist (x3), and the Royal Commission on the Ancient and Historic Monuments in Wales (RCAHMW) (x1). Copies of all notes, plans, and photographs arising from the watching brief will be stored at Aeon Archaeology under the project code **A0039.2** with the originals being lodged in a suitable repository to be agreed with the archaeological curator.

Any artefacts arising from the fieldwork were to be lodged with the Gwynedd Museum and Art Gallery, Bangor, Gwynedd.

6.0 HISTORY OF THE SITE

(Reproduced from Aeon Archaeology report 0040; further information including mapping and provisional phase drawings are presented in the archaeological assessment Aeon Archaeology report 0040)

6.1 Prehistoric and Roman Period

The site is located within the Dinorwig Registered Landscape of Outstanding Historic Interest (HLW (Gw) 6), designated primarily for containing evidence of landuse and settlement from the prehistoric period onwards, superimposed by recent extensive and outstanding remains of the 19th and 20th Century slate industry.

However, the prehistoric period is poorly represented within the localised landscape and the only evidence of this era within 1.0km of the hydro scheme was the discovery of a Bronze Age flat bronze axe at Dinas Mot (PRN: 4504) which is currently held within a private collection.

The Roman period is also poorly represented and the only known Roman site within 1.0km of the pipeline route is the hypothesised route of the Segontium to Bryn-y-gefeiliau Roman road (PRN: 17601) running southeast to northwest through the pass of Llanberis, and located approximately 95.0m north of the proposed turbine house location. There is some structural evidence which could be regarded as evidence of a made Roman road measuring approximately 2.7m in width and the marching camp at Penygwryd would also suggest that the route was used but does not imply the presence of a made roadway (RCAHMW 1960).

6.2 Early Medieval, Medieval and Post-Medieval Periods

The Early Medieval period is also poorly represented within this part of northwest Wales and there are no known sites within 1.0km of the proposed pipeline. Sites from this era are particularly rare in north Wales, although they must have existed, and it is likely that sites were reused and built upon thus accounting for the lack of surviving physical remains.

Approximately 370.0m to the southeast of the proposed pipeline route at Dinas Mot lies a well preserved medieval house platform (PRN: 4507). Further to the southeast and approximately 420.0m from the hydro scheme lies a stone built medieval long-hut (PRN: 5793) measuring 9.0m by 6.0m with a stony platform downslope and denuded drainage hood upslope. Two entrances were identified within the hut as well as the collapsed remains of a possibly later hut (HER).

Further evidence of the medieval period can be seen approximately 970.0m north of the proposed hydro route where ridge and furrow farming (PRN: 27644) has been identified. Aside from these three sites no other known medieval sites have been identified within 1.0km of the proposed development.

The proposed route of the hydro-electric scheme is depicted in detail on the first, second and third edition 25" county series Ordnance Survey maps of 1889, 1900 and 1914 respectively although the southern part of the scheme including the hydro intake is not shown on these maps and the relevant

map could not be sourced. However, the Ordnance Survey 6" map of 1891 does show the area to the south of the scheme, albeit in less detail.

All four maps depict the area much as it exists today, with the A4086 Pass of Llanberis road situated to the north and the property of Bryn-Goleu (feature 1), which is to be utilised as the turbine house, shown as a square structure surrounded by an enclosure. The maps all depict the footbridge (feature 3) over the Afon Gennog to the east of the scheme, as well as the trackway (feature 2) linking the A4086 with Bryn-Goleu and Cwm Glas Mawr in the west. The 25" edition maps depict the area of the pipeline route as two reasonably large fields, although the southern part of the scheme is not shown. The 6" map of 1891, which shows the entirety of the scheme, shows that the pipeline route actually passes through four enclosed grazing fields. The remains of the field walls can still be seen although some have become ruinous.

By the production of the second edition 25" Ordnance Survey map of 1900 the property of Bryn-Goleu appears to have been extended to include two circular sheepfolds to the immediate southeast, and is similarly shown on the third edition map of 1914. This map also depicts the sheep shelter (feature 4) and the sheepfold (feature 7) both of which were identified during the site visit.

6.3 Aerial Photographs

Aerial photographs of the pipeline route were inspected in the RCAHMW for sites additional to the HER and site visit. Photographs taken by the Royal Air Force in 1946 and 1948 were examined, as were photographs taken by the Ordnance Survey in 1973, 1997, and 2009. No additional sites were observed aside from those identified from the site visit.

7.0 STATUTORY AND NON-STATUTORY DESIGNATIONS

(Reproduced from Aeon Archaeology report 0040; further information including mapping and photographs are presented in the archaeological assessment Aeon Archaeology report 0040)

7.1 Non-designated monument points from the Gwynedd Historic Environment Record

The Gwynedd Historic Environment Record (HER) maintains a register of non-designated archaeological sites represented as single point data or as polygons. These are identified through their Primary Reference Number (PRN). These include sites which are of archaeological/historical interest, artefact find spots, documentary evidence, and locations of past events such as archaeological projects.

There are 5 non-designated monuments within 1.0km of the proposed pipeline route (see appendix I) but none lie within the 40.0m wide assessment corridor centred on the penstock route or within 100.0m. In addition there are 16 new monument sites within 1.0km of the proposed scheme, these are monument points that have been identified during past fieldwork but are not fully recorded within the Gwynedd HER. No new monument sites lie within the 40.0m wide assessment corridor centred on the penstock route or within 100.0m.

7.2 Scheduled Ancient Monuments

Scheduled monuments are those considered to be monuments of national importance. The Ancient Monuments and Archaeological Areas Act 1979 supports a formal system of Scheduled Monument Consent (SMC) for any work to a designated monument. Any works within a Scheduled area will require SMC; this includes non-invasive techniques such as geophysics or field-walking.

There are no Scheduled Ancient Monuments within 1.0km of the proposed pipeline route (see appendix I).

7.3 Listed Buildings

The Secretary of State for Culture, Media and Sport holds a List of Buildings of Special Architectural or Historic Interest, considered to be of national importance. Compiled under the Planning (Listed Buildings and Conservation Areas) Act 1990, the List includes structures from boundary walls and telephone boxes to cathedrals. Listing gives statutory protection and restrictions apply. Consent may be required for works to, or that affect the setting of, a Listed Building and the Local Planning Authority conservation officer should be consulted if in doubt.

There are 3 Listed Buildings within 1.0km of the proposed pipeline route (see appendix I) but none lie within the 40.0m assessment zone centred on the pipe.

The pipe route lies within 500.0m of the following:

- (i) Approximately 63.0m south of the grade II *Milestone* Listed Building (LB: 21839).

7.4 National Monuments Record

The Royal Commission on the Ancient and Historic Monuments in Wales (RCAHMW) maintains the National Monuments Record (NMR) for Wales. This is a register of non-designated archaeological sites represented as single point data or as polygons. These are identified through their National Primary Reference Number (NPRN) and include sites which are of archaeological/historical interest, artefact find spots, documentary evidence, and locations of past events such as archaeological projects that are not statutorily protected.

There are 2 non-designated monument points within 1.0km of the pipeline route (see appendix I) but none lie within the 40.0m assessment zone centred on the pipe.

The pipe route lies within 100.0m of the following:

- (ii) Approximately 76.0m west of the post-medieval *Blaen-y-Nant, Pass of Llanberis* (NPRN: 409912).

7.5 Historic Landscape Character Areas (HLCAs)

Cadw, National Resource Wales (formerly the Countryside Council for Wales), and the International Council of Monuments and Sites (ICOMOS UK) compiled the two volume Register of Landscapes of Historic Interest in Wales. This includes 58 landscapes of outstanding or special historic interest, which are considered to be the best examples of different types of historic landscapes in Wales. The Register provides information to decision makers and landscape managers, to help ensure that the historic character of the landscape is sustained, and that where change is contemplated, it is well-informed.

The proposed development site lies within the following Historic Landscape Area (HLA):

- (i) The *Dinorwig Landscape of Outstanding Historic Interest* (HLW(Gw)6).

Historic Landscape Characterisation takes a closer look at the historic landscape by showing the processes that have shaped the landscape over centuries of human activity, contributing to its present character. Detailed characterisation studies have been compiled by the four Welsh Archaeological Trusts for all 58 areas on the Register. They are used by local government and developers to help assess the impact of development proposals on the historic landscape.

The proposed development area lies within the following Historic Landscape Character Areas (HLCAs):

- (i) The *Nant Peris* Historic Landscape Character area (HLCA: 43);
- (ii) The *Unenclosed Mountain (North Carneddau)* Historic Landscape Character area (HLCA: 36).

7.6 Historic Parks and Gardens

Cadw holds a Register of Historic Parks and Gardens of Special Historic Interest. These Registered landscapes are graded I, II* or II, and include private gardens, public parks and other green spaces. They are valued for their design, diversity and historical importance. Inclusion on the Register brings no additional statutory controls, but there is a presumption in favour of conservation of the designated site. Local authorities are required to consult Cadw on applications affecting sites Registered as grade I or II* and the Garden History Society on sites of all grades.

There are no historic parks and gardens within the 40.0m wide assessment corridor centred on the pipe route or within 1.0km of the proposed development area.

7.7 Events

The location of the proposed pipeline route is included within the Historic Landscape Characterisation of Ardal Arfon carried out in 2000 by the Gwynedd Archaeological Trust but no specific sites were identified as part of the work. No other projects have been undertaken within the vicinity of the hydro scheme.

8.0 DETAILED ARCHAEOLOGICAL RECORD – BRYN GOLEU

8.1 Description (plates 1-13)

The ruined property of Bryn-Goleu is located at the foot of the slope at NGR SH 62171 56942 (figures 3 and 4). The detailed archaeological record of the structure was undertaken on 14th September 2014 by Richard Cooke BA MA MifA, archaeological contractor and consultant at Aeon Archaeology.

The structure measures 7.5m by 6.7m in plan (external elevations) orientated east to west, with the walls standing generally to 1.5m in height, with the exception of the western gable which stands to 2.5m in height. The building is roofless and the walls are constructed from very large sized dressed angular stone blocks of dry-stone bond, although later repairs using a gritty mortar are evident on the eastern elevation and traces of exterior render can be seen on the northern elevation. In plan the building is divided into three rooms, one large rectangular room (room 1) in the western half and two smaller rooms (room 2 and room 3) in the eastern half.

Room 1 measures 5.5m by 3.7m internally orientated from north to south. A large open fireplace constructed from stone blocks is located on the west gable, and there are the remains of a window and entranceway in the northern elevation. A blocked aperture in the western wall appears to have been a sheep door suggesting that the structure had originally functioned as a sheep fold or animal barn, later being adapted for human habitation. Further evidence of this is apparent in the fact that the fireplace on the western gable wall is only partially keyed into the masonry, showing that it is a later addition. A narrower entrance is also located in the southern elevation and access is provided into rooms 2 and 3 via doorways through a stone-built internal partition running from north to south and delineating the eastern boundary of room 1.

Room 2 is located within the north-eastern corner of the property and measures 3.0m by 2.0m orientated from north to south. A window opening is located in the northern elevation and the floor is entirely hidden by fallen masonry, although a dry-bonded stone-built partition wall runs from east to west at the southern end of the room and divides it from room 3, with no apparent access between the two.

Room 3 is located in the south-eastern part of the structure and measures 2.0m by 1.8m orientated from east to west. The room is accessed via a doorway in the western elevation from room 1 and a window opening is present in the southern elevation. The floor is entirely obscured by fallen masonry and the room is otherwise featureless.

An attached rectangular sheepfold (sheepfold 1) is located to the immediate west of the building and measures 5.0m by 2.2m orientated north to south. The western wall of the sheepfold is constructed from medium sized angular stone rubble blocks bonded by a gritty mortar and revetts the natural slope at this point. A 1.0m high sheep door provides access southward into the paddock area and a blocked sheep door in the western gable of Bryn Goleu originally provided access into the fold.

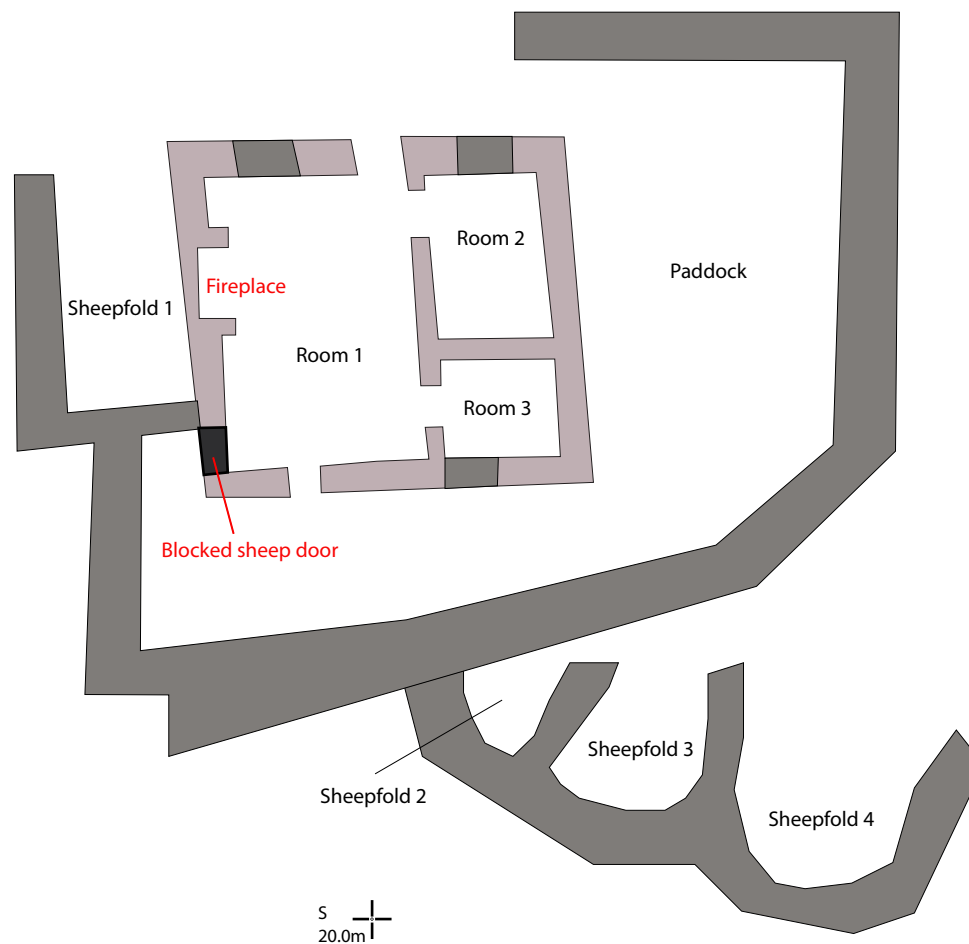
The property is surrounded by an enclosure wall measuring 1.0m in width and upstanding to a maximum height of approximately 0.6m, although very ruinous along much of its length. The enclosure wall encircles an area measuring 13.0m by 9.0m orientated east to west and forms a

paddock to the immediate east of Bryn Goleu measuring approximately 9.0m by 5.0m orientated north to south.

Three circular sheepfolds (sheepfolds 2-4) are located at the southeast end of the paddock, each constructed from dry-bonded large and medium sized sub-angular stone cobbles and measuring approximately 1.7m in diameter. Bryn-Goleu is shown in detail on the first, second and third edition 25" Ordnance Survey maps of 1889, 1900 and 1914 (figures 4, 6 and 7 respectively) and appears to have been enlarged to include the circular sheepfolds between 1889 and 1900. The building is post-medieval in date most likely 19th Century and is considered to be of local importance.



N
0.0m



0 2 4 6 8 10m

S
20.0m



Figure 03: Plan of Bryn Goleu (feature 01), Nant Peris.

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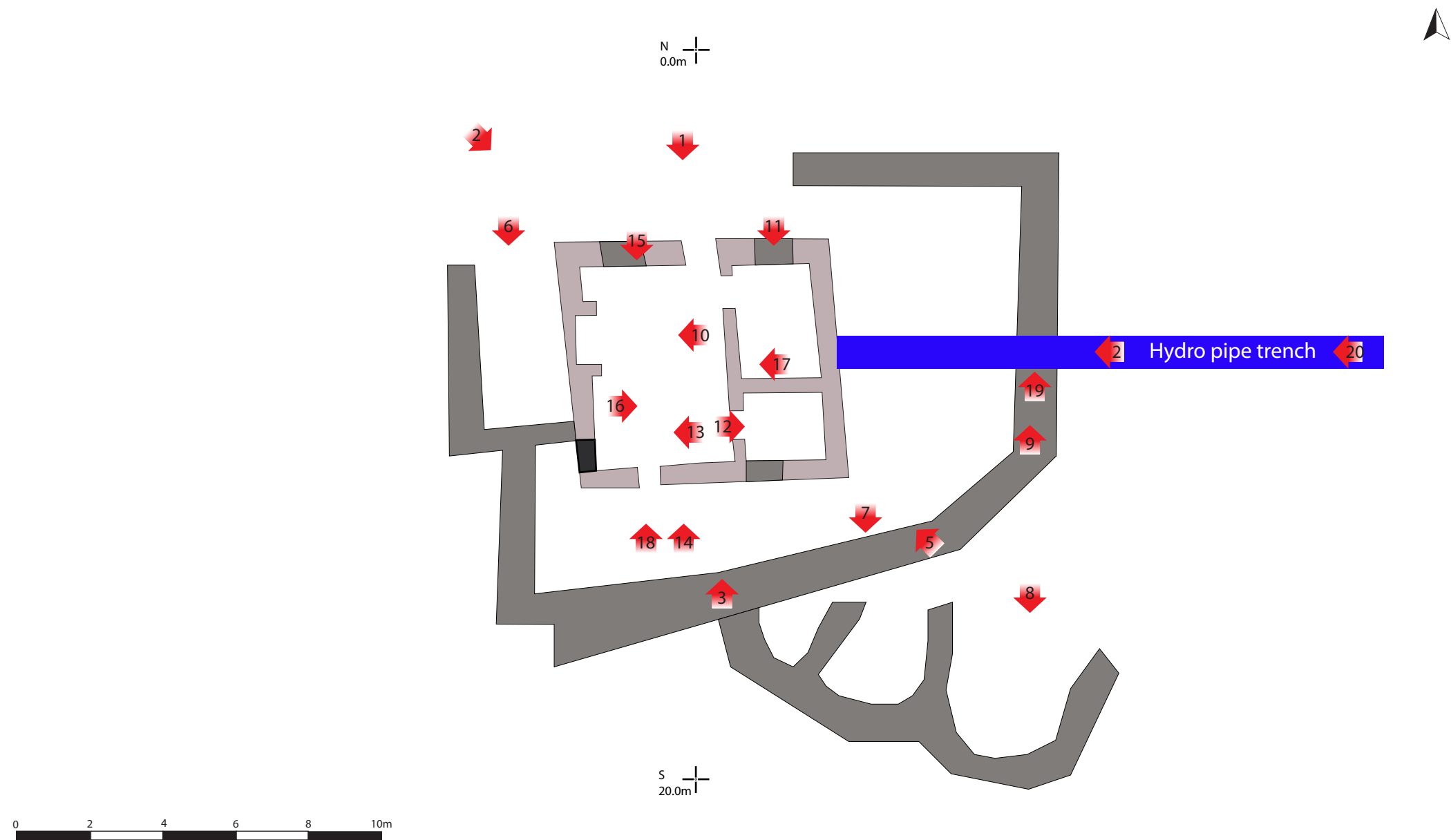


Figure 04: Location and orientation of photographs of Bryn Goleu (feature 01).



Plate 01: Bryn Goleu north facing external elevation, from the north. Scale 1.0m.



Plate 02: Bryn Goleu west facing external elevation, from the northwest. Scale 1.0m.



Plate 03: Bryn Goleu south facing external elevation, from the south. Scale 1.0m.



Plate 04: Bryn Goleu east facing external elevation, from the east. Scale 1.0m.



Plate 05: Bryn Goleu south and east facing external elevations, from the southeast. Scale 1.0m.



Plate 06: Bryn Goleu sheepfold 1, from the north. Scale 1.0m.



Plate 07: Bryn Goleu sheepfolds 2 and 3, from the north. Scale 1.0m.



Plate 08: Bryn Goleu sheepfold 4, from the north. Scale 1.0m.



Plate 09: Bryn Goleu east paddock wall, from the south. Scale 1.0m.



Plate 10: Bryn Goleu room 1 east facing internal elevation showing fireplace, from the east. Scale 1.0m.



Plate 11: Bryn Goleu room 2, from the north. Scale 1.0m.



Plate 12: Bryn Goleu room 3, from the west. Scale 1.0m.



Plate 13: Bryn Goleu room 1 showing blocked sheep door, from the west. Scale 1.0m.

9.0 QUANTIFICATION OF RESULTS

9.1 The Documentary Archive

The following documentary records were created during the archaeological watching brief:

Record Sheets	3
Watching brief day sheets	3
Drawings	1
Digital photographs	58

9.2 Environmental Samples

No environmental samples were taken as part of the watching brief as no suitable archaeological deposits were encountered.

9.3 Artefacts

No artefacts were recovered during the archaeological watching brief.

10.0 RESULTS OF THE ARCHAEOLOGICAL WATCHING BRIEF

10.1 Bryn Goleu (feature 1)

As part of the installation of the new hydro electric scheme the remains of Bryn Goleu were required to be demolished, with a new building being constructed from the recovered stone and of the same dimensions over the footprint of the demolished building. This structure would then house the turbine for the scheme.

As part of the archaeological planning condition of full planning permission it was required that a watching brief be maintained during the reduction and removal of Bryn Goleu on to the naturally occurring glacial substrata. This began on 16th September 2014 using a tracked excavator, initially with toothed bucket, to remove the fallen stone within all three rooms of the property (plate 14). The tracked excavator was then used to carefully demolish the upstanding walls and to remove the stone and stockpile it for use in the turbine house rebuild.

A toothed ditching bucket was then used to carefully scrape away any remaining fallen stone and debris from the inside of Bryn Goleu after which the floor was investigated via cleaning using hand-tools (plates 15 and 16). A small area measuring approximately 2.0m square was cleaned to reveal a roughly laid floor core of mid-dark grey silt-clay with frequent medium and small sized angular rubble cobbles and occasional red-brick fragments. This deposit, although clearly having functioned as the floor surface, was by no means carefully laid or finished to any kind of standard. Several sherds of modern ceramic were recovered from the floor core as well as lengths of electrical wire. The hand-cleaning of the floor surface was abandoned due to the discovery of broken fragments of asbestos sheet in among the floor debris, suggesting that at least part of the roof had been constructed from this material.

A tracked excavator with toothless ditching bucket was then used to carefully reduce the floor core in spits of approximately 0.1m with an archaeologist being present the whole time in order to monitor this reduction. The floor core was found to measure 0.5m in depth (plates 17 and 18) and directly overlaid the natural glacial sand. It was clear through the lack of glacial erratics present that the base of the site had been cleared of overburden and stones prior to the lay down of the floor core, presumably removing any earlier trace of occupation at the site. No further archaeological remains were observed and no artefacts recovered.

The watching brief was also maintained during the breaching of the paddock wall of Bryn Goleu and during the excavation of the hydro pipe trench within 10.0m of the structure (plates 19 and 20). The paddock wall was found to be constructed from small sized sub-rounded stones laid directly on top of naturally occurring and partly buried glacial erratics. The wall did not extend beneath the current land surface and measured 0.5m in height by approximately 1.0m in width.

The hydro pipe trench measured approximately 0.8m in width and was excavated through a 0.1m deep mid grey-brown silt-clay topsoil deposit straight on to a bright orange clay-sand glacial substrata. No archaeological remains or artefacts were recovered and the trench was found to be entirely sterile of archaeology.



Plate 14: Removal of tumbled stone within Bryn Goleu, from the south.



Plate 15: Cleaned floor core within Bryn Goleu, from the north. Scale 1.0m.



Plate 16: Cleaned floor core within Bryn Goleu, from the west. Scale 1.0m.



Plate 17: East facing section of floor core within Bryn Goleu, from the east. Scale 0.5m.



Plate 18: Bryn Goleu reduced to natural glacial substrata, from the south. Scale 1.0m.



Plate 19: South facing section of east paddock wall of Bryn Goleu, from the south. Scale 0.5m.



Plate 20: Hydro pipe trench, from the east. Scale 0.5m.

10.2 Field Wall (feature 5)

A watching brief was also maintained during the breaching of field boundary wall (feature 5) (plates 21 and 22) NGR SH 62254 56869 – SH 62190 56848. This was undertaken on 16th September 2014 using a tracked excavator with toothless ditching bucket. The field boundary wall measured approximately 66.0m in length and was orientated northeast to southwest dividing the field in two. The wall measured 0.6m in height and 0.5m in width with the upstanding remains being constructed from large sized sub-rounded and sub-angular cobbles.

The wall did not extend much beyond the turf layer and appeared to have been for the most part laid on the ground surface. No artefacts were recovered from the breached wall section. The wall is depicted on the first, second and third edition 25" Ordnance Survey maps of 1889, 1900 and 1914 respectively and is probably post-medieval in date but could have earlier origins. The rough and uncoursed form of the wall as well as its meandering route could suggest a medieval field pattern or potentially even a prehistoric field enclosure.

10.3 Field Wall (feature 6)

A watching brief was also maintained during the breaching of field boundary wall (feature 6) (plates 23 and 24) NGR SH 62114 56828 – SH 62157 56756. This was undertaken on 17th September 2014 using a tracked excavator with toothless ditching bucket. The field boundary wall measured approximately 85.0m in length and orientated northwest to southeast dividing the field in two. The wall measured 0.8m in height and 0.6m in width with the upstanding remains being constructed from large and medium sized sub-rounded cobbles.

The wall did not extend much beyond the turf layer and appeared to have been for the most part laid on the ground surface incorporating large glacial erratic into its construction. No artefacts were recovered from the breached wall section. The wall is depicted on the first, second and third edition 25" Ordnance Survey maps of 1889, 1900 and 1914 respectively and is probably post-medieval in date but could have earlier origins. The rough and uncoursed form of the wall as well as its meandering route could suggest a medieval field pattern or potentially even a prehistoric field enclosure.



Plate 21: Field wall feature 5 prior to being breached, from the north. Scale 1.0m.



Plate 22: East facing section of field wall feature 5, from the east. Scale 1.0m.



Plate 23: Field wall feature 6 prior to being breached, from the southeast. Scale 1.0m.



Plate 24: Northeast facing section of field wall feature 6, from the northeast. Scale 1.0m.

11.0 CONCLUSION AND RECOMMENDATIONS

The archaeological watching brief during the reduction and demolition of Bryn Goleu (feature 1) and during the breaching of field boundary walls (features 5 and 6) did not produce any buried archaeological remains.

The structure of Bryn Goleu occupied an area of high ground in what would otherwise have been a marshy river valley with extremely steep mountain slopes that were unsuitable to early habitation. It is possible that the promontory occupied by Bryn Goleu had in fact been utilised as a habitation site in the medieval or even earlier periods, however the watching brief showed that prior to the construction of Bryn Goleu the site had been reduced on to the natural glacial substrata with glacial erratic boulders removed. This would almost certainly have destroyed any earlier remains at the site.

The excavation of the hydro pipe trench within 10.0m proximity of Bryn Goleu was found to be entirely devoid of archaeological remains. This is not particularly surprising as the structure of Bryn Goleu occupies the majority of the high ground, and once you move away from it you immediately encounter low-lying marshy ground that would have been unsuitable for early habitation.

The watching brief during the breaching of field boundary walls (features 5 and 6) showed that for the most part these two walls were constructed directly on to the existing ground surface and were not built within a foundation cut. Moreover, both walls utilised large glacial erratic stones within their construction. The results of the watching brief is by no means dismissive of an early origin for the field walls, perhaps in the medieval period or prehistoric era, but merely showed there was a lack of structural or artefactual evidence to provide a conclusive origin for the walls' construction.

12.0 SOURCES

OS Maps

1st edition 25 inch Ordnance Survey Map of 1889.

2nd edition 25 inch Ordnance Survey Map of 1900.

3rd edition 25 inch Ordnance Survey Map of 1914.

OS 1:10 000 Series sheet SH 65NE, SH 65SE, SH 65SW, and SH 65NW.

Aerial Photographs

RAF Aerial Photographs

3G/TUD/UK/193 frames 6173, 6174, 6203 and 6204. Dated 10th May 1946.

541/38 frames 3098-3101. Dated 21st May 1948.

OS Aerial Photographs

73-113 frame 793. Dated 1973.

97-562 frame 061. Dated 1997.

97-538 frame 008. Dated 1997.

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