

# PARC PADARN, CHWAREL DINORWIG / PARC PADARN DINORWIG QUARRY

COFNOD ADEILAD HANESYDDOL /  
HISTORIC BUILDING RECORDING



Ymddiriedolaeth Archaeolegol Gwynedd  
Gwynedd Archaeological Trust

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## COFNOD ADEILAD HANESYDDOL / HISTORIC BUILDING RECORDING

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Front Cover image: Southern lateral side of Fire Queen shed (archive reference: G2805\_004).

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## **CRYNHODEB ANHECHNEGOL**

*Comisiynwyd Ymddiriedolaeth Archaeolegol Gwynedd gan Chambers Conservation Ltd i ymgymryd â Chofnod Adeilad Lefel 3 ym Mharc Padarn, Chwarel Dinorwig, yn dilyn dynodiad y safle yn safle treftadaeth y byd UNESCO a chyn adnewyddu siediau Fire Queen ar gyfer arddangos injan stêm Fire Queen. . Cyflawnwyd cofnod ffotograffig o sied locomotifau Fire Queen ar waelod yr incllein A a Utility a strwythurau storio yn gysylltiedig â Chwarel Vivian ar 12 a 13 Hydref gan ganolbwyntio ar nodweddion gwreiddiol y strwythurau ynghyd â'r swyddogaeth bosibl. o'r strwythurau cyfleustodau.*

## **NON-TECHNICAL SUMMARY**

*Gwynedd Archaeological Trust was commissioned by Chambers Conservation Ltd to undertake a Level 3 Building Record at Parc Padarn, Dinorwic Quarry, following the sites designation as a UNESCO world heritage site and ahead of the Fire Queen sheds renovation for the display of the Fire Queen steam engine. A photographic record of the Fire Queen locomotive shed at the bottom of the A-incline and utility and storage structures associated with Vivian Quarry was carried out on the 12<sup>th</sup> and 13<sup>th</sup> of October with a focus on original features of the structures along with the possible function of the utility structures.*

# 1 INTRODUCTION

Gwynedd Archaeological Trust (GAT) has been commissioned by Chambers Conservation Ltd, to undertake building recording for structures associated with slate quarrying and slate processing at Dinorwig Quarry, Gwynedd LL55 3EU (NGR SH5951460360; cf. Figure 01) following the inclusion of the slate mines of North Wales as UNESCO World Heritage sites. The quarry contains a total of 379 sites with primary reference numbers (PRN's) on the Gwynedd Historic Environment Record (HER), which survive in varying conditions since their abandonment during the late 19<sup>th</sup> and 20<sup>th</sup> centuries. The proposed work is to provide an analytical record of three structures included on a priority list of at risk relict structures within the UNESCO World Heritage boundary at Dinorwig Quarry (Hopewell 2018, Chambers Conservation Ltd. 2021). They comprise a former locomotive shed, located at Parc Padarn, a Utility Unit & blast shelter, and a storage barn, both within Vivian Quarry. The development works will include renovation and alterations to the existing Fire Queen locomotive shed.

The recording was undertaken in October 2023, in accordance with the following standards and guidelines:

- Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs) Version 2 (The Welsh Archaeological Trusts, 2020);
- Guidelines for digital archives (Royal Commission on Ancient and Historic Monuments of Wales, 2015).
- Management of Archaeological Projects (English Heritage, 1991);
- Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide (Historic England, 2015);
- Standard and Guidance for the Archaeological Investigation and Recording of Standing Buildings or Structures (Chartered Institute for Archaeologists, 2020);
- Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials (Chartered Institute for Archaeologists, 2020);
- Standard and guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives (Chartered Institute for Archaeologists, 2020); and
- Understanding Historic Buildings: A Guide to Good Recording Practice (Historic England, 2016).

The recording was monitored by Cadw and Gwynedd Archaeological Planning Service (GAPS) and undertaken in accordance with an approved written scheme of investigation (cf. [Appendix I](#)). In line with the regional Historic Environment Record (HER) requirements, the

HER was contacted at the onset of the project to ensure that any data arising was formatted in a manner suitable for accession to the HER ; the HER enquiry number for this project was GATHER1937 and the Event Primary Reference Number was 46695.

Gwynedd Archaeological Trust is certified to ISO 9001:2008 and ISO 14001:2004 (Cert. No. 74180/A/0001/UK/En) and is a Registered Organisation with the Chartered Institute for Archaeologists (CIfA).



## 2 HISTORICAL BACKGROUND

The slate quarry known as Dinorwig can be found carved out of the slopes of Mount Elidir located between the villages of Llanberis and Dinorwig, overlooking the two lakes at Llyn Peris and Llyn Padarn. Dinorwig is known for being the second largest slate quarry in the world and the site has seen slate extraction from the late 18<sup>th</sup> century until the abandonment of the site in the early 1960's. The cultural, social and geographic impact of the slate mining industry on Northwest Wales has seen the slate quarries achieve UNESCO World Heritage status in July 2021, along with structures associated with the quarrying, processing of slate and sites connected with the transport infrastructure and accommodation for workers found within this incredible industrial landscape.

The landscape of what remains of Mount Elidir and the Dinorwig quarry is dominated by the slate mining industry and the massive scale of the industrial processes of slate extraction and transportation in the area has eradicated any evidence of prehistoric land use and much of the pre quarry historic aspects of the landscape within the boundary of the UNESCO World Heritage site.

The site and stories of the quarrymen have seen extensive research and study over the years due to the geographical impact of the slate mines upon the landscape of Wales and the cultural and social histories of those who worked at Dinorwig. Two books have been written about Dinorwig, Chambers Jones, R 2006 *Dinorwic - The Llanberis Slate Quarry, 1780-1969* and Carrington, D. C. 1994 *Delving in Dinorwig*. These historic accounts of Dinorwig contain useful information and historic photographs of the site but no surveys of the condition of the assets within the boundary were undertaken.

The first archaeological survey to be carried out at Dinorwig was undertaken in 1995 by Gwynedd Archaeological Trust and the survey identified 218 assets and these were further categorised by site type, but no further study was carried out during this project.

In 2018 GAT carried out a more thorough walkover survey using the previous survey from 1995 as a guide. This survey identified a further 161 assets within the site boundary, bringing the total number of assets to 379. These were recorded with descriptive records, photographs and the sites were categorised into character areas. A map regression was carried out and the extent to which the quarry grew is clear from 1908-1965 with the quarried terraces extending to the south east along the bank of Llyn Peris with the construction of the buildings to be recorded as part of this survey seen within the quarry site as marked on the map.

In early 2023, GAT completed a Level 3 record of six structures within the quarry (report GAT\_1700), including:

- Hafod Owen and Winder House (PRN 82,949; NGR SH58446043);
- Counterbalance Inclines A1 and A2 (PRNs 67,132 and 67,134; NGR SH58696034 to SH58806023);
- Lower Incline Drum house (PRN 67,133; NGR SH58766029);
- Upper Incline Drum house (PRN 67,135; NGR SH58836018);
- Iron Bridge with Slate Abutments over the Railway (PRN 67,137; NGR SH58846017); and
- Weighbridge House and Other Buildings, with a Cantilevered Slab Shelter (PRN 67,682; SH58846016).

The Hafod Owen building and winding house had been moved to Gilfach Ddu in 1974, adjacent to the Pardarn Country Park car park, where it was rebuilt; the recording identified the main elements of the buildings and their associated machinery, noting that the Hafod Owen incline had required engine power and extremely steep engineering to extract slate from the original quarry pit. The report stated that the context and understanding of this was somewhat lost in its new location, particularly in the relationship of the engine house to the winding house. The numberings on the stones, to enable an accurate rebuild were clearly noted on the winding hose, but only partially on the engine house, whilst the presence of upside-down graffiti suggested that at least one stone was inverted in the rebuild, suggesting 100% accuracy in the replacement of stones was not required in all cases.

The remaining structures were in their original locations and the report stated there was a significant amount of original structural information that was successfully recorded and understood.

*Chambers Conservation Ltd* completed a conservation architect's report for Parc Padarn in May 2021 (Chambers Conservation Ltd. 2021)). The report was written to accompany a schedule of condition and repairs and was included four site visits between 25th February and 26th March 2021. A total of 30No structures were assessed in the report for their general condition and any structural issues; the structures were located at Gilfach Ddu and Vivian Quarry (cf. Figure 01) and included the Utility Unit & Blast Shelter (designated 11V; PRN 67,148) and Storage Barn (designated 12V; PRN 67,151).

The first gallery of Vivian quarry was opened in 1873 and operated as a separate quarrying site to the large scale extractions to the east. The quarry has 7 levels or galleries and

infrastructure to transport the slate to the nearby railway system were built in the form of counter balance inclines and a modified form of aerial ropeway system which is recorded in this study as the Vivian Utility Unit. The quarry was last worked in 1960 and is now part of the Padarn Country Park and is currently in use as the Vivian diving centre on account of the lower sections of the quarry being fully submerged in water.

The Fire Queen shed can be found outside the slate prepping workshop known as Gilfach Ddu and is directly connected to the railway system connected to Port Dinorwic. The structure is a well preserved example of a locomotive shed in the architectural style of the nearby quarry yard which is now the National Slate Museum. It is believed to have been constructed in 1870 to house the 0.6 metre gauge rolling stock but from 1882 to 1969 it was repurposed as a small museum housing the Fire Queen locomotive.

An examination of the 25-inch to 1-mile Ordnance Survey County Series maps of the area was carried out (Caernarvonshire Sheets XVI.8 & XVII.5; published in 1888/9, 1900 and 1914 respectively; cf. Figures 02. 03 and 04). This map regression shows that the Utility Unit & Blast Shelter are not apparent in any of the maps dated from 1889 to 1914. A structure at the site of the Storage Barn in Vivian Quarry is present on the 2<sup>nd</sup> edition map dated to 1900.

### 3 METHOD STATEMENT

#### 3.1 Introduction

A Level 3 Record, as defined by *Understanding Historic Buildings: A Guide to Good Recording Practice*, is required for the structures that lie within the UNESCO World Heritage site at Dinorwig Quarry. A Level 3 record is characterised in *Understanding Historic Buildings* (Historic England, 2016) as an analytical record and comprises an introductory description followed by a systematic account of the designated structures' origins, development, and use. The record will include an account of the evidence on which the analysis has been based, allowing the validity of the record to be re-examined in detail. It will also include all drawn and photographic records that may be required to illustrate the structures' appearance and to support an historical analysis (Historic England, 2016: 26). Information from reports GAT\_1622, GAT\_1700 and Chambers Conservation Ltd. 2021 Issue 4 were used to support the recording.

The Level 3 Record was completed on the 12<sup>th</sup> and 13<sup>th</sup> October 2023 and included the recording of three structures which formerly were part of the wider Dinorwig Quarry. *The Level 3 record was limited to accessible areas and in accordance with a suitable risk assessment and health & safety parameters. Due to a collapsed roof, the interior of the Utility Unit was not accessible, so the photographic record was limited to the exterior.*

### *3.1.1 Locomotive Shed*

A late 19th century locomotive shed built to serve on the Padarn railway (Primary Reference Number (PRN) 63991; NGR SH5862460380; cf. Figure 01 and Figures 02 and 03). It was built c.1870 to house the first 0.6m gauge locomotives on the internal Dinorwig quarry system when the Dinorwig Quarry Railway was cut back from Muriau to Gilfach Ddu. From 1882 to 1969 it served as a small museum housing the locomotive Fire Queen. It is described in the regional HER as a long rectangular-plan high single-storey structure with lean-to addition on north gable end. The main building comprises snecked rock-faced rubblestone with slate-stone quoins, dressed slate-stone slabs to lean-to, a slate roof with long gabled ventilated louvre to ridge of main shed and banded slates on lean-to. The long west wall of the shed has three tall round-headed decorated cast-iron windows (of very similar pattern to those in Quarry Workshops) with tightly jointed pointed slate voussoirs and slate sills, integral slate-stone stack with moulded capping to north. The south gable end has a round headed doorway for the locomotive, with dressed slate voussoirs; the lean-to on western wall has blocked up windows to the east and west sides of the lean-to and a doorway on north. This particular shed is thought to have housed the locomotive which passed through the Glan-y-Bala tunnel to connect with the south-eastern area of the quarry until tipping allowed the line to be re-laid around the bluff. The lean-to on the north gable end appears to be a later addition. The shed has constructed in a similar idiom to the adjacent former quarry yard, now the National Slate Museum.

### 3.1.2 Utility Unit & Blast Shelter

The Utility Unit and blast shelter are located close to the eastern bank of Pwll Vivian (NGR SH58666046C; cf. Figure 01 and [Figure 04](#)). As described in Chambers Conservation Ltd. 2021 Issue 4, the Utility Unit structure is a medium-sized building with stacked slate walls and a mono-pitched slate roof, which slopes down towards the vertical rock-face almost immediately behind; there is a timber access door on the south side, together with an unglazed casement window. On the west side facing Pwll Vivian there is a steel loading door; on the north side of the building there is a lean-to blast shelter, which has stacked slate walls to the north and east sides and a roof consisting of large slates laid over log beams (Chambers Conservation Ltd. 2021:39).

In terms of the building condition, around half of the roof has collapsed into the building; whilst there was vegetation growing, there were no large plants or trees. The Chambers Conservation Ltd. report states that a large loose slate was noted on the edge of the roof near the pole and door and the walls were described as generally sound with no major issues noted. There is some ivy growth and the window had failing paintwork and no glazing and therefore has an unkempt appearance; the boarded door was decayed at the base and boarded; a loose slate at the top of the steps leading to the door could be a trip hazard. The lean-to roof log beams were damp and slightly decayed in places but substantial enough to be structurally sound; no issues were noted with the walls (*ibid.*).

There was no access to the interior.

### 3.1.3 Storage Barn

The Utility Unit and blast shelter located close to the eastern bank of Pwll Vivian (NGR SH58646041C; cf. Figure 01 and Figure 04). As described in Chambers Conservation Ltd. 2021 Issue 4, the barn is a single storey structure, consisting of a pair of parallel walls made of stacked slates. The roof consists of irregular slate slabs laid over steel joists and at the rear, there is a hole in the roof of an unknown purpose; the rockface forms the rear wall (Chambers Conservation Ltd. 2021:40).

In terms of the building condition, the Chambers Conservation Ltd. report states that the top side of the roof could not be seen, but it was clear that there was vegetation growing which that may cause slates to be dislodged, whilst trees growing on the nearby bank may also have an effect; on the lower (southern) side of the roof was a loose slate that may be in danger of falling imminently. Inside the structure was evidence that slates had fallen from the roof through the large gaps between the metal joists; the joists themselves were rusted but appeared sound - one appears misaligned, but as it is next to the hole, this could be deliberate or due to whatever caused the hole. The walls are described as straight and in good condition with a few minor areas, such as a missing block on the right-hand side of the opening (*ibid.*).



### 3.2 Photographic Record

The photographic record was based on *Understanding Historic Buildings* photographic elements 1 to 9 (Historic England, 2016: 26) and included:

- a general view or views of the respective structures in their wider setting or landscape;
- their external appearance; typically a series of oblique views that show all external elevations, and give an overall impression of their size and shape. If relevant during recording, where individual elevations include complex historical information it may also be appropriate to take views at right-angles to the plane of the elevation;
- further views (if relevant during the recording visit) to reflect the original design intentions, where these are known from documentary sources or can be inferred from the structures or their setting;
- the overall appearance of the principal rooms and circulation areas (where accessible);
- any external or internal detail, structural or decorative, which is relevant to the structures' design, development and use, with scale where appropriate;
- any machinery or other plant, or evidence of former existence;
- any dates or other inscriptions; any signage, makers' plates or graffiti which contribute to an understanding of the structures. A transcription should be made wherever characters are difficult to interpret;
- any building contents which have a significant bearing on the structures' history.
- Copies of maps, drawings, views and photographs, if present in the structures and illustrating development or that of its site.
- The use of suitable scales along with artificial lighting where necessary.

Photographic images were taken using a digital SLR (Nikon D3100) camera set to maximum resolution (4928 x 3264; 16.2 effective megapixels) in RAW format. A photographic record was maintained on site using GAT pro-formas and digitised in Microsoft Excel and Access as part of the fieldwork archive and dissemination process (archive numbering system G2805\_001 to G2805\_054; cf. [Appendix II](#)). The location and orientation of photographs taken were recorded on an annotated copy of *Chambers Conservation* Job Number LPCP.03 Drawing No. 01 and Job Number LPCP.04 Drawing No. 01 and then digitised for

final reporting (cf. Figures 02 and 04 respectively). The photographic images has been converted to TIFF for final archiving using Adobe Photoshop.

### 3.3 Written Record

The written record was based on *Understanding Historic Buildings* report elements 1-3, 6-9, 11-13, 23 (Historic England, 2016: 26) and included:

- The precise location of the structures (NGR format) and an address;
- A note of any statutory or non-statutory designations (in this instance, Primary Reference Numbers);
- The date of when the record was made as well as the name of the recorder and location of the project archive;
- A description of the structures' form, function, date and sequence of development. The names of architects, builder, patrons and owners should be included if known;
- An introduction briefly setting out the circumstances in which the record was made, its objectives, methods, scope and limitations, and any constraints. Where appropriate the brief for the work or the project design should be stated or appended;
- Acknowledgements to all those who have made a significant contribution to the making of the record, or who have given permission for copyright items to be reproduced;
- A discussion of the published sources relating to the structures' location and setting, an account of their history as given in published sources, an analysis of historic map evidence (map regression) and a critical evaluation of previous records of the structures.;
- An account of the structures' overall form (structure, materials, layout) and of successive phases of development, together with the evidence supporting this analysis (if applicable);
- An account of the structures' past and present use. An account of any fixtures, fittings, plant or machinery present, and their purpose; and
- Full bibliographic and other references, or a list of the sources consulted.

The written record was completed using a building record pro-forma and room record pro-forma; the basic record pro-forma was used to record the exterior and interior elevations, as well as key structural details. Key dimensions and detailed measurements were completed using hand tapes and a laser distance measurer.

### 3.4 Drawn Record

Measured drawings were based on *Understanding Historic Buildings* drawing elements 2 to 12 (Historic England, 2016: 26) and included:

- Measured plans (to scale or fully dimensioned) as existing.
- Measured drawings recording the form or location of other significant structural detail.
- Measured cross-sections or long-sections to illustrate the vertical relationships.
- Measured drawings to show the form of any architectural decoration (for example the moulding profiles of door surrounds, beams, mullions and cornices) or small-scale functional detail not easily captured by photography. A measured detail drawing is particularly valuable when the feature in question is an aid to dating.
- Measured elevations, where these are necessary to an understanding of the structures' design, development or function.
- A site plan relating the structures and to any related topographical and landscape features.
- A plan or plans identifying the location and direction of accompanying photographs.
- Copies of earlier drawings (if applicable) throwing light on the structures' history.

In this instance, the scaled plans and elevations detailed in *Chambers Conservation Ltd* Job Number LPCP.03 Drawing Nos. 01 and 02, and Job Number LPCP.04 Drawing No. 01 were used (cf. Figures 02, 03 and 04 respectively).

### 3.5 Dissemination & Archiving

The physical archive is stored in a designated project folder and the location confirmed in the Data Management Plan; the digital dataset is stored on a dedicated Trust server, with the location confirmed in the Data Management Plan via a specific hyperlink. The working project archive in this instance comprises digital data including photographic data, documentation, and written data, as well as paper records, including project pro-formas. The Data Management Plan is stored on a project specific form in the GAT project database (format: *Microsoft Access*) and a Selection Strategy has been completed and appended (cf. [Appendix III](#)). The following dissemination and archiving of the report and digital dataset were applied:

- A digital report has been provided to *Chambers Conservation Ltd*, Cade, Cyngor Gwynedd and Gwynedd Archaeological Planning Service;
- A digital report has been provided to the regional Historic Environment Record, along with a digital dataset comprising an Event PRN summary. The report and dataset were submitted in accordance with the required standards set out in *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)* (Version 2); and
- A digital report and digital archive dataset have been provided to the Royal Commission on Ancient and Historical Monuments, Wales, in accordance with the *RCAHMW Guidelines for Digital Archives Version 1*. The dataset was prepared in the format required by RCAHMW and included:
  - Photographic metadata (*Microsoft Access*);
  - Photographic archive (*TIFF* format);
  - Project Information form (*Excel*);
  - File Information form (*Excel*) – *Microsoft Word* report text final;
  - File Information form (*Excel*) – Photographic metadata (general);
  - File Information form (*Excel*) – *Adobe PDF* report final; and
  - File Information form (*Excel*) - Photographic metadata (detail).

## 4 RESULTS

### 4.1 Locomotive Shed

*Primary Reference Number: 63991*

*NGR: SH5862460380*

*Photographic Archive: G2805\_001 to G2805\_022; and G2805\_051 to G2805\_054*

*Figure: 04*

*Plates: 01 to 26*

The Fire Queen Engine Shed is a gabled rectangular structure, oriented east west with a double door entrance on the eastern side with rail tracks heading from the tunnel in the mountain to the north of the slate yard known as Gilfach Ddu, into the shed through these double doors allowing the locomotive engine to enter the shed. The centrally located curbed entranceway at the west is 3.22 metres in height and 2.44 metres in width. It is constructed of snecked granite blocks on the southern elevation with slate window and door surrounds, slate sills and patented Dinorwig cast iron window frames with small lights, three on the south side 1.1 metres from the ground level, 1.26 metres wide and 1.9 metres in height. The windows are arched with rounded tops with uniform protruding keystones. Slate voussoirs and sills show evidence of tooling. A ventilation canopy runs east west along the ridge of the roofline, presumably to allow smoke and steam to escape. The gable ends of this canopy with wooden slats along the lateral sides. There is a slate chimney at the western gable end above an internal chimney breast. There is a slate built mono-pitched roofed lean to building at the western end of the shed, with a west facing door and south facing window, these appear to be later additions to the building and has a roof of decorative rounded slate. The east facing elevation of the Fire Queen shed is made of slate with no window and is built into the rising bank. All guttering is of modern plastic and has been recently replaced. Metal work bracketing was noted at the southwestern corner of unknown purpose. Roofing slates of shed appear renewed, with modern ceramic ridge tiles. The entrance door is of oak with decorated studs and a decorated wire twist door handle on the exterior.

It is clear from the condition of the exterior of the Fire Queen shed that the building has been well maintained over the last century with many of the original features of the structures surviving to a good condition.

The interior of the shed is currently in use as a workshop and storage building for the council workers who maintain the Parc Padarn area and its surroundings. The shed is internally rendered with lime mortar and the window returns in the southern side are 0.3 of a metre

deep. The western gable end of the structure is 0.7 metres thick. The walls behind the facing are built of slate shale rubble. The chimney breast is 1.4 metres wide and 0.28 metres deep against the internal western gable wall. The fireplace has a slate surround and metal and brick internal structure. The western gable wall was difficult to access on account of the buildings current use as a Storage Barn, with boxes, shelving and gardening equipment obscures much of this end of the structure. The roof of the building is constructed of three trusses known as the queen post style, with a central post and bracing slats on either side and connected by metal bolts and struts. These are overlaid by two rows of purlins and common rafters. These are constructed of soft wood, with the slates above appearing to have been replaced in modern times. Lead flashing is present in places throughout the roof. The internal height of the building is 3.7 metres to the level of the eaves and 5.34 metres to ridge level. The northern internal wall is fitted as a workshop (probably in the 20<sup>th</sup> century after its use as a locomotive shed) with areas of missing lime mortar revealing the shale slate rubble internal construction and patches of red ox blood paint and green paint surviving in small areas on the mortar. The floor is boarded in modern plywood that covers the railway tracks and concrete beneath. The internal dimensions of the structure are 13.3 metres x 4.9 metres with the wall thickness being 0.6 metres.



## 4.2 Utility Unit & Blast Shelter

*Primary Reference Number: 67148*

*NGR: SH5867560463*

*Photographic Archive: G2805\_023 to G2805\_050*

*Figure: 05*

*Plates: 26 to 45*

The Utility Unit located within the Vivian Quarry is a rectangular building identified as the ropeway system winding house with a blast shelter abutting the northern side. It is constructed of part mortared shale rubble with a mono-pitched shale roof running east west. It has an opening with two iron shutters on the western side which is 1.4 metres wide and 1.2 metres above ground level and is 1.8 metres tall. The south side has a wooden window with two wooden transoms, the entrance doorway and a plinth of 5 slate steps lead to a doorway which is 2.8 metres protruding from the building, and 2.1 metres wide, rising to a Height of 1.2 metres. The doorway was 2.1 metres wide and 1.3 metres high and formerly had a wooden door and frame of pitch pine, now collapsed and resting on the top step. All lintels are of cut slate. On the north side of the building a mono-pitched blast shelter was located. This is a separate structure with the southern side abutting the Utility Unit and the stonework is not keyed in. This structure is rendered internally and has a mixture of logs and cut timbers as rafters for the roof. It is roofed with rough cut slate. There are no internal features within the blast shelter. There is a telegraph pole on the south side of the building with a cog wheel immediately to the west of the Utility Unit which was likely taken from the machinery within the structure.

The rough-cut roof of the main structure of the Utility Unit has collapsed into the centre of the structure and lies partially on top of the machinery that powered the ropeway system that transported quarry carts across the opening of the quarry (now flooded and used as a diving training centre). For this reason access to the structure was impossible and unsafe with the internal elements recorded from the open doorway. The roof slates were supported by large timbers, now badly rotten and partially collapsed. The machinery seen within includes a foot switch, metal box and wheel handles which controlled a ropeway system in the Vivian Quarry.

### **4.3 Storage Barn**

*Primary Reference Number: 67151*

*NGR: SH5866260419*

*Photographic Archive: G2805\_040 to G2805\_048*

*Figure: 05*

*Plates: 46 to 54*

The Storage Barn within the Vivian quarry is to the south of the Utility Unit and measures in at 5 metres wide, 9 metres deep and 5.87 metres high. The building is constructed of two parallel cut slate walls which are 1.2 metres wide on the northern side and 0.93 metres wide to the south. The north side is stepped with two inward thinnings of the wall creating narrowing stepped constructions with the first step at 1.86 metres above ground level, the second is 1.53 metres high. The cut slate blocks average 0.7 metres by 0.2 metres but are all of different size. The building is roofed with railway track re-used as rafters and covered with large rough slates. It is built against the quarry face with no rear eastern wall. No other internal features excepts metal pins that may have supported a second floor for storage and graffiti of a train (Plate 44) which is a superb 19<sup>th</sup> century example. This train art appears unfinished with no bogies on the carriages. It is located on the internal south wall 2 metres back from the entrance and 1.1 metre above ground level. The wall is slightly mono-pitched north south with the northern wall higher than the southern wall.

## 5 CONCLUSION

Gwynedd Archaeological Trust was commissioned by Chambers Conservation Ltd, to undertake building recording for three structures associated with slate quarrying and slate processing at Dinorwig Quarry, Gwynedd, comprising a Locomotive Shed, Utility Unit/Blast Shelter and a Storage Barn. This report represents the technical aspects of this recording work.

The map regression shows that a building is visible at the site of the storage barn in Vivian Quarry in the 2<sup>nd</sup> and 3<sup>rd</sup> edition 25-inch to 1-mile maps published in 1900 and 1914. The Utility Unit & Blast Shelter do not appear on the early maps suggesting it may have been constructed post 1914.

It was clear during the recording that the condition of the exterior of the Fire Queen locomotive shed that the building has been well maintained with many of the original features of the structure surviving to a good condition. It is currently in use as a store, with the interior also in good condition, with surviving structural elements. The removal of the plywood floor in the interior will likely reveal the 0.6 metre gauge railway tracks beneath.

The Utility Unit was identified as a ropeway system winding house; it was in a dilapidated condition and unsafe to enter without the removal of the collapsed portions of the roof. Machinery associated with the winding mechanism was visible inside, with a cog wheel taken and reused on a telegraph pole to the south side of the building.

The Storage Barn has survived to a good condition other than the absence of the second floor. It was roofed with railway track re-used as rafters and covered with large rough slates, whilst graffiti of a steam train was visible on an interior wall. The graffiti of the steam train is an important archaeological feature and is comparable with the paddle steamer graffiti previously identified on the A-incline winding house (cf. report GAT\_1700).

## 6 SOURCES CONSULTED

1. Chambers Conservation Ltd 2021, *Parc Padarnn, Llanberis. Conservation Architect's Report- Issue 4*. Unpublished Report for Cadw
2. Chartered Institute for Archaeologists, 2020, Standard and Guidance for the Archaeological Investigation and Recording of Standing Buildings or Structures
3. Chartered Institute for Archaeologists, 2020, Standard and guidance for the collection, documentation, conservation and research of archaeological materials
4. Chartered Institute for Archaeologists, 2020, Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives
5. Chartered Institute for Archaeologists, 2020, Standard and Guidance for an Archaeological Watching Brief
6. Evans R, Woods M & Baumgardner J. 2023. The Slate Landscape of Northwest Wales - Unesco World Heritage Site. Dinorwig Slate Quarry Mountain Landscape Building Record. Unpublished GAT Report No. 1700.
7. Evans, English Heritage, 1991, Management of Archaeological Projects (MAP2)
8. Historic England, 2015, Management of Research Projects in the Historic Environment (MoRPHE)
9. Historic England, 2016. *Understanding Historic Buildings: A Guide to Good Recording Practice*
10. Hopewell, D. 2018 *Slate Landscapes of North-West Wales World Heritage Site Nomination. Field Survey and Character Area Production*. Unpublished GAT Report No. 1428
11. Hopewell, D. 2018 G2656 *The Slate Landscapes of North-West Wales World Heritage Site. Quarry Workings: A Review of Survey Records*. Unpublished GAT Report No. 1622
12. Royal Commission on Ancient and Historic Monuments of Wales, 2015, Guidelines for digital archives
13. The Welsh Archaeological Trusts, 2020. *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs) Version 2*.



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PARC PADARN, LLANBERIS – CONSERVATION ARCHITECT’S REPORT

DRAWING 01 – Location Plan of Structures (Rev A)









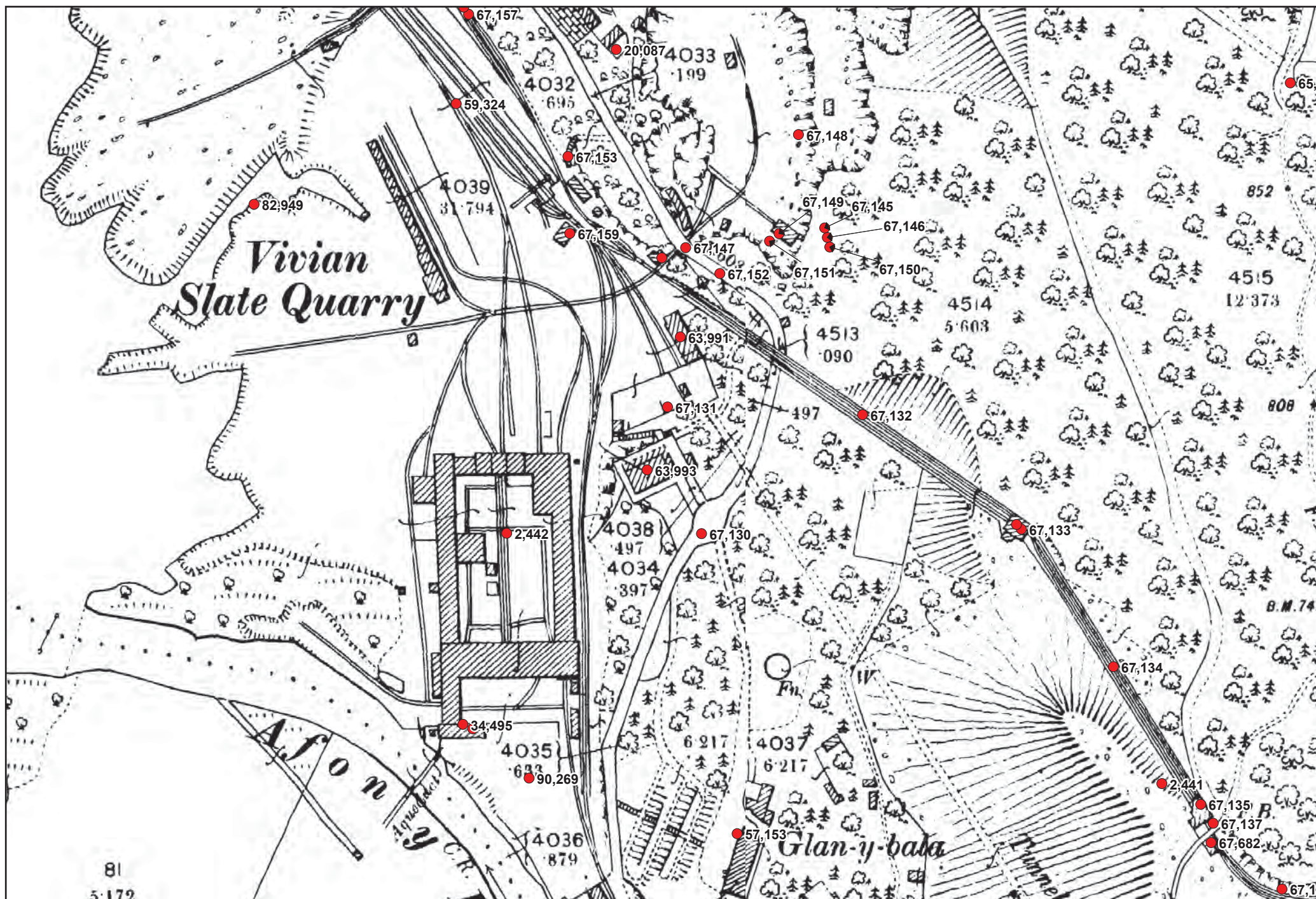


Figure 03: Reproduction of the 2nd edition 1-inch to 25-mile Ordnance Survey County Series map (Caernarvonshire Sheets XVI.8 & XVII.5), published in 1900. Scale: 1:2000@A4.



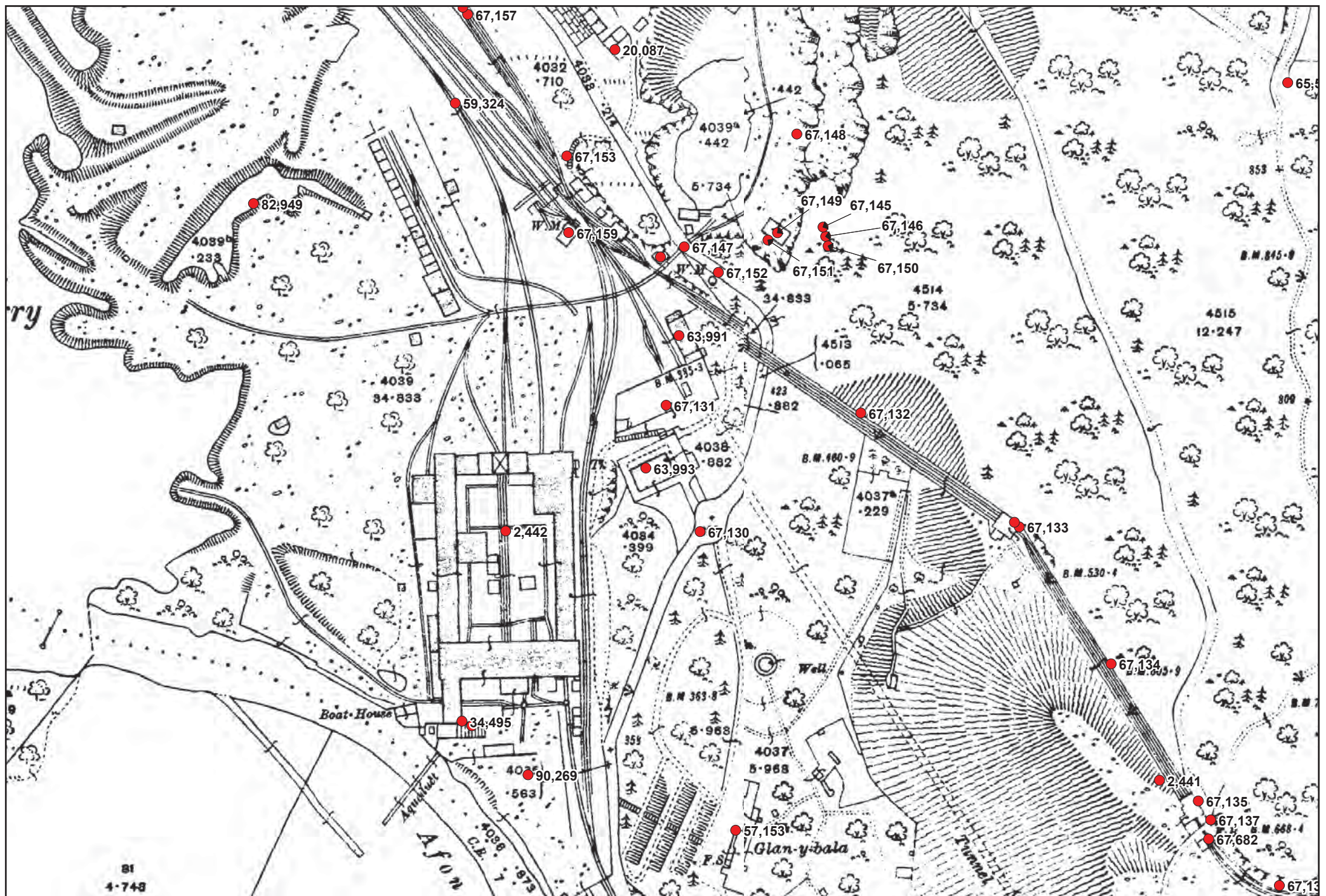


Figure 04: Reproduction of the 3rd edition 1-inch to 25-mile Ordnance Survey County Series map (Caernarvonshire Sheets XVI.8 & XVII.5), published in 1914. Scale: 1:2000@A4.



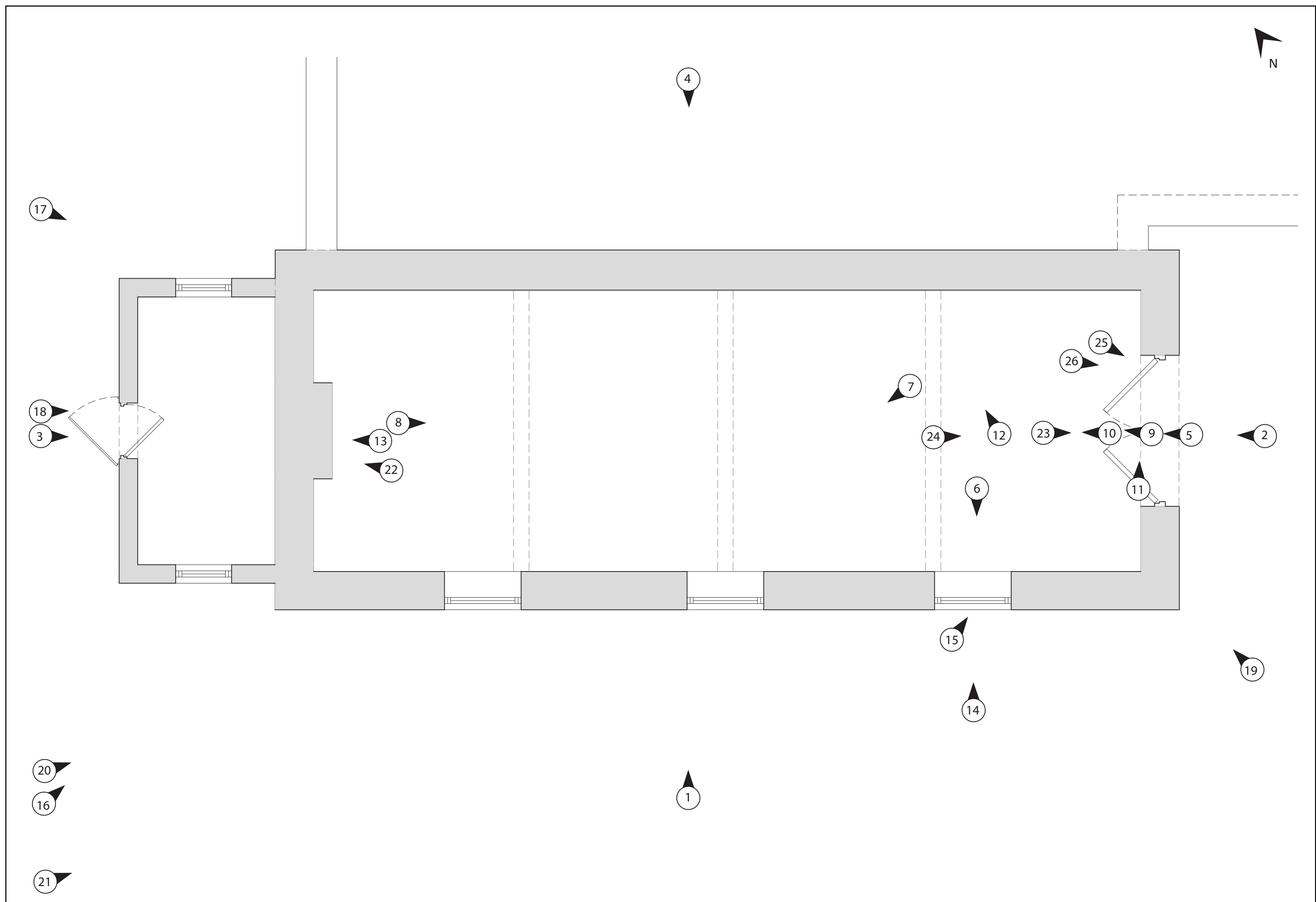


Figure 05: Locomotive Shed (Primary Reference Number 63991). Reproduction of Chambers Conservation Job Number LPCP.03 Drawing No. 01 showing location and direction of photographic archive. Not to Scale.

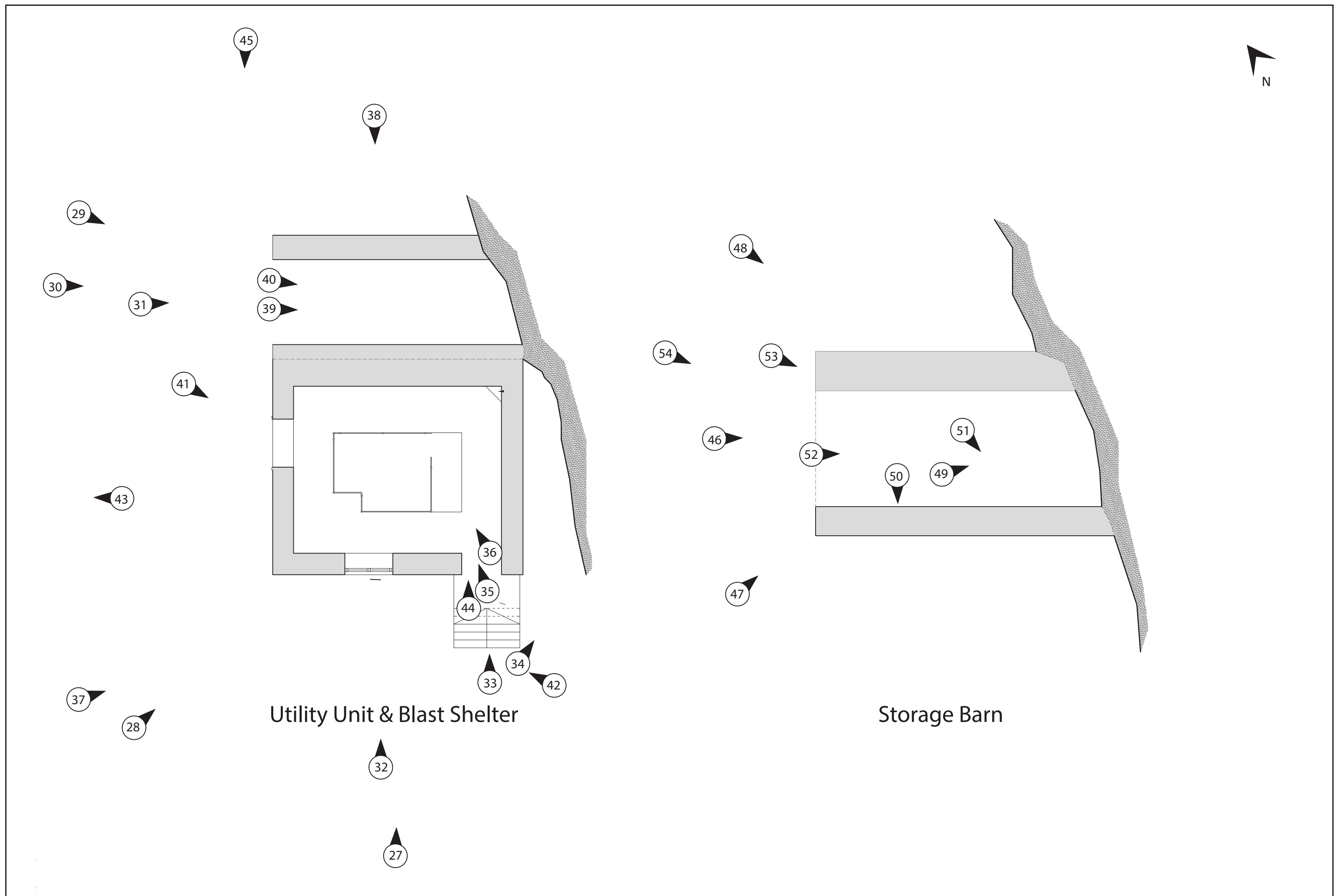


Figure 06: Utility Unit & Blast Shelter (Primary Reference Number 6748) and Storage Barn (Primary Reference Number 67151) - Reproduction of Chambers Conservation Job Number LPCP.04 Drawing No. 01 showing location and direction of photographic archive. Not to Scale.



Plate 1: Fire Queen Locomotive Shed - Southern lateral side of Fire Queen shed; scale 1m; view from S (archive reference: G2805\_001).



Plate 2: Fire Queen Locomotive Shed - Eastern gable end of locomotive shed; scale 1m; view from E (archive reference: G2805\_002).





Plate 3: Fire Queen Locomotive Shed - Western gable end of locomotive shed Shed; scale 1m; view from W (archive reference: G2805\_003).



Plate 4: Fire Queen Locomotive Shed - Northern side of locomotive shed obscured by trees, taken from bottom of A-incline; scale not used; view from N (archive reference: G2805\_004).





Plate 5: Fire Queen Locomotive Shed - Shot into interior of locomotive shed through doorway in eastern gable; scale 1m; view from E (archive reference: G2805\_005).



Plate 6: Fire Queen Locomotive Shed - Shot of eastern most window on southern lateral wall from interior (Partially obscured by gardening tools); scale 1m; view from N (archive reference: G2805\_006).





Plate 7: Fire Queen Locomotive Shed - Shot looking in SW corner of locomotive shed (showing current use as workshop); scale 1m; view from NE (archive reference: G2805\_007).



Plate 8: Fire Queen Locomotive Shed - Shot looking into e corner of locomotive shed showing open doorway; scale 1m; view from W (archive reference: G2805\_008).





Plate 9: Fire Queen Locomotive Shed - shot of roof trusses taken from doorway; scale not used; view from E (archive reference: G2805\_009).



Plate 10: Fire Queen Locomotive Shed - shot of central roof truss and modern lighting and heater; scale not used; view from E (archive reference: G2805\_010).





Plate 11: Fire Queen Locomotive Shed - Portrait shot of detail of door in eastern gable (note decorative door handle); scale 1m; view from SSW (archive reference: G2805\_011).



Plate 12: Fire Queen Locomotive Shed - Shot of northern lateral wall interior; scale 1m; view from SE (archive reference: G2805\_012).





Plate 13: Fire Queen Locomotive Shed - Portrait of fireplace at western gable end (obscured by ladder and boxes); scale not used; view from E (archive reference: G2805\_013).



Plate 14: Fire Queen Locomotive Shed - Shot of eastern most window in southern lateral wall; scale 1m; view from S (archive reference: G2805\_014).





Plate 15: Fire Queen Locomotive Shed - Closeup of tooling on sill in eastern most window of southern lateral wall; scale not used; view from S (archive reference: G2805\_015).



Plate 16: Fire Queen Locomotive Shed - Angled shot of SW corner of exterior of locomotive shed; scale 1m; view from SW (archive reference: G2805\_016).





Plate 17: Fire Queen Locomotive Shed - Angled shot of NW corner of exterior of locomotive shed; scale 1m; view from NW (archive reference: G2805\_017).



Plate 18: Fire Queen Locomotive Shed - Detail of chimney at western end of locomotive shed; scale 1m; view from W (archive reference: G2805\_018).





Plate 19: Fire Queen Locomotive Shed - Angled shot of SE corner of eastern gable end of locomotive shed; scale 1m; view from SE (archive reference: G2805\_019).



Plate 20: Fire Queen Locomotive Shed - Wide shot of locomotive shed showing relationship with tunnel to the east; scale not used; view from W (archive reference: G2805\_020).





Plate 21: Fire Queen Locomotive Shed - General wide shot showing locomotive shed in relation to Vivian Quarry to the northwest; scale not used; view from SE (archive reference: G2805\_021).



Plate 22: Fire Queen Locomotive Shed - Detail of fireplace (partially obscured by boxes); scale not used; view from ENE (archive reference: G2805\_022).





Plate 23: Fire Queen Locomotive Shed - View of inside of main doors to locomotive shed showing cut portions to allow doors to open fully; scale not used; view from W (archive reference: G2805\_051).



Plate 24: Fire Queen Locomotive Shed - View of inside of main doors to locomotive shed showing cut portions to allow doors to open fully; scale not used; view from W (archive reference: G2805\_052).



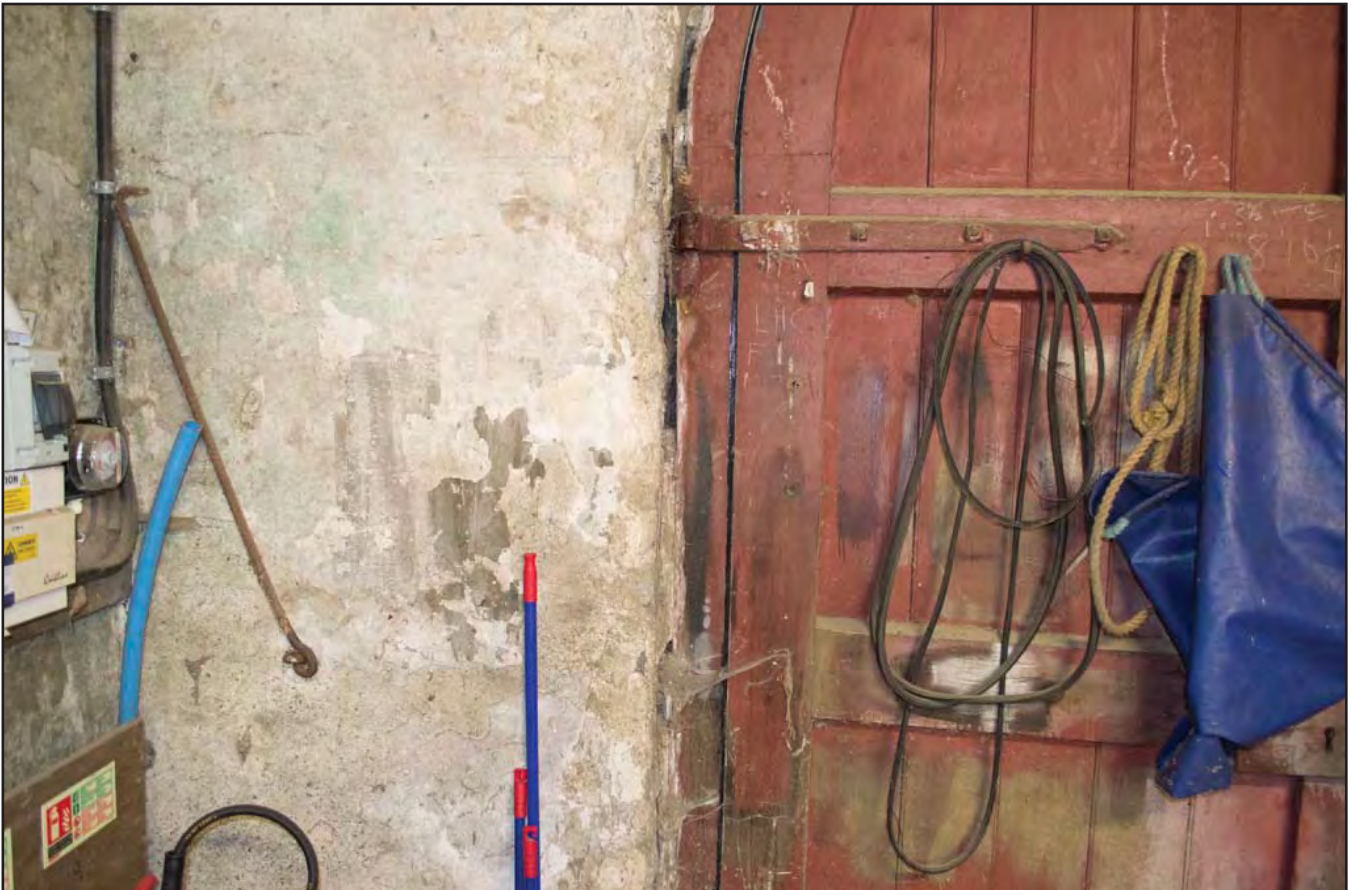


Plate 25: Fire Queen Locomotive Shed - View of bar latch on north side of entrance doors in the locomotive shed; scale not used; view from W (archive reference: G2805\_053).



Plate 26: Fire Queen Locomotive Shed - View of bar latch on north side of entrance doors in the locomotive shed; scale not used; view from W (archive reference: G2805\_054).





Plate 27: Vivian Quarry Utility Unit & Blast Shelter - Shot of southern lateral side of utility unit and blast shelter; scale 1m; view from S (archive reference: G2805\_023).



Plate 28: Vivian Quarry Utility Unit & Blast Shelter - Shot of southeastern corner of utility unit and blast shelter; scale 1m; view from SE (archive reference: G2805\_024).





Plate 29: Vivian Quarry Utility Unit & Blast Shelter - Shot of blast shelter abutting the utility unit; scale 1m; view from NW (archive reference: G2805\_025).



Plate 30: Vivian Quarry Utility Unit & Blast Shelter - Shot of blast shelter abutting the utility unit; scale 1m; view from W (archive reference: G2805\_026).





Plate 31: Vivian Quarry Utility Unit & Blast Shelter - Straight on shot of blast shelter; scale 1m; view from W (archive reference: G2805\_027).



Plate 32: Vivian Quarry Utility Unit & Blast Shelter - Doorway to utility unit; scale 1m; view from S (archive reference: G2805\_028).





Plate 33: Vivian Quarry Utility Unit & Blast Shelter - Detail of steps into utility unit; scale 1m; view from S (archive reference: G2805\_029).



Plate 34: Vivian Quarry Utility Unit & Blast Shelter - East gable end of utility unit where it abuts quarry face; scale 1m; view from S (archive reference: G2805\_030).





**Plate 35: Vivian Quarry Utility Unit & Blast Shelter - Shot through door of utility unit showing levers; scale not used; view from S (archive reference: G2805\_031).**



**Plate 36: Vivian Quarry Utility Unit & Blast Shelter - Shot through door showing machinery; scale not used; view from S (archive reference: G2805\_032).**





Plate 37: Vivian Quarry Utility Unit & Blast Shelter - View of telegraph pole on south side of utility building; scale not used; view from SW (archive reference: G2805\_033).



Plate 38: Vivian Quarry Utility Unit & Blast Shelter - View of north side of blast shelter; scale 1 m; view from N (archive reference: G2805\_034).





Plate 39: Vivian Quarry Utility Unit & Blast Shelter - View of interior of blast shelter; scale 1 m; view from W (archive reference: G2805\_035).



Plate 40: Vivian Quarry Utility Unit & Blast Shelter - Detail of roof structure within the blast shelter; scale not used; view from W (archive reference: G2805\_036).





Plate 41: Vivian Quarry Utility Unit & Blast Shelter - Detail of iron doors and cog wheel on west side of utility building; scale 1m; view from W (archive reference: G2805\_037).



Plate 42: Vivian Quarry Utility Unit & Blast Shelter - Detail showing collapse door on steps; scale 1m; view from S (archive reference: G2805\_038).





Plate 43: Vivian Quarry Utility Unit & Blast Shelter - General view across quarry pool showing cable ride (that the utility unit probably powers); scale not used; view from ESE (archive reference: G2805\_039)..



Plate 44: Vivian Quarry Utility Unit & Blast Shelter - View of collapsed roof above machinery in the utility unit; scale not used; view from S (archive reference: G2805\_049).





Plate 45: Vivian Quarry Utility Unit & Blast Shelter - General view of quarry pool; scale not used; view from N (archive reference: G2805\_050).



Plate 46: Vivian Quarry Storage Barn - General view into storage barn; scale 1m; view from W (archive reference: G2805\_040).





Plate 47: Vivian Quarry Storage Barn - Angled view of storage barn in Vivian Quarry; scale 1m; view from SE (archive reference: G2805\_041).



Plate 48: Vivian Quarry Storage Barn - Angled view of storage barn in Vivian Quarry; scale 1m; view from NW (archive reference: G2805\_042).





Plate 49: Vivian Quarry Storage Barn - Back of storage barn showing quarried rock face; scale 1m; view from W (archive reference: G2805\_043).



Plate 50: Vivian Quarry Storage Barn - Close up of initials and train graffiti on southern inside wall of storage barn; scale not used; view from N (archive reference: G2805\_044).





Plate 51: Vivian Quarry Storage Barn - Interior of storage barn showing relict second storey; scale not used; view from NW (archive reference: G2805\_045).



Plate 52: Vivian Quarry Storage Barn - Shot of roof from interior showing recycled rail tracks used as roof rafters; scale not used; view from NW (archive reference: G2805\_046).





**Plate 53: Vivian Quarry Storage Barn - Shot of wider base of wall on northern side; scale 1m; view from W (archive reference: G2805\_047).**



**Plate 54: Vivian Quarry Storage Barn - Shot showing metal box to the west of storage barn; scale 1m; view from W (archive reference: G2805\_048).**



## **APPENDIX I**

### **Gwynedd Archaeological Trust Written Scheme of Investigation**

DINORWIG SLATE QUARRY MOUNTAIN  
LANDSCAPE – PARC PADARN (G2805)

WRITTEN SCHEME OF INVESTIGATION FOR A  
LEVEL 3 BUILDING RECORD

*Prepared for*

*CHAMBERS CONSERVATION LTD*

***October 2023***



Ymddiriedolaeth Archaeolegol Gwynedd  
Gwynedd Archaeological Trust



All GAT staff should sign their copy to confirm the project specification is read and understood and retain a copy of the specification for the duration of their involvement with the project. On completion, the specification should be retained with the project archive:

Name

Signature

Date

**DINORWIG SLATE QUARRY MOUNTAIN LANDSCAPE –  
PARC PADARN(G2805)**

**WRITTEN SCHEME OF INVESTIGATION FOR A LEVEL 3 BUILDING RECORD**

Prepared for *Chambers Conservation*, October 2023

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# 1 INTRODUCTION

Gwynedd Archaeological Trust (GAT) has been commissioned by Chambers Conservation Ltd, to undertake building recording for structures associated with slate quarrying and slate processing at Dinorwig Quarry, Gwynedd LL55 3EU (NGR SH5951460360; cf. [Figure 01](#)) following the inclusion of the slate mines of North Wales as UNESCO World Heritage sites. The quarry contains a total of 379 sites with primary reference numbers (PRN's) on the Gwynedd Historic Environment Record (HER), which survive in varying conditions since their abandonment during the late 19<sup>th</sup> and 20<sup>th</sup> centuries. The proposed work is to provide an analytical record of three structures included on a priority list of at risk relict structures within the UNESCO World Heritage boundary at Dinorwig Quarry (Hopewell 2018, Chambers Conservation Ltd. 2021). They comprise a former locomotive shed, located at Parc Padarn, a utility unit & blast shelter, and a storage barn, both within Vivian Quarry. The recording will be undertaken in October 2023, in accordance with the following standards and guidelines:

- Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs) Version 2 (The Welsh Archaeological Trusts, 2020);
- Guidelines for digital archives (Royal Commission on Ancient and Historic Monuments of Wales, 2015).
- Management of Archaeological Projects (English Heritage, 1991);
- Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide (Historic England, 2015);
- Standard and Guidance for the Archaeological Investigation and Recording of Standing Buildings or Structures (Chartered Institute for Archaeologists, 2020);
- Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials (Chartered Institute for Archaeologists, 2020);
- Standard and guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives (Chartered Institute for Archaeologists, 2020); and
- Understanding Historic Buildings: A Guide to Good Recording Practice (Historic England, 2016).

Gwynedd Archaeological Trust is certified to ISO 9001:2008 and ISO 14001:2004 (Cert. No. 74180/A/0001/UK/En) and is a Registered Organisation with the Chartered Institute for Archaeologists (CIfA).



## **1.1 Monitoring Arrangements**

The building record will be monitored by Cadw. Cadw have requested that the building record is undertaken in accordance with Understanding Historic Buildings: A Guide to Good Recording Practice Level 3 (Historic England, 2016).

The content of this WSI and all subsequent reporting by GAT must be approved by Cadw prior to final issue.

## 1.2 Historic Environment Record

In line with the Gwynedd Historic Environment Record (HER) requirements, the HER will be contacted at the onset of the project to ensure that any data arising is formatted in a manner suitable for accession to the HER and follows the guidance set out in *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)* (The Welsh Archaeological Trusts, 2020). The HER will be informed of the project start date, location including grid reference, estimated timescale for the work, and further relevant information associated with the project.

The GAT HER Enquiry Number for this project is GATHER1937 and the Event PRN is 46695.

Prior to submission of data to the HER on completion of the project, a bilingual event summary document will be prepared in *Microsoft Word* based on the format defined in section 4.2 of *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)* (Version 2).



## 2 HISTORICAL BACKGROUND

The slate quarry known as Dinorwig can be found carved out of the slopes of Mount Elidir located between the villages of Llanberis and Dinorwig, overlooking the two lakes at Llyn Peris and Llyn Padarn. Dinorwig is known for being the second largest slate quarry in the world and the site has seen slate extraction from the late 18<sup>th</sup> century until the abandonment of the site in the early 1960's. The cultural, social and geographic impact of the slate mining industry on Northwest Wales has seen the slate quarries achieve UNESCO World Heritage status in July 2021, along with structures associated with the quarrying, processing of slate and sites connected with the transport infrastructure and accommodation for workers found within this incredible industrial landscape.

The landscape of what remains of Mount Elidir and the Dinorwig quarry is dominated by the slate mining industry and the massive scale of the industrial processes of slate extraction and transportation in the area has eradicated any evidence of prehistoric land use and much of the pre quarry historic aspects of the landscape within the boundary of the UNESCO World Heritage site.

The site and stories of the quarrymen have seen extensive research and study over the years due to the geographical impact of the slate mines upon the landscape of Wales and the cultural and social histories of those who worked at Dinorwig. Two books have been written about Dinorwig, Chambers Jones, R 2006 *Dinorwic - The Llanberis Slate Quarry, 1780-1969* and Carrington, D. C. 1994 *Delving in Dinorwig*. These historic accounts of Dinorwig contain useful information and historic photographs of the site but no surveys of the condition of the assets within the boundary were undertaken.

The first archaeological survey to be carried out at Dinorwig was undertaken in 1995 by Gwynedd Archaeological Trust and the survey identified 218 assets and these were further categorised by site type, but no further study was carried out during this project.

In 2018 GAT carried out a more thorough walkover survey using the previous survey from 1995 as a guide. This survey identified a further 161 assets within the site boundary, bringing the total number of assets to 379. These were recorded with descriptive records, photographs and the sites were categorised into character areas. A map regression was carried out and the extent to which the quarry grew is clear from 1908-1965 with the quarried terraces extending to the south east along the bank of Llyn Peris with the construction of the buildings to be recorded as part of this survey seen within the quarry site as marked on the map.

In early 2023, GAT completed a Level 3 record of six structures within the quarry (report GAT\_1700), including:

- Hafod Owen and Winder House (PRN 82,949; NGR SH58446043);
- Counterbalance Inclines A1 and A2 (PRNs 67,132 and 67,134; NGR SH58696034 to SH58806023);
- Lower Incline Drum house (PRN 67,133; NGR SH58766029);
- Upper Incline Drum house (PRN 67,135; NGR SH58836018);
- Iron Bridge with Slate Abutments over the Railway (PRN 67,137; NGR SH58846017); and
- Weighbridge House and Other Buildings, with a Cantilevered Slab Shelter (PRN 67,682; SH58846016).

The Hafod Owen building and winding house had been moved to Gilfach Ddu in 1974, adjacent to the Pardarn Country Park car park, where it was rebuilt; the recording identified the main elements of the buildings and their associated machinery, noting that the Hafod Owen incline had required engine power and extremely steep engineering to extract slate from the original quarry pit. The report stated that the context and understanding of this was somewhat lost in its new location, particularly in the relationship of the engine house to the winding house. The numberings on the stones, to enable an accurate rebuild were clearly noted on the winding hose, but only partially on the engine house, whilst the presence of upside-down graffiti suggested that at least one stone was inverted in the rebuild, suggesting 100% accuracy in the replacement of stones was not required in all cases.

The remaining structures were in their original locations and the report stated there was a significant amount of original structural information that was successfully recorded and understood.

*Chambers Conservation Ltd* completed a conservation architect's report for Parc Padarn in May 2021 (*Chambers Conservation Ltd. 2021*). The report was written to accompany a schedule of condition and repairs and was included four site visits between 25th February and 26th March 2021. A total of 30No structures were assessed in the report for their general condition and any structural issues; the structures were located at Gilfach Ddu and Vivian Quarry (cf. Figure 01) and included the Utility Unit & Blast Shelter (designated 11V) and Storage Barn (designated 12V).



## 3 METHOD STATEMENT

### 3.1 Introduction

A Level 3 Record, as defined by *Understanding Historic Buildings: A Guide to Good Recording Practice*, is required for the structures that lie within the UNESCO World Heritage site at Dinorwig Quarry. A Level 3 record is characterised in *Understanding Historic Buildings* (Historic England, 2016) as an analytical record and comprises an introductory description followed by a systematic account of the designated structures' origins, development, and use. The record will include an account of the evidence on which the analysis has been based, allowing the validity of the record to be re-examined in detail. It will also include all drawn and photographic records that may be required to illustrate the structures' appearance and to support an historical analysis. (Historic England, 2016: 26); information from reports GAT\_1622, GAT\_1700 and Chambers Conservation Ltd. 2021 Issue 4 will be used to support this.

The Level 3 Record will be completed during October 2023, and will consist of the full recording of three structures which formerly were part of the wider Dinorwig Quarry. *The Level 3 record will be limited to accessible areas and in accordance with a suitable risk assessment and health & safety parameters. Due to a collapsed roof, the interior of the utility unit is not accessible, so the photographic record will be limited to the exterior.*

### 3.1.1 *Locomotive Shed*

A late 19th century locomotive shed built to serve on the Padarn railway (Primary Reference Number (PRN) 63991; NGR SH5862460380; cf. [Figure 01](#) and [Figures 02](#) and [03](#)). It was built c.1870 to house the first 0.6m gauge locomotives on the internal Dinorwig quarry system when the Dinorwig Quarry Railway was cut back from Muriau to Gilfach Ddu. From 1882 to 1969 it served as a small museum housing the locomotive Fire Queen. It is described in the regional HER as a long rectangular-plan high single-storey structure with lean-to addition on north gable end. The main building comprises snecked rock-faced rubblestone with slate-stone quoins, dressed slate-stone slabs to lean-to, a slate roof with long gabled ventilated louvre to ridge of main shed and banded slates on lean-to. The long west wall of the shed has three tall round-headed decorated cast-iron windows (of very similar pattern to those in Quarry Workshops) with tightly jointed pointed slate voussoirs and slate sills, integral slate-stone stack with moulded capping to north. The south gable end has a pointed doorway for the locomotive, with dressed slate voussoirs; a lean-to on north has window to west and doorway on north. This particular shed is thought to have housed the locomotive which passed through the Glan-y-Bala tunnel to connect with the south-eastern area of the quarry until tipping allowed the line to be re-laid around the bluff. The lean-to on the north gable end appears to be a later addition. The shed has constructed in a similar idiom to the adjacent former quarry yard, now the National Slate Museum.



### 3.1.2 Utility Unit & Blast Shelter

The utility unit and blast shelter located close to the eastern bank of Pwll Vivian (NGR SH58666046C; cf. [Figure 01](#) and [Figure 04](#)). As described in Chambers Conservation Ltd. 2021 Issue 4, the utility unit structure is a medium-sized building with stacked slate walls and a mono-pitched slate roof, which slopes down towards the vertical rock-face almost immediately behind; there is a timber access door on the south side, together with an unglazed casement window. On the west side facing Pwll Vivian there is a steel loading door; on the north side of the building there is a lean-to blast shelter, which has stacked slate walls to the north and east sides and a roof consisting of large slates laid over log beams (Chambers Conservation Ltd. 2021:39).

In terms of the building condition, the Chambers Conservation Ltd. report states that the roof of the utility unit was not visible, but there was no evidence of significant issues; whilst there was vegetation growing, there were no large plants or trees. A large loose slate was noted on the edge of the roof near the pole and door and the walls were described as generally sound with no major issues noted. There is some ivy growth and the window had failing paintwork and no glazing and therefore has an unkempt appearance; the boarded door was decayed at the base and boarded; a loose slate at the top of the steps leading to the door could be a trip hazard. The lean-to roof log beams were damp and slightly decayed in places but substantial enough to be structurally sound; no issues were noted with the walls (*ibid.*).

There is no access to the interior.

### 3.1.3 Storage Barn

The utility unit and blast shelter located close to the eastern bank of Pwll Vivian (NGR SH58646041C; cf. [Figure 01](#) and [Figure 04](#)). As described in Chambers Conservation Ltd. 2021 Issue 4, the barn is a single storey structure, consisting of a pair of parallel walls made of stacked slates. The roof consists of irregular slate slabs laid over steel joists and at the rear, there is an hole in the roof of an unknown purpose; the rockface forms the rear wall (Chambers Conservation Ltd. 2021:40).

In terms of the building condition, the Chambers Conservation Ltd. report states that the top side of the roof could not be seen, but it was clear that there was vegetation growing which that may cause slates to be dislodged, whilst trees growing on the nearby bank may also have an effect; on the lower (southern) side of the roof was a loose slate that may be in danger of falling imminently. Inside the structure was evidence that slates had fallen from the roof through the large gaps between the metal joists; the joists themselves were rusted but appeared sound - one appears misaligned, but as it is next to the hole, this could be deliberate or due to whatever caused the hole. The walls are described as straight and in good condition with a few minor areas, such as a missing block on the right-hand side of the opening (*ibid.*).



## 3.2 Photographic Record

The photographic record will include *Understanding Historic Buildings* photographic elements 1 to 9 (Historic England, 2016: 26) and include:

- a general view or views of the respective structures in their wider setting or landscape;
- their external appearance; typically a series of oblique views that show all external elevations, and give an overall impression of their size and shape. If relevant during recording, where individual elevations include complex historical information it may also be appropriate to take views at right-angles to the plane of the elevation;
- further views (if relevant during the recording visit) to reflect the original design intentions, where these are known from documentary sources or can be inferred from the structures or their setting;
- the overall appearance of the principal rooms and circulation areas (where accessible);
- any external or internal detail, structural or decorative, which is relevant to the structures' design, development and use, with scale where appropriate;
- any machinery or other plant, or evidence of former existence;
- any dates or other inscriptions; any signage, makers' plates or graffiti which contribute to an understanding of the structures. A transcription should be made wherever characters are difficult to interpret;
- any building contents which have a significant bearing on the structures' history.
- Copies of maps, drawings, views and photographs, if present in the structures and illustrating development or that of its site.
- The use of suitable scales along with artificial lighting where necessary.

Photographic images will be taken using a digital SLR (Nikon D3100) camera set to maximum resolution (4928 x 3264; 16.2 effective megapixels) in RAW format. A photographic record will maintained on site using GAT pro-formas ([Appendix III](#)) and digitised in Microsoft Excel and Access as part of the fieldwork archive and dissemination process; the archive numbering system will start from G2805\_001. The location and orientation of photographs taken will be recorded on an annotated copy of *Chambers Conservation* Job Number LPCP.03 Drawing No. 01 and Job Number LPCP.04 Drawing No. 01 a (cf. Figures [02](#) and [04](#) respectively) and then digitised for final reporting. The

photographic images will then be converted to TIFF for final archiving using Adobe Photoshop.



### 3.3 Written Record

The written record will include *Understanding Historic Buildings* report elements 1-3, 6-9, 11-13, 23 (Historic England, 2016: 26). This will include:

- The precise location of the structures (NGR format) and an address;
- A note of any statutory or non-statutory designations (in this instance, Primary Reference Numbers);
- The date of when the record was made as well as the name of the recorder and location of the project archive;
- A description of the structures' form, function, date and sequence of development. The names of architects, builder, patrons and owners should be included if known;
- An introduction briefly setting out the circumstances in which the record was made, its objectives, methods, scope and limitations, and any constraints. Where appropriate the brief for the work or the project design should be stated or appended;
- Acknowledgements to all those who have made a significant contribution to the making of the record, or who have given permission for copyright items to be reproduced;
- A discussion of the published sources relating to the structures' location and setting, an account of their history as given in published sources, an analysis of historic map evidence (map regression) and a critical evaluation of previous records of the structures.;
- An account of the structures' overall form (structure, materials, layout) and of successive phases of development, together with the evidence supporting this analysis (if applicable);
- An account of the structures' past and present use. An account of any fixtures, fittings, plant or machinery present, and their purpose; and
- Full bibliographic and other references, or a list of the sources consulted.

The written record will be completed using a building record pro-forma ([Appendix I](#)) and a room record pro-forma ([Appendix II](#)). The basic record pro-forma will be used to record the exterior and interior elevations, as well as key structural details. Key dimensions and detailed measurements will be completed using hand tapes and a laser distance measurer.

### 3.4 Drawn Record

Measured drawings will be prepared in accordance with *Understanding Historic Buildings* drawing elements 2 and sometimes one or more of items 3 to 12 (Historic England, 2016: 26). This will include:

- Measured plans (to scale or fully dimensioned) as existing.
- Measured drawings recording the form or location of other significant structural detail.
- Measured cross-sections or long-sections to illustrate the vertical relationships.
- Measured drawings to show the form of any architectural decoration (for example the moulding profiles of door surrounds, beams, mullions and cornices) or small-scale functional detail not easily captured by photography. A measured detail drawing is particularly valuable when the feature in question is an aid to dating.
- Measured elevations, where these are necessary to an understanding of the structures' design, development or function.
- A site plan relating the structures and to any related topographical and landscape features.
- A plan or plans identifying the location and direction of accompanying photographs.
- Copies of earlier drawings (if applicable) throwing light on the structures' history.

In this instance, the scaled plans and elevations detailed in *Chambers Conservation* Job Number LPCP.03 Drawing Nos. 01 and 02, and Job Number LPCP.04 Drawing No. 01 will be used (cf. Figures [02](#), 03 and [04](#) respectively).



### 3.5 Working Project Archive & Data Management Plan

Following the completion of the fieldwork, a programme of fieldwork archiving will be completed based on following task list:

Pro-formas: all cross referenced and complete;

Photographic Metadata: completed in *Microsoft Access* and cross-referenced with all pro-formas;

This data will then be used as the basis for the physical and digital dataset archives. Information from these will be used to compile the project report. The physical archive will be stored in a designated project folder and the location confirmed in the Trust project database; the digital dataset will be stored on a dedicated Trust server, with the location confirmed in the Trust project database via a specific hyperlink. External datasets for the HER and RCAHMW are as defined in the dissemination strategy below. De-selected digital data will be confirmed in an updated digital management plan appended to the final report.

A draft report will be submitted within one month of fieldwork completion and a final report will be submitted to the regional Historic Environment Record within six months of project completion. The report will include the following:

1. Non-technical summary (Welsh and English)
2. Introduction
3. Background
4. Methodology
5. Results
6. Conclusion
7. List of sources consulted.
8. Appendix I – approved GAT project specification
9. Appendix II – GAT photographic metadata
10. Appendix III – GAT selection strategy

On final approval, the following dissemination and archiving of the report and digital dataset will apply:

- A digital report(s) will be provided to the client and CADW (draft report then final report);

- A digital report will be provided to the regional Historic Environment Record along with a digital dataset comprising an Event PRN summary. The report and dataset will be submitted in accordance with the required standards set out in *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)* (Version 2); and
- A digital report and digital archive dataset will be provided to Royal Commission on Ancient and Historic Monuments, Wales, in accordance with the *RCAHMW Guidelines for Digital Archives Version 1*. The dataset will be prepared in the format required by RCAHMW and will include:
  - Photographic metadata (Microsoft Access);
  - Photographic archive (TIFF format);
  - Project Information form (Excel);
  - File Information form (Excel) – Microsoft Word report text final;
  - File Information form (Excel) – Photographic metadata (general);
  - File Information form (Excel) – Adobe PDF report final; and
  - File Information form (Excel) - Photographic metadata (detail).



### 3.6 Selection Strategy

As defined in *Standard and Guidance for The Creation, Compilation, Transfer and Deposition of Archaeological Archives* (Chartered Institute for Archaeologists, 2020) section 3.3.1, a project specific selection strategy and data management plan should be prepared. In support of this, the Chartered Institute for Archaeologist (CIfA), have stated that it is “widely accepted that not all the records and materials collected or created during the course of an Archaeological Project require preservation in perpetuity. These records and materials constitute the Working Project Archive which will be subject to Selection, in order to establish what will be retained for long-term curation”. The aim of selection is to ensure that all the elements retained from the Working Project Archive for inclusion in the Archaeological Archive are appropriate to establish the significance of the project and support “future research, outreach, engagement, display and learning activities”. Selection should be “focused on selecting what is to be retained to support these future needs, rather than deciding what can be dispersed” and can be qualified by a selection strategy, which details the project-specific selection process, agreed by all parties (including GAT, client and/or landowner), which will be applied to a Working Project Archive prior to its transfer into curatorial care as the Archaeological Archive.

The selection strategy is summarised in [Appendix IV](#) will be confirmed in the final report; it will take into account:

- The aims and objectives of the project.
- The brief and/or Written Scheme of Investigation (WSI)).
- The Collecting Institution’s collection policy and/or deposition guidelines.
- Local and regional research frameworks.
- Relevant thematic or period specific research frameworks.
- The project’s Data Management Plan (DMP).
- Internal recording and reporting policies.
- Material-specific guidance documents.

## **4 PERSONNEL**

The project will be managed by Neil McGuinness, Principal Archaeologist GAT Contracts Section and undertaken by a Project Archaeologist. The Project Archaeologist will be responsible for all field management duties, including GAT liaison, client liaison, coordination and delegation of tasks. The Project Archaeologist will also be responsible for the completion of all on site pro-formas and the fieldwork archive as well as for submitting a draft final report (or interim report) for project manager review and approval. The report will then be submitted as per the arrangements defined above.



## 5 HEALTH AND SAFETY

A site specific risk assessment will be prepared by the GAT Project Archaeologist in advance of works, with any additional risks identified on site highlighted in the dynamic risks section and appropriate mitigation undertaken. The GAT Project Archaeologist will be issued with required personal safety equipment, including high visibility jacket, steel toe-capped boots and safety helmet. All site work will be managed and undertaken in accordance with the GAT Health & Safety Policy. *Due to a collapsed roof, the interior of the utility unit and blast shelter is not accessible; a dynamic risk assessment will need to be made on site regarding interior access for the storage barn.*

## **6 SOCIAL MEDIA**

One of the key aims in the GAT mission statement is to improve the understanding, conservation and promotion of the historic environment in our area and inform and educate the wider public. To help achieve this, GAT maintains an active social media presence and seeks all opportunities to promote our projects and results. With permission, GAT would like the opportunity to promote our work on this scheme through our social media platforms. This could include social media postings during our attendance on site as well as any postings to highlight results. In all instances, approval will be sought from client prior to any postings.



## **7 INSURANCE**

### **7.1 Public/Products Liability**

Limit of Indemnity- £5,000,000 any one event in respect of Public Liability

INSURER Ecclesiastical Insurance Office Plc.

POLICY TYPE Public Liability

POLICY NUMBER 000375

EXPIRY DATE 22/08/2024

### **7.2 Employers Liability**

Limit of Indemnity- £10,000,000 any one occurrence.

INSURER Ecclesiastical Insurance Office Plc.

POLICY TYPE Public Liability

POLICY NUMBER 000375

EXPIRY DATE 22/08/2024

### **7.3 Professional Indemnity**

Limit of Indemnity- £5,000,000 in respect of each and every claim

INSURER AXA Insurance UK Plc

POLICY TYPE Professional Indemnity

POLICY NUMBER TG0275

EXPIRY DATE 22/08/2024

## 8 SOURCES CONSULTED

1. Chambers Conservation Ltd 2021, *Parc Padarnn, Llanberis. Conservation Architect's Report- Issue 4*. Unpublished Report for Cadw
2. Chartered Institute for Archaeologists, 2020, Standard and Guidance for the Archaeological Investigation and Recording of Standing Buildings or Structures
3. Chartered Institute for Archaeologists, 2020, Standard and guidance for the collection, documentation, conservation and research of archaeological materials
4. Chartered Institute for Archaeologists, 2020, Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives
5. Chartered Institute for Archaeologists, 2020, Standard and Guidance for an Archaeological Watching Brief
6. Evans R, Woods M & Baumgardner J. 2023. The Slate Landscape of Northwest Wales - Unesco World Heritage Site. Dinorwig Slate Quarry Mountain Landscape Building Record. Unpublished GAT Report No. 1700.
7. Evans, English Heritage, 1991, Management of Archaeological Projects (MAP2)
8. Historic England, 2015, Management of Research Projects in the Historic Environment (MoRPHE)
9. Historic England, 2016. *Understanding Historic Buildings: A Guide to Good Recording Practice*
10. Hopewell, D. 2018 *Slate Landscapes of North-West Wales World Heritage Site Nomination. Field Survey and Character Area Production*. Unpublished GAT Report No. 1428
11. Hopewell, D. 2018 G2656 *The Slate Landscapes of North-West Wales World Heritage Site. Quarry Workings: A Review of Survey Records*. Unpublished GAT Report No. 1622
12. Royal Commission on Ancient and Historic Monuments of Wales, 2015, Guidelines for digital archives
13. The Welsh Archaeological Trusts, 2020. *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs) Version 2*.



## **FIGURE 01**

**Reproduction of Chambers Conservation Ltd. 2021 Drawing 01 –  
Location Plan of Structures (Rev A).**



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PARC PADARN, LLANBERIS – CONSERVATION ARCHITECT’S REPORT

DRAWING 01 – Location Plan of Structures (Rev A)

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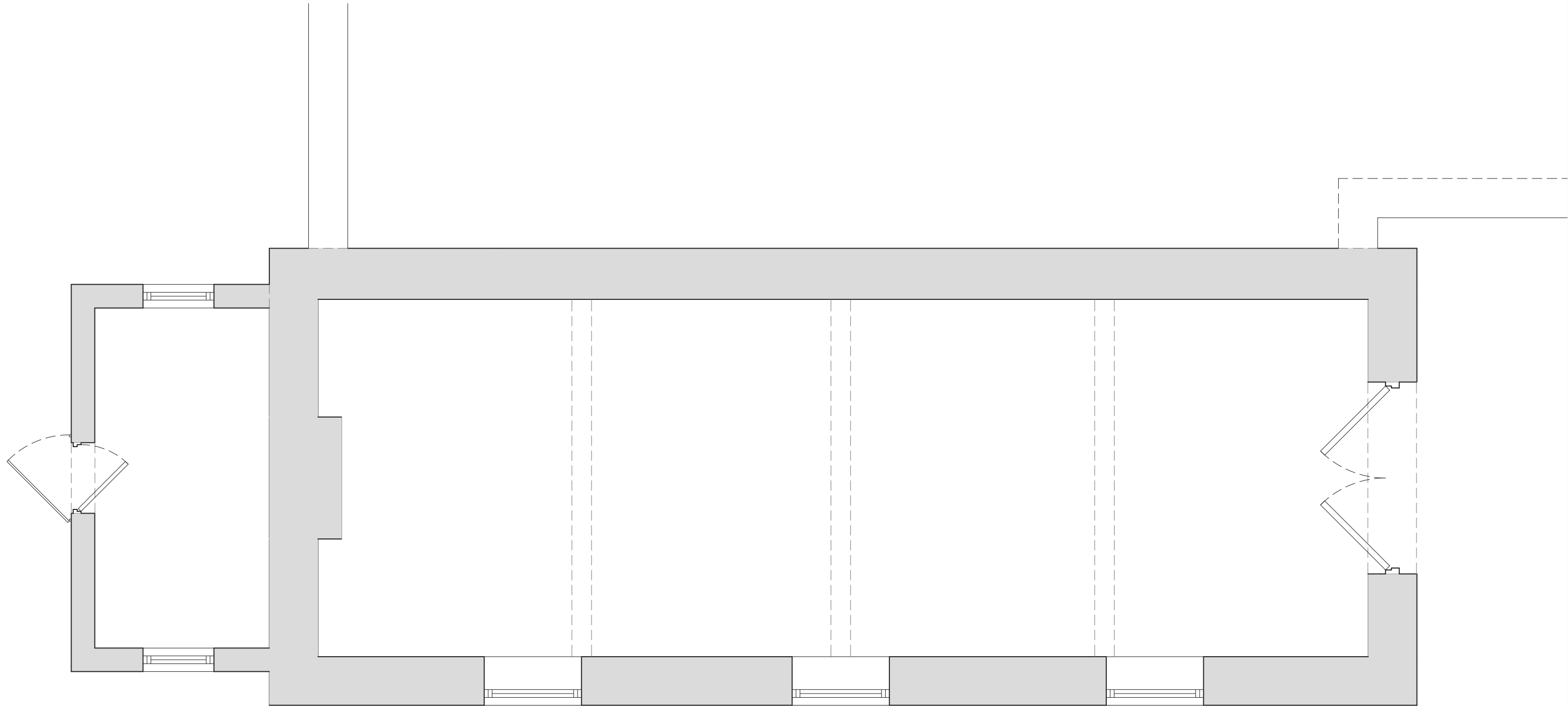


Jennifer Chambers, Director 07484 133270  
www.chambersconservation.com jennifer@chambersconservation.com  
Chambers Conservation Ltd, 88 Tattenhall Road, Tattenhall, Chester CH3 9QJ

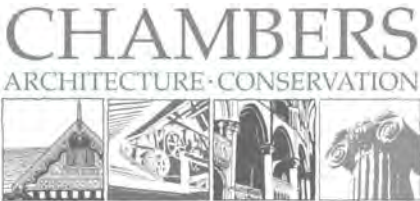


## **FIGURE 02**

**Reproduction of *Chambers Conservation* Job Number LPCP.03 Drawing  
No. 01**



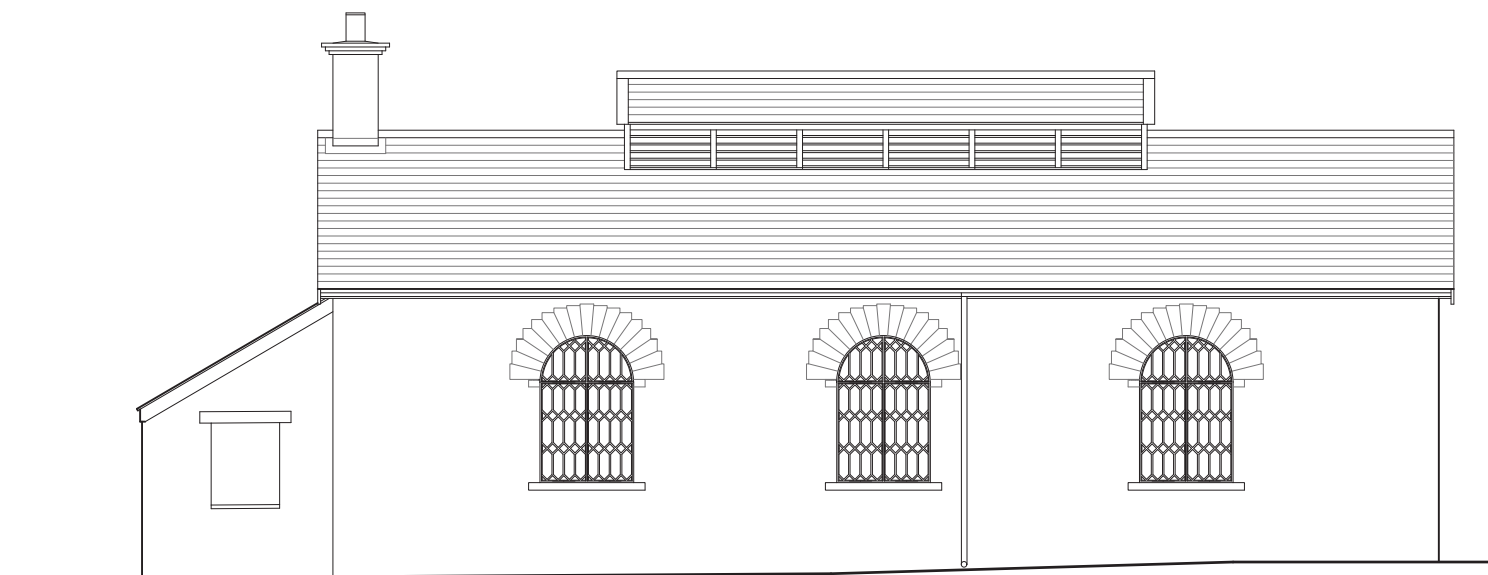
Plan as Existing  
(1:50 at A3)

PROJECT	PARC PADARN, LLANBERIS - FIRE QUEEN SHED	DRAWING STATUS	WORK IN PROGRESS	First Issue	11.09.2023	<div>© Chambers Conservation Ltd jennifer@chambersconservation.com rob@chambersconservation.com 07484 133270 or 07919 300428 www.chambersconservation.com</div> <div>Registered in England and Wales, no. 09787239 Registered address: Mercury House, High Street, Tattenhall CH3 9PX Do not scale from this drawing unless agreed</div> <div></div>
JOB NUMBER	LPCP.03	DRAWING NO.	01			
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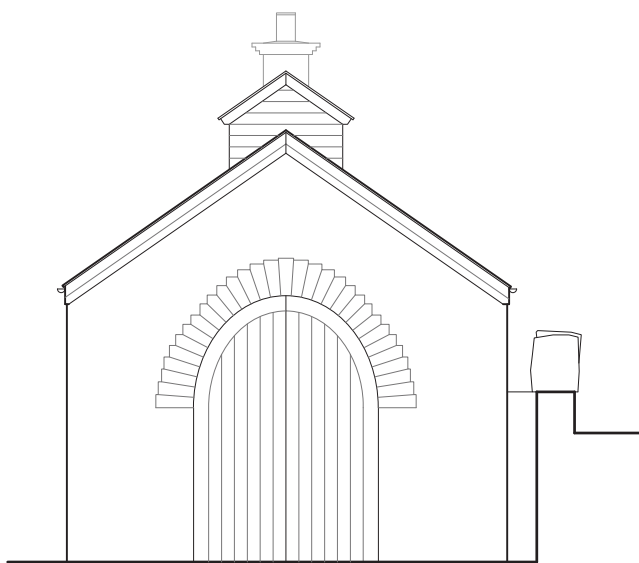
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**Reproduction of *Chambers Conservation* Job Number LPCP.03 Drawing  
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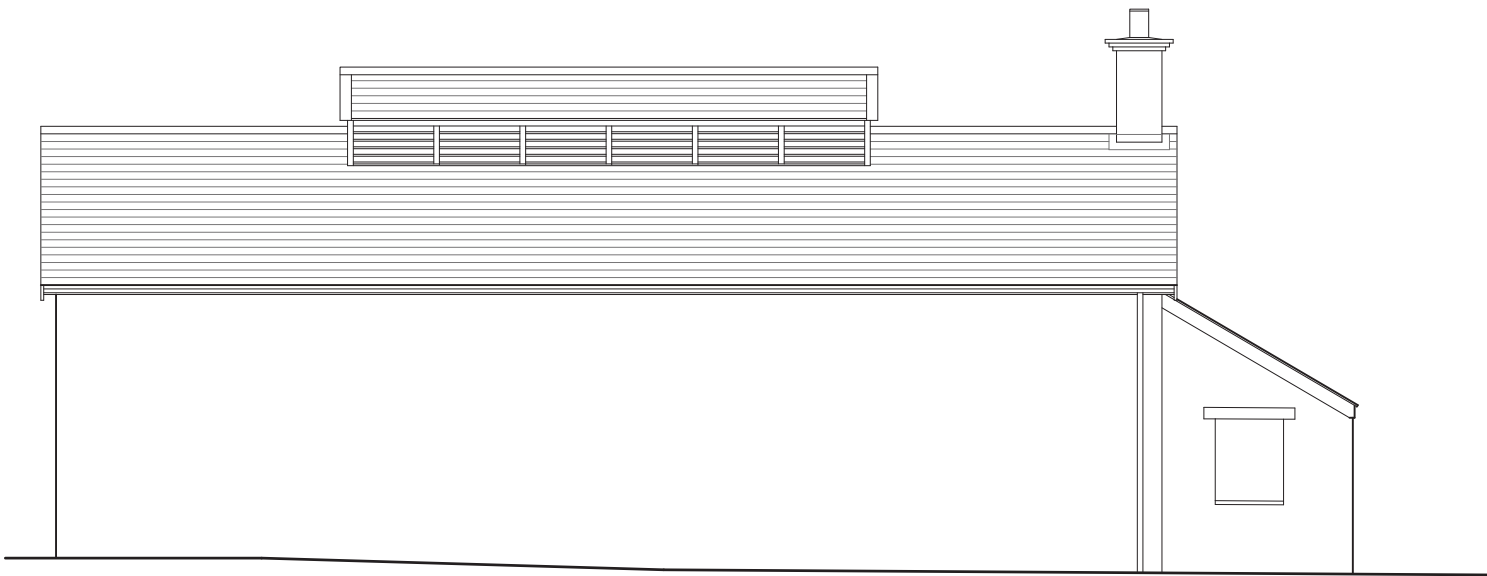




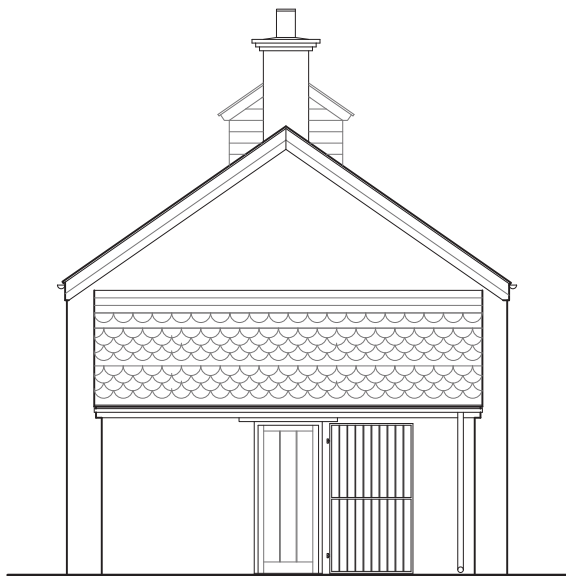
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(1:100 at A3)



South Elevation as Existing  
(1:100 at A3)



East Facing Elevation as Existing  
(1:100 at A3)



North Elevation as Existing  
(1:100 at A3)

PROJECT  
PARC PADARN, LLANBERIS - FIRE QUEEN SHED

JOB NUMBER  
LPCP.03

DRAWING TITLE  
FIRE QUEEN SHED - ELEVATIONS AS EXISTING

DRAWING STATUS  
WORK IN PROGRESS

DRAWING NO.  
02

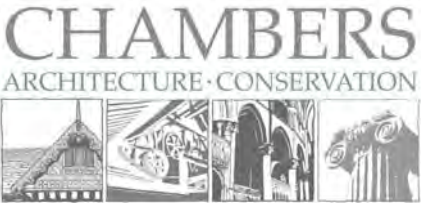
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First Issue  
25.07.2023

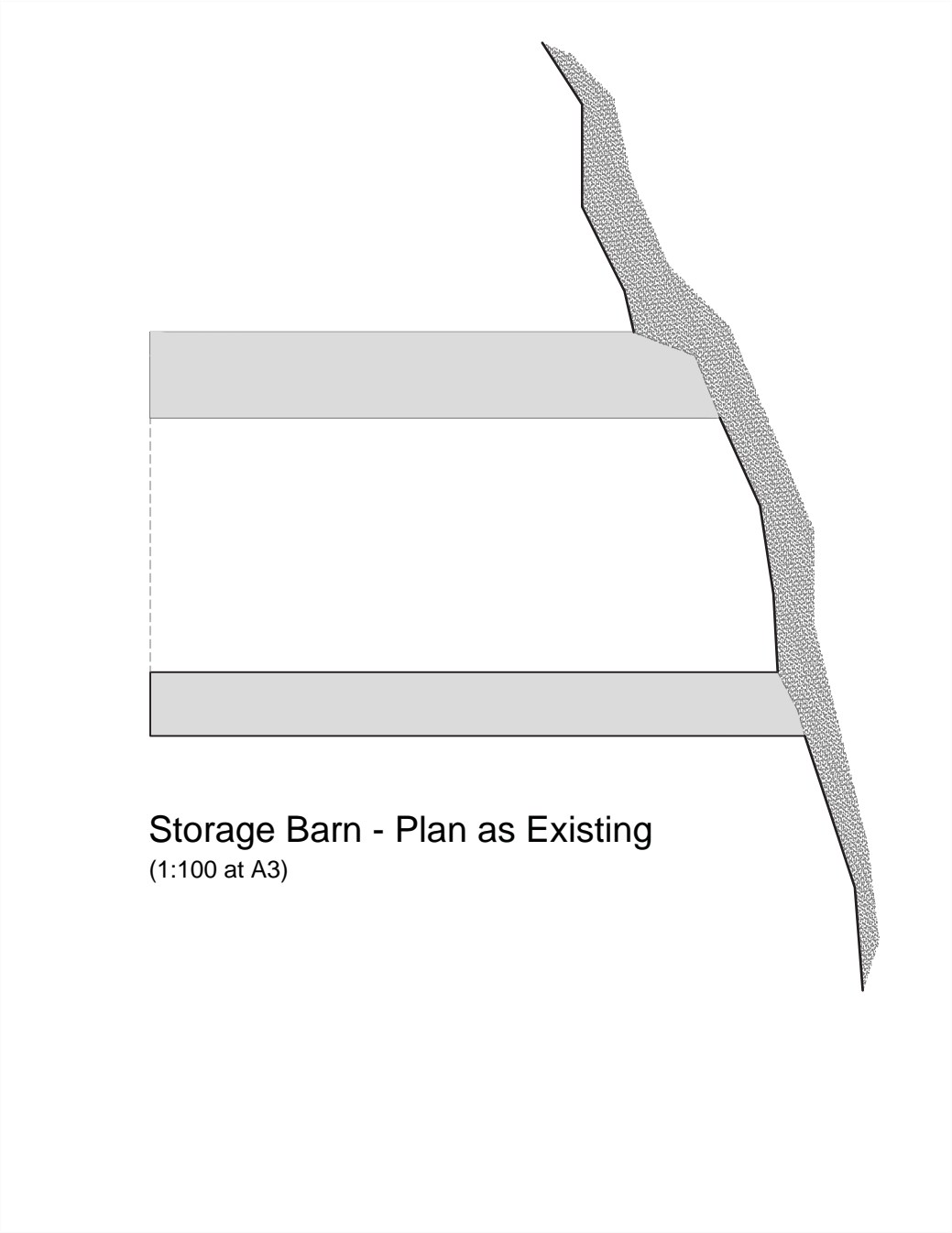
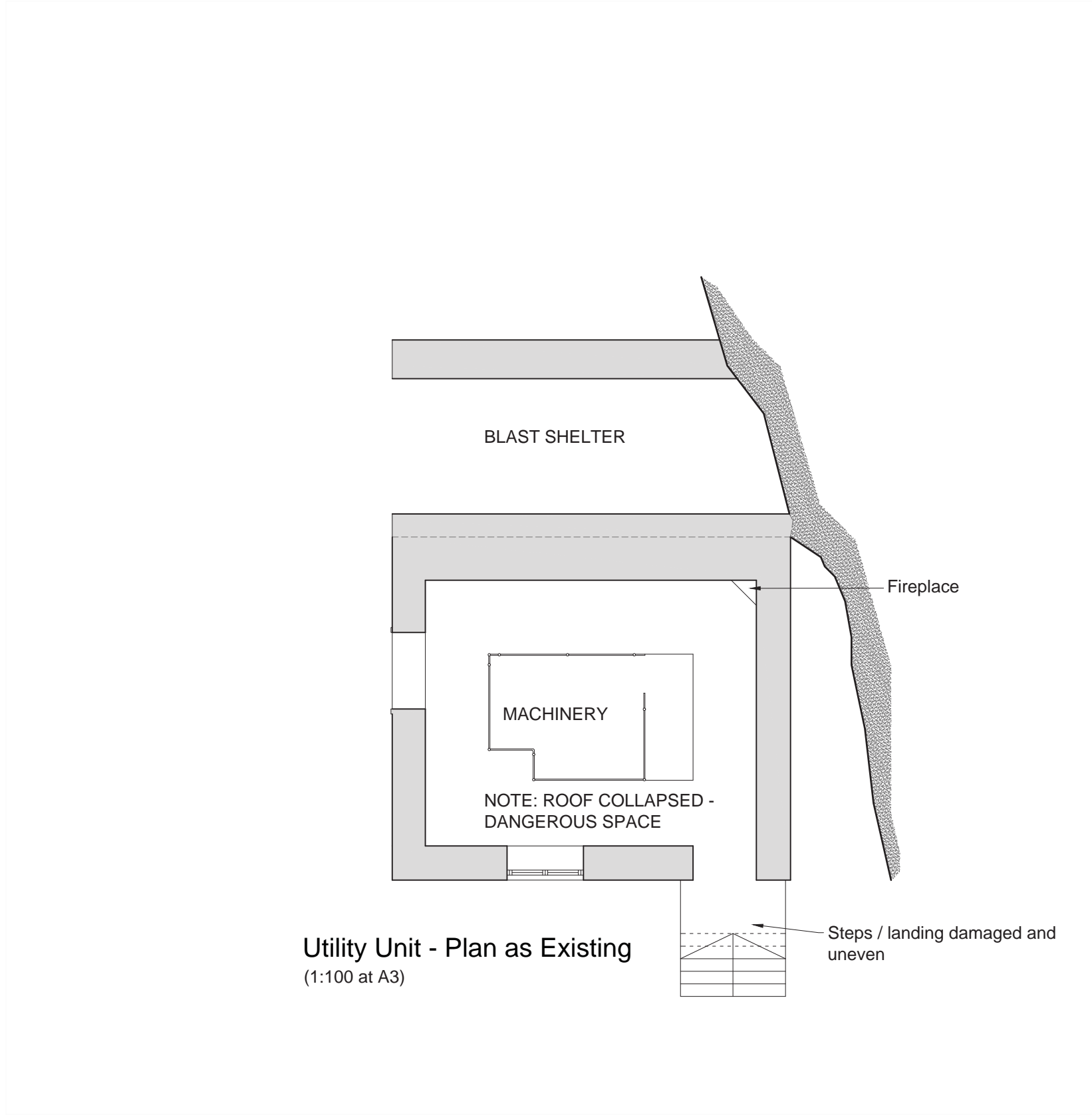
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Tattenhall CH3 9PX  
Do not scale from this drawing unless agreed



## **FIGURE 04**

**Reproduction of *Chambers Conservation* Job Number LPCP.04 Drawing  
No. 01**





## **APPENDIX I**

### **Gwynedd Archaeological Trust Building Record pro-forma**

YMDDIRIEDOLAETH ARCHAEOLEGOL GWYNEDD ARCHAEOLOGICAL TRUST		
BASIC RECORDING FORM	Project name	Project number
Feature name		Feature Number
NGR		
Description		
<div></div>		
Recommendations for further assessment		
<div></div>		
Photographic record numbers		
Digital		
	Visit date	Visit by

## **APPENDIX II**

### **Gwynedd Archaeological Trust Room Recording Pro-Forma**



YMDDIRIEDOLAETH ARCHAEOLEGOL GWYNEDD ARCHAEOLOGICAL TRUST			
ROOM RECORDING FORM		Project name	Project number
Room Number	Floor /Level		
Description			
Photographic record numbers		Scales used	Dimensions Length  Width  Height

	Visit date	Visit by
--	------------	----------

## **APPENDIX III**

### **Gwynedd Archaeological Trust Photographic Metadata Pro-Forma**



## Digital Photographic Record

Include main context numbers for each shot, drawing numbers for sections and any other relevant numbers for cross referencing.

Delete any unwanted photos **immediately** from the camera.

Regularly upload photographs to computer.

[illegible]



## **APPENDIX IV**

### **Gwynedd Archaeological Trust Selection Strategy**

# G2805\_Parc\_Padarn

## 04/10/2023 v1.0

### Selection Strategy

#### Project Information

##### Project Management

<b>Project Manager</b>	John Roberts <a href="mailto:john.roberts@heneb.co.uk">john.roberts@heneb.co.uk</a>
<b>Archaeological Archive Manager</b>	John Roberts <a href="mailto:john.roberts@heneb.co.uk">john.roberts@heneb.co.uk</a>
<b>Organisation</b>	Gwynedd Archaeological Trust

Stakeholders		Date Contacted
<b>Collecting Institution(s)</b>	GAT Historic Environment Record	28/09/2023
	RCAHMMW	On completion of Project Archive
<b>Project Lead / Project Assurance</b>	Cadw	tbc
<b>Landowner / Developer</b>	Cyngor Gwynedd	n/a

##### Resources

<b>Resources required</b> Describe the resources required to implement this Selection Strategy, particularly if unusual resources are required.	No unusual resources required outside of GAT normal operating equipment and personnel.
--	--

##### Context

Describe below the context of this Selection Strategy. You should refer to:

- The aims and objectives of the project;
- Local Authority guidance (including the brief);
- Research Frameworks;
- The repository collection development policy and/or deposition policy;
- Material-specific guidance documents.

**Note:** This section may be copied from your Project Design/WSI to ensure all Stakeholders receive this context information.

The full aims and objectives of this project are detailed in the project specific WSI.

Gwynedd Archaeological Trust (GAT) has been commissioned by Chambers Conservation Ltd, to undertake building recording for structures associated with slate quarrying and slate processing at Dinorwig Quarry, Gwynedd LL55 3EU (NGR SH5951460360; cf. WSI Figure 01) following the inclusion of the slate mines of North Wales as UNESCO World Heritage sites. The quarry contains a total of 379 sites with primary reference numbers (PRN's) on the Gwynedd Historic Environment Record (HER), which survive in varying conditions since their abandonment during the late 19<sup>th</sup> and 20<sup>th</sup> centuries. The proposed work is to provide an analytical record of three structures included on a priority list of at risk relict structures within the UNESCO World Heritage boundary at Dinorwig Quarry (Hopewell 2018, Chambers Conservation Ltd. 2021). They comprise a former locomotive shed, located at Parc Padarn, a utility unit & blast shelter, and a storage barn, both within Vivian Quarry. The recording will be undertaken in October 2023.

Source: Gwynedd Archaeological Trust. 2023. Dinorwig Slate Quarry Mountain Landscape – Parc Padarn: Written Scheme of Investigation for Archaeological Mitigation: Level 3 Building Record. October 2023. Project G2805.



# 1 – Digital Data

## Stakeholders

Name the individual(s) responsible for the Digital Data Selection decisions (i.e. Archaeological Archive Manager, Project Manager, Collections Curator).

John Roberts (GAT Principal Archaeologist)

## Selection

### Location of Data Management Plan (DMP)

Selection of digital data elements should be considered in your project's DMP. For the purpose of the Selection Strategy, you can either copy the selection section of your DMP below, or attach it as an appendix to this document. Please indicate here if the DMP is attached.

All digital data will be collected, stored and selected in lines with the Gwynedd Archaeological Trust (GAT) Data Management Plan located on GAT's servers (available on request).

Following the completion of the fieldwork, a working project archive will be created based on following task list;

1. Pro-formas: all cross referenced and complete;
2. Photographic Metadata: completed in *Microsoft Access* and cross-referenced with all pro-formas;

All relevant site archive data will be added to a digital project register specific to this project, which will be prepared in *Microsoft Excel*. This data will be used as the basis for the physical and digital dataset archives. Information from these will be used to compile the project report. The physical archive will be stored in a designated project folder and the location confirmed in the Trust project database; the digital dataset will be stored on a dedicated Trust server, with the location confirmed in the Trust project database via a specific hyperlink. External datasets for the HER and RCAHMW are as defined in the dissemination strategy below. De-selected digital data will be confirmed in an updated digital management plan appended to the final report

## De-Selected Digital Data

This will be confirmed in the finalised selection strategy at project end

## 2 – Documents

### Stakeholders

Name the individual(s) responsible for the Documents Selection decisions (i.e. Archaeological Archive Manager, Project Manager, Repository Representative).

John Roberts – Principal Archaeologist, Gwynedd Archaeological Trust;  
Sean Derby – Historic Environment Record, Gwynedd Archaeological Trust;  
Gareth Edwards, *Head of Knowledge and Understanding, RCAHMW*

### Selection

- A digital report will be provided to the regional Historic Environment Record; this will be submitted within six months of project completion (final report only), along with a digital dataset comprising an Event PRN summary. The report and dataset will be submitted in accordance with the required standards set out in *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)* (Version 2); and
- A digital report and digital archive dataset will be provided to Royal Commission on Ancient and Historic Monuments, Wales (final report only), in accordance with the *RCAHMW Guidelines for Digital Archives Version 1*. The dataset will be prepared in the format required by RCAHMW and included:
  - Photographic metadata (Microsoft Access);
  - Photographic archive (TIFF format);
  - Project Information form (Excel);
  - File Information form (Excel) – Microsoft Word report text final;
  - File Information form (Excel) – Photographic metadata (general);
  - File Information form (Excel) – Adobe PDF report final; and
  - File Information form (Excel) - Photographic metadata (detail).

### De-Selected Documents

Describe the procedure for dealing with De-selected material and what specialist advice has informed this procedure.

This will be confirmed in the finalised selection strategy at project end

## **APPENDIX II**

### **Gwynedd Archaeological Trust photographic metadata**



PRN	PHOTO RECORD NUMBER	PROJECT PHASE	DESCRIPTION	SITE SUB-DIVISION	VIEW FROM	SCALE	CREATOR	DATE	ORIGINATING ORGANISATION	PLATE
63991	G2805_001	Building Recording	Southern lateral side of Fire Queen shed	Fire Queen Locomotive Shed	S	1m	Robert Evans	12/10/23	Gwynedd Archaeological Trust	1
63991	G2805_002	Building Recording	Eastern gable end of Fire Queen Locomotive Shed	Fire Queen Locomotive Shed	E	1m	Robert Evans	12/10/23	Gwynedd Archaeological Trust	2
63991	G2805_003	Building Recording	Western gable end of Fire Queen Locomotive Shed	Fire Queen Locomotive Shed	W	1m	Robert Evans	12/10/23	Gwynedd Archaeological Trust	3
63991	G2805_004	Building Recording	Northern Lateral side of Fire Queen obscured by trees, taken from bottom of A-incline	Fire Queen Locomotive Shed	N	not used	Robert Evans	12/10/23	Gwynedd Archaeological Trust	4
63991	G2805_005	Building Recording	Shot into interior of Fire Queen through doorway in eastern gable	Fire Queen Locomotive Shed	E	1m	Robert Evans	12/10/23	Gwynedd Archaeological Trust	5
63991	G2805_006	Building Recording	Shot on eastern most window on southern lateral wall from interior (Partially obscured by gardening tools)	Fire Queen Locomotive Shed	N	1m	Robert Evans	12/10/23	Gwynedd Archaeological Trust	6
63991	G2805_007	Building Recording	Shot looking in SW corner of Fire Queen (showing current use as workshop)	Fire Queen Locomotive Shed	NE	1m	Robert Evans	12/10/23	Gwynedd Archaeological Trust	7
63991	G2805_008	Building Recording	Shot looking into e corner of Fire Queen showing open doorway	Fire Queen Locomotive Shed	W	1m	Robert Evans	12/10/23	Gwynedd Archaeological Trust	8
63991	G2805_009	Building Recording	shot of roof trusses taken from doorway	Fire Queen Locomotive Shed	E	not used	Robert Evans	12/10/23	Gwynedd Archaeological Trust	9

PRN	PHOTO RECORD NUMBER	PROJECT PHASE	DESCRIPTION	SITE SUB-DIVISION	VIEW FROM	SCALE	CREATOR	DATE	ORIGINATING ORGANISATION	PLATE
63991	G2805_010	Building Recording	shot of central roof truss and modern lighting and heater	Fire Queen Locomotive Shed	E	not used	Robert Evans	12/10/23	Gwynedd Archaeological Trust	10
63991	G2805_011	Building Recording	Portrait shot of detail of door in eastern gable (note decorative door handle)	Fire Queen Locomotive Shed	SSW	1m	Robert Evans	12/10/23	Gwynedd Archaeological Trust	11
63991	G2805_012	Building Recording	Shot of northern lateral wall interior	Fire Queen Locomotive Shed	SE	1m	Robert Evans	12/10/23	Gwynedd Archaeological Trust	12
63991	G2805_013	Building Recording	Portrait of fireplace at western gable end (obscured by ladder and boxes)	Fire Queen Locomotive Shed	E	not used	Robert Evans	12/10/23	Gwynedd Archaeological Trust	13
63991	G2805_014	Building Recording	Shot of eastern most window in southern lateral wall	Fire Queen Locomotive Shed	S	1m	Robert Evans	12/10/23	Gwynedd Archaeological Trust	14
63991	G2805_015	Building Recording	Closeup of tooling on sill in eastern most window of southern lateral wall	Fire Queen Locomotive Shed	S	not used	Robert Evans	12/10/23	Gwynedd Archaeological Trust	15
63991	G2805_016	Building Recording	Angled shot of SW corner of exterior of Fire Queen	Fire Queen Locomotive Shed	SW	1m	Robert Evans	12/10/23	Gwynedd Archaeological Trust	16
63991	G2805_017	Building Recording	Angled shot of NW corner of exterior of Fire Queen	Fire Queen Locomotive Shed	NW	1m	Robert Evans	12/10/23	Gwynedd Archaeological Trust	17
63991	G2805_018	Building Recording	Detail of chimney at western end of Fire Queen	Fire Queen Locomotive Shed	W	1m	Robert Evans	12/10/23	Gwynedd Archaeological Trust	18
63991	G2805_019	Building Recording	Angled shot of SE corner of eastern gable end of Fire Queen	Fire Queen Locomotive Shed	SE	1m	Robert Evans	12/10/23	Gwynedd Archaeological Trust	19

PRN	PHOTO RECORD NUMBER	PROJECT PHASE	DESCRIPTION	SITE SUB-DIVISION	VIEW FROM	SCALE	CREATOR	DATE	ORIGINATING ORGANISATION	PLATE
63991	G2805_020	Building Recording	Wide shot of Fire Queen showing relationship with tunnel to the east	Fire Queen Locomotive Shed	W	not used	Robert Evans	12/10/23	Gwynedd Archaeological Trust	20
63991	G2805_021	Building Recording	General wide shot showing Fire Queen in relation to Vivian quarry to the northwest	Fire Queen Locomotive Shed	SE	not used	Robert Evans	12/10/23	Gwynedd Archaeological Trust	21
63991	G2805_022	Building Recording	Detail of fireplace (partially obscured by boxes)	Fire Queen Locomotive Shed	ENE	not used	Robert Evans	12/10/23	Gwynedd Archaeological Trust	22
67148	G2805_023	Building Recording	Shot of southern lateral side of Vivian Quarry Utility Unit & Blast Shelter	Vivian Quarry Utility Unit & Blast Shelter	S	1m	Robert Evans	12/10/23	Gwynedd Archaeological Trust	27
67148	G2805_024	Building Recording	Shot of southeastern corner of VUU	Vivian Quarry Utility Unit & Blast Shelter	SE	1m	Robert Evans	12/10/23	Gwynedd Archaeological Trust	28
67148	G2805_025	Building Recording	Shot of blast shelter that abuts the utility unit	Vivian Quarry Utility Unit & Blast Shelter	NW	1m	Robert Evans	12/10/23	Gwynedd Archaeological Trust	29
67148	G2805_026	Building Recording	Shot of blast shelter that abuts the utility unit	Vivian Quarry Utility Unit & Blast Shelter	W	1m	Robert Evans	12/10/23	Gwynedd Archaeological Trust	30
67148	G2805_027	Building Recording	Straight non shot of blast shelter	Vivian Quarry Utility Unit & Blast Shelter	W	1m	Robert Evans	12/10/23	Gwynedd Archaeological Trust	31
67148	G2805_028	Building Recording	Doorway to utility unit	Vivian Quarry Utility Unit & Blast Shelter	S	1m	Robert Evans	12/10/23	Gwynedd Archaeological Trust	32



PRN	PHOTO RECORD NUMBER	PROJECT PHASE	DESCRIPTION	SITE SUB-DIVISION	VIEW FROM	SCALE	CREATOR	DATE	ORIGINATING ORGANISATION	PLATE
67148	G2805_029	Building Recording	Detail of steps into utility unit	Vivian Quarry Utility Unit & Blast Shelter	S	1m	Robert Evans	12/10/23	Gwynedd Archaeological Trust	33
67148	G2805_030	Building Recording	East gable end of utility unit where it abuts quarry face	Vivian Quarry Utility Unit & Blast Shelter	S	1m	Robert Evans	12/10/23	Gwynedd Archaeological Trust	34
67148	G2805_031	Building Recording	Shot through door of utility unit showing levers	Vivian Quarry Utility Unit & Blast Shelter	S	not used	Robert Evans	12/10/23	Gwynedd Archaeological Trust	35
67148	G2805_032	Building Recording	Shot through door showing machinery	Vivian Quarry Utility Unit & Blast Shelter	S	not used	Robert Evans	12/10/23	Gwynedd Archaeological Trust	36
67148	G2805_033	Building Recording	View of telegraph pole on south side of utility building	Vivian Quarry Utility Unit & Blast Shelter	SW	not used	Robert Evans	12/10/23	Gwynedd Archaeological Trust	37
67148	G2805_034	Building Recording	View of north side of blast shelter	Vivian Quarry Utility Unit & Blast Shelter	N	1m	Robert Evans	12/10/23	Gwynedd Archaeological Trust	38
67148	G2805_035	Building Recording	View of interior of blast shelter	Vivian Quarry Utility Unit & Blast Shelter	W	1m	Robert Evans	12/10/23	Gwynedd Archaeological Trust	39
67148	G2805_036	Building Recording	Detail of roof structure within the blast shelter	Vivian Quarry Utility Unit & Blast Shelter	W	not used	Robert Evans	12/10/23	Gwynedd Archaeological Trust	40
67148	G2805_037	Building Recording	Detail of iron doors and cog wheel on west side of utility building	Vivian Quarry Utility Unit & Blast Shelter	W	1m	Robert Evans	12/10/23	Gwynedd Archaeological Trust	41
67148	G2805_038	Building Recording	Detail showing collapse door on steps	Vivian Quarry Utility Unit & Blast Shelter	S	1m	Robert Evans	12/10/23	Gwynedd Archaeological Trust	42

PRN	PHOTO RECORD NUMBER	PROJECT PHASE	DESCRIPTION	SITE SUB-DIVISION	VIEW FROM	SCALE	CREATOR	DATE	ORIGINATING ORGANISATION	PLATE
67148	G2805_039	Building Recording	General view across quarry pool showing cable ride (that the utility unit probably powers)	Vivian Quarry Utility Unit & Blast Shelter	ESE	not used	Robert Evans	12/10/23	Gwynedd Archaeological Trust	43
67151	G2805_040	Building Recording	General view into Storage Barn	Vivian Quarry Storage Barn	W	1m	Robert Evans	12/10/23	Gwynedd Archaeological Trust	46
67151	G2805_041	Building Recording	Angled view of storage shed in Vivian quarry	Vivian Quarry Storage Barn	SE	1m	Robert Evans	12/10/23	Gwynedd Archaeological Trust	47
67151	G2805_042	Building Recording	Angled view of storage shed in Vivian Quarry	Vivian Quarry Storage Barn	NW	1m	Robert Evans	12/10/23	Gwynedd Archaeological Trust	48
67151	G2805_043	Building Recording	Back of Storage Barn showing quarried rock face	Vivian Quarry Storage Barn	W	1m	Robert Evans	12/10/23	Gwynedd Archaeological Trust	49
67151	G2805_044	Building Recording	Close up of initials and train graffiti on southern inside wall of Storage Barn	Vivian Quarry Storage Barn	N	not used	Robert Evans	12/10/23	Gwynedd Archaeological Trust	50
67151	G2805_045	Building Recording	Interior of Storage Barn showing relict second storey	Vivian Quarry Storage Barn	NW	not used	Robert Evans	12/10/23	Gwynedd Archaeological Trust	51
67151	G2805_046	Building Recording	Shot of roof from interior showing recycled rail tracks used as roof rafters	Vivian Quarry Storage Barn	NW	not used	Robert Evans	12/10/23	Gwynedd Archaeological Trust	52
67151	G2805_047	Building Recording	Shot of wider base of wall on northern side	Vivian Quarry Storage Barn	W	1m	Robert Evans	12/10/23	Gwynedd Archaeological Trust	53

PRN	PHOTO RECORD NUMBER	PROJECT PHASE	DESCRIPTION	SITE SUB-DIVISION	VIEW FROM	SCALE	CREATOR	DATE	ORIGINATING ORGANISATION	PLATE
67151	G2805_048	Building Recording	Shot showing metal box to the west of Storage Barn	Vivian Quarry Storage Barn	W	1m	Robert Evans	12/10/23	Gwynedd Archaeological Trust	54
67148	G2805_049	Building Recording	View of collapsed roof above machinery in the utility unit	Vivian Quarry Utility Unit & Blast Shelter	S	not used	Robert Evans	12/10/23	Gwynedd Archaeological Trust	44
67148	G2805_050	Building Recording	General view of quarry pool	Vivian Quarry Utility Unit & Blast Shelter	N	not used	Robert Evans	12/10/23	Gwynedd Archaeological Trust	45
63991	G2805_051	Building Recording	View of inside of main doors to fire queen shed showing cut portions to allow doors to open fully	Fire Queen Locomotive Shed	W	not used	Robert Evans	13/10/23	Gwynedd Archaeological Trust	23
63991	G2805_052	Building Recording	View of inside of main doors to fire queen shed showing cut portions to allow doors to open fully	Fire Queen Locomotive Shed	W	not used	Robert Evans	13/10/23	Gwynedd Archaeological Trust	24
63991	G2805_053	Building Recording	View of bar latch on north side of entrance doors in Fire Queen	Fire Queen Locomotive Shed	W	not used	Robert Evans	13/10/23	Gwynedd Archaeological Trust	25
63991	G2805_054	Building Recording	View of bar latch on north side of entrance doors in Fire Queen	Fire Queen Locomotive Shed	W	not used	Robert Evans	13/10/23	Gwynedd Archaeological Trust	26



## **APPENDIX III**

### **Gwynedd Archaeological Trust Selection Strategy Final**

# G2805\_Parc\_Padarn

## 25/10/2023 v2.0

### Selection Strategy

#### Project Information

##### Project Management

<b>Project Manager</b>	John Roberts <a href="mailto:john.roberts@heneb.co.uk">john.roberts @heneb.co.uk</a>
<b>Archaeological Archive Manager</b>	John Roberts <a href="mailto:john.roberts@heneb.co.uk">john.roberts @heneb.co.uk</a>
<b>Organisation</b>	Gwynedd Archaeological Trust

Stakeholders		Date Contacted
<b>Collecting Institution(s)</b>	GAT Historic Environment Record	28/09/2023
	RCAHMMW	On completion of Project Archive
<b>Project Lead / Project Assurance</b>	Cadw	05/10/2023
<b>Landowner / Developer</b>	Cyngor Gwynedd	n/a

##### Resources

<b>Resources required</b> Describe the resources required to implement this Selection Strategy, particularly if unusual resources are required.	No unusual resources required outside of GAT normal operating equipment and personnel.
--	--

##### Context

Describe below the context of this Selection Strategy. You should refer to:

- The aims and objectives of the project;
- Local Authority guidance (including the brief);
- Research Frameworks;
- The repository collection development policy and/or deposition policy;
- Material-specific guidance documents.

**Note:** This section may be copied from your Project Design/WSI to ensure all Stakeholders receive this context information.

The full aims and objectives of this project are detailed in the project specific WSI.

Gwynedd Archaeological Trust (GAT) has been commissioned by Chambers Conservation Ltd, to undertake building recording for structures associated with slate quarrying and slate processing at Dinorwig Quarry, Gwynedd LL55 3EU (NGR SH5951460360; cf. WSI Figure 01) following the inclusion of the slate mines of North Wales as UNESCO World Heritage sites. The quarry contains a total of 379 sites with primary reference numbers (PRN's) on the Gwynedd Historic Environment Record (HER), which survive in varying conditions since their abandonment during the late 19<sup>th</sup> and 20<sup>th</sup> centuries. The proposed work is to provide an analytical record of three structures included on a priority list of at risk relict structures within the UNESCO World Heritage boundary at Dinorwig Quarry (Hopewell 2018, Chambers Conservation Ltd. 2021). They comprise a former locomotive shed, located at Parc Padarn, a utility unit & blast shelter, and a storage barn, both within Vivian Quarry. The recording will be undertaken in October 2023.

Source: Gwynedd Archaeological Trust. 2023. Dinorwig Slate Quarry Mountain Landscape – Parc Padarn: Written Scheme of Investigation for Archaeological Mitigation: Level 3 Building Record. October 2023. Project G2805.



# 1 – Digital Data

## Stakeholders

Name the individual(s) responsible for the Digital Data Selection decisions (i.e. Archaeological Archive Manager, Project Manager, Collections Curator).

John Roberts (GAT Principal Archaeologist)

## Selection

### Location of Data Management Plan (DMP)

Selection of digital data elements should be considered in your project's DMP. For the purpose of the Selection Strategy, you can either copy the selection section of your DMP below, or attach it as an appendix to this document. Please indicate here if the DMP is attached.

All digital data will be collected, stored and selected in lines with the Gwynedd Archaeological Trust (GAT) Data Management Plan located on GAT's servers (available on request).

Following the completion of the fieldwork, a working project archive will be created based on following task list;

1. Pro-formas: all cross referenced and complete;
2. Photographic Metadata: completed in *Microsoft Access* and cross-referenced with all pro-formas;

All relevant site archive data will be added to a digital project register specific to this project, which will be prepared in *Microsoft Excel*. This data will be used as the basis for the physical and digital dataset archives. Information from these will be used to compile the project report. The physical archive will be stored in a designated project folder and the location confirmed in the Trust project database; the digital dataset will be stored on a dedicated Trust server, with the location confirmed in the Trust project database via a specific hyperlink. External datasets for the HER and RCAHMW are as defined in the dissemination strategy below. De-selected digital data will be confirmed in an updated digital management plan appended to the final report

## De-Selected Digital Data

G2805\_combined\_figures.pdf  
G2805\_combined\_plates.pdf  
G2805\_figures\_plates.docx  
G2805\_figures\_plates.pdf  
GAT\_1735.docx  
GAT\_1735.pdf  
G2805\_Appendix\_I.pdf  
G2805\_Appendix\_II.docx  
G2805\_Appendix\_II.pdf  
G2805\_Parc\_Padarn\5\_Building\_Recording  
G2805\_Figure\_01.pdf  
G2805\_Figure\_02.pdf  
G2805\_Figure\_03.pdf  
G2805\_Figure\_04.pdf  
G2805\_Figure\_05\_Fire Queen photo direction plan.pdf  
G2805\_Figure\_06\_Vivian utility & storage unit photo direction plan.pdf  
G2805\_Plates01  
G2805\_Plates03  
G2805\_Plates05

G2805\_Plates07  
G2805\_Plates09  
G2805\_Plates11  
G2805\_Plates13  
G2805\_Plates15  
G2805\_Plates17  
G2805\_Plates19  
G2805\_Plates21  
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G2805\_Plates37  
G2805\_Plates39  
G2805\_Plates41  
G2805\_Plates43  
G2805\_Plates45  
G2805\_Plates47  
G2805\_Plates49  
G2805\_Plates51  
G2805\_Plates53

## 2 – Documents

### Stakeholders

Name the individual(s) responsible for the Documents Selection decisions (i.e. Archaeological Archive Manager, Project Manager, Repository Representative).

John Roberts – Principal Archaeologist, Gwynedd Archaeological Trust;  
Sean Derby – Historic Environment Record, Gwynedd Archaeological Trust;  
Gareth Edwards, *Head of Knowledge and Understanding, RCAHMW*

### Selection

- A digital report will be provided to the regional Historic Environment Record; this will be submitted within six months of project completion (final report only), along with a digital dataset comprising an Event PRN summary. The report and dataset will be submitted in accordance with the required standards set out in *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)* (Version 2); and
- A digital report and digital archive dataset will be provided to Royal Commission on Ancient and Historic Monuments, Wales (final report only), in accordance with the *RCAHMW Guidelines for Digital Archives Version 1*. The dataset will be prepared in the format required by RCAHMW and included:
  - Photographic metadata (Microsoft Access);
  - Photographic archive (TIFF format);
  - Project Information form (Excel);
  - File Information form (Excel) – Microsoft Word report text final;
  - File Information form (Excel) – Photographic metadata (general);
  - File Information form (Excel) – Adobe PDF report final; and
  - File Information form (Excel) - Photographic metadata (detail).

### De-Selected Documents

Describe the procedure for dealing with De-selected material and what specialist advice has informed this procedure.

This will be confirmed in the finalised selection strategy at project end





Gwynedd Archaeological Trust  
Ymddiriedolaeth Archaeolegol Gwynedd

Craig Beuno, Ffordd y Garth, Bangor, Gwynedd. LL57 2RT  
Ffon: 01248 352535. Ffacs: 01248 370925. email: [gat@heneb.co.uk](mailto:gat@heneb.co.uk)

