

**Results of Archaeological Works at**  
**Barracks Cottage, Penmon, Anglesey**

NGR SH 62909 80638



**Report Number CR105-2016**



**C.R Archaeology**

Compiled by Catherine Rees  
on Behalf of Mr D. Klein

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## **Results of Archaeological Works at Barracks Cottage, Penmon, Anglesey**

<b>Planning Application Number:</b>	35C289
<b>National Grid Reference:</b>	SH 62909 80638
<b>Client:</b>	Mr D. Klein
<b>Report Author:</b>	Catherine Rees
<b>Report Number:</b>	CR105-2016
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## 1.0 Introduction

C.R Archaeology were instructed by Mr D. Klein to conduct archaeological works at Barracks Cottage, Penmon, Anglesey (figure 1) in compliance with conditions placed upon his planning application.

Planning permission has been granted for the restoration of Barracks Cottage to form a single dwelling house together with associated access, services and parking (appendix a). It is proposed that the restoration of the barracks building will be as close to the original design as is practicable, particularly in terms of the external features. The bell tower, which was a prominent feature of the structure, will be reinstated using the original carved limestone which is still on site.

Two changes are proposed to the existing external openings. The western gable, where the bell tower is located, previously had a large window opening. It is believed that this window contributed to the instability of this gable end and this opening will therefore be closed in order to strengthen the elevation. The form of the opening will however be retained to show how the building developed. To compensate for this closure a new opening will be created on the southern, front elevation which will match the existing window.

A garage for two vehicles is to be erected to the north-east of the house. The garage will be orientated to present the narrow frontage to the principal elevation to minimise impact. It has been designed with a pitched natural slate roof and rendered walls. The plot curtilage will be marked by timber post and rail fencing with a timber gate to delineate it from the grazing area.

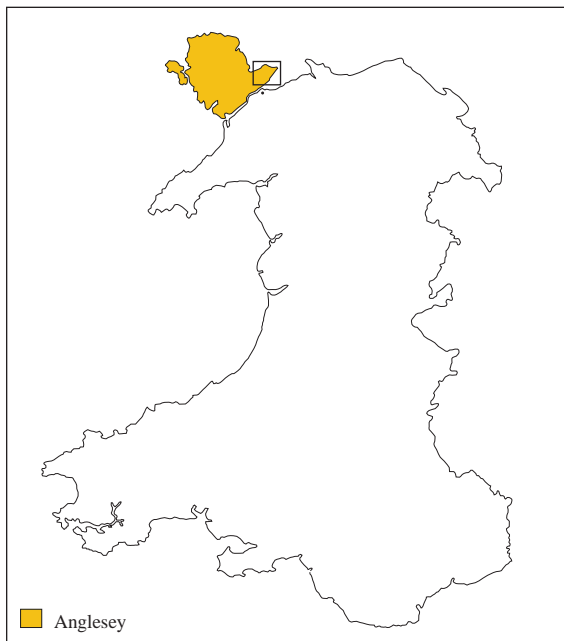
The proposed development is located within the Isle of Anglesey Area of Outstanding Natural Beauty and the the Penmon Landscape of Outstanding Historic Interest (HLW (Gw) 15). It is within 400m of Scheduled Ancient Monument AN044 – the Penmon Deer Park enclosed hut circle group, within 200m of Scheduled Ancient Monument AN061 – Penmon Dovecot, and within 150m of Scheduled Ancient Monuments AN062 (Penmon Priory) and AN602 (St Seiriol's Well).

A Specification for Archaeological Works (see appendix a) was written with reference to a letter written by Development Control Archaeologist Jenny Emmett of GAPS (January 2011) and email/telephone correspondence during July & August 2015 as a methodology for a programme of works.

These works comprised a Level 3 Building Recording on the cottage prior to any works being undertaken on site, followed by a supplementary photographic record of the cottage following the clearance of the loose material and vegetation within the building. This allowed a detailed record of the building interior to be made as it was unsafe to enter the building prior to the clearance of the interior and the erection of scaffolding.

The first phase of works was the creation of a Level 3 Building Record of the structure as it stood to record the building prior to any work being undertaken. This phase included historic/archival research and the compilation of a photographic record of the cottage and surrounding area. The second phase of works was undertaken following the clearance of debris and vegetation from within the cottage. This allowed for the full photographic recording of the building.

Due to the location of this building on an area of made ground and the utilisation where possible of existing pipes was not considered to be necessary to conduct a watching brief on the services associated with the development. Concern had been expressed over a possible re-routing of the access track to the property and the sourcing of stone to be utilised in the restoration. It has since been confirmed that there is to be no change to the existing access route which is to be resurfaced to provide suitable vehicular access to the cottage.



**Figure 1. Site Location Map**

(Source: OS Open Data Mapping. Contains Ordnance Survey data © Crown copyright and database right [2015])

Modern building material is to be used to rebuild internal walls and when rebuilding the gable end original stone will only be used for exterior facing. It is therefore highly unlikely that there will be a need to source additional stone. However should this eventuality arise then further permissions for any quarrying required will be sought separately.

## **2.0 Project Aims & Objectives**

The aim of this programme of works was to create a Level 3 Building Record of the derelict building prior to its restoration.

It aimed to fulfil the mitigation criteria for undertaking an Archaeological Building Recording as specified in the ClfA Standard and Guidance documents (2014).

The objectives of the archaeological programme were to provide an archive record of the building; to increase understanding of the site's history, development and significance and to make available information about the archaeological resource existing on the site.

## **3.0 Scheme of Works - Methodology**

The archaeological works were conducted in phases and each is detailed separately below.

### **3.1 Scheme of Works – Methodology for Building Recording**

The methodology employed conformed to the requirements for a Level 3 Building Record as specified in *Understanding Historic Buildings: A Guide to Good Recording Practice* (Historic England 2016) and The Chartered Institute for Archaeologists: *Standard and Guidance for the Archaeological Investigation and Recording of Standing Buildings or Structures* (2014).

The following points are detailed in *Understanding Historic Buildings: A Guide to Good Recording Practice* (Historic England 2016).

The record created for the site consists of:

Written Account	Points 1-3, 5-13, 15-18, 21 & 22
Drawings	Points 1-2, 7-9
Photography	Points 1-2, 4-5 & 7.

#### **3.1.1 Desk Based Research**

A history of the site was compiled utilising information sourced from Anglesey, Caernarfon and Bangor University Archives. A map progression was undertaken along with a general archival research. Historic newspapers, census records and web resources were also utilised.

The works were conducted in accordance with the ClfA Standards and Guidance for Historic Environment Desk-based Assessment (2014) and includes the information required to fulfil points 1-3, 5-13, 15-18, 21 & 22 as specified in *Understanding Historic Buildings: A Guide to Good Recording Practice* (Historic England 2016).

This material forms the historical background of this archaeological report. The report also includes the results of the photographic survey and an additional compact disc containing all site images in Tiff format.

### 3.1.2 Drawn Survey

Architects plans and elevations of the building were produced by Plan Consult Design Solutions (see appendix a). These drawings have been utilised to fulfil points 1, 2 & 7 as specified in “*Understanding Historic Buildings: A Guide to Good Recording Practice*” (Historic England 2016). Location plans and historical material were produced/sourced by C.R Archaeology to fulfil criteria 8-9 in the aforementioned document.

### 3.1.3 Photographic Survey

A photographic survey of the building was undertaken. This includes:

- 1) A photographic survey of the exterior including general shots of the site environs - includes a basic record of the associated quarry area
- 2) A photographic survey of the interior of the cottage

At the time of the initial site visit the building interior was overgrown and obscured by vegetation, fallen building rubble and general material which has accumulated on the site. This led to the compilation of the photographic record being undertaken in stages. An initial visit was made to record the building prior to any works taking place, and a further visit was made following the clearance of the building interior.

The methodology employed conformed to the requirements of photographic recording to the equivalent of a Level 3 Survey, as specified in *Understanding Historic Buildings: A Guide to Good Recording Practice* (Historic England 2016) and consists of works specified in points 1-2, 4-5 & 7.

#### 3.1.3.1 Equipment

The photographic survey was undertaken using a 13.1 mega-pixel Sony Alpha 350 and a 20.1 mega-pixel Sony Alpha58 digital camera with a variety of standard and other lenses using a tripod where necessary. Images were captured in RAW format for later processing into high resolution JPG and TIFF files.

Where possible all exterior and interior elevations of the building were photographed with scales from ground level. Additional photographs were taken detailing important architectural features and the general setting of the site.

### 3.2 Archive Compilation

All records created during the fieldwork were checked for consistency and accuracy and 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).

### 3.3 Timetable for Proposed Works

An initial site visit was made on 4<sup>th</sup> August 2015. A second visit was made on 18<sup>th</sup> October 2016. Further time was allotted to archival research, report compilation and site archiving. Gwynedd Archaeological Planning Services were informed of the exact site days to allow monitoring of works.

### **3.3.1 Staffing**

The project was managed by Catherine Rees (BA, MA, PgDip HEC, MCIfA).

All projects are carried out in accordance with CIfA *Standard and Guidance* documents.

### **3.3.2 Monitoring**

The project was subject to monitoring by Gwynedd Archaeological Planning Services. The monitor was given prior notice of the commencement of the fieldwork. GAPS were notified of the commencement dates for archaeological site work.

### **3.3.3 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 operative level and carry a Construction Related Organisation (CRO) White Card for Archaeological Technician (Code 5363).

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

### **3.4 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 combines the results of the various phases of works and contains:

- A copy of the design brief and agreed specification
- A location plan
- A descriptive and interpretive written account of the building, building history and building phases
- Architects and historical plans and elevations (where possible)
- A plan illustrating the location and direction of any photographs or drawings
- A full bibliography of sources consulted
- An archive compact disc

The report details the results of the Level 3 Building recording and combines the results of the pre-commencement photographic survey, photographs taken following the clearance of the buildings with the archival research.



Copies of the reports 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.

A summary of the work will be published in the Archaeology in Wales Journal.

### **3.4.1 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 Geographical and Geological Context**

### **4.1 Topography**

The site is located approximately 120 metres to the south west of St Seiriol's Church and Priory at Penmon, Anglesey. The building occupies an elevated position on a hillside above the road which leads to the Church, former Priory and dovecote and the road which leads to Penmon Point. It is on an artificially levelled plateau and the remains of the limestone quarry associated with the barracks building are located nearby.

### **4.2 Geology**

The bedrock geology at the site is described as "*Loggerheads Limestone Formation - Limestone. Sedimentary Bedrock formed approximately 331 to 335 million years ago in the Carboniferous Period. Local environment previously dominated by shallow carbonate seas. These rocks were formed in warm shallow seas with carbonate deposited on platform, shelf and slope areas; often rich in corals and shelly faunas. May include evaporites where seawater was trapped and salts concentrated by evaporation*". The superficial geology strata 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.bgs.ac.uk](http://www.bgs.ac.uk)).

## **5.0 Historical Background**

Within the vicinity of the proposed development site lie a number of significant archaeological sites of Iron Age/Romano British, Early Medieval and Medieval dates together with the considerable remains of the quarrying industry which together, with ecclesiastic and agriculture use, were to form the economic focus for this area from at least the 10<sup>th</sup> Century ([www.heneb.co.uk/hlcpenmon/limestonequarries.html](http://www.heneb.co.uk/hlcpenmon/limestonequarries.html)).

The proposed development is located within the Isle of Anglesey Area of Outstanding Natural Beauty and the the Penmon Landscape of Outstanding Historic Interest (HLW (Gw) 15). It is within 400m of Scheduled Ancient Monument AN044 – the Penmon Deer Park enclosed hut circle group, within 200m of Scheduled Ancient Monument AN061 – Penmon Dovecot, and within 150m of Scheduled Ancient Monuments AN062 (Penmon Priory) and AN602 (St Seiriol's Well).

Due to the localised nature of the works and the minimal below ground interventions planned the historic and archaeological background of the area will not be discussed further and the historical background will concentrate on Barracks Cottage and the associated quarrying.

The quarrying of limestone and gritstone has been undertaken at Penmon since the Medieval period. The scale of works was industrialised in the Nineteenth Century when the exceptionally fine quality of the material became sought after for large public buildings and infrastructure projects both on the Isle of Anglesey and beyond ([www.heneb.co.uk/hlcpenmon/limestonequarries.html](http://www.heneb.co.uk/hlcpenmon/limestonequarries.html)).

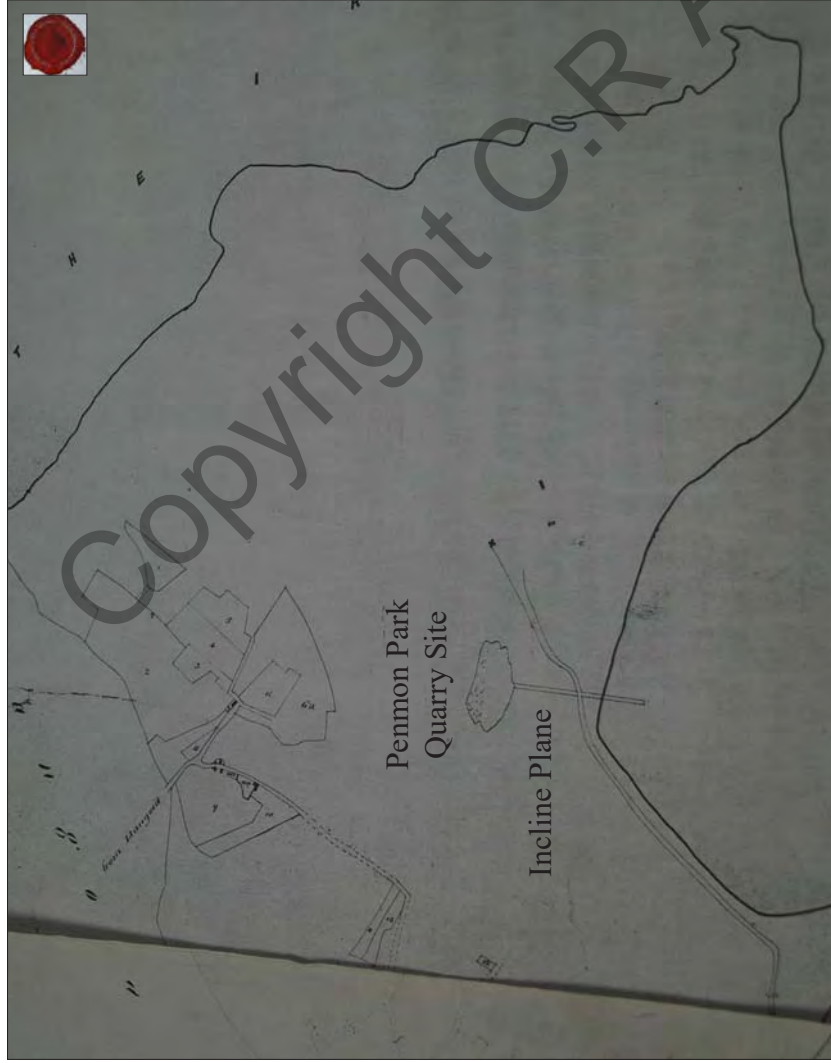
The quarry which Barracks Cottage is associated with was given a number of different names throughout the period when it was in use including Penmon Park Quarry, Bulkeley Quarry and Marble Quarry. In order to avoid confusion the name Penmon Park Quarry will be used in this document with reference made to periods when another name is adopted.

The earliest references to there having been quarry barracks at Penmon were found in relation to the extraction of stone for Thomas Telford's London to Holyhead Road – particularly for use in the Menai Suspension Bridge. An account written in 1833 by Lewis Morris describes how works commenced in 1818. He states "*quarries of limestone, both of dark and mottled colour, were opened at Penmon Point, the north-eastern extremity of Anglesey, for the erection of the piers, &c.; railways of small extent for conveying the stone, carpenters' and smiths' shops, a storehouse, office, kiln for burning lime, and quays for the vessels to unload, were soon completed; barracks were erected for the accommodation of the men employed in the quarries*" (Morris 1833).

We know very little about these barracks or their occupants but it is likely that these dwellings would have housed itinerant workers following the scheme along with labour from the surrounding districts. It would seem unlikely in this instance that the workers were commuting on a weekly basis such as was found at the more famous Anglesey Barracks at Dinorwic Quarry. This is supported by the records from a court case which appeared before magistrates in July 1823 in which the wives of two quarry workers were both ordered to keep the piece following an altercation (Anglesey Archives WQ/S/1823/T/224). Ellin Blackman and Margaret Grierson were listed as living at the barracks and it is evident that families as well as the quarry workers were housed there.

We do not have any sources which describe or illustrate the barracks but by looking at other similar sites in the area we can build up a picture of the conditions which were likely encountered. In his work on the industrialisation of North Wales David Gwyn states "*the provision of accommodation within or near the quarry premises was considered one of the distinguishing features of the industry. Though they were referred to as 'barracks' (in Welsh, barics), they were very far removed from military barracks or the comfortable arrangements which might be found in a German mine. Where individual buildings can be identified from census records, it is often clear that particularly in the expansionist years of the late 1860's and early 1870's that people were often living in the most cramped conditions. Typically the architecture of a barracks was little different from a vernacular row, sometimes of two storey, 'industrial' housing*" (Gwyn 2006: 68). He adds that these buildings were often situated in the working area of the quarry and were often a row of cubicle like dwellings. Little provision was made for families and he is only able to cite one example in which there is a school erected for the children of the quarrymen (ibid).

The works on the Menai Suspension Bridge were completed in 1826 and it is unclear as to how long the barracks remained occupied after these works were completed. No record post-dating 1826 was found which mentioned these barracks and there are no barracks building shown on the Tithe Map of 1847 (figure 2) or any mention of a barracks building (or series of dwellings with quarrymen in occupation which would suggest a barracks row) made in either the Tithe listings or in the slightly earlier 1841 census.



**Figure 2 (Above).** 1847 Tithe Map Showing the Penmon Park Quarry  
(Source: Anglesey Archives)

**Figure 3 (Left).** Extract from 1874/5 Promotional Material for the  
Newly Formed Anglesea (Penmon) Marble Quarry Company Limited  
(Source: Anglesey Archives WDAE/128)



An examination of the 1841 census was made and it is evident from this document that there has been a decline in the number of men employed at the various quarries. Most occupations listed on the census relate to agricultural work with farmers and agricultural labours numerically dominant. Also listed are wheelwrights, pilots and painters along with a small number of quarrymen and stone masons.

The 1847 Tithe map shows that the quarry and incline plane associated with the works at Penmon Park Quarry had been extensive and it would seem highly likely that the barracks could have been situated here. There are no other quarry workings shown on this map and it is possible that this was the only one which was active at this time.

The census of 1851 also makes no mention of a barracks building but there has been an increase in the number of quarrymen and stone masons listed. It must however be noted that they are still outnumbered by agricultural labourers and seamen. This situation is mirrored in the 1861 census which records a large rise in the number of pilots listed. Shipping appears to be transporting a greater quantity of goods – presumably including stone. Interestingly there is a decline in the number of quarry workers listed in the 1871 census and this decline may be related to problems with the quarry which led to a redevelopment phase.

This hypothesis is supported by information included in a prospectus produced by the Anglesea (Penmon) Marble Quarries Company Ltd in 1874 (figure 3). This document contained a series of reports which were commissioned to detail the previous high profile customers of the quarry and the buildings which have been built from its stone, to attest to the quality and quantity of the limestone at the quarry and to describe the current state of the quarry and scope for improvement (Anglesey Archives WDAE/128/1-5).

Extracts from these documents have been included below in order to demonstrate the general character of the reports and to provide information on the quarry in 1874. The following account was written by Mr. John Thomas of the firm John Thomas & Son.

*“I have been connected with the Penmon Park Quarries for many years. My father, the late Mr. William Thomas, builder, at one time carried on the Quarries on a large scale, who was the contractor of the Birminham Town Hall, which was built with these stones, and he supplied thousands of tons of railway blocks under sleepers, and for many other buildings and purposes I could name. Of these stones the largest portion of the Menai Lighthouse was built, Penmaenmawr Viaduct, also the Conwy and Menai Tubular and Suspension bridges were erected, and Scores of other buildings I could name”.*

In addition to offering information as to the various uses to which the stone has been put he also demonstrates how the quarry could be developed in order to dramatically increase productivity and profits. He states:

*“Notwithstanding the present rude mode of development, and disadvantages under which the Quarries are now being carried on, blocks roughly shaped (squared) are being delivered F.O.B. at the Quarry Pier at a cost of four shillings per ton; but I am satisfied a material reduction in this cost could be made within six months from the time active operations on the extended scale where commenced; but the quarries within six weeks from this time could be placed in such a state of development as to produce 200 tons of building stone a day, in the production of which large quantity of stone for quick lime would also be obtained. Stones cut and dressed to dimensions, for all building purposes, can be sold at an average of 2s. 6d. per foot cube F.O.B. at the Quarry Pier, and the cost of which will not exceed 1s. per foot.*

*The Quarries are capable of producing very large dimension blocks, 20tons and upwards, of good solid stone, without any winches or veins, and the stone is durable and weighty. 12ft. 6in. square block will weigh a ton.*

*I would suggest if you intend to carry on these Quarries on a large scale, to bring to the market all kind of sawn and polished slabs, and all kinds of stones for building purposes, and for the manufacture of tombs and monuments &c., that you erect machinery, such as sand saw-frames, Hunter saws and turntables, so as to work all kinds of masonry, almost ready to go into work; thus with a few masons, all kinds of plain work such as steps, sills, quoins, string courses, &c. could be supplied at a very low price. No doubt, with a competent man as manager, with every facility for loading a profit of 50%, could be realised, especially if a double quay were erected” (Anglesey Archives WDAE/128/1-5).*

The emphasis on the potential for improvement at the quarry is also stressed by a second Mr. John Thomas who signs himself “Formerly Government Inspector for the Holyhead Breakwater”. His report states:

*“Referring to my Report of 1<sup>st</sup> August last, I now have the pleasure of informing you as to the present state of your Quarries, and their prospect for the future.*

*The Marble beds referred to in my former report are improving in quality as they are worked. I find blocks of enormous size, solidity, and purity, are obtained, such as I am sure cannot be equalled in any Quarry in the Principality.*

*The Quarries, which had latterly been worked in a somewhat slovenly manner (being to a certain extent choked by the accumulation of debris), are now in excellent working order, and great credit is due to your manager for their present clean condition, business like appearance, and the general working arrangement that I found had been established.*

*The Plant are unusually good, and could not be in better condition.*

*The improvements made in the shipping pier, are of substantial and solid character, and I should recommend an addition of 30 or 40 yards to the present length, which could be made at a small cost, as there are sufficient blocks of suitable stone on the spot to form the outer walls, while the centre could be filled in with some of the rubble already there, the removal of which would be a convenience in working the stone of the Quarries.*

*The quay has been very much improved since the date of my last report, and there is now room for storing a very large quantity of stone awaiting shipment. A very substantial gantry has been built which will enable you to remove blocks of any dimension with the greatest ease.*

*Foundations are laid upon the quay for the engine and boiler and machine houses. The engine, which is lying on the premises, is a 20 horse-power, very strong, and of sufficient power to drive all the machinery you will require.*

*The site selected for the engine room appeared to me to have been well chosen, as I am well informed you intend erecting one or two of Blake’s Stone Crushers, which can be placed as to receive the stone in its descent from the Quarries, and after breaking it into the required sizes for chemical works, discharge it direct into the trucks again at the quay level below, ready for shipment.*

*The cargoes loading for the Holyhead Docks, appeared good merchantable blocks, and I estimate you may commence shipping from 70 to 80 tons per day of such stone. With more men you may very soon double this quantity without any further outlay for dead work or plant, beyond what you are*

*intending to erect. I should, however, suggest the purchase of a steam travelling crane for the pier, as it would greatly facilitate the shipping arrangements; and when you get more men, you will find a steam crane in the Quarries themselves, of good service.*

***It would greatly contribute to the success of your Quarries if you were to build some workmen's cottages, otherwise I fear you will find a difficulty in keeping good men.***

*In conclusion I may say that having known these Quarries for the last 40 years, I have the greatest confidence in speaking to their value. I have never seen them in such good condition, nor, indeed, could more be desired beyond the additions to the machinery to which I have already referred, both in this and my former report.*

*I estimate to accomplish this, and to **build some cottages**, you will require to spend £3,000 to £4,000, but having done this judiciously in the manner indicated, you will be in a position, within six months to earn at least £10,000 to £12,000 a year profit" (Anglesey Archives WDAE/128/1-5).*

Accompanying these documents was a drawn section through the Bulkeley (Penmon Park) quarry face showing some of the incline plane, buildings and machinery described above. It is included as figure 4.

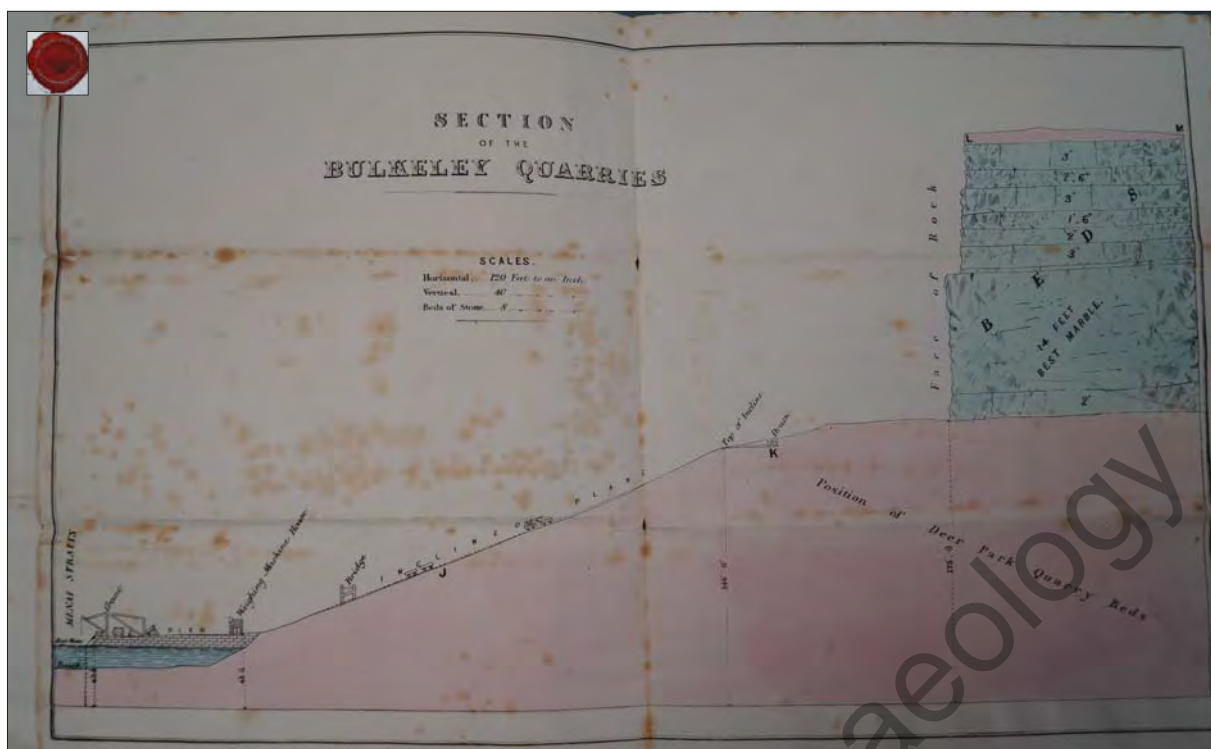
Also sourced from this period of quarry expansion was an 1874 plan which had been commissioned by the Bulkeley family to show the extent and locations of the sites which were to be quarried by the Anglesea (Penmon) Marble Quarries Company Ltd (Source: Bangor University Archives Baron Hill 6494). This plan (figure 5) is of particular interest as it shows the limited development which the quarry sites (Deer Park, Bulkeley and Flagstaff) have undergone and how few in number the buildings are prior to the improvements made following the establishment of this company. There is no building located on the site of the Barracks Cottage allowing us to narrow down the date of construction to between 1874 and 1881 when it first appears in the national Census.

Although it is not possible to refine the site chronology further it should be noted that the barracks were built as part of the wider redevelopment of the quarries at Penmon which is detailed in the prospectus above. There are very strong similarities between the barracks and the building complex near the Menai shore which have a date stone which reads 1877. The works are described by David Gwyn in his 2006 book. He records "substantial sawing plant was installed in only one location, the Penmon Park quarries which marketed limestone as "*Anglesey Marble*" suitable for monumental work, table tops and mantle pieces. They were equipped around 1875 with processing plant comprising six frame saws, polishing machines and gantry cranes, all steam powered, and the following year an elaborate two-storey mill building was completed to house them. The structure is more reminiscent of a writing slate mill than of the open cutting yards typical of most British stone quarries, where the air could blow away unhealthy dust" (Gwyn 2006: 74).

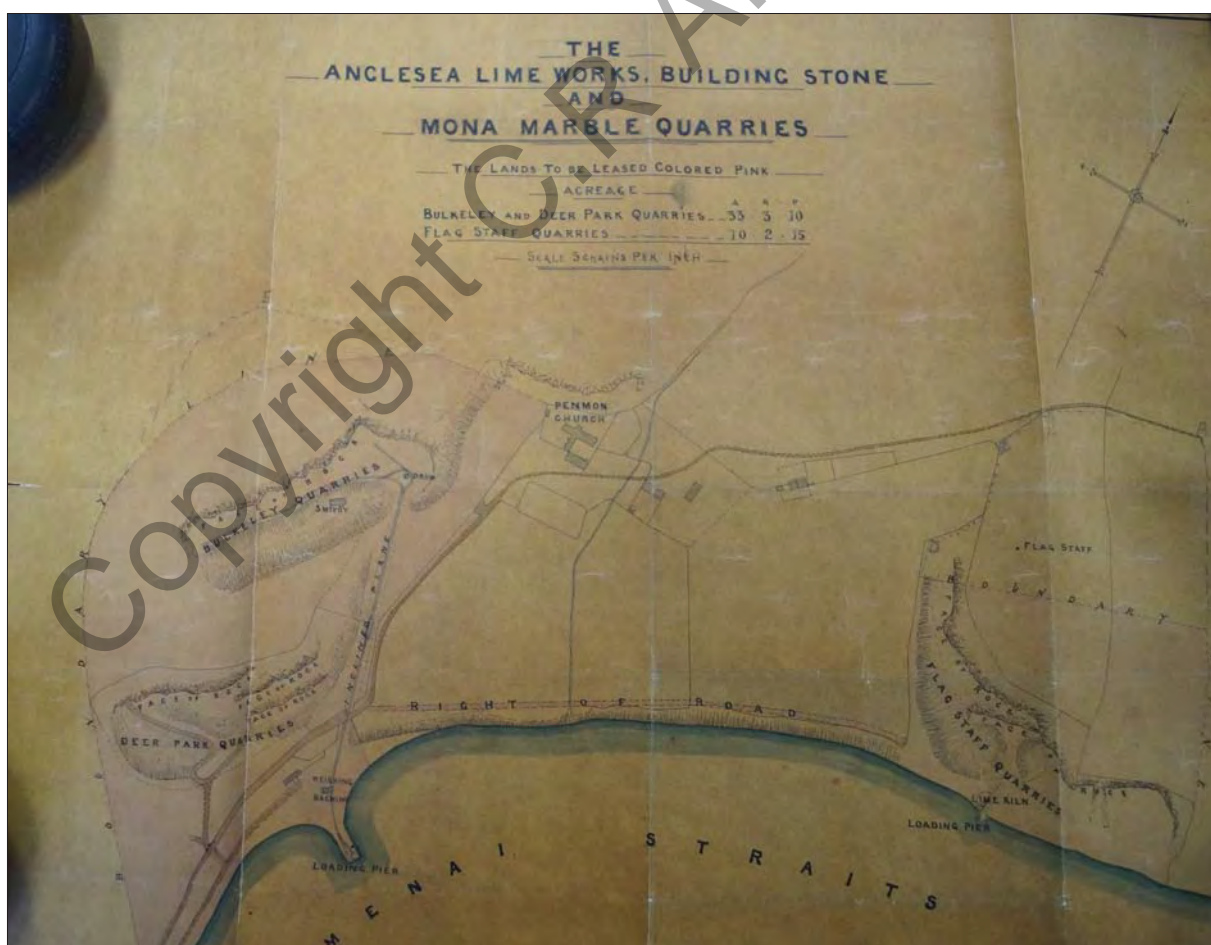
There is very little mention of the quarries in archival material and it would seem that most of the records have been lost. There are however a few snippets of information which have been pieced together from newspapers, trade directories and from the Baron Hill papers held in Bangor University Archives. The information is discussed chronologically.

The Anglesea (Penmon) Marble Quarries Company Ltd found itself in difficulty within a relatively short time of taking over works at the Penmon Quarry sites. An article published in the North Wales Chronicle on January 19<sup>th</sup> 1878 details the non-payment of the wages of 24 quarrymen. The men were each owed wages from the 15<sup>th</sup> October until the 22<sup>nd</sup> January and were each seeking further compensation for lost earnings up to the 5<sup>th</sup> of January as they had not been formally discharged and were therefore unable to seek work elsewhere. The company claimed that due to the death of the





**Figure 4.** Section Through the Bulkeley (Penmon Park) Quarry Produced in 1874 (Source: Anglesey Archives WDAE/128)



**Figure 5.** Plan of the Bulkeley (Penmon Park) Quarry Produced in 1874 Showing a Smithy but no Barracks at the Site (Source: Bangor University Archives Baron Hill 6494)

quarry manager and a shortage of funds it had been unable to raise the money. The court found in favour of the quarry workers and the company was ordered to pay the wages and the compensation, which together with the court costs totalled almost £200. The company did however state that it was unable to raise the money to pay the workers within the required 2 days and requested 5 within which to make payments.

This was not the only court case in which the company was involved at this time as in 1879 the company was caught up in a legal battle following the snapping of a crane and the loss of a ship whilst loading stone at Penmon in 1877. The case occupied the papers for a period of months whilst it was determined who was at fault in this instance. A sum of £1500 was sought by the shipping company but in March 1879 a Liverpool court found in favour of The Penmon Quarries Company (North Wales Chronicle March 15<sup>th</sup> 1879).

The Anglesea (Penmon) Marble Quarries Company Ltd are advertised in the 1880 Slater's Directory although the quarries are believed to have changed hands shortly after this date.

There is a record of a counterpart lease in the Baron Hill Archive dated 11<sup>th</sup> April 1881 between Sir R.L.M.W Bulkeley, Bart., to Mr Phillip Henry Jones, for limestone and other quarries known as Bulkeley Quarries and Deer Park Quarries situated in the parish of Penmon. The lease was for 50 years and stated that royalties would not exceed £75 in the first year, £100 in the second year and £150 in the third and succeeding years (Source: Bangor University Archives: Baron Hill Papers 3798).

In the 1881 census the Barracks Cottage is recorded as "Barricks" and is occupied by Griffith Hughes (35), his wife Ellen (40) and their five children Ellen (10), Ann (8), Thomas (6), Elizabeth (4) and Griffith (1). Of interest given the proximity of the new barracks to the Smithy is that Griffith's occupation is listed as a blacksmith. The youngest child was not born at Penmon but in the neighbouring parish of Llangoed suggesting the family have relocated due to the employment of Griffith in the quarry and the availability of family accommodation. The neighbouring property is named Marble Quarry House and is occupied by two female servants Mary Hughes (24) and Elizabeth Williams (30). Marble Quarry House is the offices which were housed in the south-western portion of the current building with the barracks situated at the north-eastern end of the block.

There has been an increase in the number of quarry workers recorded in the 1881 census – a trend which continues through the 1891 and 1901 census'.

The Baron Hill papers hold a letter dated June 1883 in which J. Williams of Ty Mawr, Pengreigwen, Amlwch offers to buy Penmon Marble Quarry and requests that Sir Richard Bulkely act as Chairman (Source: Bangor University Archives Baron Hill Papers 7116). The Caernarvonshire and Anglesey Directory of 1886 lists a John Murray as manager of Penmon Monumental Works, Penmon Quarry.

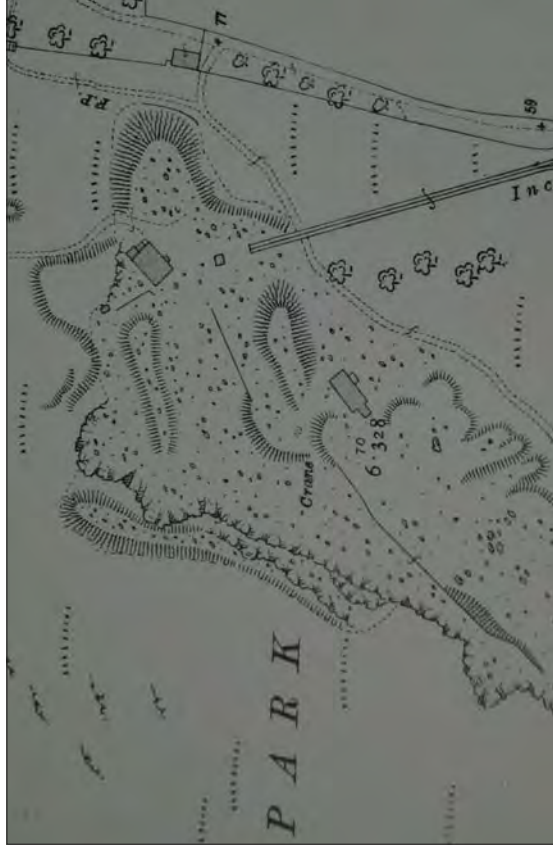
The barracks building (both the Barricks and Marble Quarry House elements detailed above) are shown on the First Edition Ordnance Survey Map of 1889 (surveyed 1887, see figure 6). The building is shown as having a porch over the front doorway nearest to the bell tower. Other than the existence of a porch, the shape in plan is as survives today and on examination of the structure on the ground the Barracks Cottage was found to be of a single construction phase, rather than the south-western bay having been added at a slightly later date.

There is no mention of a Barracks building in the 1891 Census although there is a property named "*Marble Quarry Cottage*" which is presumably that building. The Marble Quarry Cottage is occupied by stone mason John Roberts (49), his wife Ellen (40), and their children Margaret (15), Harriet (13), Winifred (10), John (5) and Henry (2 months).





**Figure 6.** First Edition Ordnance Survey Map (Surveyed 1887)



**Figure 7.** 1901 Edition Ordnance Survey Map (Surveyed 1899)



**Figure 8.** 1926 Edition Ordnance Survey Map (Surveyed 1914)



**Figure 9.** Photograph of the Barracks Cottage Taken Prior to the Collapse of the Bell Tower (Supplied by Client)

The Penmon Park Quarry was to change hands once more in 1897 (Source: Bangor University Archives Baron Hill Papers 7118). Richard Henry Williams Bulkeley of Baron Hill leased the Bulkeley Quarries (Penmon Park) and the Deerpark Quarries to William Stainton, a civil and mining engineer from Liverpool. The royalties agreed were 9d. per ton on large stone worked and 2d. per ton on other stone. If the payments did not amount to a set sum of £50 in the 1<sup>st</sup> year, £75 in the 2<sup>nd</sup> year and £100 in the 3<sup>rd</sup> and subsequent years then those amounts were to be paid as a minimum rent.

The building is shown on the 1901 Ordnance Survey Map (surveyed 1899, see figure 7). This source shows that there three lean-to structures against the north-eastern gable wall of the property presumably for coal and tools although it is possible that one may have functioned as a privy.

The Barracks name reappears in the 1901 census and is occupied by joiner Evan Parry (31), his wife Mary (29), their children John (6), Mary (4) and Evan (1) and Owen Evans a boarder. Evan's occupation is recorded as limestone quarry man.

In 1911 Barracks Cottage is occupied by Rowland Owens (62) – a loader, his wife Sarah (62) and John Jones (9) a visitor. The adjacent building is listed as “*Marble Quarry Building*” and the use is given as offices.

The quarry once more appears to be in difficulty at this time and a document dated September 14<sup>th</sup> 1911 (Source: Bangor University Archives Baron Hill 7121) records the surrender of the lease of the Bulkeley and Deer Park Quarries and the release from rent and royalties of Howard Hope of Penmon. No further records for the site could be sourced although work undertaken by Gwynedd Archaeological Trust states that the works had closed by around 1920 ([www.heneb.co.uk/hlcpenmon/limestonequarries.html](http://www.heneb.co.uk/hlcpenmon/limestonequarries.html)).

The Barracks Building is shown on the 1926 Ordnance Survey Map (surveyed 1914, see figure 8) and is no longer shown as having a porch or outbuildings.

Research conducted for the Design & Access Statement for Planning Consent Application for Restoration of Building to form Dwelling house - Barracks Cottage, Penmon, Isle of Anglesey recorded that “*it appears that the building ceased to be used as a barracks between the wars and post-war was used for agricultural storage. The major damage to the structure occurred when hay which was being stored there was set alight by vandals*”.

Figure 9 shows the derelict building prior to the collapse of the bell tower and the roof.

## **6.0 Results of Archaeological Works**

A site visit to Barracks Cottage was conducted on 4<sup>th</sup> August 2015. During this a comprehensive record of the site prior to the commencement of works was made. The exterior and any accessible interior features were photographed. A second visit was made on 18<sup>th</sup> October 2016 following the clearance of the building interior.

The property was built between 1874 and 1881 and was erected as part of a larger redevelopment of the quarry sites at Penmon Park (Bulkeley) and Deer Park. A lack of worker's accommodation was highlighted in reports commissioned following the establishment of the Anglesea (Penmon) Marble Company Ltd and the barracks building was built in response to this. The building also housed the site offices.

The barracks building is of a similar design as the those constructed to house the new stone cutting machinery near the coast at the bottom of the inclined plane and were undoubtedly designed by the same architect. The building is in stark contrast to the later barracks buildings at Flagstaff and Dinmor Quarries which were both large sheds with no amenities. It is very much out of step with the prevailing approach to housing workers elsewhere and rather than offering cramped and rather squalid conditions the building appears more like a small country house, perched as it is overlooking the Menai Straits.

This building has clearly been designed to showcase the Penmon “marble” and is constructed using dressed stone and rubble quarried on site. The structure is divided into two separate elements with the larger north-eastern portion functioning as accommodation for workers and their families and the smaller south-western area being utilised as a quarry office. At least in the earlier period of use there was servant’s accommodation associated with the office building and it is likely that this was at first floor or possibly an attic level.

The building is currently derelict and the majority of original/historic interior features have not survived. The south-western gable where the bell tower was located has collapsed and the majority of the roof structure is missing.

A photographic survey was made of all accessible interior and exterior spaces prior to clearance works being undertaken. A return visit was made following the clearance of the building interior and the erection of scaffolding around the surviving structure.

### **6.1 Drawn Record**

Architects drawings (plans and elevations) of the site were produced by Plan Consult Design Solutions in 2010 (amended 2011 see appendix a). Copies of these drawings were taken to site when C.R Archaeology visited to compile a photographic record and were annotated to show the location/direction of photographic plates.

### **6.2 Results of Photographic Survey (Plates 1 - 28)**

A comprehensive photographic survey was conducted and the full photographic archive has been included in TIFF format on an accompanying disc at the back of this report. These photographs are subdivided by interior and exterior. Relevant photographs are incorporated into the main text as numbered plates and the positions of these are marked in appendix b.

#### **6.2.1 Building Exterior (Plates 1 - 10)**

Barracks Cottage is a two storey, five bay structure with seven window openings and 2 doorways in the front (south-east facing) elevation (plates 1 & 2). At the time of the site visit there were no surviving doors or windows within the recesses. The window openings at the first floor level had been reduced in height at some point although it was unclear as to when this was undertaken. The window openings do seem rather large for a worker’s accommodation of this period but as mentioned previously this design has clearly been selected to showcase the materials and the building must not therefore not considered as only a barracks. It must also be noted that in the barracks portion of the block there were no window openings at first floor level to the rear of the building. The large windows in the south-eastern elevation would therefore have allowed the maximum amount of light to enter the building at this level.

The external finish on the building has not survived in its entirety and the frontage is currently of predominantly exposed stone, but there are areas where the original lime render survives.





**Plate 1.** Barracks Cottage - Front Elevation (South-East Facing)



**Plate 2.** Front (South-East Facing) and Gable (South-West Facing) Elevations



**Plate 3.** South-West Facing Gable Elevation  
Showing Collapsed Bell Tower



**Plate 4.** Rear (North-West) Facing Elevation

The bell tower on the south-western gable is believed to be an original feature of the building and would have allowed the quarry manager to summon the men to work and to keep time throughout the day. It had collapsed by the time of the site visit (plates 2 & 3) but is shown in-situ in figure 9. The bell tower was not lime rendered and the dressed/carved stone used would have been an advertisement for the properties of the stone.

An interesting feature at the first floor level of the south-western gable is an extremely large arched window opening which can be seen on figure 9. This window would have given the quarry manager and those visiting a commanding view over the quarry site, and down to the Menai Straits. In order to accommodate the large opening in the gable end there is no corresponding window in the most south-westerly bay of the front elevation.

The rear elevation of the building (plates 4 – 7) contains four openings, three at ground floor level and one at first floor level. Two of the three openings at ground floor level (those within the north-eastern barracks building portion) have been partially blocked in order to reduce their height. Due to their height it is unclear as to whether these openings had previously been doors or windows, but on balance it would seem most likely that at least one of the opening was a window as otherwise there would have been no natural light in the room to the rear of the building. Prior to the clearance of the building interior a doorway survived between this room and the main living area.

The opening into the quarry office was a door and there was no doorway between this room and the front portion of the building, only a small window into the interior in order to allow light into the room. This rear entrance would have been the only access point into the room leading one to postulate that this may have been the strong room and may have housed the quarry safe.

There are no openings in the north-eastern gable of the building. Traces of the roof lines of the lean-to structures are still evident on this elevation (see plate 8). The remains of a corrugated iron and wood structure was found at the rear of the building (see plate 4) which was presumably the remains of one of these structures.

The building has a simple pitched slate roof with a chimney in the north-eastern gable and a second one between the second and third bays. Where surviving the roof structure could be seen to be a king post truss. The chimney between the bays had collapsed at the time of the visit although it is shown on figure 9. The chimney stacks are of dressed stone and the pots shown are all of the same design. The pots are a buff ceramic with a square profile and quarter circle decorations at each corner. This design was common in the nineteenth century and these pots are likely to be original.

### **6.2.2 Building Interior (Plates 11 - 23)**

The internal divisions do not survive in their entirety but elements of the layout were preserved. As previously mentioned the building was split into separate two units – the barracks to the north-east and the quarry office to the south-west. The north-eastern gable wall and the gable between the two properties both house chimneys.

When examining the dividing wall between the properties it is evident that this block is a single build rather an initial phase when the barracks was built, followed by the later addition of the office with bell tower (see plates 16 & 22).

We know from the census entries that the barracks had 4 rooms but only three could be identified on the ground. The ground floor was divided into a larger space at the front of the building and a narrow room to the building rear (see plates 14 & 19). The partition has a doorway allowing access between the two rooms (plate 14). The exact function of this room is not known but it may have been a small room for weekly boarders to occupy which lies outside the main family space and has a separate





**Plate 5.** Rear Elevation (North-West Facing)  
Surviving Roof and Chimney Stack



**Plate 6.** Rear Elevation (North-West Facing)



**Plate 7.** Rear Elevation (North-West Facing)



**Plate 8.** North-East Facing Gable Elevation





**Plate 9.** Remains of Bell Tower



**Plate 10.** Remains of Bell Tower



**Plate 11.** Barracks Cottage Interior Showing Surviving Roof Structure



**Plate 12.** Barracks Cottage Interior Prior  
To the Commencement of Works





**Plate 13.** Surviving Internal Division of Space & Remains of Steps



**Plate 14.** Surviving Internal Division of Space



**Plate 15.** Barracks Cottage Interior -  
Front Elevation Following Clearance Works



**Plate 16.** Barracks Cottage Interior -  
Front Elevation Following Clearance Works

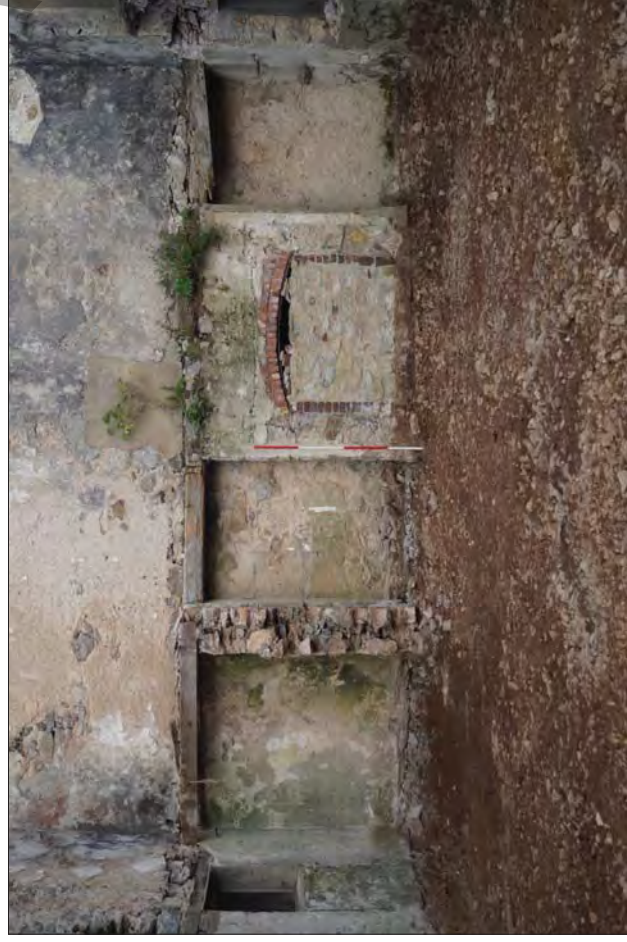




**Plate 17.** Barracks Cottage Interior - North-East Facing  
Gable Following Clearance Works



**Plate 18.** Detail of Blocked Fireplace at Ground Floor Level



**Plate 19.** Detail of Ground Floor Area and  
Blocked First Floor Fireplace



**Plate 20.** Pencil Graffiti in North-Western Niche

entrance. This is supported by the fact that there was never more than one boarder recorded as living with the families at the property. There was an interesting piece of pencil graffiti on the north-eastern gable wall within this space which appears to be a wheel with spokes or possibly a compass (see plate 20). The graffiti unfortunately not be dated and it may well postdate the building's use as accommodation.

There was no clear idea as to how the first floor space was divided, or if indeed it was divided. There is a small blocked fireplace in the north-eastern gable. If this space had been divided it would most likely have been on a north-west – south-east axis as to divide the space north-east – south-west would have blocked all light to the rear portion. It is also possible that this space was not divided and the fourth room was at the attic level although it must be noted that there was no evidence of roof lights.

In the office building there is a ground floor division in the same place as that found in the barracks. There was no doorway between the two spaces, just a window opening to allow light into the room (plate 13). It is postulated that this room may have functioned as a strong room but this is by no means certain and may have been another room for boarders. The remains of the stairway can be seen in plate 13.

No evidence for any divisions at first floor level were found and in a space this size it would seem unlikely. It was also unclear as to whether the attic space was utilised.

### **6.2.3 Wider Area (Plates 24 – 28)**

Barracks Cottage sits within a wider limestone quarrying landscape and it lies within the Penmon Park quarry (plate 27). The pathway up to the cottage partially follows the inclined plane (plates 25 & 26) and there are the remains of a retaining wall still visible within the quarry floor (plate 28). It is possible that parts of the smithy also survive but a detailed record/systematic search of the quarry area was not within the scope of the site works.

## **7.0 Conclusion**

The Barracks Cottage is a rare example of a surviving barracks building and is an important piece of the industrial and social history of the Penmon area. It was erected between 1874 and 1881 by the Anglesea (Penmon) Marble Quarry Company Ltd and is contemporary with the construction of the industrial buildings near the shoreline which housed the stone cutting equipment.

It was built as single phase and was divided into two separate buildings – a barracks in the north-eastern portion and an office building in the south-western. It was used in these ways until just after the Second World War when it was used for agricultural storage.

The cottage is associated with the Penmon Park Quarry (also known as Marble Quarry and Bulkeley Quarry). The quarry and associated buildings changed hands a number of times during their history and this has resulted in the loss of many of the quarry records including plans and architects drawings. Despite this the compilation of a reasonably comprehensive building history has been possible utilising a mixture of archival material, historic newspapers and web sources.

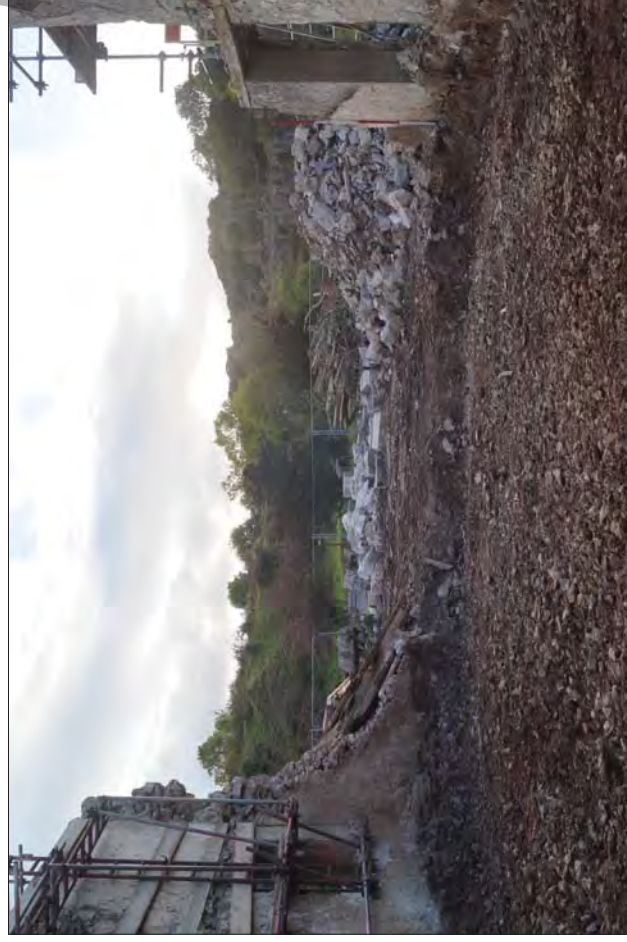




**Plate 21.** Barracks Cottage Interior - North-West Facing  
Elevation Following Clearance Works



**Plate 22.** Barracks Cottage Interior - North-West Facing  
Elevation Following Clearance Works



**Plate 23.** Only Surviving Portion of the  
South-Western Gable Elevation



**Plate 24.** Adjacent Quarry Face (Penmon Park/Bulkeley Quarry)





**Plate 25.** Barracks Cottage - View Up Inclined Plane



**Plate 26.** View From Top of Inclined Plane Towards the Sea



**Plate 27.** View of Penmon Park/Bulkeley Quarry from Barracks Cottage



**Plate 28.** Structural Remains Within Quarry Area Revetment Wall is Marked on First Edition Ordnance Survey Map

## 8.0 Bibliography

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

*Design & Access Statement for Planning Consent Application for Restoration of Building to form Dwelling house - Barracks Cottage, Penmon, Isle of Anglesey*

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

English Heritage. 2006. *Understanding Historic Buildings: A Guide to Good Practice*

Gwyn, D. 2006. Gwynedd. *Inheriting a Revolution: The Archaeology of Industrialisation in North-West Wales*. Chichester. Phillimore & CO. Ltd

Morris, L. 1833. *A Topographical Dictionary of Wales. Volume 1*

The Chartered Institute for Archaeologists. 2014. *Code of Conduct*

The Chartered Institute for Archaeologists. 2014. *Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology*

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

The Chartered Institute for Archaeologists. 2014. *Standard and Guidance for Archaeological Desk-Based Assessment*

The Chartered Institute for Archaeologists. 2014. *Standard and Guidance for the Archaeological Investigation and Recording of Standing Buildings or Structures*

The Chartered Institute for Archaeologists. 2014. *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

### Archival Sources

#### Anglesey Archives

Tithe Record for Penmon Parish 1847

First and Second Edition OS Mapping (1889 & 1901)

WDAE/128/1-5 Papers relating to Anglesea (Penmon) Marble Quarries Company Ltd 1874-5

WQ/S/1823/T/224 – Recognisance 1823



### **Bangor University Archives**

Baron Hill 6494 – Plan of Quarry Sites Penmon 1874  
Baron Hill Papers 3798 Counterpart Lease 1881  
Baron Hill Papers 7116 Letter 1883  
Baron Hill Papers 7118 Quarry Lease 1897  
Baron Hill 7121 Surrender of Quarry Lease 1911

### **Trade Directories**

1880 Slater's Directory  
1886 The Caernarvonshire and Anglesey Directory

### **Newspaper References**

North Wales Chronicle on January 19<sup>th</sup> 1878  
North Wales Chronicle March 15<sup>th</sup> 1879

### **Census Records for Penmon**

1841  
1851  
1861  
1871  
1881  
1891  
1901  
1911

### **Websites – all sites were visited 08/08/2015**

[www.bgs.ac.uk/geologyofbritain/home.html](http://www.bgs.ac.uk/geologyofbritain/home.html)  
[www.cadw.wales.gov.uk](http://www.cadw.wales.gov.uk)  
[www.coflein.gov.uk](http://www.coflein.gov.uk)  
<http://www.heneb.co.uk/hlcpenmon/limestonequarries.html>  
[www.historicwales.gov.uk/](http://www.historicwales.gov.uk/)

## **Appendix A.** Specification for Archaeological Works

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**Specification for Archaeological Works at**

**Barracks Cottage, Penmon, Anglesey**

NGR SH 62909 80638



**Report Number CR105-2015**



**C.R Archaeology**  
Compiled by Catherine Rees  
on Behalf of Mr D. Klein



Copyright C.R Archaeology

## **Specification for Archaeological Works at Barracks Cottage, Penmon, Anglesey**

<b>Planning Application Number:</b>	35C289
<b>National Grid Reference:</b>	SH 62909 80638
<b>Client:</b>	Mr D. Klein
<b>Report Author:</b>	Catherine Rees
<b>Report Number:</b>	CR105-2015
<b>Date:</b>	08/08/2015

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### **Appendix A. Proposed Development Plans**

## 1.0 Introduction

C.R Archaeology have been instructed by Mr D. Klein to conduct archaeological works at Barracks Cottage, Penmon, Anglesey (figure 1) in compliance with conditions placed upon his planning application.

Planning permission has been granted for the restoration of Barracks Cottage to form a single dwelling house together with associated access, services and parking (appendix a). It is proposed that the restoration of the barracks building will be as close to the original design as is practicable, particularly in terms of the external features. The Belltower, which was a prominent feature of the structure, will be reinstated using the original carved limestone which is still on site.

Two changes are proposed to the existing external openings. The western gable, where the Belltower is located, previously had a large window opening which it is believed contributed to the instability of this gable end. It is therefore proposed to close this opening in order to strengthen the elevation. The form of the opening will however be retained to show how the building developed. To compensate for this a new opening will be created on the southern, front elevation which will match the existing window.

A garage for two vehicles is to be erected to the north-east of the house. The garage will be orientated to present the narrow frontage to the principal elevation to minimise impact. A pitched natural slate roof and rendered walls are proposed. The curtilage will be marked by timber post and rail fencing with a timber gate to delineate it from the grazing area.

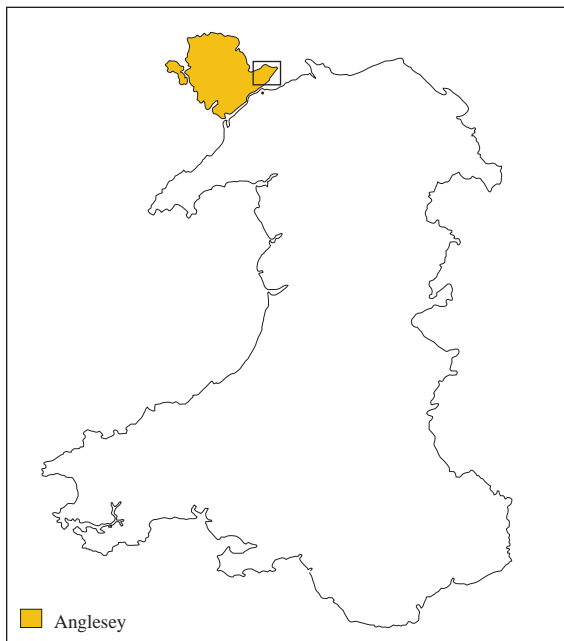
The proposed development is located within the Isle of Anglesey Area of Outstanding Natural Beauty and the the Penmon Landscape of Outstanding Historic Interest (HLW (Gw) 15). It is within 400m of Scheduled Ancient Monument AN044 – the Penmon Deer Park enclosed hut circle group, within 200m of Scheduled Ancient Monument AN061 – Penmon Dovecot, and within 150m of Scheduled Ancient Monuments AN062 (Penmon Priory) and AN602 (St Seiriol's Well).

This specification has been written with reference to a letter written by Development Control Archaeologist Jenny Emmett of GAPS (January 2011) and email/telephone correspondence during July & August 2015 as a methodology for a programme of works . These works are comprised of a Level 3 Building Recording on the cottage prior to any works being undertaken on site followed by a supplementary photographic record of the cottage following the clearance of the loose material and vegetation within the building. This will allow a detailed record of the building interior to be made as it is currently unsafe to enter the building.

The first phase of works will be the creation of a Level 3 Building Record of the structure as it currently stands in order to record the building prior to any work being undertaken. This phase will include historic/archival research and the compilation of a photographic record of the cottage and surrounding area. The second phase of works will be undertaken following the clearance of debris and vegetation from within the cottage which will allow for the full photographic recording of the building.

Due to the location of this building on an area of made ground, and the utilisation where possible of existing pipes it is not considered to be necessary to conduct a watching brief on the services associated with the development.

Concern had been expressed over a possible re-routing of the access track to the property and the sourcing of stone to be utilised in the restoration. It has since been confirmed that there is to be no change to the existing access route which is to be resurfaced to provide suitable vehicular access to the cottage. Modern building material is to be used to rebuild internal walls and when rebuilding the



**Figure 1. Site Location Map**

(Source: OS Open Data Mapping. Contains Ordnance Survey data © Crown copyright and database right [2015])

gable end original stone will only be used for exterior facing. It is therefore highly unlikely that there will be a need to source additional stone. However should this eventuality arise then further permissions for any quarrying required will be sought separately.

## **2.0 Project Aims & Objectives**

The aim of this programme of works is to create a Level 3 Building Record of the derelict building prior to its restoration.

It aims to fulfil the mitigation criteria for undertaking an Archaeological Building Recording as specified in the ClfA Standard and Guidance documents (2014).

The objectives of the archaeological programme are to provide an archive record of the building; to increase understanding of the site's history, development and significance and to make available information about the archaeological resource existing on the site.

## **3.0 Historical Background**

This section is through necessity brief and is intended merely to provide a basic outline of the history and archaeology of the immediate area. The compilation of a more detailed history will form an integral part of the final report.

Within the vicinity of proposed development site lie a number of significant archaeological sites of Iron Age/Romano British, Early Medieval and Medieval dates together with the considerable remains of the quarrying industry which together with ecclesiastic and agriculture use were to form the economic focus for this area from at least the 10<sup>th</sup> Century ([www.heneb.co.uk/hlcpenmon/limestonequarries.html](http://www.heneb.co.uk/hlcpenmon/limestonequarries.html)).

The proposed development is located within the Isle of Anglesey Area of Outstanding Natural Beauty and the the Penmon Landscape of Outstanding Historic Interest (HLW (Gw) 15). It is within 400m of Scheduled Ancient Monument AN044 – the Penmon Deer Park enclosed hut circle group, within 200m of Scheduled Ancient Monument AN061 – Penmon Dovecot, and within 150m of Scheduled Ancient Monuments AN062 (Penmon Priory) and AN602 (St Seiriol's Well).

The following historical biography is specific to the Barracks Cottage Building Itself and has been taken from the Design & Access Statement for Planning Consent Application for Restoration of Building to form Dwelling house - Barracks Cottage, Penmon, Isle of Anglesey.

*“The house is an increasingly rare survival of the structures associated with the quarrying of limestone on Anglesey. The limestone of Penmon and the Traeth Bychan beds has long been recognised as a top quality architectural and building stone capable of being carved as a freestone to a very fine level of detail. In the 19th Century the limestone was exported very widely and was used for imposing municipal and other buildings in many cities of the UK including Birmingham City Hall, as well as Telford's Menai Bridge, Stephenson's Britannia Bridge and the Manchester Ship Canal. The quality of the stone and its ability to be carved and polished earned it the name of 'Anglesey Marble'.*

*Barracks Cottage sits in the appropriately named Marble Quarry which produced semi dressed stone and rock for the production of lime for the building and agricultural industries. The quarry was greatly expanded between 1885 and 1916 and the building would seem to date from this period. It appears to have been built in two stages. The initial stage appears to be a three bay double piled house to the north east. This appears to have been built as the Quarry Manager's house. This was then extended to the south west by two bays and a belltower incorporated in the gable. The belltower would be used for calling the quarrymen in from their work.*

*Barracks buildings were a relatively common feature of the slate quarrying industry in Gwynedd but less so in the stone quarrying industry of Anglesey. Workers would be billeted in the building during the week, returning home on Friday evening or Saturday morning and returning to the Quarry on a Sunday evening. In the slate industry barracks, of which more is known, the men were often housed in groups of related or geographically close men. For example, in the Dinorwic Quarry near Llanberis one group of buildings is known as the Anglesey Barracks as it housed men from the island. It is very likely that Barracks Cottage functioned in a similar way albeit on a smaller scale.*

*It appears that the building ceased to be used as a barracks between the wars and post-war was used for agricultural storage. The major damage to the structure occurred when hay which was being stored there was set alight by vandals”.*

## **4.0 Geographical and Geological Context**

### **4.1 Topography**

The site is located approximately 120 metres to the south west of St Seiriol's Church and Priory at Penmon, Anglesey. The building occupies an elevated position on a hillside above the road which leads to the Church, former Priory and dovecote and the road which leads to Penmon Point. It is on an artificially levelled plateau and the remains of the limestone quarry associated with the barracks building are located nearby.

### **4.2 Geology**

The bedrock geology at the site is described as “*Loggerheads Limestone Formation - Limestone. Sedimentary Bedrock formed approximately 331 to 335 million years ago in the Carboniferous Period. Local environment previously dominated by shallow carbonate seas. These rocks were formed in warm shallow seas with carbonate deposited on platform, shelf and slope areas; often rich in corals and shelly faunas. May include evaporites where seawater was trapped and salts concentrated by evaporation*”. The superficial geology strata 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.bgs.ac.uk](http://www.bgs.ac.uk)).

## **5.0 Scheme of Works - Methodology**

The proposed works will be conducted in phases and each is detailed separately below.

### **5.1 Scheme of Works – Methodology for Building Recording**

The methodology employed will conform to the requirements for a Level 3 Building Record as specified in *Understanding Historic Buildings: A Guide to Good Recording Practice* (English Heritage 2006) and The Chartered Institute for Archaeologists: *Standard and Guidance for the Archaeological Investigation and Recording of Standing Buildings or Structures* (2014).

The following points are detailed in *Understanding Historic Buildings: A Guide to Good Recording Practice* (English Heritage 2006).

The record created for the site will consist of:

Written Account	Points 1-3, 5-13, 15-18, 21 & 22
Drawings	Points 1-2, 7-9
Photography	Points 1-2, 4-5 & 7.

### 5.1.1 Desk Based Research

A basic history of the site will be compiled utilising information sourced from Anglesey, Caernarfon and Bangor University Archives. A map progression will be undertaken along with a general archival research. Web resources will also be utilised.

The works will be conducted in accordance with the CIfA Standards and Guidance for Historic Environment Desk-based Assessment (2014) and will include the information required to fulfil points 1-3, 5-13, 15-18, 21 & 22 as specified in *Understanding Historic Buildings: A Guide to Good Recording Practice* (English Heritage 2006).

This material will form the historical background for the archaeological report. The report will also include the results of the photographic survey and an additional compact disc containing all site images in Tiff format.

### 5.1.2 Drawn Survey

Architects plans and elevations of the building have been produced and these will be annotated and amended as necessary to reflect the current building layout and to aid in the interpretation of any building phasing. These drawings will be utilised to fulfil points 1, 2 & 7 as specified in *“Understanding Historic Buildings: A Guide to Good Recording Practice”* (English Heritage 2006). Location plans and historical material will be produced/sourced by C.R Archaeology to fulfil criteria 8-9 in the aforementioned document.

### 5.1.3 Photographic Survey

A photographic survey of the building will be undertaken. This will include:

- 1) A photographic survey of the exterior including general shots of the site environs - to include a basic record of the associated quarry area
- 2) If safe to do so a photographic survey of the interior of the cottage will be made although much of the building is unsafe to enter and in order to make these areas safe it may be necessary to partially remove some internal walls during the clearance works

The building interior is currently overgrown and obscured by vegetation, fallen building rubble and general material which has accumulated on the site. The compilation of the photographic record will therefore have to be undertaken in stages, with an initial visit made to record the buildings prior to any works taking place and further visits made following the clearance of the building interior.

The methodology employed will conform to the requirements of photographic recording to the equivalent of a Level 3 Survey, as specified in *Understanding Historic Buildings: A Guide to Good Recording Practice* (English Heritage 2006) and will include works specified in points 1-2, 4-5 & 7.

#### 5.1.3.1 Equipment

The photographic survey will be undertaken using a 20.1 mega-pixel Sony Alpha58 digital camera with a variety of standard and other lenses using a tripod where necessary. Images will be captured in RAW format for later processing into high resolution JPG and TIFF files.

Where possible all exterior and interior elevations of the building will be photographed with scales from ground level. Additional photographs will be taken detailing important architectural features and the general setting of the site.

## **5.2 Archive Compilation**

All records created during the fieldwork will be checked for consistency and accuracy and will form part of the *Primary Site Archive (PI)* (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).

## **5.3. Timetable for Proposed Works**

It is envisaged that initial works at the site will commence as soon as possible. Initial site work (photographic building recording) is to take place over one day with further site visits when clearance/groundworks are undertaken – this work is planned for early 2016. Gwynedd Archaeological Planning Services will be informed of the exact site days to allow monitoring of works.

### **5.3.1 Staffing**

The project will be managed by Catherine Rees (BA, MA, PgDip HEC, MCIfA).

All projects are carried out in accordance with CIfA *Standard and Guidance* documents.

### **5.3.2 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. GAPS will be notified in writing of the commencement dates for archaeological site work.

### **5.3.3 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.



## **5.4 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.

The report will combine the results from the various phases of works and will include:

- A copy of the design brief and agreed specification
- A location plan
- A descriptive and interpretive written account of the building, building history and building phases
- Architects and historical plans and elevations (where possible)
- A plan illustrating the location and direction of any photographs or drawings
- A full bibliography of sources consulted
- An archive compact disc

The report will detail the results of the Level 3 Building recording and combine the results of the pre-commencement photographic survey, photographs taken following the clearance of the buildings with the archival research.

Copies of the reports 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.

A summary of the work will be published in the Archaeology in Wales Journal.

### **5.4.1 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.

## 6.0 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)*

English Heritage. 2006. *Understanding Historic Buildings: A Guide to Good Practice*

The Chartered Institute for Archaeologists. 2014. *Code of Conduct*

The Chartered Institute for Archaeologists. 2014. *Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology*

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

The Chartered Institute for Archaeologists. 2014. *Standard and Guidance for Archaeological Desk-Based Assessment*

The Chartered Institute for Archaeologists. 2014. *Standard and Guidance for the Archaeological Investigation and Recording of Standing Buildings or Structures*

The Chartered Institute for Archaeologists. 2014. *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 sites were visited 08/08/2015

[www.bgs.ac.uk/geologyofbritain/home.html](http://www.bgs.ac.uk/geologyofbritain/home.html)

[www.cadw.wales.gov.uk](http://www.cadw.wales.gov.uk)

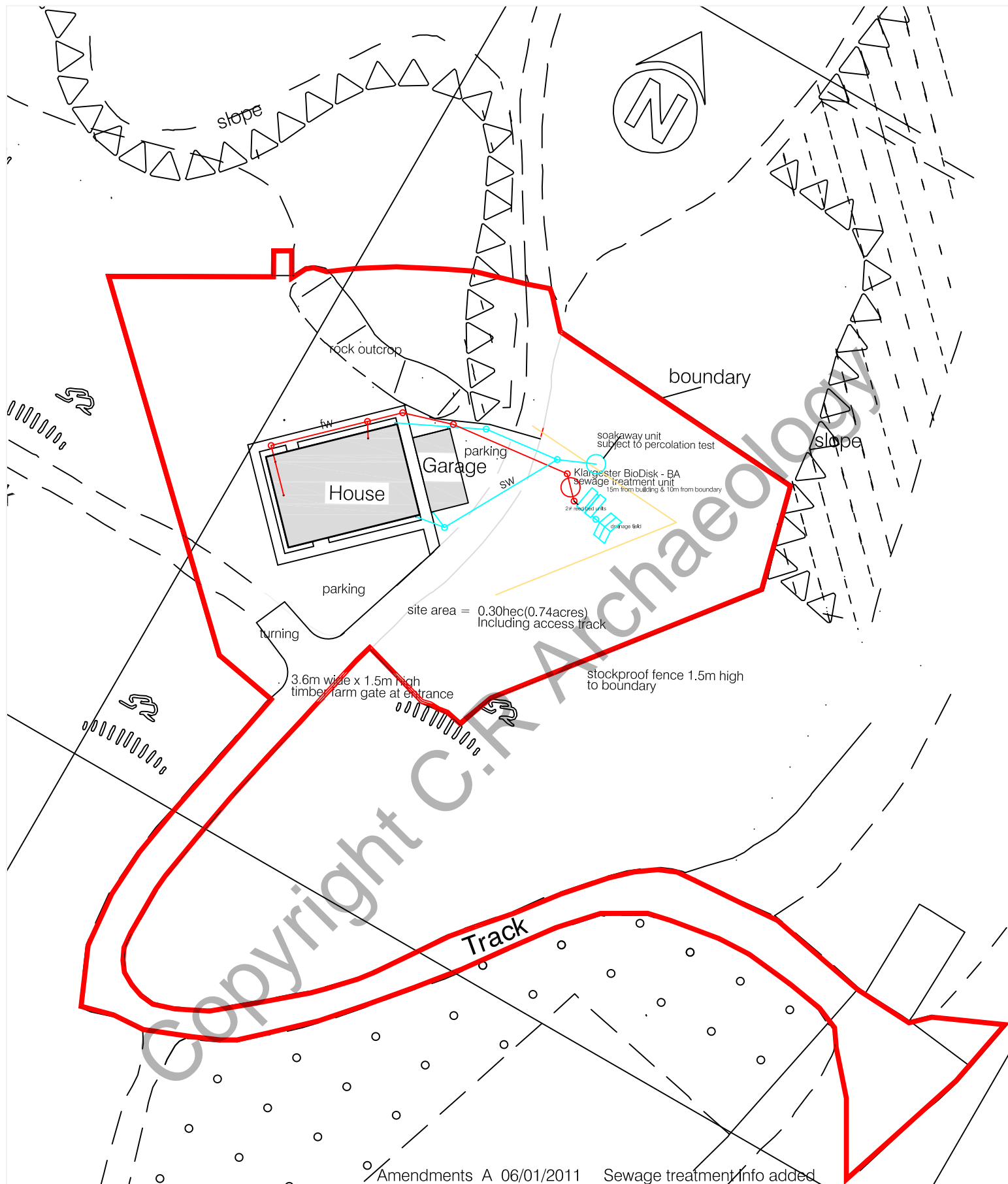
[www.coflein.gov.uk](http://www.coflein.gov.uk)

<http://www.heneb.co.uk/hlcpennmon/limestonequarries.html>

[www.historicwales.gov.uk/](http://www.historicwales.gov.uk/)

## **Appendix A.** Proposed Development Plans

Copyright C.R Archaeology



The Barracks

Penmon Anglesey

Mr D G Jones

Drawing

Site Layout Plan

Drawn eoj

Date 17/09/10

Scale

1 : 500

**Plan|consult**  
design|solutions

9 Bryn Morfa  
Bodelwyddan  
Denbighshire  
LL18 5TP

t: 01745 582789  
m: 07977 632657  
e: planconsult@hotmail.com

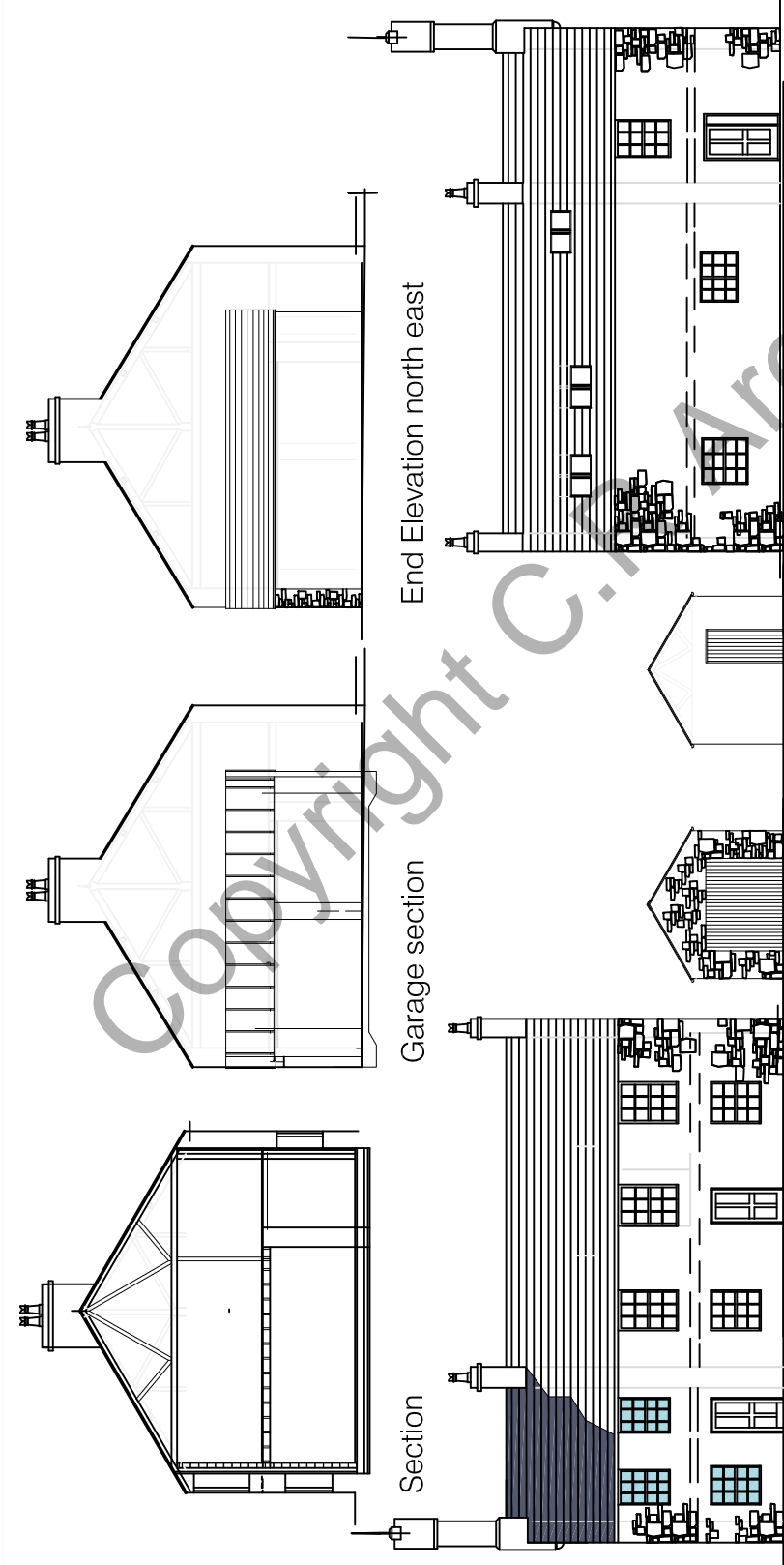
Project No

010510

Drg No

002 A





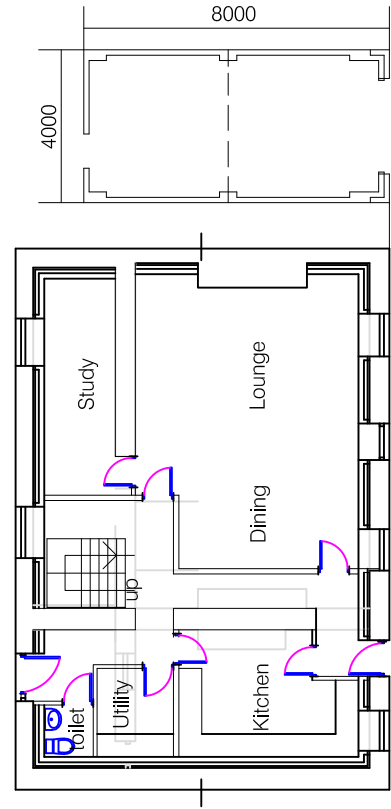
End Elevation south west

Materials/Finishes

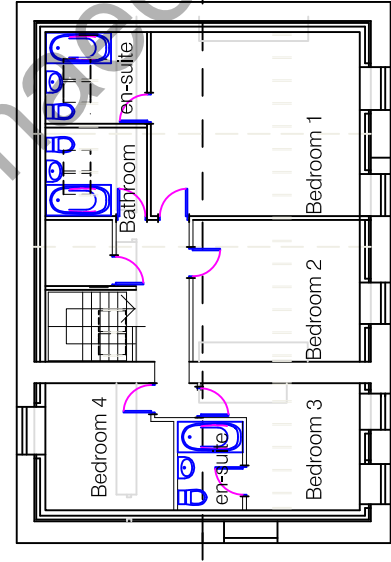
- ROOF : Natural slate at 30 deg pitch, fascia boards in dark grey preservative stain.
- BELTOWER : Rebuilt using recovered dressed limestone.
- CHIMNEYS : Coursed semi- dressed limestone with lime mortar pointing.
- WALLS : Limestone uncoursed rubble with spread lime mortar pointing finished with white microporous masonry paint.
- GARAGE: Front as main walls with side and rear walls granite aggregate on grey coloured mortar backing.Slate roof, timber doors.
- WINDOWS : Twelve pane vertical sliding sash spring loaded double glazed timber windows white finish
- FRONT ELEVATION : Twelve pane vertical sliding sash spring loaded double glazed timber windows white finish
- REAR ELEVATION : Twelve pane vertical sliding sash spring loaded double glazed timber windows white finish.
- Twelve pane side hung casement window.

Front Elevation south east

Rear Elevation north west



Ground Floor Plan



First Floor Plan

Project:  
The Barracks

Approved:  
13/09/10

Architect:  
Penmon Anglesey

Client:  
Mr D G Jones

Proposed Plans Sections and Elevations

Drawn by:  
Date: 20/09/10

Scale:  
1 : 100

Planconsult  
design solutions

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01245 802780  
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Project No:  
010510

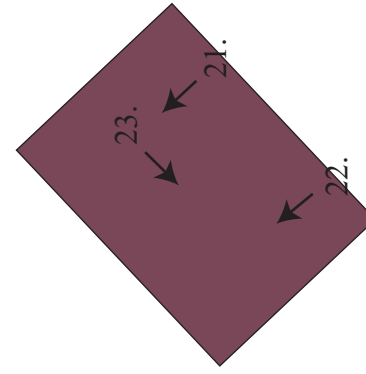
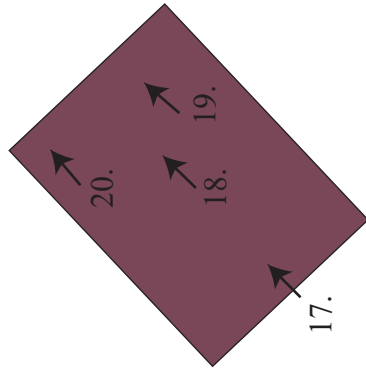
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02

**Appendix B.** Location and Direction of Photographic Plates

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Continued From Above



Appendix B. Location and Direction of Photographic Plates