

Results of Archaeological Works at Pen y Castell Isaf, Bryncroes

NGR SH 23247 30322



Report Number CR78-2014



C.R Archaeology

Compiled by C. Rees & M. Jones
on Behalf of Mr. J Poulson

C.R Archaeology wish to thank the staff at Gwynedd Historic Environment Record, Gwynedd Archives, Caernarfon and Bangor University Archives for all their assistance during our research for this project.

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C14/0208/32/LL

National Grid Reference:

SH 23247 30322

Client:

Mr. J Poulson

Report Authors:

Catherine Rees & Matthew Jones

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1.0 Introduction

C.R Archaeology were instructed by Mr. John Poulson to conduct archaeological works at Pen y Castell Isaf in compliance with planning conditions placed on the development (Planning Reference C14/0208/32/LL). Planning permission has been granted to remove current building extensions and to erect rear and side extensions with associated drainage/foul water systems (Appendix A).

The development site is situated on the Llŷn Peninsula (Figure 1). It lies outside the Llŷn Area of Outstanding Natural Beauty (AONB) but is located within the Llŷn and Bardsey Landscape of Outstanding Historic Interest. The site is located immediately adjacent to the Late Prehistoric Defended Enclosure of Castell Caeron (PRN 1234). It was believed to be a possibility that Pen y Castell Isaf had been constructed at the original main entrance.

Works undertaken at the neighbouring property of Pen y Castell Uchaf in 2010 showed that although there was considerable disturbance/removal of archaeological remains within the footprint of the existing building plot, part of the former outer rampart had survived and overlay a buried soil. The proposed extension to the rear of Pen y Castell Isaf also extends into the line of the ramparts and it was unclear from available information to what extent this area has been previously disturbed.

The results from the works at Pen y Castell Uchaf demonstrated a high potential for surviving archaeological deposits with localised and confined modern disturbance. It was therefore considered that given the limited understanding of this type of monument, and the potentially significant location of the plot at the entrance to the enclosure, that any surviving archaeology would be of high importance.

A specification (CR77-2014 included as Appendix B) was written and agreed in response to a letter written by Development Control Archaeologist Jenny Emmett of Gwynedd Archaeological Planning Services (dated 18th March 2014 Ref: 0318je01/D1899) and a telephone call on 18th August 2014 as a methodology for an Archaeological Watching Brief with mitigation strategy for small scale excavation should archaeological remains be uncovered.

Site works were conducted on 27th August 2014 and it was evident from the Archaeological Watching Brief that post-medieval farming activity together with previous landscaping at the rear of Pen y Castell Isaf had removed all trace of any archaeological remains.

2.0 Project Aims

The aims of this element of the programme of works were to monitor all ground works associated with the proposed extension of Pen y Castell Isaf in order to assess the survival, character and date of any archaeological remains and to excavate, record and analyse any archaeological remains uncovered.

It aimed to fulfil the mitigation criteria for archaeological works as specified in a letter prepared by GAPS on the 18th March 2014.

3.0 Scheme of Works – Methodology

The methodologies employed conformed to The Institute for Archaeologists: *Standard and Guidance for Archaeological Watching Brief* (Revised 2008) and The Institute for Archaeologists: *Standard and Guidance for Archaeological Excavation* (Revised 2008).

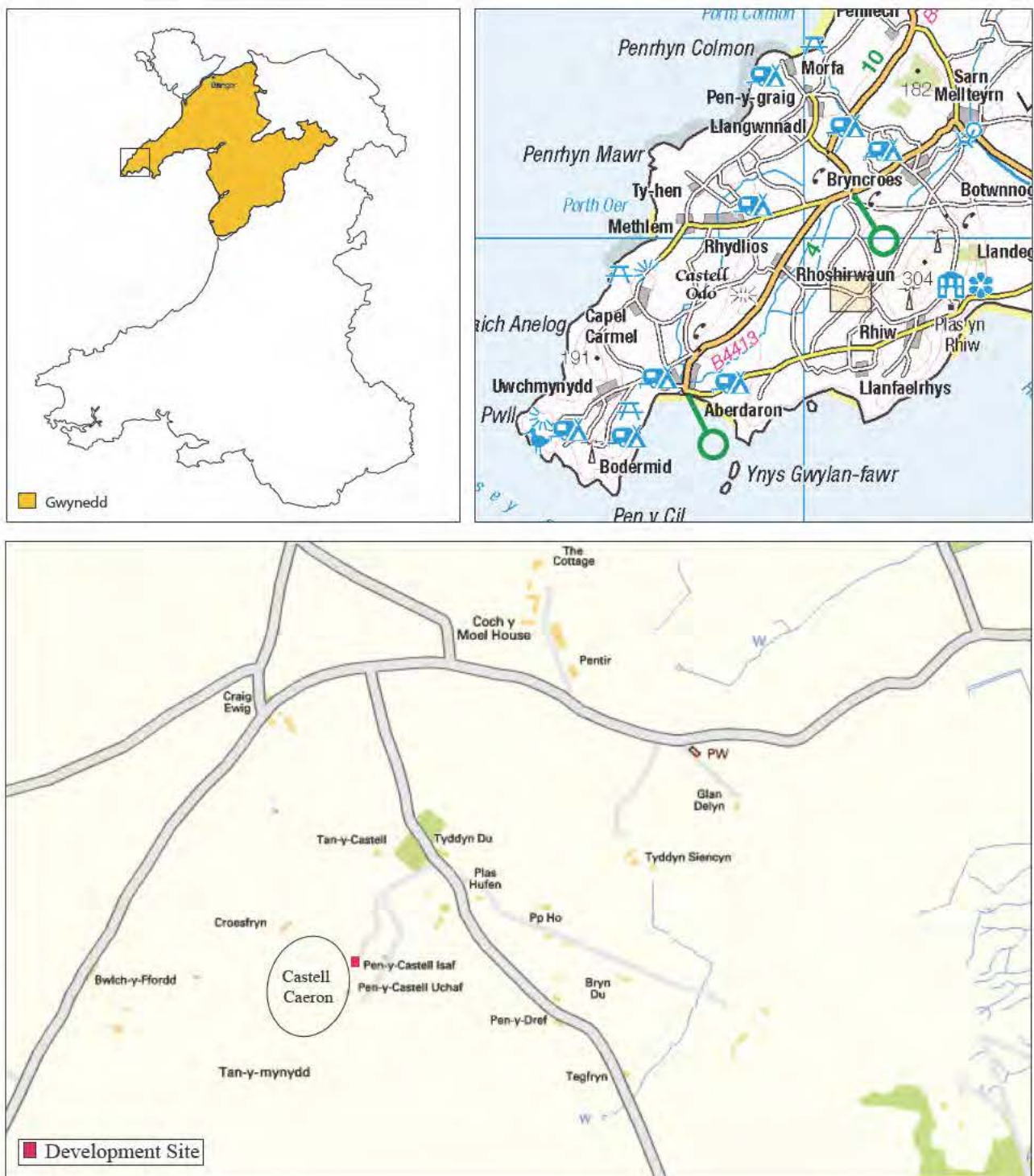


Figure 1. Location Map
 (Source: OS Open Data Mapping Contains Ordnance Survey data
 © Crown copyright and database right 2014)

3.1 Desk Based Research

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

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

Works were carried out in accordance with the IfA Standards and Guidance for Historic Environment Desk Based Assessment (IfA 1994 (Revised 2009)).

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

3.2 Archaeological Watching Brief

This watching brief monitored all groundworks associated with the erection of the building extensions at Pen y Castell Isaf. This included all topsoil and subsoil stripping, the excavation of house foundations and all new service trenches. The areas were stripped to the required development depth as no archaeological remains are encountered.

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.

C.R Archaeology notified GAPS as the date of the commencement of works (Wednesday 27th August). Due to the negative results a site visit to allow for the inspection of works was not deemed necessary.

Fieldwork was conducted and managed by Matthew Jones (MA) of C.R Archaeology. All staff members will have experience equivalent to AIfA level and cv's can be provided on request.

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*. Sample forms can be provided on request. The written record comprises completed *pro-forma* record sheets.

Plans, sections and elevations were produced on gridded, archive standard stable polyester film at scales of 1:10, 1:20 or 1:50, as appropriate. Representative measured sections were prepared as appropriate showing the sequence and depths of deposits. All drawings were numbered and listed in a drawing register, these drawing numbers being cross-referenced to written site records. A 'harris matrix' diagram was created.

A high-resolution 14.2mp Sony Alpha digital camera was used to create a photographic record of the site. This was comprised of general photographs due to the negative results of the fieldwork.

All photographic records were indexed and cross-referenced to written site records. 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/contingency measures were necessary.

3.2.3 Recovery, Processing and Curation of Artefactual Material

No artefactual material was recovered during site works.

3.2.4 Archive Compilation

All records created during the fieldwork were checked for consistency and accuracy and will form part of the *Primary Site Archive (P1)* (EH 2006). The archive contains 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.

Any archive/artefactual material created/discovered during this archaeological project will be deposited in Bangor Museum. Archive material will be deposited in accordance with the museum's terms and conditions for archive deposition.

3.3 Timetable for Proposed Works

Groundworks commenced on Wednesday 27th August 2014 and took one day. Additional time was allotted for archive research, report compilation and site archiving. 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 staff have a skill set equivalent to the IfA AIfA level. All projects are carried out in accordance with IfA *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. The monitor was notified in writing (via email) of the commencement dates for archaeological site work and was updated with the results of all works conducted as watching brief elements. This was as an email with attached JPEG photographs.

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 a CITB health and safety test at least operative level and carry a Construction Related Organisation (CRO) White Card for Archaeological Technician (Code 5363).

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

3.7 The Report

This 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
- Sufficient historical and archaeological detail to allow interpretation of the results and to support assessment of significance
- 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 fieldwork.

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 Topological Background

4.1 Topography

Pen y Castell Isaf is located within the parish of Bryn croes on the Llŷn Peninsular. It is situated on a wide, natural shelf at the northern end of Mynydd Rhiw, immediately adjacent to Castell Caeron. The area enclosed with the circuit walls of Castell Caeron is slightly higher than the rest of the shelf and outside the fort the land falls sharply away on the north west side. It slopes more gently to the north-east and is almost level to the south west. The ground rises steeply about 100m the south-eastern side of the fort.

4.2 Geology

The bedrock is recorded as “*Llyn Shear Zone Complex - Mylonite. Metamorphic Bedrock formed approximately 508 to 635 million years ago in the Cambrian and Ediacaran Periods. Original rocks without interpretation. Later crushed in fault zone or shear zone. These rocks have undergone low grade metamorphism, high grade regional metamorphism, or crushing in a fault or shear zone and it is not known whether they were of igneous, sedimentary or older metamorphic origin*” (www.mapapps.bgs.ac.uk).

The superficial geology is recorded as “*Till, Devensian - Diamicton. Superficial Deposits formed up to 2 million years ago in the Quaternary Period. Local environment previously dominated by ice age conditions. These rocks were formed in cold periods with Ice Age glaciers scouring the landscape and depositing moraines of till with outwash sand and gravel deposits from seasonal and post glacial meltwaters*” (www.mapapps.bgs.ac.uk).

5.0 Historical & Archaeological Background

For ease of interpretation this section has been divided into a brief history of the known archaeological sites within the vicinity of Pen y Castell Isaf, followed by a more detailed section specific to the house and its immediate environs.

5.1 Results of Search of Historic Environment Record

The Gwynedd HER records for the area around Pen y Castell Isaf were examined. Within the 500m search area five results were returned and all of the results are for sites/artefacts of Prehistoric/Romano British date.

There are two findspots recorded near Pen y Castell Isaf, PRN 1624 is a stone tool described as follows: “a few preliminary flakes have been removed from a tabular piece of rock with considerably weathered faces. This flaking, from both edges and on both faces, failed to reach far enough across the piece for it to be worthy of the finer flaking that would have resulted in a desirable axe form.” PRN 3646 is a flint scraper found near Bryncroes. It has been assigned a Neolithic or Bronze Age date.

There are two archaeological sites within 500m of Pen y Castell Isaf which also belong to the Neolithic or Bronze Age periods. Mynydd Rhiw is the site of a Neolithic Axe Factory (PRN 1232) which is recorded as “Five approximately circular hollows in a line about 90m long on a bearing of 40° N, represent the site of Neolithic quarries opened to obtain material for the manufacture of stone axes and tools. The banks surrounding the hollows, up to 3m wide and 0.3m high are composed of the waste products of flaking”. The site was Excavated in 1958-59 and produced “every kind of artefact commonly found on Neolithic sites around the Irish Sea, but no polished implements were found”. Hearths were excavated which were found to be contemporary with the later stages of the axe-making phase of occupation. Mynydd Rhiw is a Scheduled Ancient Monument (CN207).

Although lying just outside the search area there are four Bronze Age burial cairns associated with Mynydd Rhiw are arranged on a prominent ridge approximately 200m to the south of the Axe Factory. A fifth cairn (PRN 1217) once existed on the summit of Mynydd Rhiw but not longer survives. The cairns have been assigned PRN's 3298, 3299, 3300 & 1233 and are a Scheduled Ancient Monument (CN102).

The second site survives only as a place name and PRN 3566 records “Cae Gromlech” a field in which it is said that a megalith once stood.

The final site which is within the search radius lies immediately adjacent to the proposed development area. Castell Caeron (PRN 1234) is recorded as a Roman Fort although there is evidence from other similar sites that it may be of far greater antiquity and radiocarbon dates from the nearby site of Meillionydd yielded a date range from c. 800 – 200 cal. BC – from the end of the Late Bronze Age to the middle of the Middle Iron Age (www.meillionydd.bangor.ac.uk).

Castell Caeron is one of a number of weak double ringwork forts in Caernarfonshire which are clustered towards the tip of the Llŷn Peninsular. It is situated on a wide, natural shelf at the northern end of Mynydd Rhiw and within the fort the ground is slightly higher than the rest of the shelf. The enclosure is oval in plan and measures c. 220ft from north-west to south-east by 250ft. It is surrounded by two stone walls c. 7ft in thickness which are positioned c. 10ft apart. Both walls have been robbed out to their base, and there are no surviving facing stones. The outer wall is destroyed around the south-east half of its circuit. The entrance, although it is thought to have been located on the eastern side of the enclosure where the wall lines have been interrupted (RCAHMW 1964: lxxi – lxxvii, 27).

There have been two projects conducted by Gwynedd Archaeological Trust which have examined Castell Caeron. The first was as part of a “*Survey of Prehistoric Defended Enclosures in North-West Wales: Assessment of Some Possibly Early Multivallate Concentric Enclosures in Llŷn and Anglesey 2006-7*” and included an earthwork survey, geophysical survey and test pitting. The survey recorded “*a narrow break and in turn in both the ramparts at the west side, presumably indicating an entrance there, designed to make approach difficult as this side has a steep slope but there are traces of a terraced track approaching diagonally along the slope. There is also a distinct in turn in the inner rampart at the north-east side and it is possible that the real entrance was there, destroyed by building activities associated with the house there.*” Geophysical survey was not possible in the area near Pen y Castell Isaf due to the presence of post medieval walls and fencing. Test pitting revealed considerable later disturbance and only one of the six test pits excavated indicated the possibility of preservation of underlying archaeological deposits (Smith & Hopewell 2007: 16 – 17).

The results of the Royal Commission and Gwynedd Archaeological Trust surveys of the monument have been included as figures 2 & 3.

In 2010 Gwynedd Archaeological Trust were commissioned to undertake an Archaeological Watching Brief at the nearby property of Pen y Castell Uchaf (GAT Report 852). A area measuring 61.42m² was excavated at the rear of the house and in the area where a previous extension had been demolished the part of the bank of Castell Caeron was observed in section. The deposit was described as a light yellowish brown clay noted up to a depth of 0.8m. This material sealed a buried orange-brown silt clay which in turn overlay the natural. The bank deposit was heavily disturbed and no finds or environmental evidence were retrieved (Evans 2010: 8).

5.2 Pen y Castell Isaf

The farmhouse at Pen y Castell Isaf is believed to be associated with the aforementioned house of Pen y Castell Uchaf as they both lie adjacent to a complex of regular small semi-improved fields of probable late 18th or 19th century date, bounded by dry stone walls, and the farms probably formed part of a larger property in former times that was later divided into two (Evans 2010: 3).

Both of the properties are shown on the 1838 Tithe Map of the area (figure 4) and remain unchanged throughout the sequence of Ordnance Survey Maps from 1888 – 1953 (figures 5 – 8).

The house at Pen y Castell Isaf was later extended and an outdoor swimming pool added.

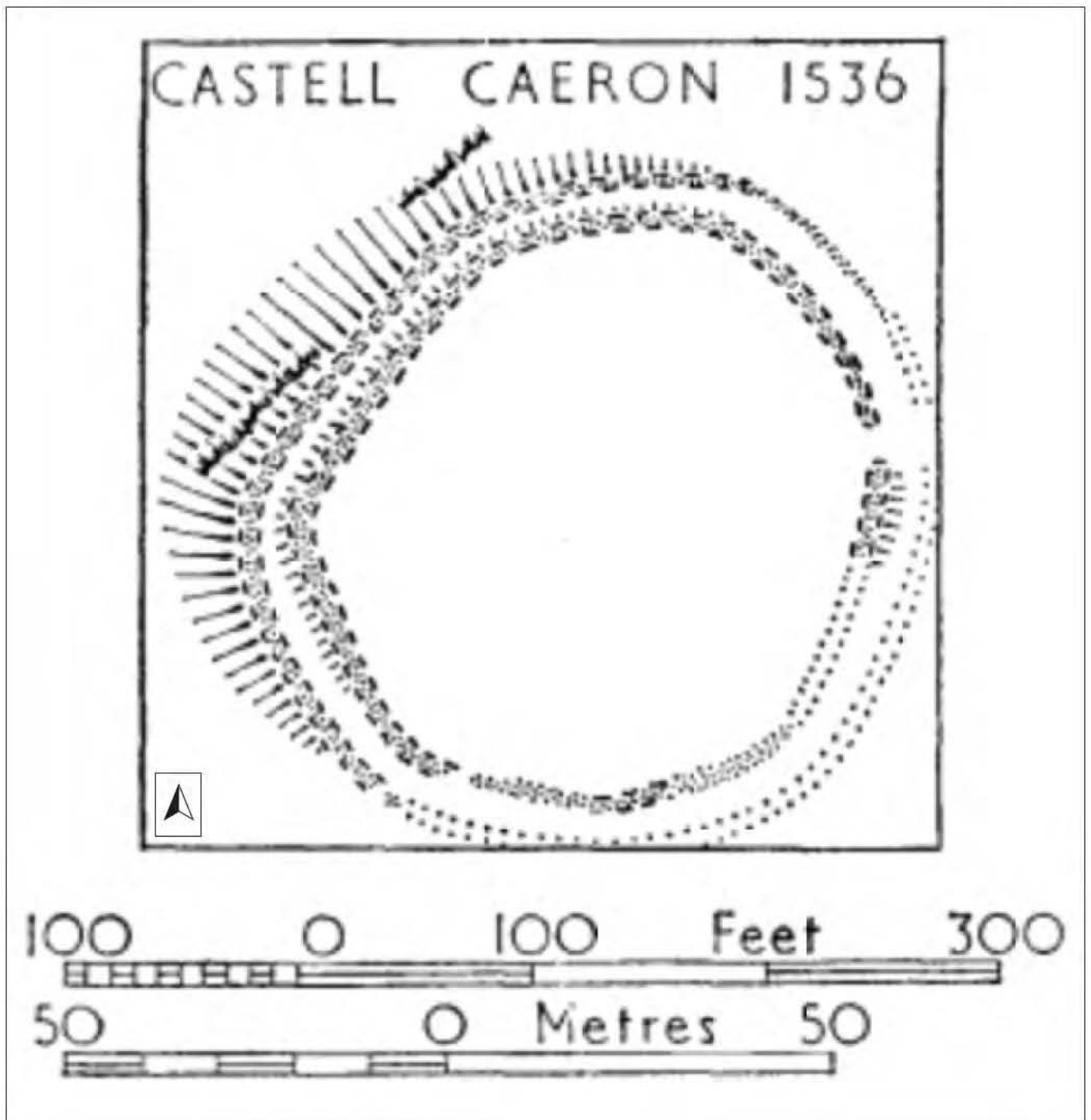


Figure 2. RCAHMW 1964 Earthwork Survey of Castell Caeron
(Source & Copyright RCAHMW 1964: lxxvii)

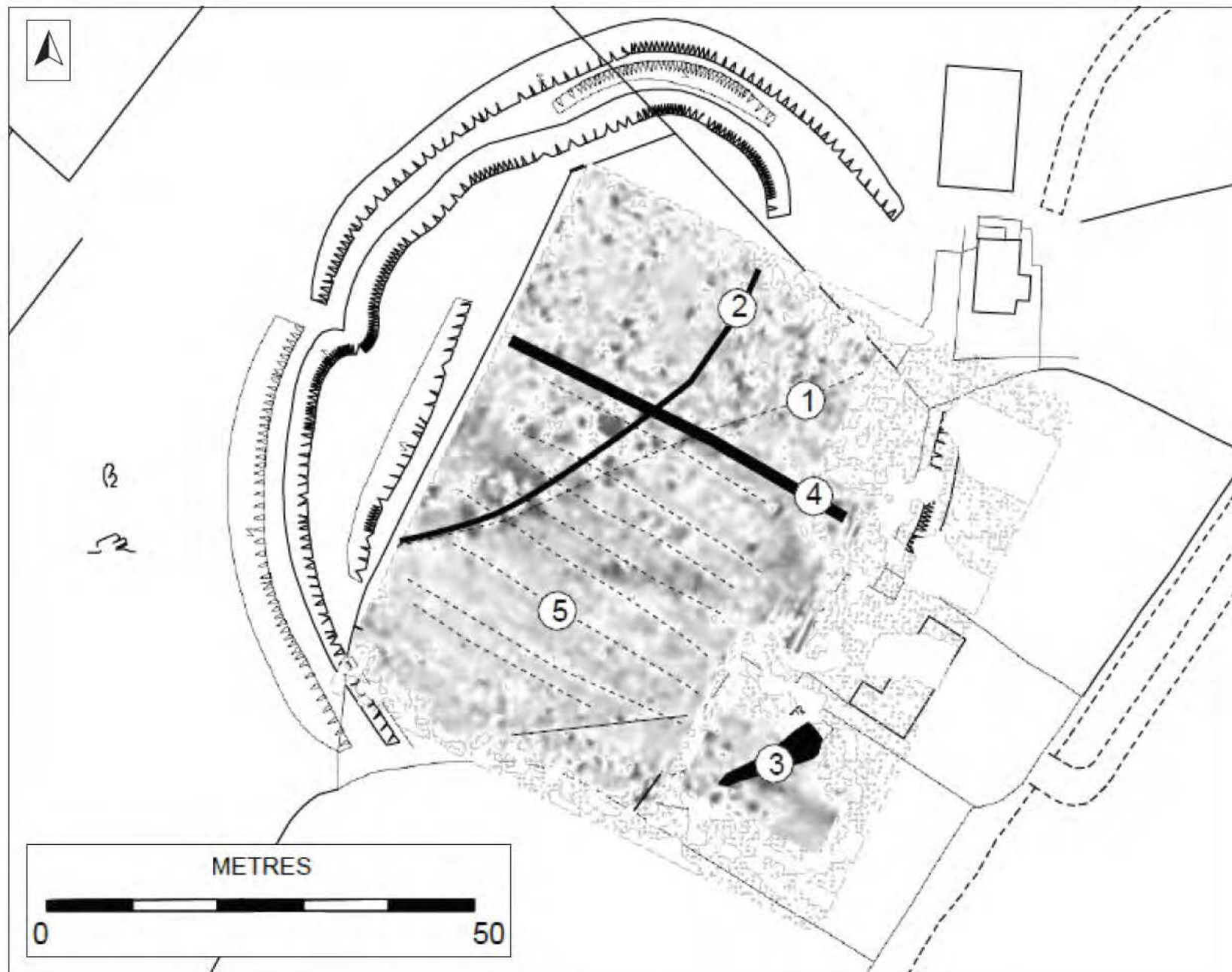


Figure 3. Gwynedd Archaeological Trust 2007 Earthwork Survey of Castell Caeron
(Source & Copyright Smith & Hopewell 2007 - GAT Report 664)



Figure 4. 1838 Tithe Map of Area Showing Pen y Castell Ucaf and Pen y Castell Isaf



Figure 5. 1888 Ordnance Survey Map Showing Pen y Castell Isaf



Figure 6. 1901 Ordnance Survey Map Showing Pen y Castell Isaf



Figure 7. 1920 Ordnance Survey Map Showing Pen y Castell Isaf



Figure 8. 1953 Ordnance Survey Map Showing Pen y Castell Isaf

6.0 Results of Archaeological Works

The excavation area was located on a slope behind Pen y Castell Isaf cottage. Previous occupants at the house had landscaped this area and had cut into the slope to create a path which was c.2m in width. The rest of this area had been used as a wooded garden and was heavily overgrown. There was also a summer house/shed with wooden decking and a laid concrete slab pathway leading to it. Vegetable bulbs noted in the top soil are indicative that there was vegetable plot on this area in the past. Plates 1 – 5 show the pre-excavation state of the development plot. It is evident from these photographs that there was no trace of earthworks/ramparts associated with Castell Caeron Hillfort visible within the area.

A roughly rectangular area of 14 meters by 6 meters was excavated into the slope at the back of Pen y Castell Isaf to a maximum depth of 1.24m. The stripped area/plate locations are shown on figure 9.

Three recognisable soil horizons were identified within the stripped area. The upper layer (01) was a top soil composed of a brown-black (organic) silty clay. It was heavily disturbed by root action from trees and large amount of onion bulbs were noted indicating an earlier vegetable patch. The layer also contained frequent small-medium sub angular stones. It was on average 0.42m in depth. This layer was very mixed and contained artefactual material dating from the modern period including tin foil and a 1980's crisp packet.

Context (02) was a subsoil layer identified beneath Context (01). It was a mid-brown clay silt layer with frequent sub-angular and rounded stones of varying size. The depth of the subsoil was 0.40m – 0.52m. This layer was also a mixed deposit which contained post-medieval material. Recovered within this layer were rim sherds of a large Buckley ware bowl together with fragments of other late 19th century pottery.

The natural (context (03)) was an orange-yellow silt clay. Due to the required development depth this deposit was partially excavated and was found to contain moderate sub-angular and rounded stone including rare large boulders. Plates 6 -9 show the site post-excavation.

No features or artefacts associated with Castell Caeron Hillfort were uncovered during the watching brief.

7.0 Discussion

No features or artefacts associated with Castell Caeron Hillfort were uncovered during the watching brief. Indeed no archaeological features at all were uncovered, and all artefacts which were recovered belonged to the late 19th century at the earliest. The presence of modern material mixed within the lower subsoil layers showed a high level of disturbance within the development area.

There is however the possibility that some of the large quantity of stone noted in contexts (01) and (02) (and visible in plates 8 & 9) could have once been part of a destroyed bank related to the Castell Caeron enclosure. It was noted during a walkover of the area outside the property boundary, that there was a low earthwork with associated loose stone running up to the dry stone wall which delineated the limits of the garden (see plates 10 & 11 which were taken from the field behind Pen y Castell Ucaf). This is presumably the feature encountered by Gwynedd Archaeological Trust during the excavation at the neighbouring property. As previously discussed this earthwork did not continue on the other side of the wall due to the landscaping of the garden area.

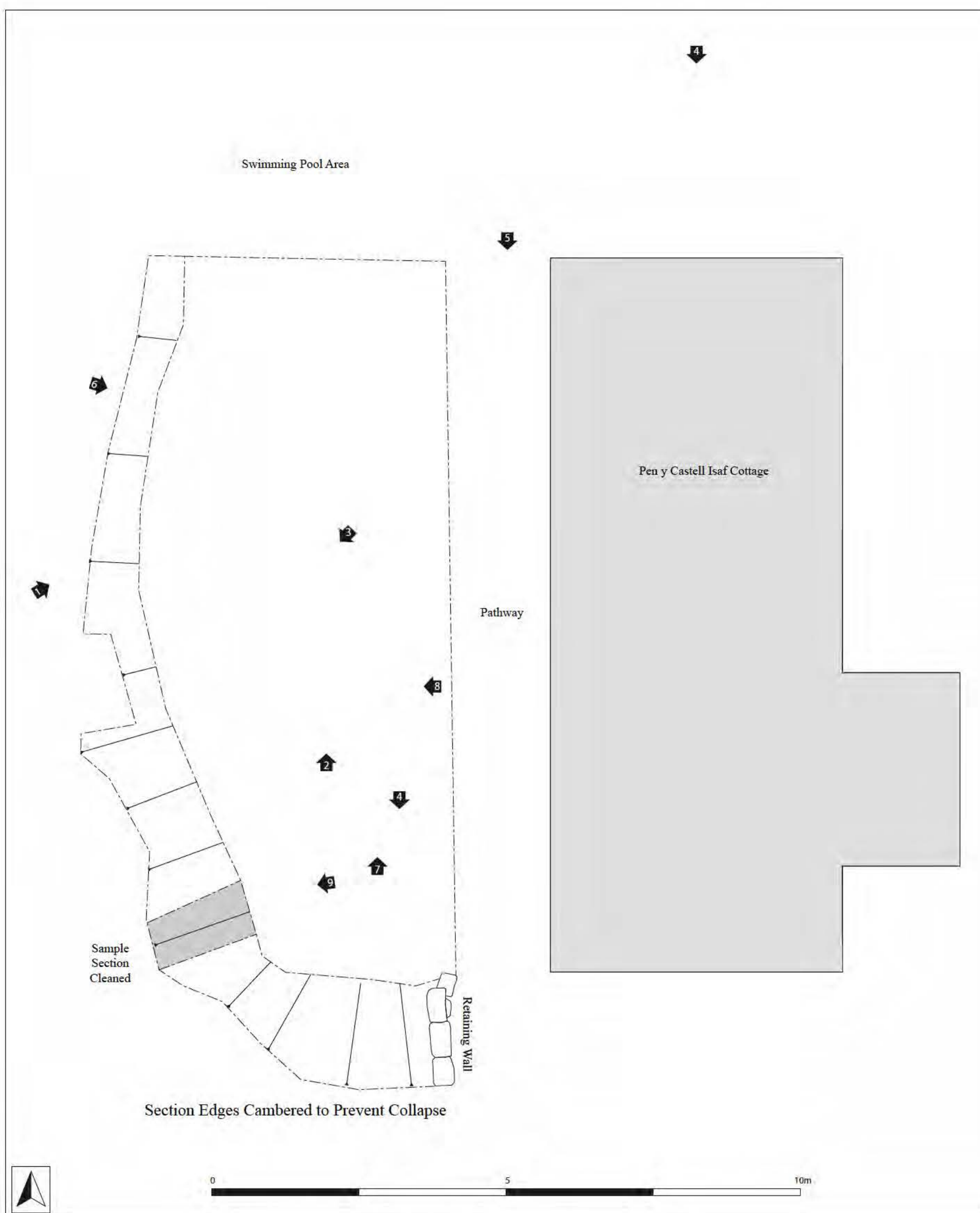


Figure 9. Post Excavation Site Plan Showing Photograph Locations



Plates 1 - 5. Pre-excavation Shots Showing Landscaping of Area Around Pen y Castell Isaf.
Disturbed Ground Seen in Plate 2 is the Backfilling of a Modern Swimming Pool



Plate 6. Site Area Following Stripping



Plate 7. Site Area Following Stripping



Plate 8. Site Area Following Stripping



Plate 9. Sample Section Showing Thin Topsoil,
Stony Subsoil & Orange Sand-Clay Natural



Plates 10 & 11. Shallow Earthwork Running Up to Property Boundary

Due to the removal of the aforementioned earthwork when the garden at Pen y Castell Isaf was landscaped by previous owners it is not possible to support or disprove the hypothesis that there was an opposing hillfort entrance in this area. All one can say with any certainty is that the earthwork did once continue into this area, but has been destroyed within the development area. It may or may not have terminated there but there were no traces of any features associated with an entrance uncovered.

8.0 Conclusion

No features or artefacts associated with Castell Caeron Hillfort were uncovered during the watching brief. Three recognisable soil horizons were identified within the stripped area – the topsoil, subsoil and natural. No archaeological features were uncovered and all artefacts which were recovered belonged to the late 19th century at the earliest. The presence of modern material mixed within the lower subsoil layers showed a high level of disturbance within the development area, as was evident from the landscaping of the area prior to the commencement of works.

9.0 Bibliography

AAF. 2007. *Archaeological Archives: A guide to best practice in creation, compilation, transfer and curation*

English Heritage. 2006. *Management Of Research Projects in the Historic Environment (MORPHE)*

Evans, R. 2010. *Pen y Castell Uchaf: Bryncroes, Gwynedd. GAT Report 852*

GAPS. 2013. *Letter dated 18th March 2014 Ref: 0318je01/D1899*

RCAHMS. 1964. *Caernarvonshire: West III: An Inventory of the Ancient Monuments in the County*. London

Smith, G & Hopewell, D. 2007. *Survey of Prehistoric Defended Enclosures in North-West Wales: Assessment of Some Possibly Early Multivallate Concentric Enclosures in Llŷn and Anglesey 2006-7*. GAT Report 664.

The Institute for Archaeologists. 1985 (Revised 2010). *Code of Conduct*

The Institute for Archaeologists. 1990 (Revised 2008). *Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology*

The Institute for Archaeologists. 2001. *Standard and guidance for the collection, documentation, conservation and research of archaeological materials*

The Institute for Archaeologists. 1994 (Revised 2008). *Standard and Guidance for Archaeological Watching Brief*

The Institute for Archaeologists. 2008. *Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives*

Walker, K. 1990. *Guidelines for the preparation of excavation archives for long-term storage*, United Kingdom Institute for Conservation (UKIC) Archaeology Section

Watkinson, D. & Neal, V. 2001. *First Aid for Finds*. London. United Kingdom Institute for Conservation of Historic & Artistic Works

Websites (All websites were consulted on 16/08/2014)

www.data.gov.uk/data/map-preview

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

www.meillionydd.bangor.ac.uk

Appendix A.

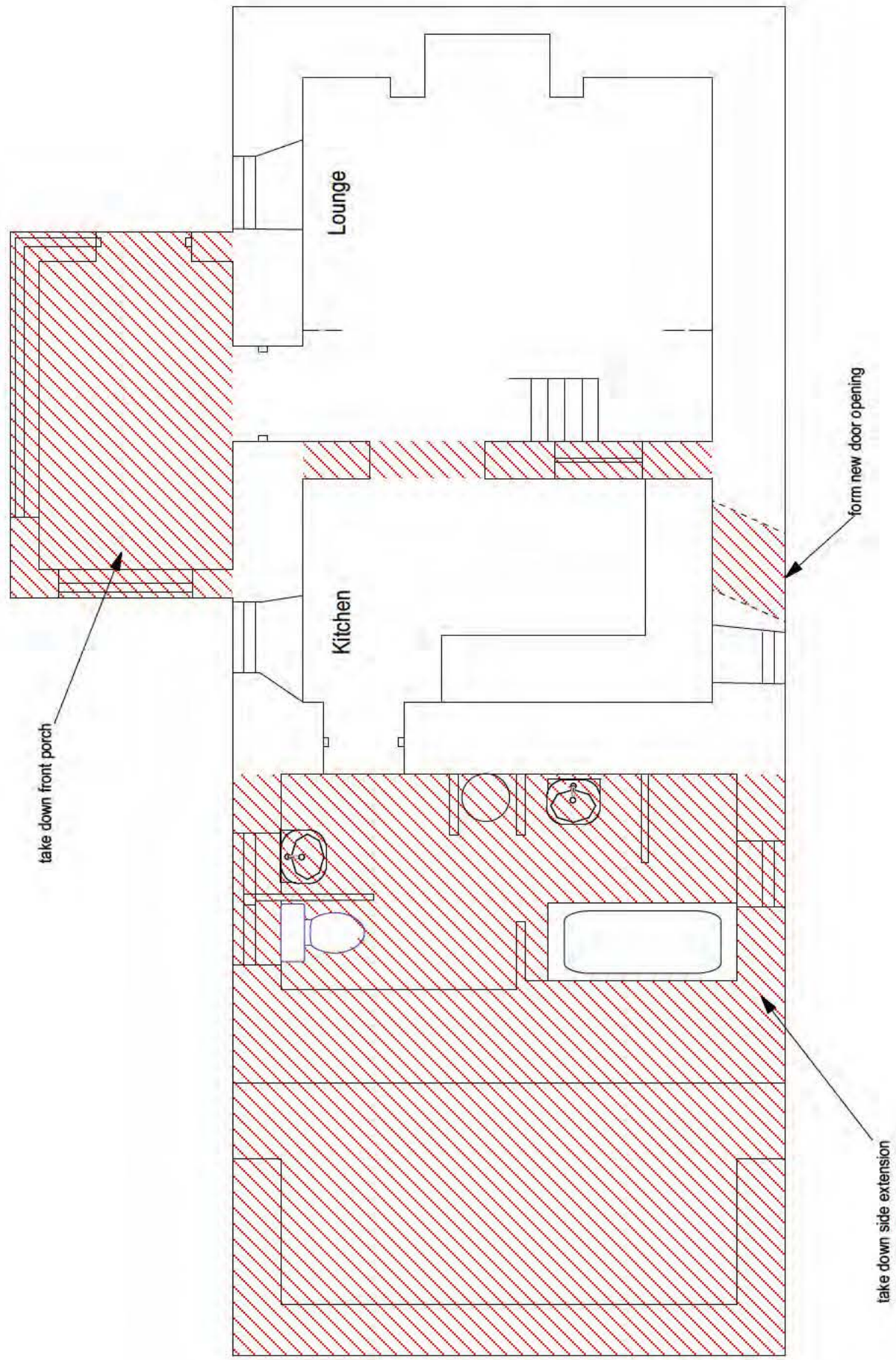
Plans/Elevations of Proposed Development

**Pen y Castell Isaf,
Bryncroes**
Ground floor (as existing)

1209/01

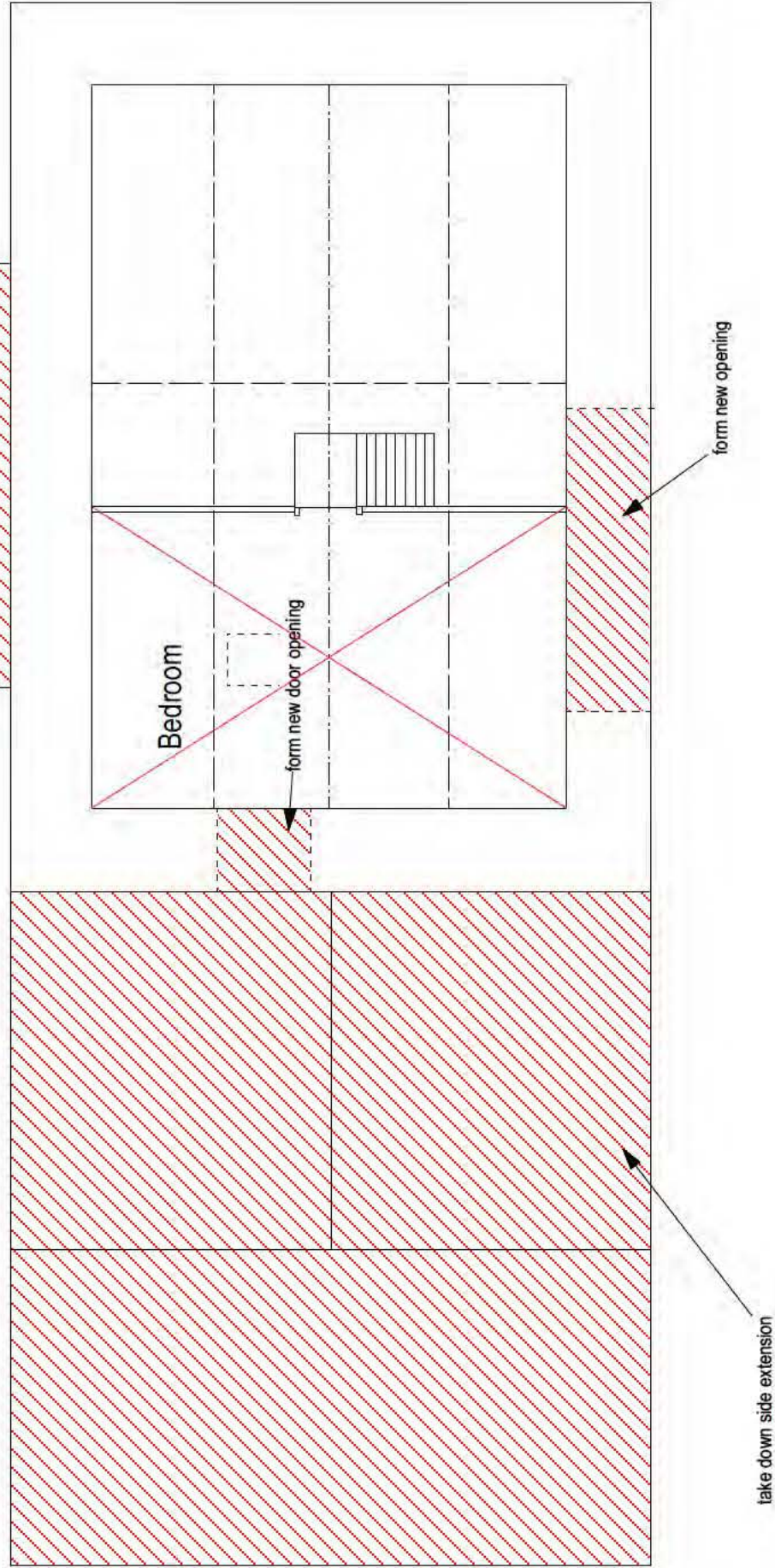
1:50

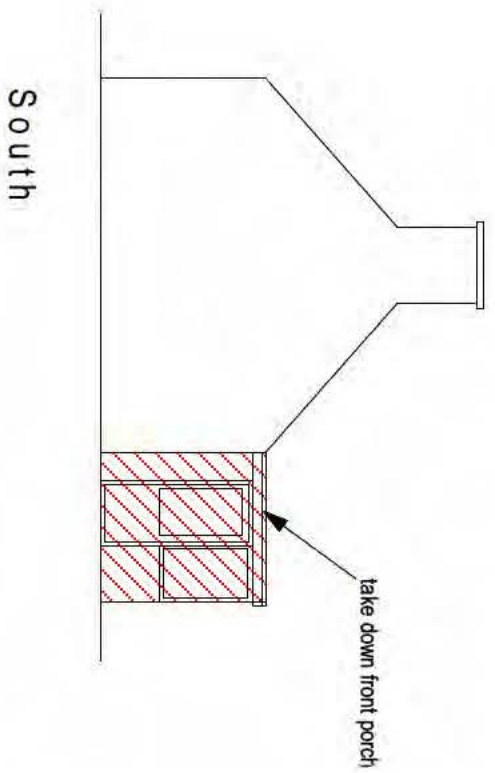
20-06-2014



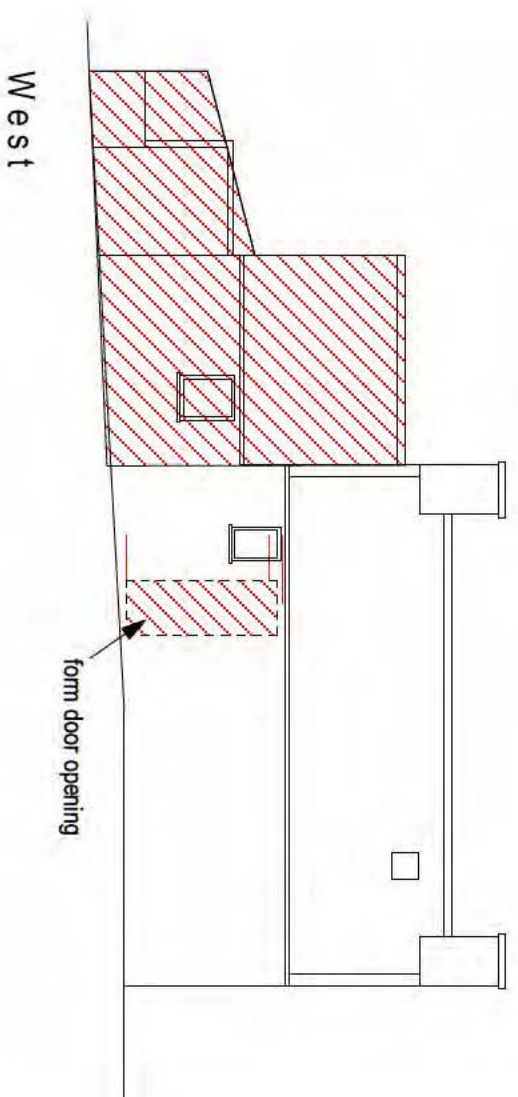
**Pen y Castell Isaf,
Bryncroes**
First floor (as existing)

1209/02
1:50
20-06-2014

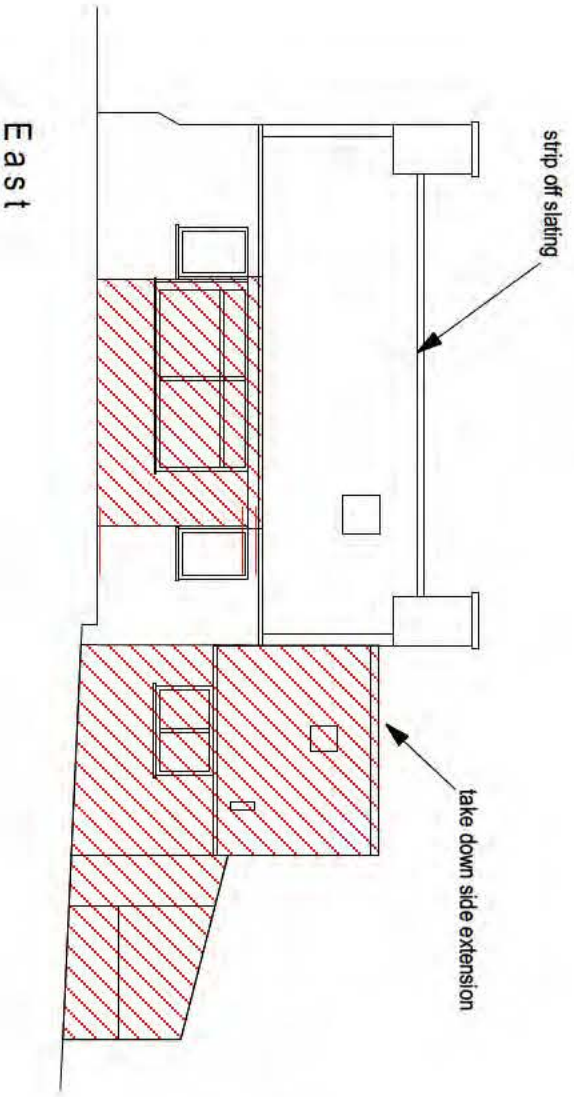




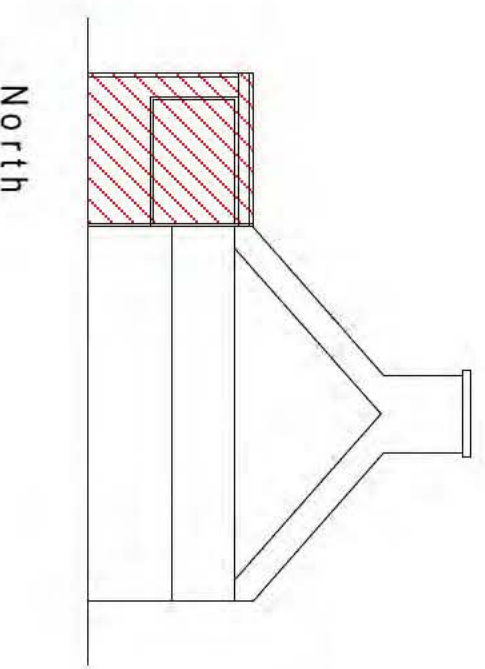
South



West



East



North

**Pen y Castell Isaf,
Bryncroes**
Elevations (as existing)

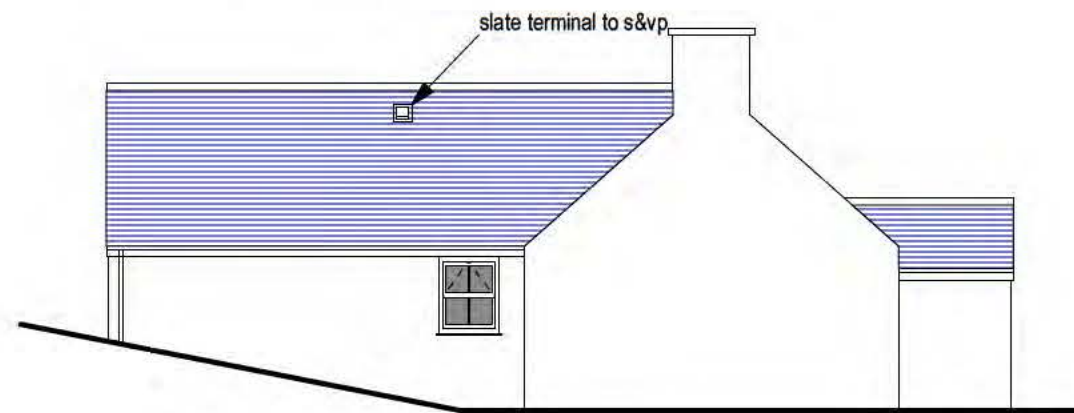
<p>Ty-Newydd cyf.</p> <p>Dylunio a rheolaeth project Design & project management</p>	<p>Ty Newydd, Ceidio, Pwllheli LL53 8UG</p> <p>Tel: 0770 925 8926 01758 720762</p> <p>ebost: gwyn@ty-newydd.com</p> <p>www.ty-newydd.com</p>
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1209/ 03

1:100

20-06-2014

100mm diam. upvc guttering and 68mm
diam. downpipes to gulley to soakaway at
least 5m from building



South



West

All windows and doors to be double glazed and draught stripped and provide a U
value of 1.6 w/m²K. Locks should not be fitted to escape windows

10000mm² openable area controllable trickle vent within frames of windows to
habitable rooms. 5000mm² to other rooms.

doors, side panels to be glazed with toughened glass to BS 6206 also windows
lower than 800mm from floor



East

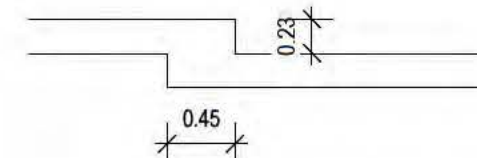
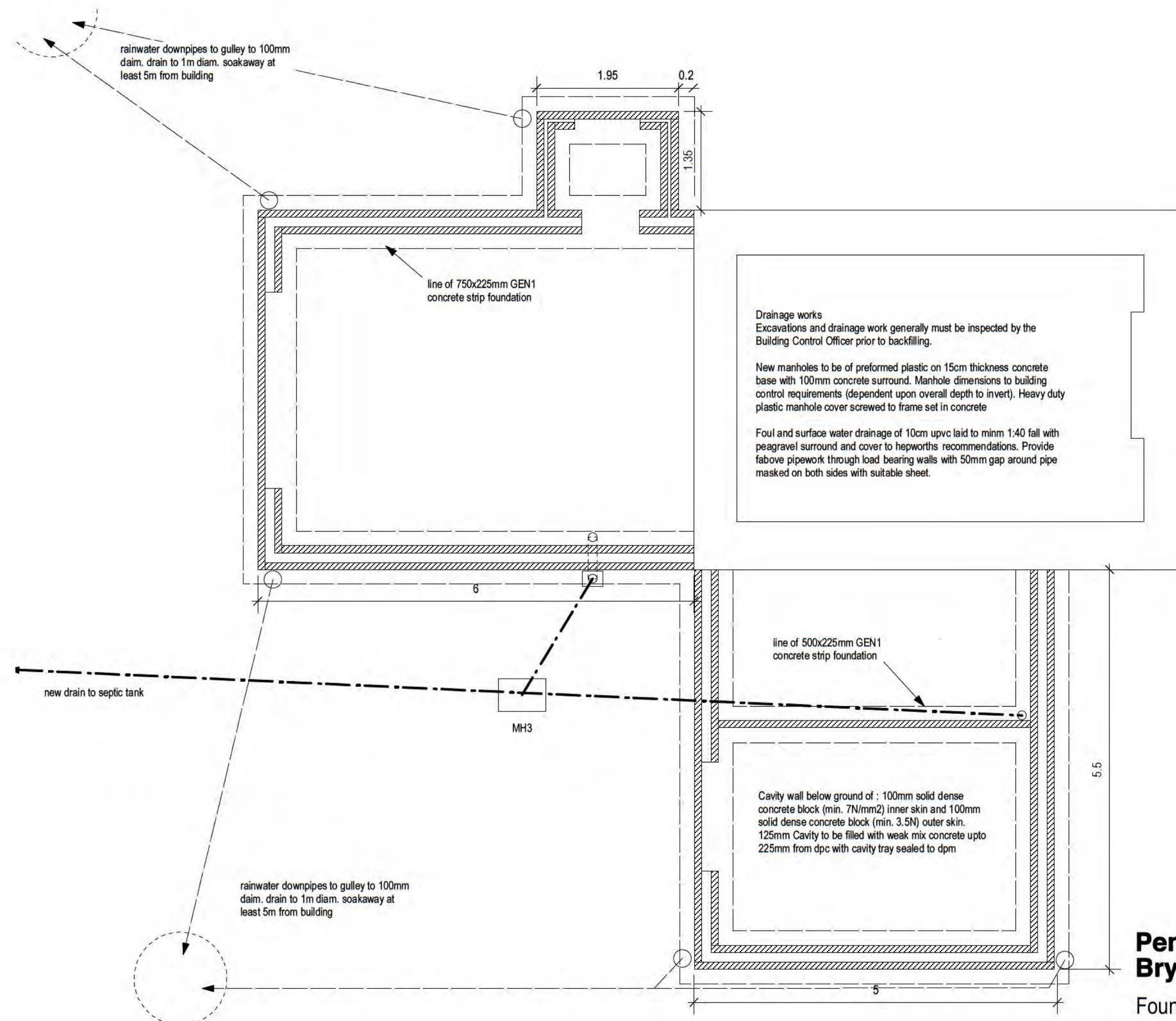


North

**Pen y Castell Isaf,
Bryncroes**
Elevations (proposed)

Ty - Newydd cyf.
Ty Newydd, Ceidio, Pwllheli LL53 8UG
Tel: 0770 925 8926 | 01758 720762
ebost: gwyn@ty-newydd.com
www.ty-newydd.com
Dylunio a rheolaeth project
Design & project management

1209/ 06
1:100
20-06-2014



Steps in foundation to be in accordance with to building control requirements

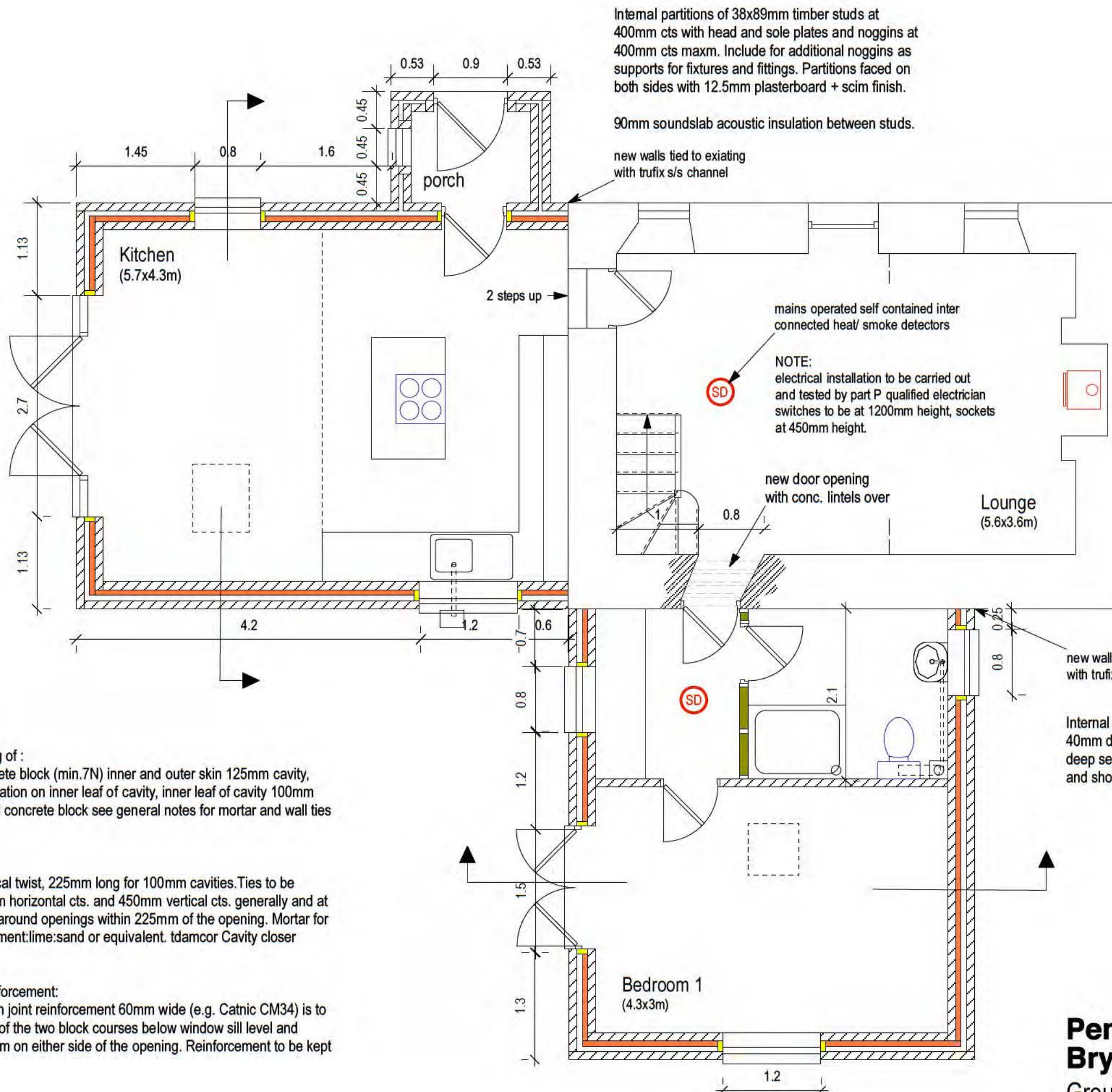
**Pen y Castell Isaf,
Bryncroes**
Founadtion/ drainage

Ty - Newydd cyf.

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Dylunio a rheolaeth project
Design & project management

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20-06-2014



Cavity wall consisting of:
100mm solid concrete block (min.7N) inner and outer skin 125mm cavity, 75mm cellotex insulation on inner leaf of cavity, inner leaf of cavity 100mm inner skin GP1 solid concrete block see general notes for mortar and wall ties to cavity wall.

Wall ties:
stainless steel vertical twist, 225mm long for 100mm cavities. Ties to be positioned at 750mm horizontal cts. and 450mm vertical cts. generally and at every block course around openings within 225mm of the opening. Mortar for blockwork: 1:1:6 cement:lime:sand or equivalent. tdamcor Cavity closer around openings.

Blockwork joint reinforcement:
Stainless steel mesh joint reinforcement 60mm wide (e.g. Catnic CM34) is to be inserted in each of the two block courses below window sill level and extend a min. 600mm on either side of the opening. Reinforcement to be kept back 25mm

**Pen y Castell Isaf,
Bryncroes**

Ground floor (proposed)

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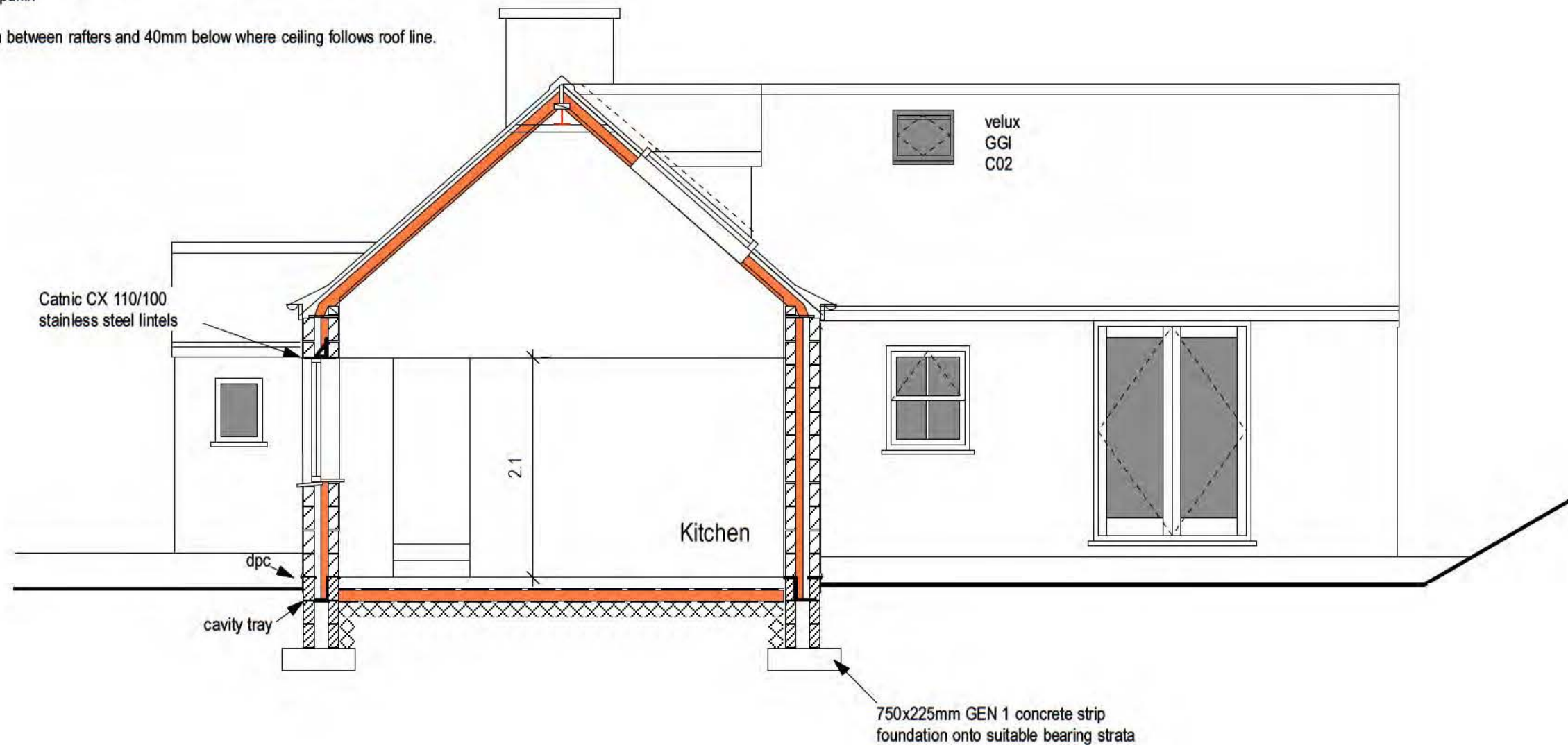
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ROOF:
natural welsh slates on 50x25mm treated timber battens on TYVEK supro underslating on 125x50mm c24 rafters at 400mm cts. 100x75mm wall plate at eaves strapped to wall at 1200mm cts. Steel ridge purlin

100mm celotex insulation between rafters and 40mm below where ceiling follows roof line.



FLOOR:
100mm power trowelled slab on 1000g visqueen dpm on 100mm celotex insulation board on 100mm C20p conc. slab on 1200g visqueen dpm on blinded 150mm hardcore well compacted. Dpm turned up at perimeter and joints taped. 25mm celotex at perimeter.

**Pen y Castell Isaf,
Bryncroes**

section b -b

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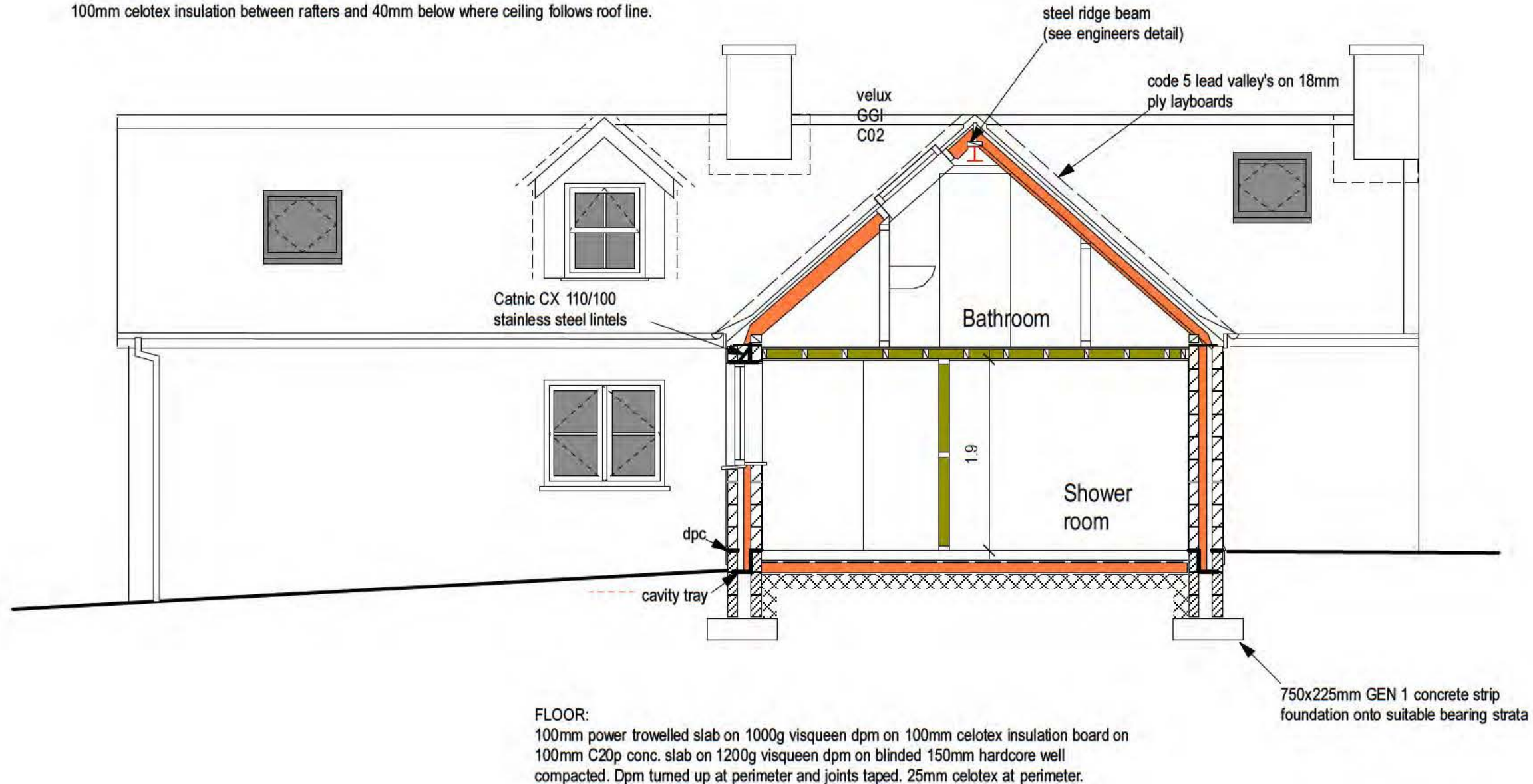
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ROOF:

natural welsh slates on 50x25mm treated timber battens on TYVEK supro underslating on 125x50mm c24 rafters at 400mm cts. 100x75mm wall plate at eaves strapped to wall at 1200mm cts. Steel ridge purlin

100mm celotex insulation between rafters and 40mm below where ceiling follows roof line.



**Pen y Castell Isaf,
Bryncroes**

section b -b

Ty - Newydd cyf.
Ty Newydd, Ceidio, Pwllheli LL53 8UG

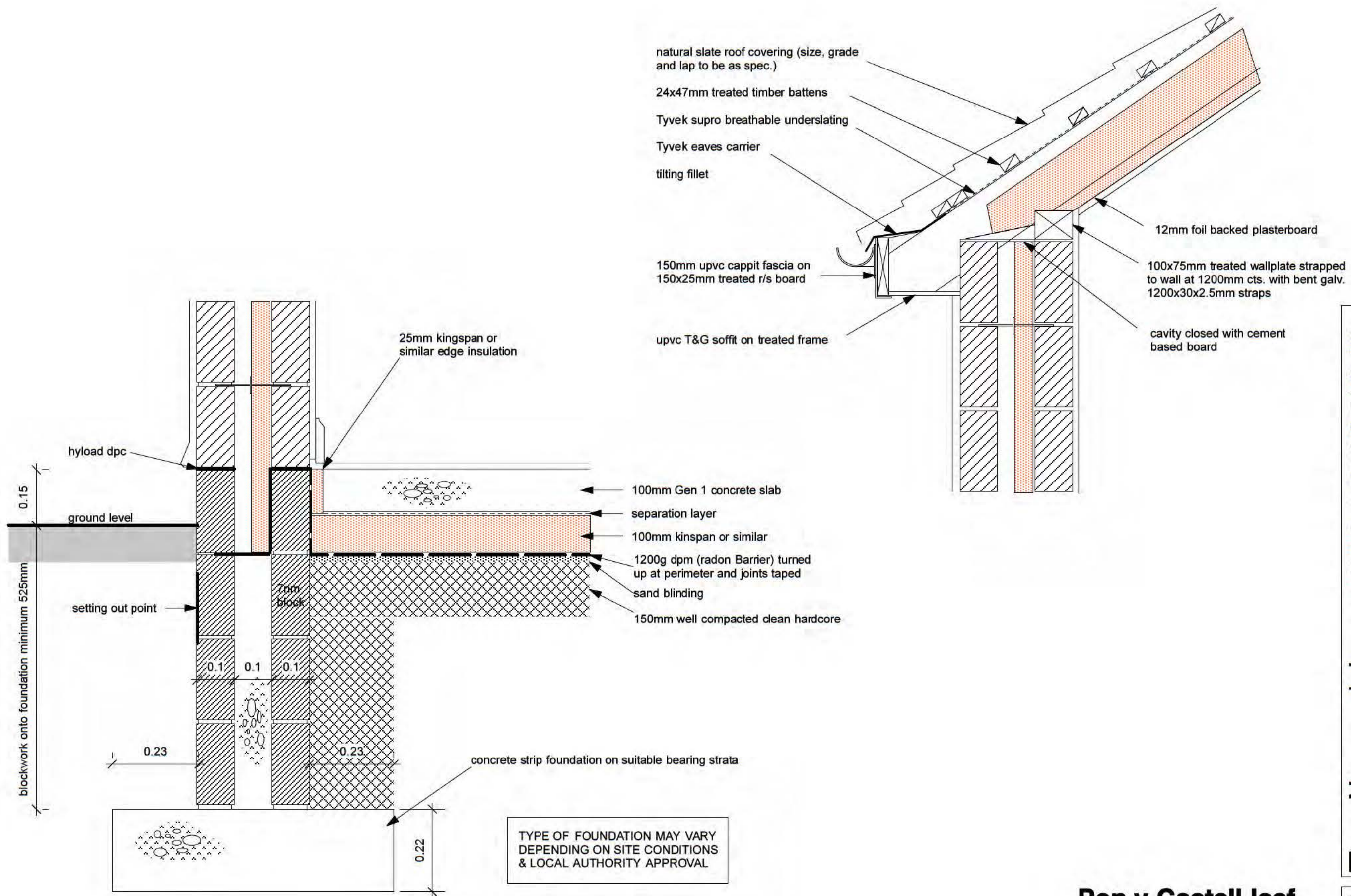
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Pen y Castell Isaf, Bryncroes

Foundation & Eaves detail

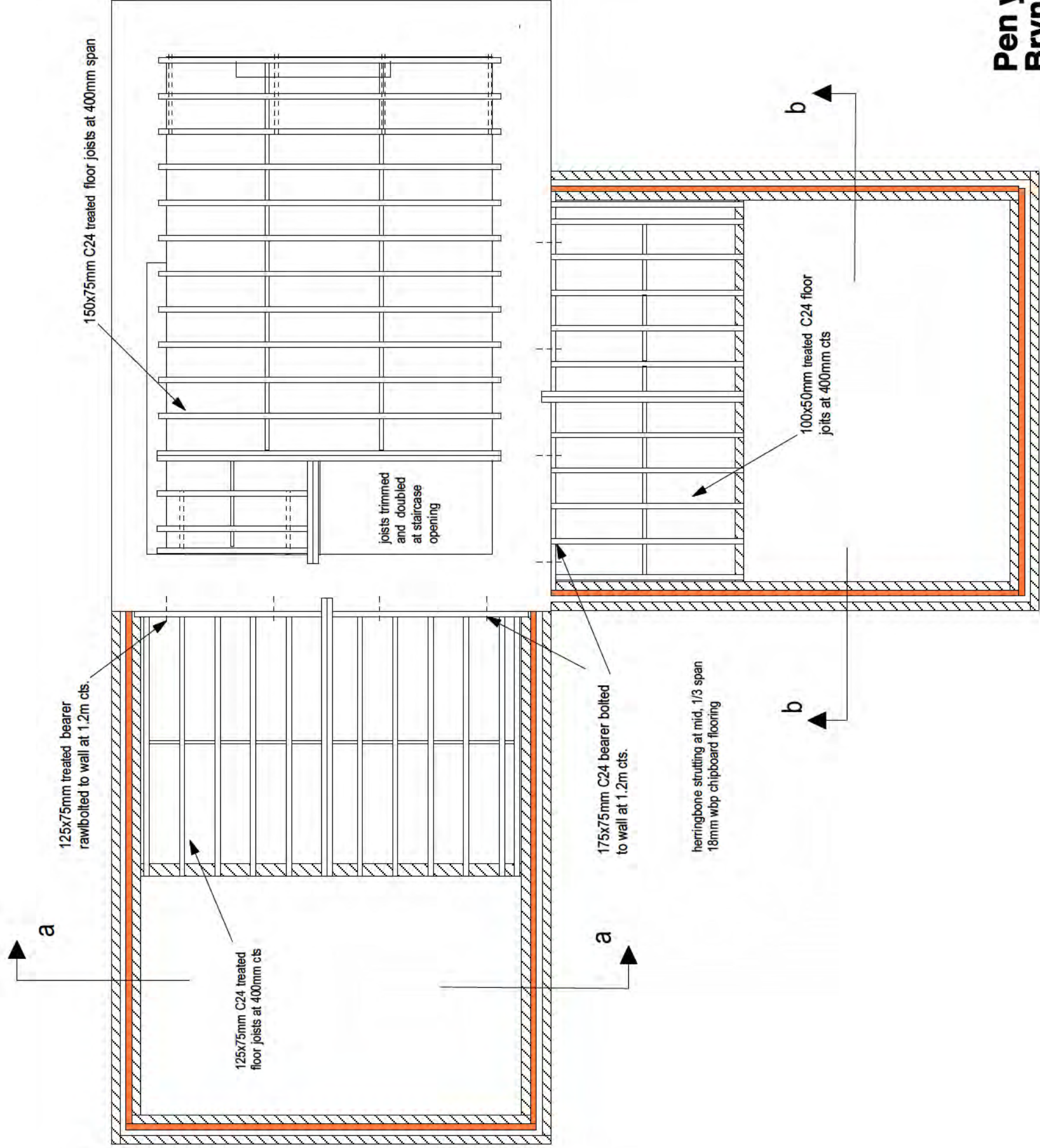
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Dylunio a rheolaeth project
 Design & project management

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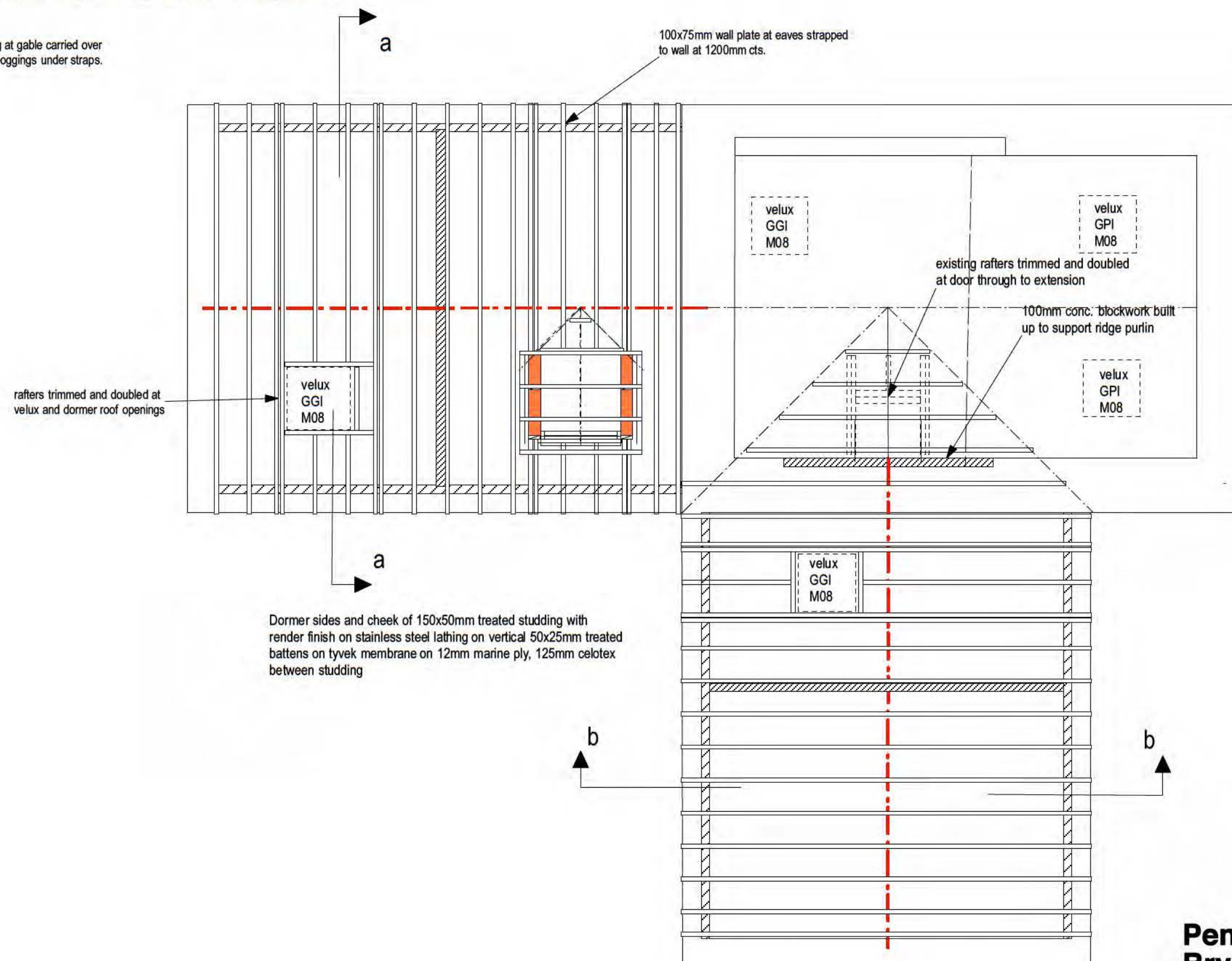


**Pen y Castell Isaf,
Bryn croes**
Floor joist layout

ROOF:
natural welsh slates on 50x25mm treated timber battens on TYVEK supro underslating on 125x50mm c24 rafters at 400mm cts. 100x75mm wall plate at eaves strapped to wall at 1200mm cts. Rafters trimmed and doubled at velux windows. Steel Ridge purlin (see engineer's detail) with timber plate bolted to top flange

100mm celotex insulation between rafters and 40mm below where ceiling follows roof line.

Galv. strapping at gable carried over 3 rafters with noggings under straps.



**Pen y Castell Isaf,
Bryncroes**
Roof layout

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20-06-2014

Appendix B.

CR77-2014 Agreed Specification for Archaeological Works at Pen y Castell Isaf

**Specification for Archaeological Works at
Pen y Castell Isaf, Bryncroes**

NGR SH 23247 30322

Report Number CR77-2014



C.R Archaeology

Compiled by C. Rees & M. Jones
on Behalf of Mr. J Poulson

Specification for Archaeological Works at Pen y Castell Isaf, Bryncroes

Planning Reference Number:

C14/0208/32/LL

National Grid Reference:

SH 23247 30322

Client:

Mr. J Poulson

Report Authors:

Catherine Rees & Matthew Jones

Report Number:

CR77-2014

Date:

18/08/2014

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Illustrations

Figure 1. Site Location Map

Figure 2. Proposed Development Plans

1.0 Introduction

C.R Archaeology have been instructed by Mr. John Poulson to conduct archaeological works at Pen y Castell Isaf in compliance with planning conditions placed on the development (Planning Reference C14/0208/32/LL). Planning permission has been granted to remove current building extensions and to erect rear and side extensions with associated drainage/foul water systems (Appendix A).

The development site is situated on the Llŷn Peninsula (Figure 1) and is located immediately adjacent to the Late Prehistoric Defended Enclosure of Castell Caeron (PRN 1234) and it is possible that Pen y Castell Isaf may have been constructed at the original main entrance to the enclosure.

Works undertaken at the neighbouring property of Pen y Castell Uchaf in 2010 showed that although there was considerable disturbance/removal of archaeological remains within the footprint of the existing building plot, part of the former outer rampart had survived and overlay a buried soil. The proposed extension to the rear of Pen y Castell Isaf will also extend into the line of the ramparts and it is unclear from available information to what extent this area has been previously disturbed.

The results from the works at Pen y Castell Uchaf demonstrated a high potential for surviving archaeological deposits with localised and confined modern disturbance. It is therefore considered that given the limited understanding of this type of monument, and the potentially significant location of the plot at the entrance to the enclosure, any surviving archaeology would be of high importance.

The site lies outside the Llŷn Area of Outstanding Natural Beauty (AONB) but is located within the Llŷn and Bardsey Landscape of Outstanding Historic Interest.

This specification has been written in response to a letter written by Development Control Archaeologist Jenny Emmett of Gwynedd Archaeological Planning Services (dated 18th March 2014 Ref: 0318je01/D1899) and a telephone call on 18th August 2014 as a methodology for an Archaeological Watching Brief with mitigation strategy for small scale excavation should archaeological remains be uncovered.

2.0 Project Aims

The aims of this element of the programme of works are to monitor all ground works associated with the proposed extension of Pen y Castell Isaf in order to assess the survival, character and date of any archaeological remains and to excavate, record and analyse any archaeological remains uncovered.

It aims to fulfil the mitigation criteria for archaeological works as specified in a letter prepared by GAPS on the 18th March 2014.

3.0 Brief 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.

The farmhouse at Pen y Castell Isaf is believed to be associated with the aforementioned house of Pen y Castell Uchaf as they both lie adjacent to a complex of regular small semi-improved fields of probable late 18th or 19th century date, bounded by dry stone walls, and the farms probably formed part of a larger property in former times that was later divided into two (Evans 2010: 3).

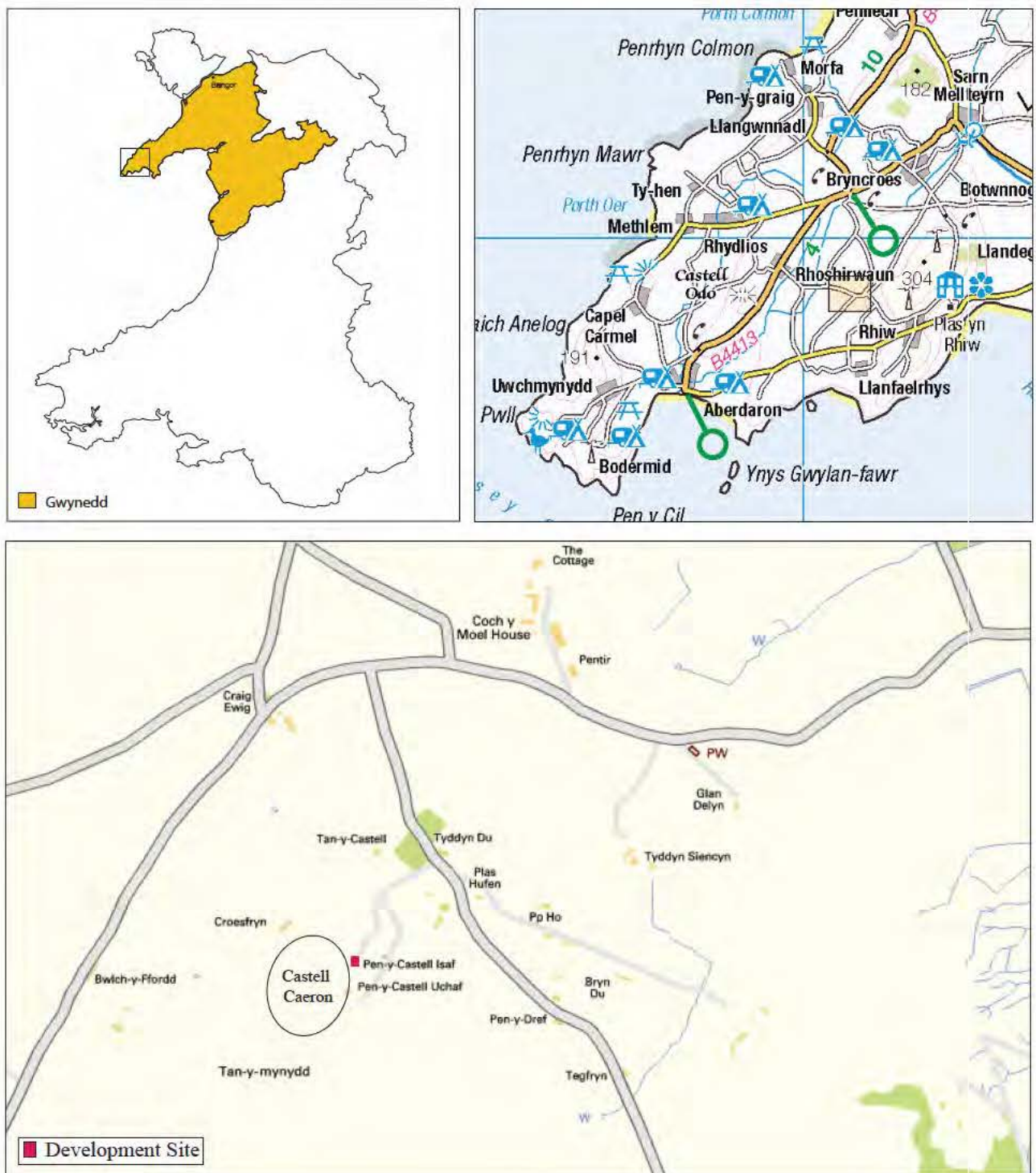


Figure 1. Location Map
 (Source: OS Open Data Mapping Contains Ordnance Survey data
 © Crown copyright and database right 2014)

The content for the following section has been taken from the RCAHMW Inventory of the Ancient Monuments of Caernarvonshire entry for Castell Caeron (RCAHMW 1964: lxxi – lxxvii, 27).

Castell Caeron is one of a number of weak double ringwork forts in Caernarfonshire which are clustered towards the tip of the Llŷn Peninsular. It is situated on a wide, natural shelf at the northern end of Mynydd Rhiw and within the fort the ground is slightly higher than the rest of the shelf.

The enclosure is oval in plan and measures c. 220ft from north-west to south-east by 250ft. It is surrounded by two stone walls c. 7ft in thickness which are positioned c. 10ft apart. Both walls have been robbed out to their base, and there are no surviving facing stones. The outer wall is destroyed around the south-east half of its circuit. The entrance, although it is thought to have been located on the eastern side of the enclosure where the wall lines have been interrupted

Also in the vicinity of the proposed development site is the Neolithic Axe Factory site of Mynydd Rhiw and a cairn on the parish boundary with Llanfaelrhys (RCAHMW 1964: 27).

3.1 Topography

Pen y Castell Isaf is located within the parish of Bryncroes on the Llŷn Peninsular. It is situated on a wide, natural shelf at the northern end of Mynydd Rhiw, immediately adjacent to Castell Caeron. The area enclosed with the circuit walls of Castell Caeron is slightly higher than the rest of the shelf and outside the fort the land falls sharply away on the north west side. It slopes more gently to the north-east and is almost level to the south west. The ground rises steeply about 100m the south-eastern side of the fort.

3.2 Geology

The bedrock is recorded as “*Llŷn Shear Zone Complex - Mylonite. Metamorphic Bedrock formed approximately 508 to 635 million years ago in the Cambrian and Ediacaran Periods. Original rocks without interpretation. Later crushed in fault zone or shear zone. These rocks have undergone low grade metamorphism, high grade regional metamorphism, or crushing in a fault or shear zone and it is not known whether they were of igneous, sedimentary or older metamorphic origin*” (www.mapapps.bgs.ac.uk).

The superficial geology is recorded as “*Till, Devensian - Diamicton. Superficial Deposits formed up to 2 million years ago in the Quaternary Period. Local environment previously dominated by ice age conditions. These rocks were formed in cold periods with Ice Age glaciers scouring the landscape and depositing moraines of till with outwash sand and gravel deposits from seasonal and post glacial meltwaters*” (www.mapapps.bgs.ac.uk).

4.0 Scheme of Works – Methodology

The methodologies employed will conform to The Institute for Archaeologists: *Standard and Guidance for Archaeological Watching Brief* (Revised 2008) and The Institute for Archaeologists: *Standard and Guidance for Archaeological Excavation* (Revised 2008).

4.1 Desk Based Research

A complete and coherent history of the site will be compiled utilising information sourced from Gwynedd and Bangor University 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 IfA Standards and Guidance for Historic Environment Desk Based Assessment (IfA 1994 (Revised 2009)).

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 associated with the erection of the building extensions at Pen y Castell Isaf. This will include any topsoil and subsoil stripping, the excavation of house foundations and all new service trenches. The areas will be stripped to the required development depth, except in the instance that archaeological remains are encountered. Should archaeological remains be present – either in the form of buried remains or as visible earthworks then the site is to be excavated to the level of the underlying natural.

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 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 (Tuesday 26th August) and if any significant archaeological features are uncovered. A site visit visit will be arranged to allow for the inspection of works.

All archaeological remains/potential archaeological remains identified during works 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. Where possible plans, elevations and sections will contain grid and level information 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 will be deposited in Bangor Museum. 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.

Any archive/artefactual material created/discovered during this archaeological project will be deposited in Bangor Museum. Archive material will be deposited in accordance with the museum's terms and conditions for archive deposition.

4.3 Timetable for Proposed Works

Groundworks will commence on Tuesday 26th August 2014 and will be carried out on a day rate basis with staff attending 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 IfA AIfA level. C.Vs for all staff employed on the project can be provided on request. All projects are carried out in accordance with IfA *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
- Sufficient historical and archaeological detail to allow interpretation of the results and to support assessment of significance
- 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 fieldwork.

Should the site yield a positive result a short article will be submitted to the Archaeology in Wales Journal and the site archive including copies of all photographs in RAW and Tiff format will be deposited the local museum.

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

AAF. 2007. *Archaeological Archives: A guide to best practice in creation, compilation, transfer and curation*

English Heritage. 2006. *Management Of Research Projects in the Historic Environment (MORPHE)*

Evans, R. 2010. *Pen y Castell Uchaf: Bryncroes, Gwynedd. GAT Report 852*

GAPS. 2013. *Letter dated 18th March 2014 Ref: 0318je01/D1899*

RCAHMMW. 1964. *Caernarvonshire: West III: An Inventory of the Ancient Monuments in the County*. London

The Institute for Archaeologists. 1985 (Revised 2010). *Code of Conduct*

The Institute for Archaeologists. 1990 (Revised 2008). *Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology*

The Institute for Archaeologists. 2001. *Standard and guidance for the collection, documentation, conservation and research of archaeological materials*

The Institute for Archaeologists. 1994 (Revised 2008). *Standard and Guidance for Archaeological Watching Brief*

The Institute for Archaeologists. 2008. *Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives*

Walker, K. 1990. *Guidelines for the preparation of excavation archives for long-term storage*, United Kingdom Institute for Conservation (UKIC) Archaeology Section

Watkinson, D. & Neal, V. 2001. *First Aid for Finds*. London. United Kingdom Institute for Conservation of Historic & Artistic Works

Websites (All websites were consulted on 16/08/2014)

www.data.gov.uk/data/map-preview

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