

**Results of Archaeological Works at
Bryn Gwredog Ucaf, Caerhun, Bangor**

NGR SH 57677 68477

Report Number CR152-2017



C.R Archaeology
Prepared by C. Rees
On Behalf of Mr. Huw Griffiths

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**Results of Archaeological Works at
Bryn Gwredog Ucaf, Caerhun, Bangor**

Planning Reference Number:

C17/0505/25/LL

National Grid Reference:

SH 57677 68477

Client:

Mr. Huw Griffiths

Report Authors:

Catherine Rees & Matthew Jones

Report Number:

CR152-2017

Date:

24/08/2017

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1.0 Introduction

C.R Archaeology were instructed by Mr. Huw Griffiths to conduct archaeological works at the above site in compliance with planning conditions placed on the development (Planning Reference: C17/0505/25/LL).

A specification was written following a telephone and email conversation with Development Control Archaeologist Jenny Emmett of Gwynedd Archaeological Planning as a methodology for an Archaeological Watching Brief. This document is included as Appendix A

The development site is situated in a rural setting near Caerhun, Gwynedd (Figure 1). Planning permission has been granted to erect a house, agricultural shed with associated access, hardstanding and soakaway (see Appendix A).

The possibility had been raised that the Roman Road running from Segontium – Canovium may be located in the vicinity of the site, and may potentially be found within the proposed development area. There have been relatively few archaeological discoveries in the immediate vicinity of the site, although this is as likely to simply be a reflection of the lack of investigation/development in the area rather than representing the low archaeological potential of the area.

The site is located within the Arfon Landscape Character Area – specifically Arfon - Area 54 Improved fields above Pentir.

The site was stripped to the underlying natural during the works and no archaeological material or artefacts were uncovered.

2.0 Project Aims

This scheme of works aimed to monitor groundworks at the site in order to assess the survival, character and date of any archaeological remains and to excavate/record any archaeological remains uncovered.

It fulfilled the mitigation criteria for undertaking an Archaeological Watching Brief as specified in the CIfA Standard and Guidance document (2014).

3.0 Scheme of Works – Methodology

The methodologies employed conformed to The Chartered Institute for Archaeologists: *Standard and Guidance for Archaeological Watching Brief* (2014).

3.1 Desk Based Research

A history of the site was compiled utilising information sourced from Gwynedd Record Office and the Gwynedd Historic Environment Record Office. A full map progression was undertaken along with a search of title records.

The Gwynedd Historic Environment Record was consulted and a search radius of 500m was examined.

These works were carried out in accordance with the CIfA Standards and Guidance for Historic Environment Desk Based Assessment (CIfA 2014).

This material forms the historical background for a full archaeological report. The report includes the results of the Archaeological Watching Brief.

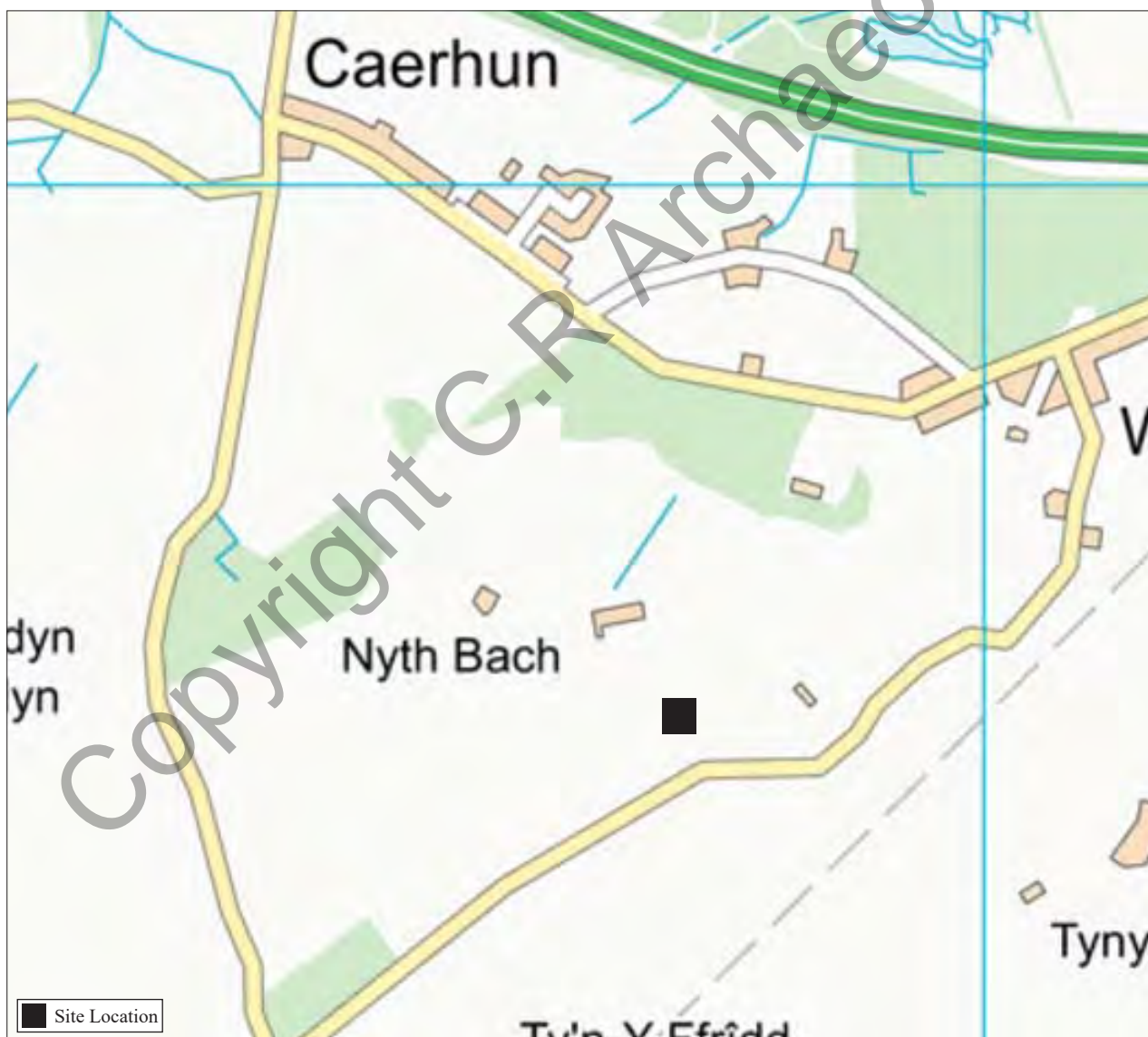
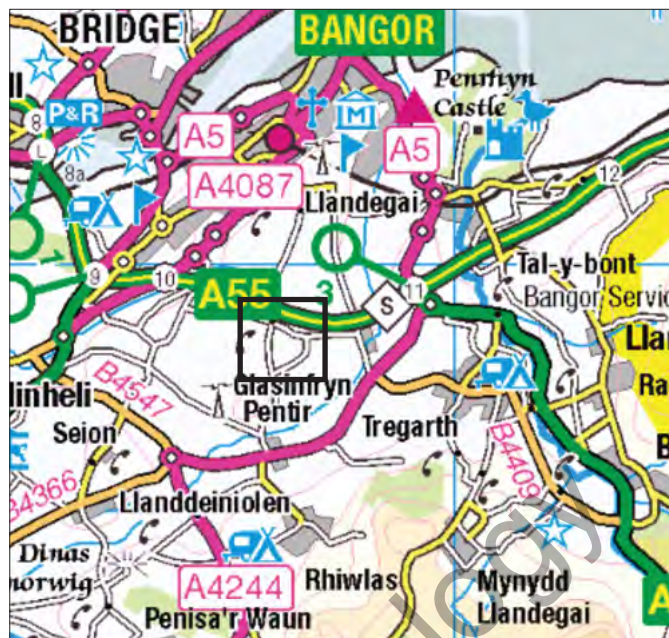
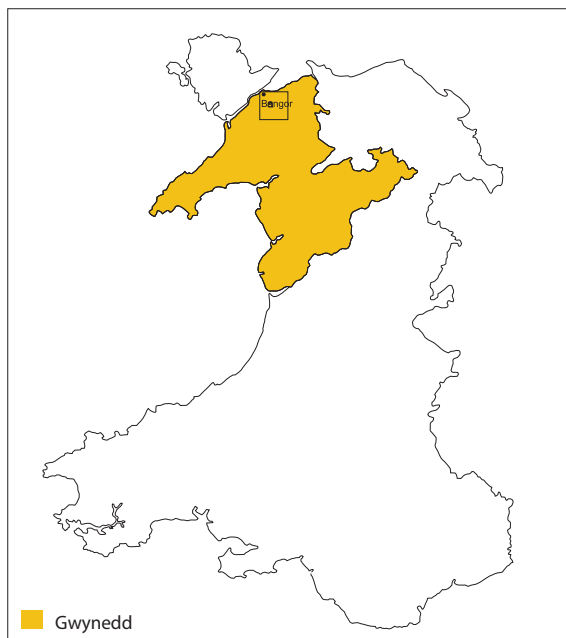


Figure 1. Site Location Map - Source: OS Open Data
(Contains Ordnance Survey data © Crown copyright and database right 2017)

3.2 Archaeological Watching Brief

The watching brief monitored all groundworks undertaken on the site. This included all topsoil and subsoil stripping and the excavation of an access roads, foundations, soakaways and service trenches.

A C.R Archaeology staff member was present during the machine excavation of all groundworks. This work was undertaken using a mechanical excavator fitted with a toothless ditching bucket. No archaeological remains were encountered within the development area and the site footprint was stripped down to the underlying natural.

C.R Archaeology notified GAPS as the date of the commencement of works. No remains were uncovered and a site visit was not deemed to be necessary.

Fieldwork was conducted and managed by Matthew Jones (MA) of C.R Archaeology.

3.2.1 Recording

The record forms at C.R Archaeology are based on the English Heritage system and full written, graphic and photographic records were made in accordance with the English Heritage *Field Recording Manual*. The written record comprises completed *pro-forma* record sheets.

A high-resolution 14.2mp Sony Alpha digital camera was used to create a photographic record of the site. General photographs were taken due to the negative result of the works.

Details concerning subject and direction of view were maintained in a photographic register, indexed by frame number. Images from photography will be stored in a loss-less digital format in this case '*.TIF'.

3.2.2 Additional Mitigation/Contingency Measures

No additional mitigation or contingency measures were necessary at the site.

3.2.3 Recovery, Processing and Curation of Artefactual Material

No artefactual material was recovered during the site works.

3.2.4 Archive Compilation

All records created during the fieldwork will be checked for consistency and accuracy and will form part of the *Primary Site Archive (P1)* (EH 2006). The archive will contain all data collected. It will be ordered, indexed, adequately documented, internally consistent, secure, quantified, conforming to standards required by the archive repository and signposted appropriately to ensure future use in research, as detailed in the English Heritage *Management of Research Projects in the Historic Environment* (MoRPHE) methodology.

The archive will be assembled in accordance with the guidelines published in, *Standards in the museum care of archaeological collections* (Museums & Galleries Commission 1994), *Guidelines for the preparation of excavation archives for long-term storage* (United Kingdom Institute for Conservation, 1990) and *Archaeological Archives: A guide to best practice in creation, compilation, transfer and curation* (AAF 2007).

As no artefacts were recovered, the paper/digital archive will be deposited at the RCAHMW. Archive material will be deposited in accordance with the RCAHMW's terms and conditions for archive deposition.

3.3 Timetable for Proposed Works

Groundworks commenced on August 7th and 8th August 2017, and were completed in 2 days. Gwynedd Archaeological Planning Services were informed of the exact site days to allow monitoring of works.

3.4 Staffing

The project was managed by Matthew Jones (BA (Archaeology), MA (Archaeology)). All projects are carried out in accordance with CIfA *Standard and Guidance* documents.

3.5 Monitoring

The project was subject to monitoring by Gwynedd Archaeological Planning Services. The monitor was given prior notice of the commencement of the fieldwork.

They were notified in writing (via email) of the commencement dates for archaeological site work and will be updated with the results of all works conducted as watching brief elements.

3.6 Health and Safety

A risk assessment was conducted prior to the commencement of works and site staff were familiarised with its contents. A first aid kit was located in the site vehicle.

All staff were issued with appropriate Personal Protective Equipment (PPE) for the site work. This consisted of:

- Safety Helmets (EN397)
- Hi-visibility vests (EN471)
- Safety footwear – steel toecap and mid-sole boots and Wellingtons (EN345-47)

All staff have passed at least a CITB health and safety test at operative level and will carry a Construction Related Organisation (CRO) White Card for Archaeological Technician (Code 5363) or a Site Visitor card.

3.7 The Report

The report clearly and accurately incorporates information gained from the programme of archaeological works. It presents the documentary evidence gathered in such a way as to create a clear and coherent record. The report contains a site plan showing the locations of photographs taken.

The report includes:

- A copy of the design brief and agreed specification
- A location plan
- A full bibliography of sources consulted
- An archive compact disc

A copy of the report in Adobe PDF format will be sent to the appropriate monitoring archaeologist for approval before formal submission. A bound paper copy and PDF digital copy of the report will be submitted as part of the formal submission. A digital Adobe PDF version and a bound paper copy of the final report and will be lodged with the Gwynedd Historic Environment Record within six months of completion of the project.

3.7.1 Copyright

C.R Archaeology and sub-contractors shall retain full copyright of any commissioned reports, tender documents or other project documents, under the Copyright, Designs and Patents Act 1988 with all rights reserved; excepting that it hereby provides a licence to the client and the local authority for the use of the report by the client and the local authority in all matters directly relating to the project as described in the Project Specification.

4.0 Geological and Topographical Background

4.1 Topography

The development site is situated in a rural setting near Caerhun, Gwynedd. It is currently in agricultural use as unimproved grazing.

4.2 Geology

The site is located on the boundary of two different geological strata. The first is:

The bedrock is recorded as *“Minffordd Formation - Sandstone And Conglomerate, Interbedded. Sedimentary Bedrock formed approximately 508 to 528 million years ago in the Cambrian Period. Local environment previously dominated by shallow seas. These rocks were formed in shallow seas with mainly siliciclastic sediments (comprising of fragments or clasts of silicate minerals) deposited as mud, silt, sand and gravel”* (www.mapapps.bgs.ac.uk/geologyofbritain/home.html).

The second strata bedrock is recorded as *“Allt Lwyd Formation - Sandstone. Sedimentary Bedrock formed approximately 467 to 479 million years ago in the Ordovician Period. Local environment previously dominated by shallow seas. These rocks were formed in shallow seas with mainly siliciclastic sediments (comprising of fragments or clasts of silicate minerals) deposited as mud, silt, sand and gravel”* (www.mapapps.bgs.ac.uk/geologyofbritain/home.html). No superficial deposits are recorded.

5.0 Historical Background

The site is located within the Arfon Landscape Character Area – specifically Arfon - Area 54 Improved fields above Pentir.

The historic background and landscape characteristics are described as:

“Historic Background

An area of fertile agricultural land in the southern part of the former parish of Pentir, which in the Medieval period may have formed the outer reaches of Maenol Bangor (and which may be the origin of the name, Pen-tir), but which by the late eighteenth century onwards was owned partly by the Vaynol estate and partly by the Penrhyn estate.

Key Historic Landscape Characteristics

Improved agricultural land. The area is characterised by large, regularly laid-out fields, and by estate farmhouses and gamekeepers' dwellings. These are typically substantial two-storey dwellings hung with slate on the first floor, and with a number of ornamental features such as decorated porches. In a number of locations, ribbon developments of labourers' or quarrymen's cottages have come into being alongside the road, with in a number of places substantial chapels. The nearest to a nucleated community is the group of houses and the public house at Pentir” (www.heneb.co.uk/hlc/arfon/arfon54.html).

The HER search was conducted with a search radius of 1000m. This search return 9 entries – two of multiperiod date, two of Roman date, three of Post Medieval date and two sites of unknown date.

5.1 Entries of Multi-period Date

There are two entries of multi-period date. PRN 15871 records the Glasinfryn Historic Landscape which is recorded as “a village situated on the former Penrhyn estate. Key historic landscape characteristics: estate village. A village constructed in the nineteenth century by the Penrhyn estate; the dwellings are typical polite reinterpretations of the vernacular tradition, and are distinguished by a number of ornamental features such as porches”.

The second site, PRN 15876, is a second Historic Landscape - Improved Fields Above Pentir. The landscape is recorded as “an area of fertile agricultural land in the southern part of the former parish of Pentir, which in the Medieval period may have formed the outer reaches of Maenol Bangor (and which may be the origin of the name, Pen-tir), but which by the late eighteenth century onwards was owned partly by the Vaynol estate and partly by the Penrhyn estate. Key historic landscape characteristics: improved agricultural land. The area is characterised by large, regularly laid-out fields, and by estate farmhouses and gamekeepers' dwellings. These are typically substantial two-storey dwellings hung with slate on the first floor, and with a number of ornamental features such as decorated porches. In a number of locations, ribbon developments of labourers' or quarrymen's cottages have come into being alongside the road, with in a number of places substantial chapels. The nearest to a nucleated community is the group of houses and the public house at Pentir”.

5.2 Entries of Prehistoric Date

There are no entries attributed a Prehistoric date within the 1000m search radius of the site.

5.3 Entries of Roman Date

There are two entries of Roman date within the 1000m search radius of the site – both of which are related to the projected route of the Segontium – Canovium Roman Road. PRN 17598 is the inland deviation of the Caernarfon to Caerhun road between Ty-coch to Caer-bythod. PRN 17835 is a linear cropmark identified through aerial photography which runs across a field to the south of Tynyffridd. *“Examination on the ground showed this to be a substantial lynchet. There was nothing to indicate that this was the line of the Roman road. A possible continuation near Pont Ty-gwyn, Glasinfryn appears to consist of modern drainage features. The grass was, however, high when it was examined and this could not be confirmed”.*

5.4 Entries of Medieval Date

There are no entries attributed a Medieval date within the 1000m search radius of the site.

5.5 Entries of Post Medieval Date

There are three sites of Post Medieval date. PRN 65141 is the Caerhun Calvinist Methodist Chapel, PRN 65160 is Fferm Glasynfryn (an early 19th century farmhouse and PRN 56191 – a building north of Bryn-Glas which was identified on the earliest Ordnance Survey Edition.

5.6 Entries of Unknown Date

There are two entries of unknown date – both of which were identified from aerial photography. PRN 57 is a cropmark enclosure, west of Pant-Caerhun – no further details are provided. PRN 216 is second earthwork enclosure at Parc Arthur. It is described as *“Earthwork, marked as Parc Arthur on OS first edition 1”. A fortified post, near Pentir, half a mile to the NE. Detail of a circular earthwork is shown on the OS 6" at the site indicated, but nothing could be seen on air photographs as the site is tree-covered. A small flat-topped hill surrounded by a collapsed stone wall, possibly the remains of a plantation ring. No trace of any antiquity and not listed by RCAHM.*



Figure 2. Early 1840's Tithe Map of Area
(Source: www.cynefin.archiveswales.org.uk/en/tithe-maps)



Figure 3. First Edition Ordnance Survey Map of Area.
Surveyed & Published 1888 (Source: www.maps.nls.uk)



Figure 4. Ordnance Survey Map of Area. Revised
1912 & Published 1920 (Source: www.maps.nls.uk)



Figure 5. Ordnance Survey Map of Area. Revised
1949 & Published 1953 (Source: www.maps.nls.uk)

Apparently artificial banks perhaps enclosing the summit of a slight hill or knoll so as to enclose the natural summit. Much overgrown with trees and shrubs which are part of the artificial plantation in the area. The feature continues in the field on the NE side but it is far less distinct here. No features visible within the banks. Could be a folly.

Small, probably circular, earthwork bank on top of a natural steep slope which leads down to a stream. Situated on what might be a natural spur. Possible entrance on the N side, slight bank and flattish interior. Covered in mature trees, a dense canopy & no undergrowth. Considerable badger digging on most of the site. Hippy tents in interior. Undoubtedly man-made, & ringwork enclosure would seem the best option”.

5.7 Cartographic Evidence

Cartographic evidence has shown that the development is located within a larger field on the 1840's tithe map of the area (figure 2). The field which the development area is now located within is shown as 4 fields. By the First Edition Ordnance Survey of 1888 (figure 3) the smaller fields have been amalgamated into a larger field. There are no further changes to the current field boundary shown on the maps of 1899, 1912 (figure 4) and 1949. The current south-eastern field boundary postdates the 1949 Ordnance Survey revision.

6.0 Results of Archaeological Works

In order that the full development footprint was monitored, an area measuring a maximum of 70m x 40m was stripped down to the underlying natural (see figure 6, plates 1 - 4).

Two deposits were identified during the archaeological watching brief. Context (01) was a mixed topsoil/turf deposit and the crop in the field had recently been cut. This deposit varied in depth between 0.20m and 0.40m. It overlay the underlying natural (02) which was a yellow-orange-brown boulder clay. There were signs of plough damage in the underlying natural.

No archaeological features were identified and no artefactual material was recovered.

7.0 Conclusion

The entire development footprint was stripped to the underlying natural during the works and no archaeological material or artefacts were uncovered.

8.0 Bibliography

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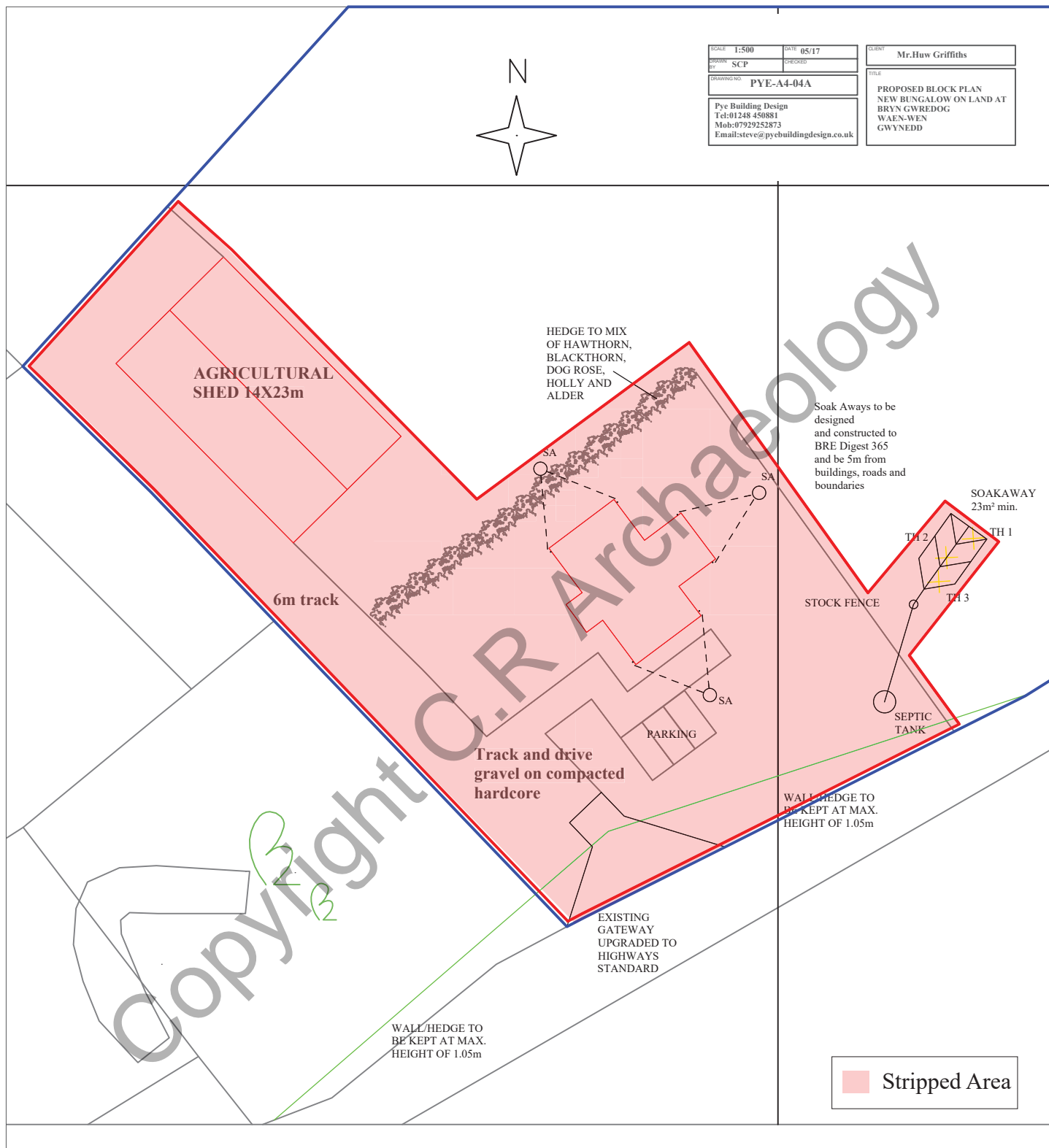


Figure 6. Area Stripped to Natural Under Watching Brief Conditions



Plate 1. Pre Excavation Shot of Development Site



Plate 2. Post Excavation Shot of Development Site



Plate 3. Post Excavation Shot of Development Site



Plate 4. Post Excavation Shot of Development Site

The Chartered Institute for Archaeologists. 2014. *Standard and guidance for the collection, documentation, conservation and research of archaeological materials*

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www.mapapps.bgs.ac.uk/geologyofbritain/home.html

www.maps.nls.uk

Appendix A.

Proposed Development Plans

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**Specification for Archaeological Works at
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Illustrations

Figure 1. Site Location Map

Appendices

Appendix A. Proposed Works

1.0 Introduction

C.R Archaeology have been instructed by Mr. Huw Griffiths to conduct archaeological works at the above site in compliance with planning conditions placed on the development (Planning Reference: C17/0505/25/LL).

This specification has been written following a telephone and email conversation with Development Control Archaeologist Jenny Emmett of Gwynedd Archaeological Planning as a methodology for an Archaeological Watching Brief.

The development site is situated in a rural setting near Caerhun, Gwynedd (Figure 1). Planning permission has been granted to erect a house, agricultural shed with associated access, hardstanding and soakaway (Appendix A).

The possibility has been raised that the Roman Road running from Segontium – Canovium may be located in the vicinity of the site, and may potentially be found within the proposed development area. There have been relatively few archaeological discoveries in the immediate vicinity of the site, although this is as likely to simply be a reflection of the lack of investigation/development in the area rather than representing the low archaeological potential of the area.

The site is located within the Arfon Landscape Character Area – specifically Arfon - Area 54 Improved fields above Pentir.

This document details the methodology for an archaeological watching brief which is to be conducted on all groundworks associated with the proposed project.

2.0 Project Aims

This scheme of works aims to monitor groundworks at the site in order to assess the survival, character and date of any archaeological remains and to excavate/record any archaeological remains uncovered.

It aims to fulfil the mitigation criteria for undertaking an Archaeological Watching Brief as specified in the CIfA Standard and Guidance document (2014).

3.0 Historical Background

The following section is, through necessity, brief and is intended to merely place the site in context. A more detailed history of the site will form an element in the proposed works and will concentrate more specifically on the site itself.

The site is located within the Arfon Landscape Character Area – specifically Arfon - Area 54 Improved fields above Pentir.

The historic background and landscape characteristics are described as:

“Historic Background

An area of fertile agricultural land in the southern part of the former parish of Pentir, which in the Medieval period may have formed the outer reaches of Maenol Bangor (and which may be the origin of the name, Pen-tir), but which by the late eighteenth century onwards was owned partly by the Vaynol estate and partly by the Penrhyn estate.

Key Historic Landscape Characteristics

Improved agricultural land. The area is characterised by large, regularly laid-out fields, and by estate farmhouses and gamekeepers’ dwellings. These are typically substantial two-storey dwellings hung with slate on the first floor, and with a number of ornamental features such as decorated porches.

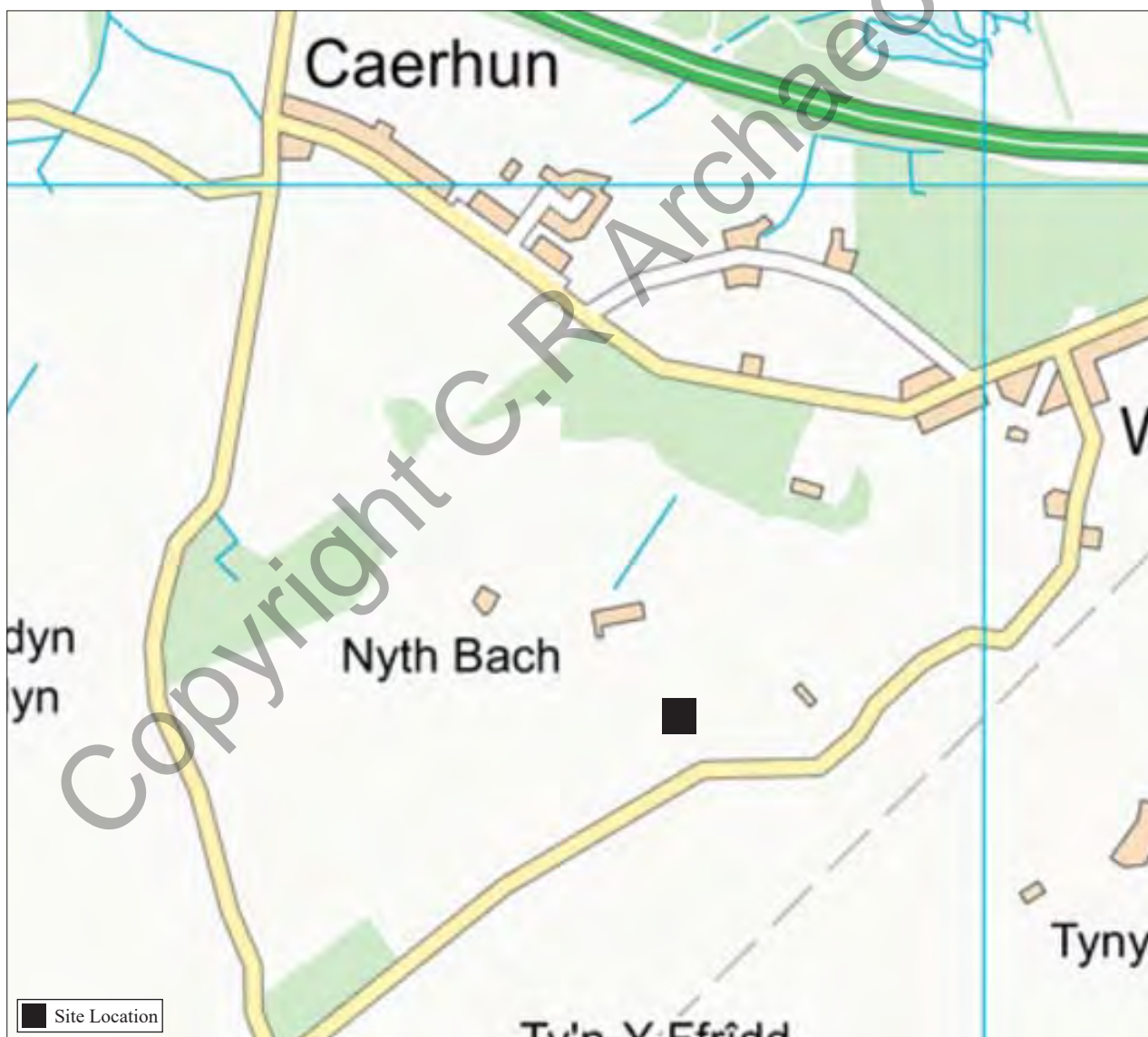
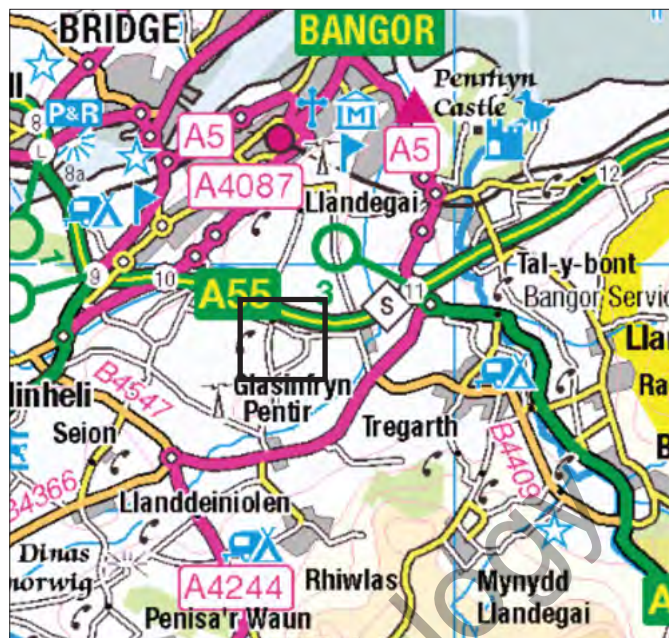
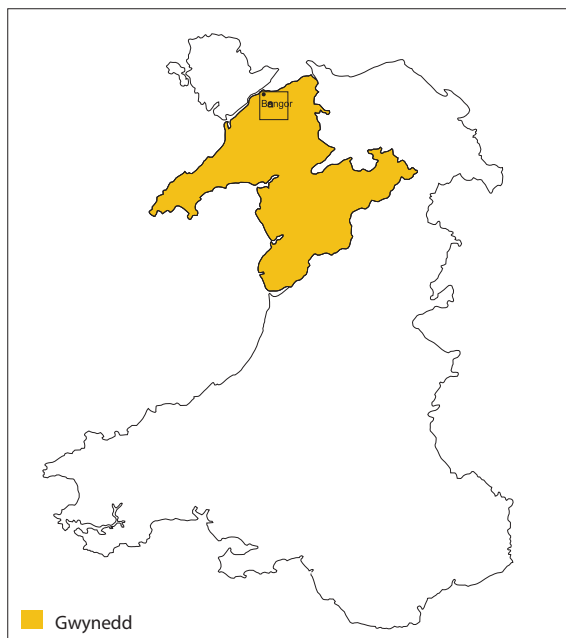


Figure 1. Site Location Map - Source: OS Open Data
(Contains Ordnance Survey data © Crown copyright and database right 2017)

In a number of locations, ribbon developments of labourers' or quarrymen's cottages have come into being alongside the road, with in a number of places substantial chapels. The nearest to a nucleated community is the group of houses and the public house at Pentir" (www.heneb.co.uk/hlc/arfon/arfon54.html).

The possibility has been raised that the Roman Road running from Segontium – Canovium may be located in the vicinity of the site. The exact route of the road between Pentir and Llanfairfechen is unknown and several possibilities have been raised. Proposed line AP2006/2810 (numbering taken from figure 4 in GAT Report 779: 2009) is located c.95m from the site boundary.

3.1 Topography

The development site is situated in a rural setting near Caerhun, Gwynedd. It is currently in agricultural use as unimproved grazing.

3.2 Geology

The site is located on the boundary of two different geological strata. The first is:

The bedrock is recorded as "Minffordd Formation - Sandstone And Conglomerate, Interbedded. Sedimentary Bedrock formed approximately 508 to 528 million years ago in the Cambrian Period. Local environment previously dominated by shallow seas. These rocks were formed in shallow seas with mainly siliciclastic sediments (comprising of fragments or clasts of silicate minerals) deposited as mud, silt, sand and gravel" (www.mapapps.bgs.ac.uk/geologyofbritain/home.html).

The second strata bedrock is recorded as "Allt Lwyd Formation - Sandstone. Sedimentary Bedrock formed approximately 467 to 479 million years ago in the Ordovician Period. Local environment previously dominated by shallow seas. These rocks were formed in shallow seas with mainly siliciclastic sediments (comprising of fragments or clasts of silicate minerals) deposited as mud, silt, sand and gravel" (www.mapapps.bgs.ac.uk/geologyofbritain/home.html).

No superficial deposits are recorded.

4.0 Scheme of Works – Methodology

The methodologies employed will conform to The Chartered Institute for Archaeologists: *Standard and Guidance for Archaeological Watching Brief* (2014).

4.1 Desk Based Research

A history of the site will be compiled utilising information sourced from Gwynedd Record Office and the Gwynedd Historic Environment Record Office. A full map progression will be undertaken along with a search of tithe records.

The Gwynedd Historic Environment Record will be consulted and a search radius of 500m will be examined.

These works will be carried out in accordance with the CIfA Standards and Guidance for Historic Environment Desk Based Assessment (CIfA 2014).

This material will form the historical background for a full archaeological report. The report will include the results of the Archaeological Watching Brief.

4.2 Archaeological Watching Brief

This watching brief will monitor all groundworks undertaken on the site. This will include all topsoil and subsoil stripping and the excavation of access roads, foundations and soakaways and any service

trenches.

A C.R Archaeology staff member will be present during the machine excavation of all groundworks. This work will be undertaken using a mechanical excavator fitted with a toothless ditching bucket. If archaeological remains are encountered then machine excavation will cease at this level until it is clear in plan that the full extent of any features have been uncovered within the development area. If the features extend beyond the limits of the development and it is felt to be beneficial to extend the width of the strip where possible an additional area of up to 1m on either side of the feature will be exposed. If this does not prove sufficient it may then be necessary to follow the procedures for Additional Mitigation/Contingency Measures.

C.R Archaeology will notify GAPS as the date of the commencement of works and if any significant archaeological features are uncovered. A site visit will be arranged to allow for the inspection of works.

All archaeological remains/potential archaeological remains identified during the stripping of the site will be marked using spray paint and cordoned off to allow excavation by C.R Archaeology staff. Any archaeological features, structures or remains will be trowel cleaned by hand. Investigation of such features, structures or deposits will be sufficient to determine their character, date, significance and quality. If features yield suitable material for dating/environmental processing then samples will be taken for processing off site. The size of these samples will depend on the size of the feature but for smaller features a sample of up to 95% will be taken. For larger features a sample of up to 40 litres will be taken. In the event of a significant discovery GAPS will be informed of the discovery and a mitigation strategy agreed before works will progress.

Fieldwork is to be conducted and managed by Matthew Jones (MA) of C.R Archaeology. Additional staff can be brought in as required and all staff members will have experience equivalent to AIfA level and cv's can be provided on request.

4.2.1 Recording

The record forms at C.R Archaeology are based on the English Heritage system and full written, graphic and photographic records will be made in accordance with the English Heritage *Field Recording Manual*. Sample forms can be provided on request. The written record shall comprise completed *pro-forma* record sheets.

Plans, sections and elevations will be produced on gridded, archive standard stable polyester film at scales of 1:10, 1:20 or 1:50, as appropriate. Representative measured sections will be prepared as appropriate showing the sequence and depths of deposits. A temporary benchmark (TBM) will be established on the site and plans, elevations and sections will contain grid and level information which where possible will be calculated relative to OS data. All drawings will be numbered and listed in a drawing register, these drawing numbers being cross-referenced to written site records. A 'harris matrix' diagram will be created.

A high-resolution 14.2mp Sony Alpha digital camera will be used to create a photographic record of the site. This will be comprised of photographs of archaeological features and appropriate groups of features and structures. Included in each photograph will be an appropriate scale and north arrow. General photographs will also be taken in the event of a negative result.

All photographic records will be indexed and cross-referenced to written site records. Details concerning subject and direction of view will be maintained in a photographic register, indexed by frame number. Images from photography will be stored in a loss-less digital format in this case '*.TIF'.

4.2.2 Additional Mitigation/Contingency Measures

In the event of a significant archaeological discovery being made during the excavation C.R Archaeology will immediately inform both the client and the development control archaeologist. Consultation will take place between C.R Archaeology, GAPS and the client with regards to the most suitable course of action.

In the unlikely event that human remains are encountered site work will cease with immediate effect. The coroner, client and monitoring body will be informed immediately. The company will abide by the requirements of Section 25 of the Burial Act 1857. Any arrangements regarding the discovery of human remains will be at the discretion of HM Coroner whose instruction/permission will be sought. All human remains are to be preserved *in situ*, covered and protected. They will only be removed in exceptional circumstances and with the appropriate Ministry of Justice licence, environmental health regulations, Coroner's permission and, if appropriate, in compliance with the Disused Burial Grounds (Amendment) Act 1981 or other local Act, with adequate security provided in such cases.

Any artefacts recovered that fall within the scope of the Treasure Act 1996 will be reported to the landowner, GAPS and to HM Coroner.

4.2.3 Recovery, Processing and Curation of Artefactual Material

All recovered artefactual material will be retained, cleaned, labelled and stored according to *Standard and Guidance for the collection, documentation, conservation and research of archaeological materials* (IfA 2008) and *First Aid for Finds* (Watkinson & Neal 2001). The aim will be to create a stable, ordered, well-documented, accessible material archive forming a resource for current and future research (IfA 2008).

All artefactual material will be bagged and labelled with the site code and context number prior to their removal from site. The archive reference number will be clearly marked on all finds.

Each assemblage will be examined according to typological or chronological criteria and conservation needs identified. An assessment report of all post-medieval material will be produced by Matthew Jones and further specialists will be appointed as required. A list of specialists will be prepared prior to the post-excavation phase of works.

Any specialist conservation necessary will be undertaken by Cardiff Conservation Services, Cardiff University. This will be conducted in accordance with guidelines issued by the Institute for Conservation.

Following analysis all archaeological material recovered it is hoped that the material will be deposited in Bangor Museum. However, the client reserves the right to retain ownership of said artefacts. Processed assemblages will be boxed according to issued guidelines and a register of contents compiled prior to deposition.

The works will be carried out in accordance with The Institute for Archaeologists: *Standard and Guidance for Archaeological Watching Brief* (Revised 2008).

4.2.4 Archive Compilation

All records created during the fieldwork will be checked for consistency and accuracy and will form part of the *Primary Site Archive (P1)* (EH 2006). The archive will contain all data collected, including records and other specialist materials. It will be ordered, indexed, adequately documented, internally

consistent, secure, quantified, conforming to standards required by the archive repository and signposted appropriately to ensure future use in research, as detailed in the English Heritage *Management of Research Projects in the Historic Environment* (MoRPHE) methodology.

The archive will be assembled in accordance with the guidelines published in, *Standards in the museum care of archaeological collections* (Museums & Galleries Commission 1994), *Guidelines for the preparation of excavation archives for long-term storage* (United Kingdom Institute for Conservation, 1990) and *Archaeological Archives: A guide to best practice in creation, compilation, transfer and curation* (AAF 2007).

All materials contained within the *Primary Site Archive (P1)* that are subsequently identified by the *Assessment Report (P2)* as appropriate for analysis will be processed by suitable specialists and the resultant *Research Archive (P3)* will be checked and ordered according to MoRPHE criteria.

Should archaeological material be recovered it is hoped any archive/artefactual material created/discovered during this archaeological project will be deposited in Bangor Museum. Should no artefacts be recovered then the paper/digital archive will be deposited at the RCAHMS. This will also be the case should the client retain the artefact assemblage from the site. Archive material will be deposited in accordance with the museum's terms and conditions for archive deposition.

4.3 Timetable for Proposed Works

It is envisaged that groundworks will commence on August 3rd 2017 and will be carried out on a day rate basis and staff will attend site as necessary. Additional time will be allotted as necessary for archive research, report compilation and site archiving. Gwynedd Archaeological Planning Services will be informed of the exact site days to allow monitoring of works.

4.4 Staffing

The project will be managed by Matthew Jones (BA (Archaeology), MA (Archaeology)). All staff will have a skill set equivalent to the CIfA CAIfA level. C.Vs for all staff employed on the project can be provided on request. All projects are carried out in accordance with CIfA *Standard and Guidance* documents.

4.5 Monitoring

The project will be subject to monitoring by Gwynedd Archaeological Planning Services. The monitor will be given prior notice of the commencement of the fieldwork. A projected time-scale and copy of the risk assessment can be provided on request to the monitoring body prior to the commencement of works.

They will be notified in writing (via email) of the commencement dates for archaeological site work and will be updated with the results of all works conducted as watching brief elements. This will be initially as a telephone call & email with attached JPEG photographs and if/when required further interim reports will be compiled.

4.6 Health and Safety

A risk assessment will be conducted prior to the commencement of works and site staff will be familiarised with its contents. A first aid kit will be located in the site vehicle.

All staff will be issued with appropriate Personal Protective Equipment (PPE) for the site work. Initially this is anticipated to consist of:

- Safety Helmets (EN397)
- Hi-visibility vests (EN471)

- Safety footwear – steel toecap and mid-sole boots and Wellingtons (EN345-47)

Any further PPE required will be provided by C.R Archaeology

All staff will have passed at least a CITB health and safety test at least operative level and will carry a Construction Related Organisation (CRO) White Card for Archaeological Technician (Code 5363) or a Site Visitor card.

C.R Archaeology staff will also comply with any Health and Safety Policy or specific on-site instructions provided by the client or their appointed Principal contractor or H&S coordinator.

4.7 The Report

The report will clearly and accurately incorporate information gained from the programme of archaeological works. It will present the documentary evidence gathered in such a way as to create a clear and coherent record. The report will contain a site plan showing the locations of photographs taken.

As a minimum the report will include:

- A copy of the design brief and agreed specification
- A location plan
- All identified features and significant finds plotted on an appropriately scaled site plan
- Full dimensional and descriptive detail of all identified finds and features
- A full bibliography of sources consulted
- An archive compact disc

A copy of the report in Adobe PDF format will be sent to the appropriate monitoring archaeologist for approval before formal submission. A bound paper copy and PDF digital copy of the report will be submitted as part of the formal submission. A digital Adobe PDF version and a bound paper copy of the final report and will be lodged with the Gwynedd Historic Environment Record within six months of completion of the project.

In the event of a positive result of site works a short article will be submitted to the Archaeology in Wales Journal.

4.7.1 Copyright

C.R Archaeology and sub-contractors shall retain full copyright of any commissioned reports, tender documents or other project documents, under the Copyright, Designs and Patents Act 1988 with all rights reserved; excepting that it hereby provides a licence to the client and the local authority for the use of the report by the client and the local authority in all matters directly relating to the project as described in the Project Specification.

5.0 Bibliography

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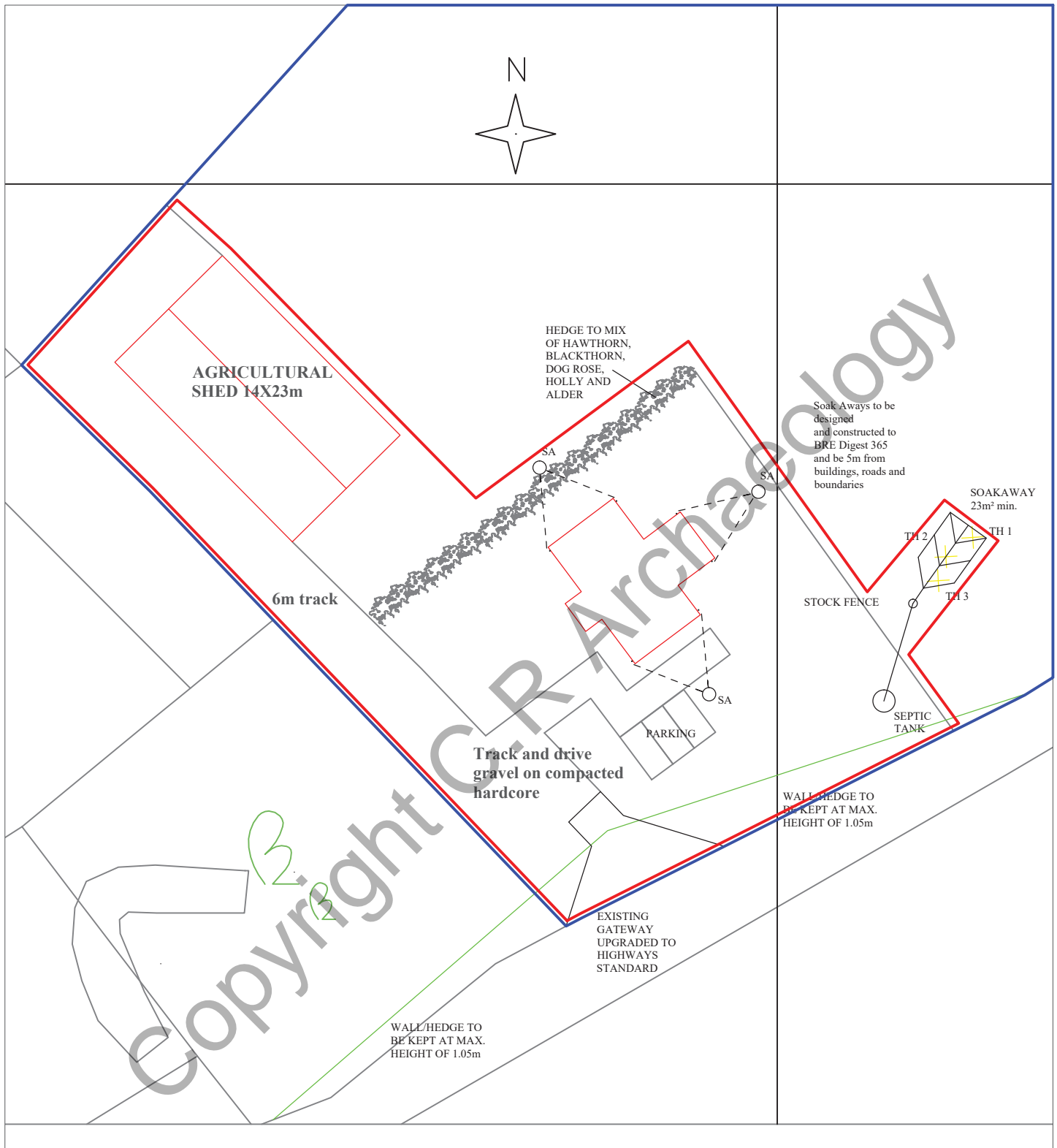
www.heneb.co.uk/hlc/arfon/arfon54.html

www.mapapps.bgs.ac.uk/geologyofbritain/home.html

Appendix A.

Proposed Development Plans

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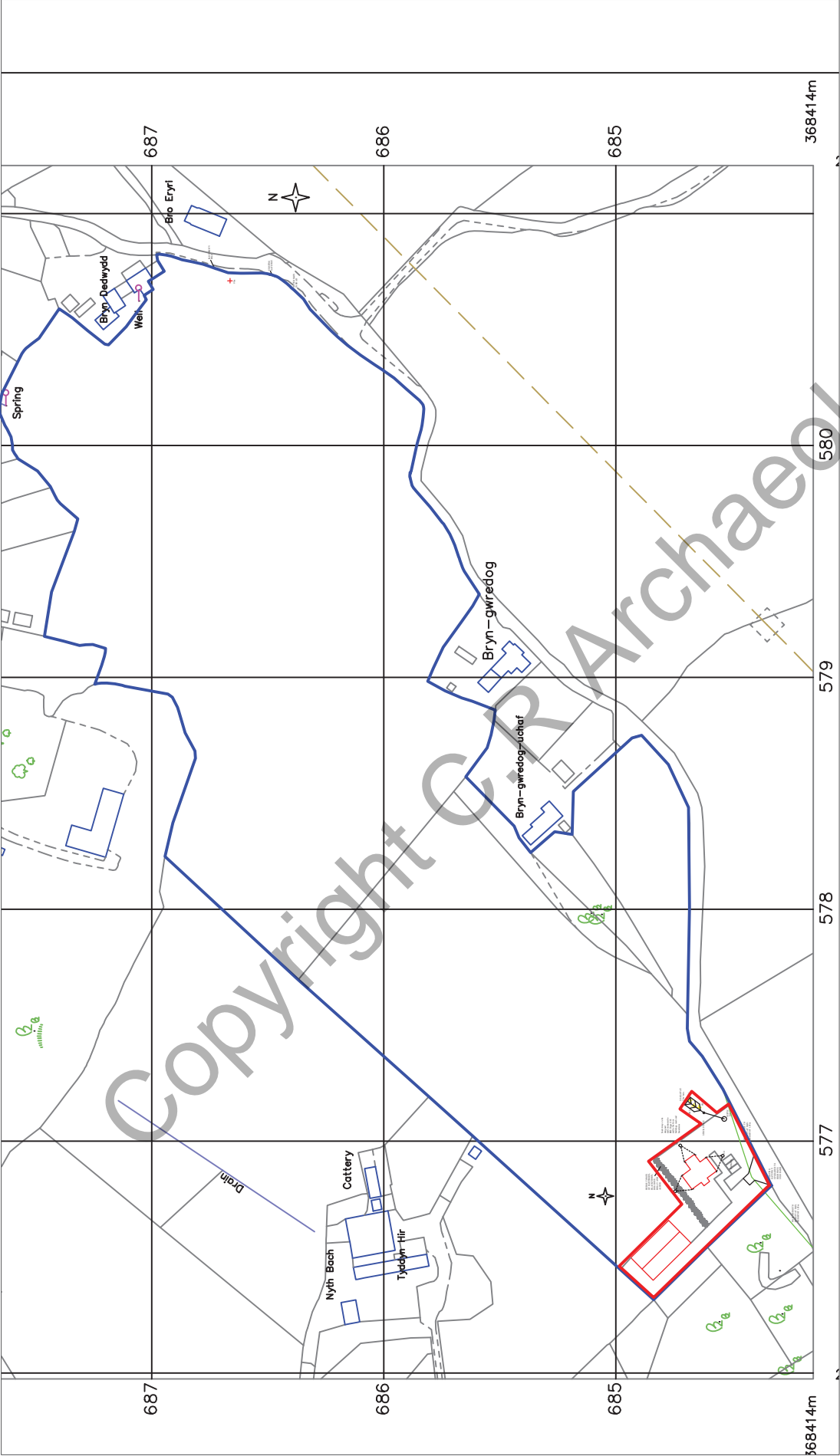
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DRAWN BY	SCP	CHECKED	

DRAWING NO.	PYE-A4-04A
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Pye Building Design
Tel:01248 450881
Mob:07929252873
Email:steve@pyebuildingdesign.co.uk

CLIENT	Mr.Huw Griffiths
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TITLE	PROPOSED BLOCK PLAN NEW BUNGALOW ON LAND AT BRYN GWREDDOG WAEN-WEN GWYNEDD
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SCALE	1:2500	DATE	05/17
DRAWN BY	SCP	CHECKED	
DRAWING NO.		PYE-A4-01	
CLIENT			
Mr.Huw Griffiths			
TITLE			
LOCATION PLAN NEW BUNGALOW ON LAND AT BRYN GWREDOG WAEN-WEN GWYNEDD			
Pye Building Design Tel:01248 450881 Mob:07929252873 Email:steve@pyebuildingdesign.co.uk			

Appendix B.

Location and Direction of Photographic Plates

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