Results of Archaeological Works at

The Old Mill, Capel Coch, Ynys Môn

NGR SH 45776 82004

Report Number: CR10-2012

C.R Archaeology
Compiled by C. Rees & M. Jones
On Behalf of Mr & Mrs Hanson

Photographs by

Aerial-Cam
Detailed Aerial Photography

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The Old Mill, Capel Coch, Ynys Môn

Planning Reference Number:	23C80G
National Grid Reference:	SH 45776 82004
Clients:	Mr & Mrs Hanson
Report Authors:	Catherine Rees & Matthew Jones
Report Number:	CR10-2012
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Illustrations

1.0 Introduction

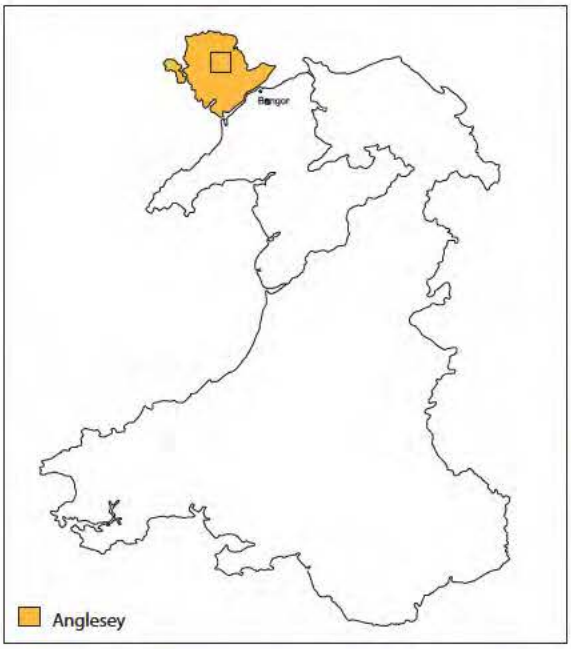
C.R Archaeology has been instructed by Mr & Mrs Hanson to conduct archaeological works at the above property in compliance with planning conditions placed on the development (Planning Reference 23C80G).

A specification was written following a discussion with Development Control Archaeologist Ashley Batten of GAPS (25th April 2012) as a methodology for a programme of works relating to a "Design Brief for Archaeological Building Record" prepared by GAPS on the 10th April 2012.

The Old Mill, Capel Coch (originally known as Melin Llidiart and referred to by this name from this point onwards) is thought to be one of the oldest surviving windmills on Anglesey, and is believed to date from the mid Eighteenth Century (www.coflein.gov.uk). It is a Grade II listed building (Cadw building ID 5389) and is recorded on the RCAHMW database (NPRN 40332).

The site is situated in a rural, inland location on the outskirts of the village of Capel Coch near Llangefni (Figure 1). Planning permission is being sought to restore the windmill and to add a two storey extension to the rear of the building to allow the structure to be converted for residential use. The exact design has yet to be formalised but is envisaged that the extension will be c.7m x 11m and will be joined to the mill via a glass linking structure.

The archaeological works conducted at Melin Llidiart created a Level 3 building recording. This included the collection of archive material which forms the historical background section of this report and the compilation of a photographic record of the site. A drawn survey of the mill structure was commissioned by the RCAHMW in 2003 and it was intended that this work be incorporated into this report. When this record was compared with the surviving structure certain elements were found to be inaccurate and new drawings were produced using measurements taken during a site visit and rectified photographs.



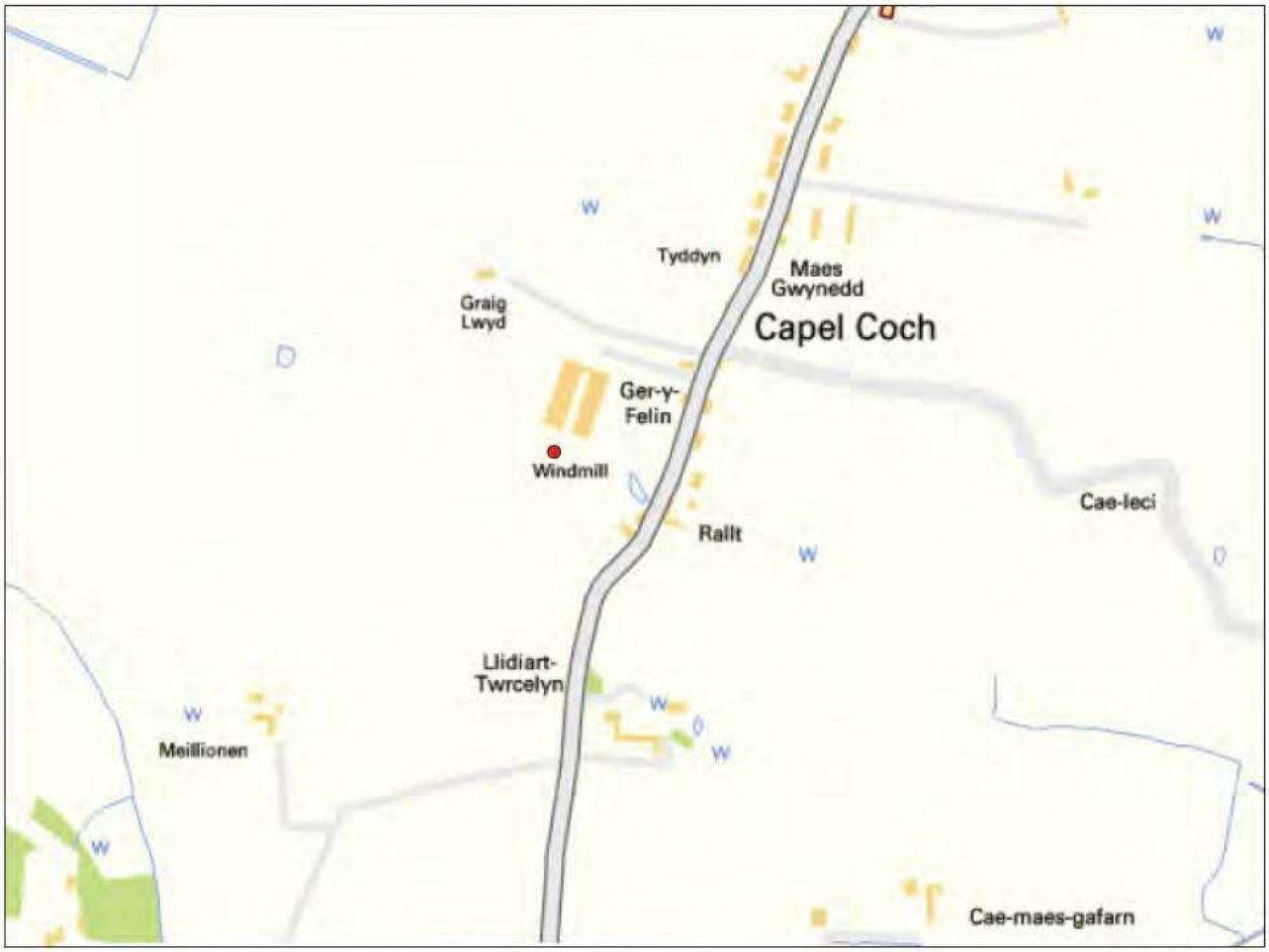


Figure 1. Melin Llidiart, Capel Coch Location Map (Source OS Open Data Mapping)

2.0 Project Aims

The programme of works undertaken at Melin Llidiart aimed to create a Level 3 Historic Building Record and thus its aims were two-fold.

The first aim of the scheme of works was to undertake desk based historical research exploring the history of the windmill. This information included a map progression, photographic illustrations and archival research which was utilised to compile a coherent narrative history of the site.

The second aim of this archaeological investigation was to create a comprehensive level 3 photographic and drawn record of the site. Emergency works were conducted by the RCAHMW in 2003 which included structural and justification reports, plans and elevations. On examination the elevations were found to be lacking in detail (i.e. included no blocked openings) and a number of features were incorrectly placed. It was therefore felt necessary to redraw this work and the results are included in the report.

3.0 Scheme of Works - Methodology

The Melin Llidiart works were conducted in three sections and each is detailed separately below. The methodology employed conformed to the requirements of a level 3 analytical building record as specified in *Understanding Historic Buildings: A Guide to Good Recording Practice* (English Heritage 2006) and The Institute for Archaeologists: *Standard and Guidance for the Archaeological Investigation and Recording of Standing Buildings or Structures* (Revised 2008).

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

The record created for Melin Llidiart consists of:

Written Account	Points 1-3, 5-9, 11-13, 22
Drawings	Points 2-9
Photography	Points 1-9

3.1 Desk Based Research

A complete and coherent history of the site was compiled utilising information sourced from Anglesey Archives, Bangor University Archives and local libraries. The Welsh Mills Society were contacted to establish if any relevant material was held by the society or its members. A full map progression was undertaken along with a search of tithe records and census returns.

The Gwynedd Historic Environment Record was consulted but this search was limited to the area immediately surrounding the windmill as a detailed archaeological assessment of the site was not required in the project brief.

The works were carried in accordance with the IfA Standards and Guidance for historic environment desk-based assessment (IfA 2009) and will include the information required to fulfil points 1-3, 5-9, 11-13 & 22 as specified in *Understanding Historic Buildings: A Guide to Good Recording Practice* (English Heritage 2006).

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

3.2 Drawn Survey

A survey of the windmill was conducted by RCAHMW in 2003 as part of an emergency recording programme (case reference RCS2/1/550). The work undertaken included structural and justification reports, plans and elevations. Copies of these documents (catalogue number C435792/ accession number NA/GEN/2009/011e) were sourced and on examination it was felt necessary that these existing works were redrawn. This was done by measuring features accessible at ground floor level and using rectified photography to add details at first and second floor level.

These drawings fulfil points 2-7 as specified in *"Understanding Historic Buildings: A Guide to Good Recording Practice"* (English Heritage 2006). Location plans and historical material have been produced/sourced by C.R Archaeology to fulfil criteria 8-9 in the aforementioned document.

3.3 Photographic Survey

A photographic survey of Melin Llidiart was undertaken by professional photographer Adam Stanford of Aerial-Cam. This work consisted of:

1) A photographic survey of the windmill exterior
2) A photographic survey of the windmill interior
3) Low level aerial photography of the site and surrounding area.

3.3.1 Equipment

A photographic survey of the windmill was undertaken using a 16 mega-pixel Nikon D7000 digital camera with a variety of standard and other lenses. Images were captured in RAW format for processing into high resolution JPG and TIFF files.

To produce as full a record as possible the camera was mounted on three different apparatus: a vehicle mounted telescopic mast, a hand held telescopic mast and a tripod. The mast was erected to a maximum height of 22m.

All exterior and interior elevations of the building were photographed with scales from ground level. Additional photographs were taken detailing important architectural features. This record was supplemented with a series of photographs taken using telescopic masts. These photographs illustrate the landscape setting of the site and the relationships between the the windmill and

neighbouring buildings. Mast photography also allowed a detailed record of the upper building elements to be created without the need to erect scaffolding therefore allowing them to be examined as part of the structure as a whole. It also allowed the roof support area to be viewed from above.
The methodology employed conforms to the requirements of photographic recording to the equivalent of a level 3 survey, as specified in *Understanding Historic Buildings: A Guide to Good Recording Practice* (English Heritage 2006) and will include works specified in points 1-9.

It was deemed necessary to supplement the drawn record created by the RCAHMW and rectified photography was also undertaken.

3.3.2 Timetable for Proposed Works

Site works at Melin Llidiart were conducted on 11th May. A further 5 days were utilised for archive research, report compilation and site archiving. Gwynedd Archaeological Planning Services were informed of the site days to allow monitoring of works.

3.4 Staffing

The project was managed by Catherine Rees (BA (Archaeology), MA (Archaeology), PgDip (Historic Environment Conservation). All staff have a skill set equivalent to the IfA AIfA level. C. Vs for all staff employed on the project can be provided on request.

The photographic survey was undertaken by professional archaeological photographer Adam Stanford of Aerial-Cam (MIfA).

The projects are carried out in accordance with IfA *Standard and Guidance* documents.

3.5 Monitoring

The project was subject to monitoring by Gwynedd Archaeological Planning Services. The monitor was given prior notice of the commencement of the fieldwork. A projected time-scale and copy of the risk assessment can be provided on request to the monitoring body. GAPS were notified in writing of the commencement dates for archaeological site work.

3.6 Health and Safety

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

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

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

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

3.7 The Report

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

As specifically detailed in the Design Brief supplied by GAPS the report includes:

- A copy of the design brief and agreed specification,
- A location plan,
- A plan illustrating the location and direction of any photographs or drawings
- Full dimensional and descriptive detail, a full bibliography of sources consulted
- An archive compact disc

A copy of the report in Adobe PDF format will be sent to the appropriate monitoring archaeologist for approval before formal submission. A bound paper copy and PDF digital copy of the report will be submitted as part of the formal submission. A digital Adobe PDF version and a bound paper copy of the final report and will be lodged with the Gwynedd Historic Environment Record within six months of completion of fieldwork, and following consultation with Anglesey Archives a PDF version will be sent for deposition in their Llangefni offices.

A short article will be submitted to the Archaeology in Wales Journal and the site archive including copies of all photographs in RAW and Tiff format will be deposited at Oriel Mon.

3.7.1 Copyright

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

4.0 Geographical and Geological Context

Melin Llidiart (Grid Reference SH 45776 82004) is located on the outskirts of Capel Coch within the Parish of Llanfihangel Tre'r Beirdd, Anglesey. It is located within the Community of Llanddyfnan.

4.1 Topography

This area falls within the Dulas Bay Hinterland region (Landscape Character 8) as defined in the 2011 Anglesey Landscape Strategy Update. The inland land portion on which the windmill stands is described as "one of improved grassland and in places arable land. Within this hedgerows and hedgebanks are common however other semi-natural vegetation, including woodlands, scrub and marshy grasslands, are mostly scattered and isolated" (www.anglesey.gov.uk/Journals).

4.2 Geology

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

The bedrock is detailed as "Ordovician Rocks (Undifferentiated) - Interbedded Mudstone And Sandstone. Sedimentary Bedrock formed approximately 443 to 495 million years ago in the Ordovician Period. Local environment previously dominated by shallow seas" (www.bgs.ac.uk).

5.0 Historical Background

A search within a 1km radius of Melin Llidiart was conducted at Gwynedd Historic Environment Record (HER) to ascertain as to whether any material specifically related to Melin Llidiart was held. This was found not to be the case. The search did however identify a number of sites of archaeological interest in the vicinity of the mill. A brief search of the RCAHMW records was also undertaken and the results of the two searches have been amalgamated and are included in Appendix A. It must be noted that, due to the limited scope of this works, this section is intended as a brief overview rather than a detailed synopsis of the locality.

5.1 An Introduction to the Windmills of Anglesey

Windmills are generally believed to be a Medieval invention and are thought to have been derived from the geared watermill. The first recorded example of the use of windmills in the United Kingdom was at Bury St. Edmunds during the last quarter of the twelfth century (Watts 1983:7).

As an exposed island subject to strong Atlantic winds, coupled with a relative scarcity of water sources suitable for driving watermills, Anglesey is a prime location for the erection of windmills and along with East Anglia and the Netherlands by the late eighteenth century Anglesey was noted for her numerous tower mills (Roberts 1958: 8).

The earliest recorded reference to a windmill on Anglesey was written in the accounts of the bailiff of Newborough for 1303 AD. This document details the purchase of timber from the Llŷn and millstones from Mathafarn and the structure is believed to have been a post or peg mill (Roberts 1958: 6-7).

Two further early references to windmills are recorded in the Baron Hill papers. These record that Melyn Hely, Menai Bridge was built in 1578 in “the which fields sometime a windmill stood”. A later entry dated 1589 speaks of “the windmill field close to Beaumaris” (Roberts 1958: 7). The existence of a post-built windmill near Beaumaris is depicted on John Speed's 1610 map of Anglesey and a further Elizabethan map sourced from the National Archives by Guise & Lees shows a further post-built windmill near Amlwch (Guise & Lees 2010: 8).

These early windmills were small wooden box-like structures rotated on an upright pole and supported by a trestle of cross-trees and quarter bars. The whole upper structure could be rotated by

hand using a tail-pole so that the sails could be turned to face the wind. The sails used were cloth which was spread over a simple wooden frame. These mills were small and were only capable of generating the power to drive a single pair of stones. Post-mills had several other factors which limited their effectiveness including the fact that they were easily blown over in storms, were vulnerable to fire and the cloth sails were susceptible to rot. These elements combined to reduce the production role played by windmills and they were to provide only a supporting role in the rural economy. Watermills continued to dominate flour production until the early eighteenth century when the stone-built tower windmills were able to provide a viable alternative during a time of drought (Guise & Lees 2010: 8).

The development of the windmill during the early eighteenth century was facilitated by a combination of events which increased the demand for grain during this period. The Industrial Revolution and the associated population growth increased the demand for foodstuffs to supply the expanding towns and cities. More land fell under cultivation and there was an increase in demand for mills to grind the extra grain produced. Environmental factors were to fully tip the balance in favour of windmills as contemporary sources detail a period of drought drying up the majority of the water supplies necessary to drive the islands watermills. The majority of the tower windmills of Anglesey were built during the period from 1730 - 1760 (Roberts 1958: 7-8).

The use of tower windmills was to further increase during the Napoleonic wars of 1793-1815. Farmers were encouraged to increase production and the the price of flour rose from c.3/4d a bushel in 1760 to 8/- in 1794 and 10/- in 1804. Accompanying this price rise were a number of improvements in farming practices including the introduction of fertilisers such as lime and seaweed to increase crop yield (Roberts 1958: 7-8).

The erection of windmills on Anglesey continued, although at a reduced pace, for the next twenty years. This was facilitated by the introduction of the Corn Laws in 1815 which effectively stopped the importation of cheaper grain from abroad allowing prices to remain at the levels attained during the height of the Napoleonic Wars. This move was favourable for Anglesey farmers and millers whose product was considered inferior to that produced on the continent. Anglesey corn prices were also cushioned by the geographic isolation of the region which rendered imports economically prohibitive (Guise & Lees 2010: 11).

This favourable situation was not to last and the effect of the repealing of the Corn Laws in 1846 was exacerbated by the completion of the Chester to Holyhead Railway in 1850 which dramatically reduced the cost of transporting goods to the area. Prices dropped dramatically and by the last quarter of the nineteenth century wheat prices had fallen by 51%, barley by 42% and oats by 37%. This drop in crop prices accompanied by a rise in demand for meat from the urban centres. More and more land was taken out of arable use and given over to pasture further reducing the need for windmills (Guise & Lees 2010: 12).

The decline of the windmill became terminal with the introduction of steam power and the mechanisation of flour production. Steam driven mills were no longer weather reliant and the process could be carried out on an ever increasing scale. Windmills were no longer maintained and repaired and were allowed to slowly decay. Those damaged by storms were not rebuilt and the last tower mill on Anglesey ceased working in November 1938 when severe gales removed the cap and sails (Guise & Lees 2010: 12-13).

In 1937 the RCAHMW recorded the survival of the windmills of Anglesey and listed 37 structures, predominantly of eighteenth and nineteenth century date, which were still extant in 1929. The majority of those recorded were empty shells (RCAHMW 1937: clxiii – clxviii).

The loss of the windmills did not pass without lament and a movement to ensure their preservation gathered pace throughout the later twentieth century and in November 1978, following the submission of a petition containing 860 names, Anglesey Borough Council paid £10,000 for the mill, granary and 4 ½ acres of land at Melin Llynnon. Works to restore the mill were undertaken over a three-year period from 1981-1983 and in 1984 Melin Llynnon was officially opened by the Mayor of Anglesey. The mill is now one of Anglesey's most popular attractions and receives thousands of visitors each year (Guise & Lees 2010: 44-55).

5.2 Melin Llidiart Historical Background

Melin Llidiart is one of thirty-one surviving windmills on Anglesey and is one of the best preserved of the examples which are yet to be converted for alternative use (Guise & Lees 2010: 61).

Melin Llidiart is believed to be one of the oldest surviving windmills on Anglesey. Little is known of the early history of the mill and a single surviving documentary reference was sourced. It is mentioned in the diaries of Squire Bulkeley of Brynddu that on the 24th October 1738 "Llwydiath Mill began to grind the first corn". The site was identified as the mill at Llwydiarth Farm, Capel Coch by R. O Roberts (1958: 8).

Estate maps or records relating to this mill could not be found and the next clear reference to the mill is in the 1841 Tithe records. The ledger map for this document (figure 2) clearly shows the mill in its current location and it is labelled as Melin Llidiart. On examination of the detailed Tithe Records the mill is clearly shown (figure 3) and the land it occupies is recorded as belonging to Richard Rowlands (figure 4) of Llwydiarth Tre'r Celyn. It is likely that the changes in spelling are the result of the cartographer being unfamiliar with the Welsh language. Richard Rowlands is listed as a farmer in the 1841 Census and he is living with his wife Mary, their seven children and two farm servants (figure 5).

In the 1851 Census (figure 6) the mill is listed separately from the main farm and the site is given the name Bryn Felin for the first time. It retains this name throughout subsequent census' and the associated house is named Bryn Felin to this day. The son of Richard Rowlands, also named Richard Rowlands, (25) is listed as the master miller and he along with his wife Catherine (25), daughter Jane (1) and a servant Elizabeth Hughes (15) are recorded as resident. It is also noted that Rowlands employed three men.

By the time of the 1861 Census (figure 7) Richard Rowlands has inherited his fathers property and has returned to the main house at Llwydiarth Tre'r Celyn. He and his wife now have five children and there are three servants listed at the property. Richard Rowlands now owns 60 acres and the residency of Bryn Felin has passed to Hugh Pritchard (40) and his wife Jane (22). Pritchard is listed as a farmer of 9 acres and a mill employing two labours and one boy. They also employ a 16 year old girl Anne Jones (16) as a domestic servant.

Figure 2. 1841 Large Scale Tithe Schedule

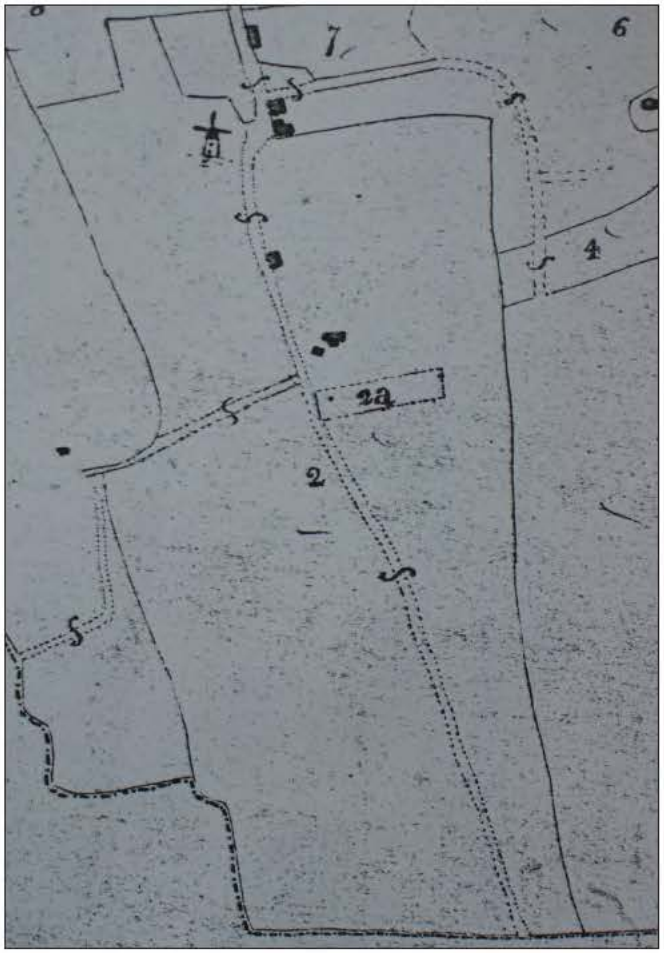
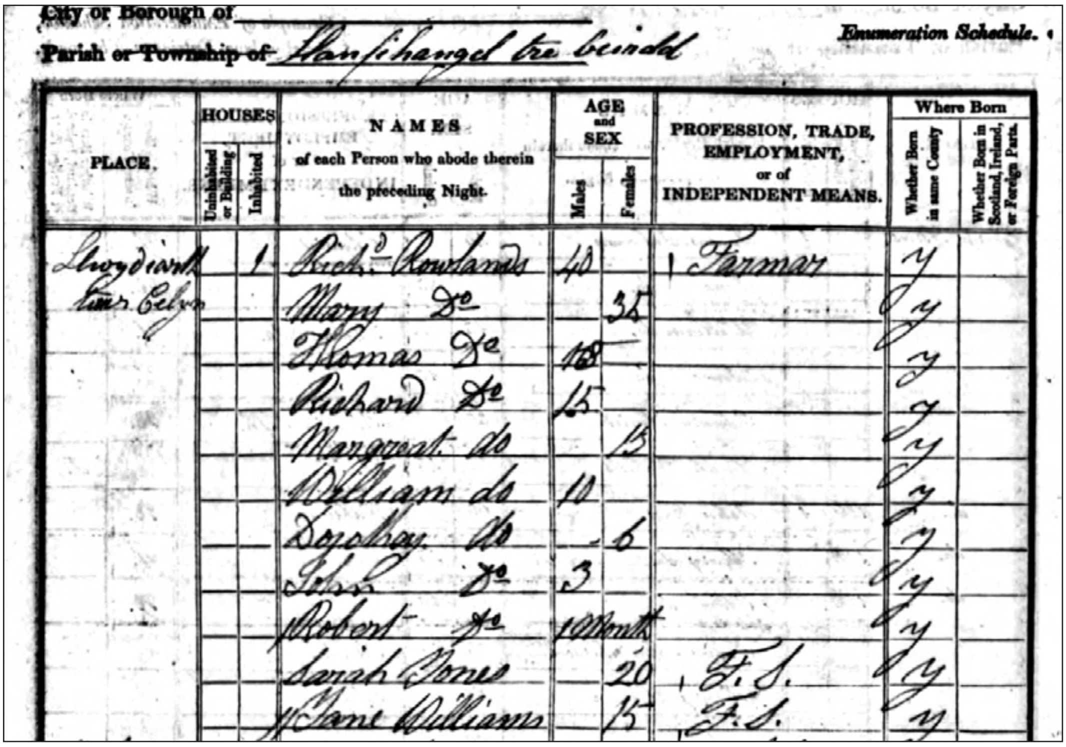


Figure 3. 1841 Tithe Map Extract Showing Melin Llidiart

Richards Richard	Richard Rowlands	2	Llidiart tir eglwys

Figure 4. 1841 Tithe Return for Plot 2

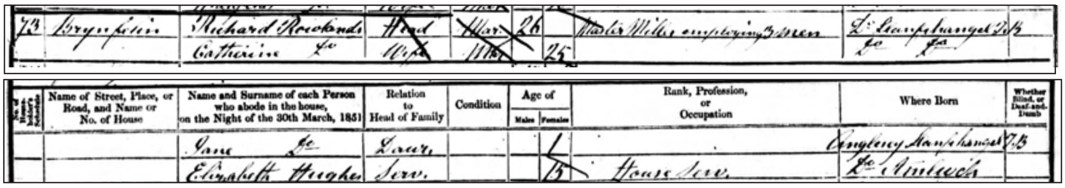


City or Borough of
Parish or Township of Llanfihangel tre beirdd

Enumeration Schedule.

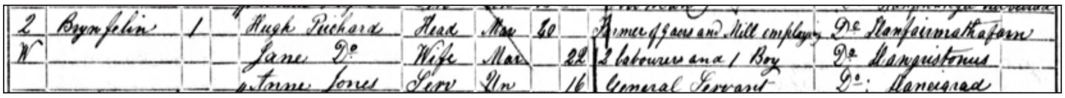
PLACE.	HOUSES: Uninhabited or Building	HOUSES: Inhabited	NAMES of each Person who abode therein the preceding Night.	AGE and SEX: Males	AGE and SEX: Females	PROFESSION, TRADE, EMPLOYMENT, or of INDEPENDENT MEANS.	Whether Born in same County	Whether Born in Scotland, Ireland, or Foreign Parts.
Llwydiarth Tmr. Celyn		1	Richd. Rowlands	40		Farmer	y	
			Mary Do		35		y	
			Thomas Do	18			y	
			Richard Do	15			y	
			Margaret do		13		y	
			William do	10			y	
			Dorothy do		6		y	
			John Do	3			y	
			Robert Do	10 Months			y	
			Sarah Jones		20	F.S.	y	
			Jane Williams		15	F.S.	y	

Figure 5. 1841 Census



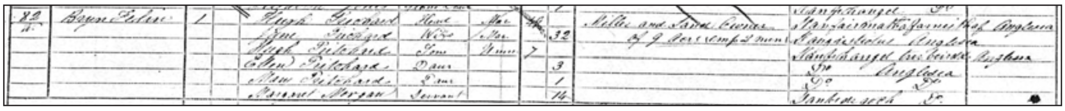
No. of Householder's Schedule	Name of Street, Place, or Road, and Name or No. of House	Name and Surname of each Person who abode in the house, on the Night of the 30th March, 1851	Relation to Head of Family	Condition	Age of Males	Age of Females	Rank, Profession, or Occupation	Where Born	Whether Blind, or Deaf-and-Dumb
73	Brynfelin	Richard Rowlands	Head	Mar	26		Master Miller employing 3 men	Do Llanfihangel TB	
		Catherine Do	Wife	Mar		25		Do Do	
		Jane Do	Daur			1		Anglesey Llanfihangel TB	
		Elizabeth Hughes	Serv.			15	House Serv.	Do Amlwch	

Figure 6. 1851 Census



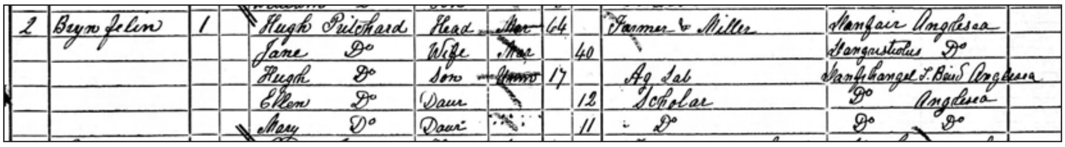
2 W	Bryn felin	1	Hugh Prichard	Head	Mar	40		Farmer of 9 acres and Mill employing 2 labourers and 1 Boy	Do Llanfairmathafarn
			Jane Do	Wife	Mar		22		Do Llanguistenus
			Anne Jones	Serv	Un		16	General Servant	Do Llaneugrad

Figure 7. 1861 Census



82	Bryn Felin	1	Hugh Prichard	Head	Mar	50		Miller and Farmer of 9 Acres empl 2 men	Llanfairmathafarneithaf Anglesea
			Jane Prichard	Wife	Mar		32		Llanguistenus Anglesea
			Hugh Pritchard	Son	Unm	7			Llanfihangel tre beirdd Anglesea
			Ellen Pritchard	Daur			3		Do Anglesea
			Mary Pritchard	Daur			1		Do Do
			Margaret Morgan	Servant			14		Penrhoslligwy Do

Figure 8. 1871 Census



2	Bryn felin	1	Hugh Pritchard	Head	Mar	64		Farmer & Miller	Llanfair Anglesea
			Jane Do	Wife	Mar		40		Llanguistenus Do
			Hugh Do	Son	Unm	17		Ag Lab	Llanfihangel T. Beird Anglesea
			Ellen Do	Daur			12	Scholar	Do Anglesea
			Mary Do	Daur			11	Do	Do Do

Figure 9. 1881 Census

Hugh Pritchard continues to be the miller at Bryn Felin and in the 1871 Census (figure 8) he is listed as miller and owner of 9 acres. He and his wife now have three children: Hugh (7), Ellen (3) and Mary (1) and servant Anne has been replaced by Margaret Morgan (14).

There is little change in the 1881 Census (figure 9) and Hugh and Jane Pritchard along with their three children are still in residence at Bryn Felin. They are no longer mentioned as employing servants and this may be indicative of a decline in the productivity of the mill. Hugh Pritchard is also listed in the 1883 Slater's Trade Directory as the miller at Bryn Felin (figure 10).

On the first edition Ordnance Survey map of Anglesey dated 1889 (figure 11) Bryn Felin is shown as a corn mill and there are a number of associated outbuildings. In addition to the surviving main house there is a building between the house and the mill which is possibly a kiln or granary structure.

The 1891 Census does not appear to list Bryn Felin and it is unclear as to why no return for the Pritchard family can be found. It may be a result of changes to the Parish Boundaries or the family may simply not have been at the property when the enumerator visited. The next record of the family is in the 1895 Slater's Trade Directory (figure 12) and it appears that Jane is a widow by this date. She is now listed as the miller at Bryn Felin.

In his synthesis on the windmills of Anglesey Roberts (1958: 14) details how Mr. William Jones was the last miller to operate the mills of Cichle, the Llwydiarth Mill at Capel Coch and Melin Wynt y Graig, Llangefni. This unfortunate series of failures earned him the nickname “Angau Melinau” which was translated as a human death watch beetle. This information cannot be verified and it is unclear if Jones did work the mill and if he did if ever took up residence at the mill house as the Jane Pritchard is clearly in residence in both 1895 and 1901. The mill was severely damaged in a storm during the late 1890's and lost the cap and sail. It was never replaced and the structure was used as an animal shelter. The loss of the mill cap and sail is evidenced in a 1910 photograph of Capel Coch (figure 13) and the 1920 Ordnance Survey Map (figure 14) which shows the mill as disused.

MILLERS.

Hughes Jno. Felin esgob, Llandyfrydog
Jones Martha, Rhosfawr Mill, Llanfair-mathafarneithaf
Jones William, Coedana
Pritchard Hugh, Brynfelin, Llanfihangel Tre'r Beirdd
Williams Richard, Cellar, Llantrisaint

Figure 10. (Above) 1883 Slater's Trade Directory

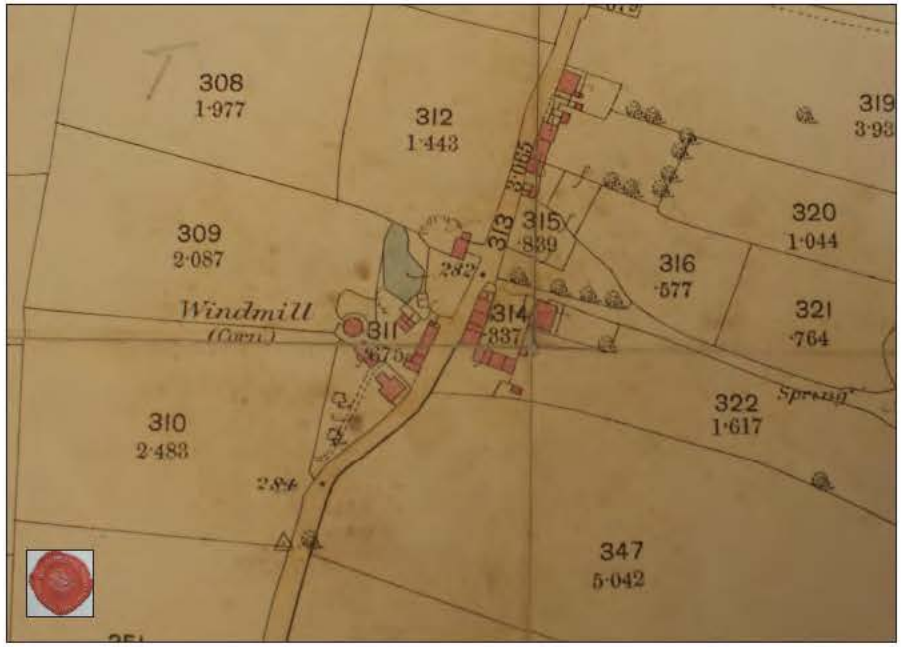


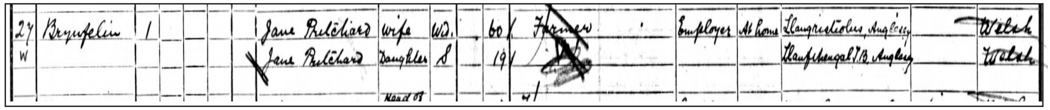
Figure 11. (Right) 1889 First Edition Ordnance Survey Map

Commercial.

Edwards William, blacksmith, Refail Newydd
Owen Richard, grocer, Capel Coch
Pritchard Jane (Mrs.), miller, Brynfelin
Williams Jane (Mrs.), Bull Inn P.H. Hebron
Williams Jane (Mrs.), grocer & draper, Hebron

Figure 12. (Above) 1895 Slater's Trade Directory

Figure 13. (Right) 1910 Photograph Of Capel Coch Showing Windmill

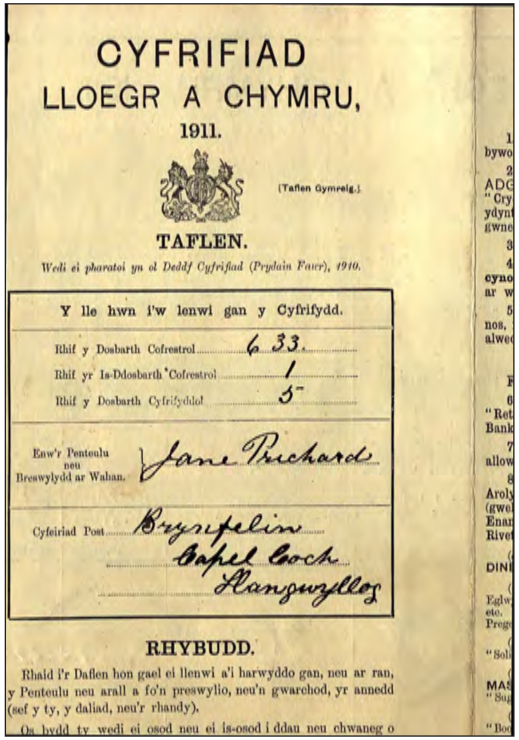


27	Brynfelin	1	Jane Pritchard	wife	Wd.	60	Farmer	Employer	At home	Llangristiolus Anglesey	Welsh
W			Jane Pritchard	Daughter	S	19				Llanfihangel Y B Anglesey	Welsh

Figure 14. (Left) 1920 Second Edition Ordnance Survey Map

Figure 15. (Above) 1901 Census Return

Figure 16. (Below) 1911 Census Return



CYFRIFIAD
LLOEGR A CHYMRU,
1911.

(Taflen Gymreig.)

TAFLEN.

Wedi ei pharatoi yn ol Deddf Cyfrifiad (Prydain Fawr), 1910.

Y lle hwn i'w lenwi gan y Cyfrifydd.

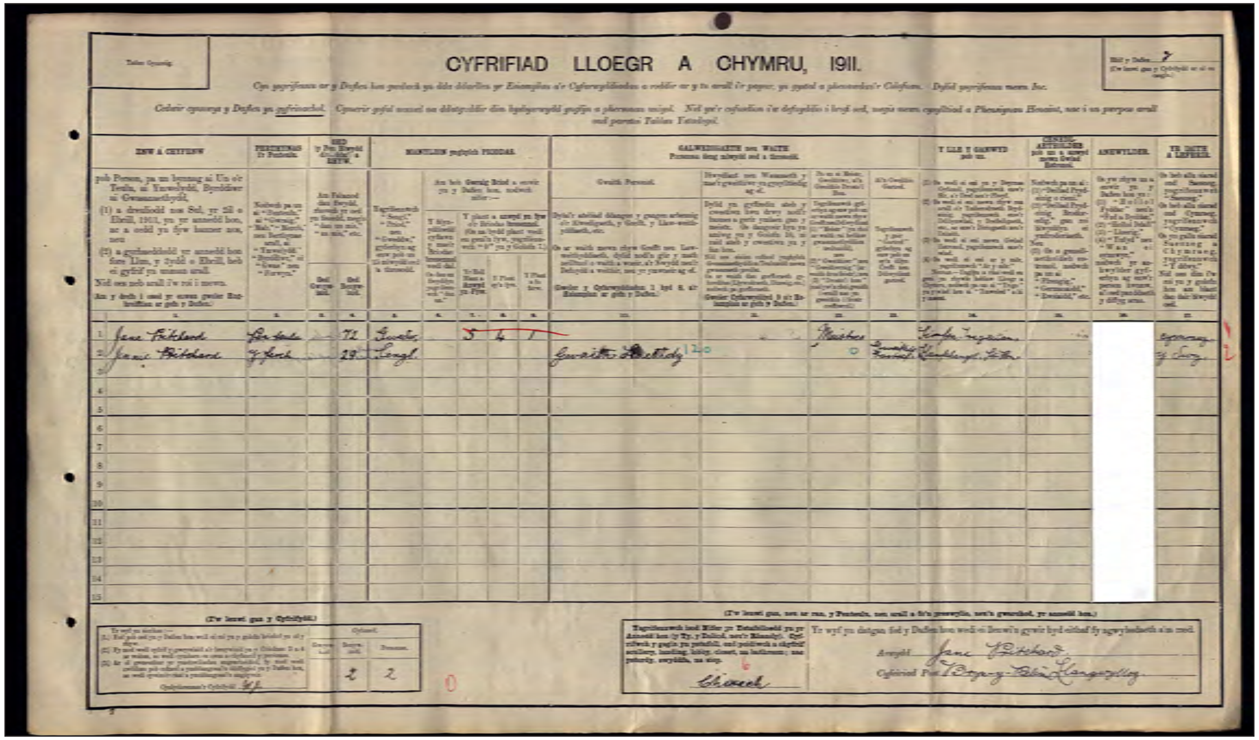
Rhif y Dosbarth Cofrestrol 633.
Rhif yr Is-Ddosbarth Cofrestrol 1
Rhif y Dosbarth Cyfrifyddol 5

Enw'r Penteulu neu Breswylydd ar Wahan. Jane Prichard

Cyfeiriad Post Brynfelin Capel Coch Llangwyllog

RHYBUDD.

Rhaid i'r Daflen hon gael ei llenwi a'i harwyddo gan, neu ar ran, y Penteulu neu arall a fo'n preswylio, neu'n gwarchod, yr annedd (sef y ty, y daliad, neu'r rhandy).



CYFRIFIAD LLOEGR A CHYMRU, 1911.

Llofnod: Jane Pritchard
Cyfeiriad Post: Brynfelin Llangwyllog

Jane Pritchard and her daughter, also named Jane, retain their residency at Bryn Felin even after the mill is no longer in use. In the 1901 (figure 15) Census Jane Sr is listed as a farmer and employer and no occupation is listed for the 1911 Census (figure 16). Her daughter's occupation is recorded as working in a dairy.

In addition to the aforementioned 1910 picture there are a number of photographs of Melin Llidiart taken after it has fallen out of use. The first was taken in 1936 (figure 17) by Donald Muggeridge during his visit to Anglesey and is held at the University of Kent. A visit to “Felin Capel Coch” in 1954 records the mill as being “in a very poor state of repair. No roof, windows, door, sails or other machinery remain (Anglesey Archives: WCC/43/1). The next photograph (figure 18) is an aerial view of the mill taken in 1969. This picture was supplied by a local resident whose house is also shown on the photograph. The final set of photographs (figures 19 & 20) is held at Anglesey Archives. These photographs were taken in 1977 as part of a survey of the islands windmills.

Figure 17. (Left) Donald Muggeridge's 1936 Photograph of Melin Llidiart

Figure 18. (Above) 1969 Aerial Photograph Showing Top of Windmill And Associated Outbuildings

Figure 19. Melin Llidiart Taken In 1977 as Part of the Windmills Of Anglesey Survey

Figure 20. Melin Llidiart Taken In 1977 as Part of the Windmills Of Anglesey Survey

6.0 Results of Archaeological Works

A site visit to Melin Llidiart was conducted on 11th May 2012. During this visit the existing drawn records were checked against the structure and found to be inaccurate. They contained no record of the blocked windows or doorway and errors in the positioning of the surviving windows. Measurements were recorded of features at ground floor level and rectified photographs taken to allow drawings to be produced.

6.1 Drawn Record

Due to the conical shape of the mill structure it was not felt sufficient to produce four drawings to cover the external elevations. Six were drawn to allow for all the openings to be shown (the south-west and north-east facing elevations were not drawn as they contained no openings). Drawings were produced from measurements taken on site and a mixture of rectified photographs and a 3-D model produced by Aerial-Cam. Elevations were produced at a scale of 1:100 and are included as figures 21 and 22. A plan of the windmill was produced at a scale of 1:50 and is included as figure 23.

6.2 Results of Photographic Survey (Plates 1 - 51)

Melin Llidiart is a three storey windmill surviving to its full height of c.9.3m. It is constructed from red sandstone with a lime mortar and render where surviving. The cap and sails are missing, as is the internal machinery and floors. There are however a number of surviving interior and exterior features and these will be discussed by floor level.

6.2.1 Mill Exterior (Plates 1 - 35)

The exterior of the mill was photographed with and without photographic scales from a variety of heights and positions over a period of two days. This allowed a detailed record of the structure to be compiled and selected photographs are included in plates 1 – 23. Figure 24 shows the positions of the general shots and figure 25 shows the positions of plates detailing architectural features. This information was used to generate a 3-D model which is included on the accompanying CD as Appendix D.

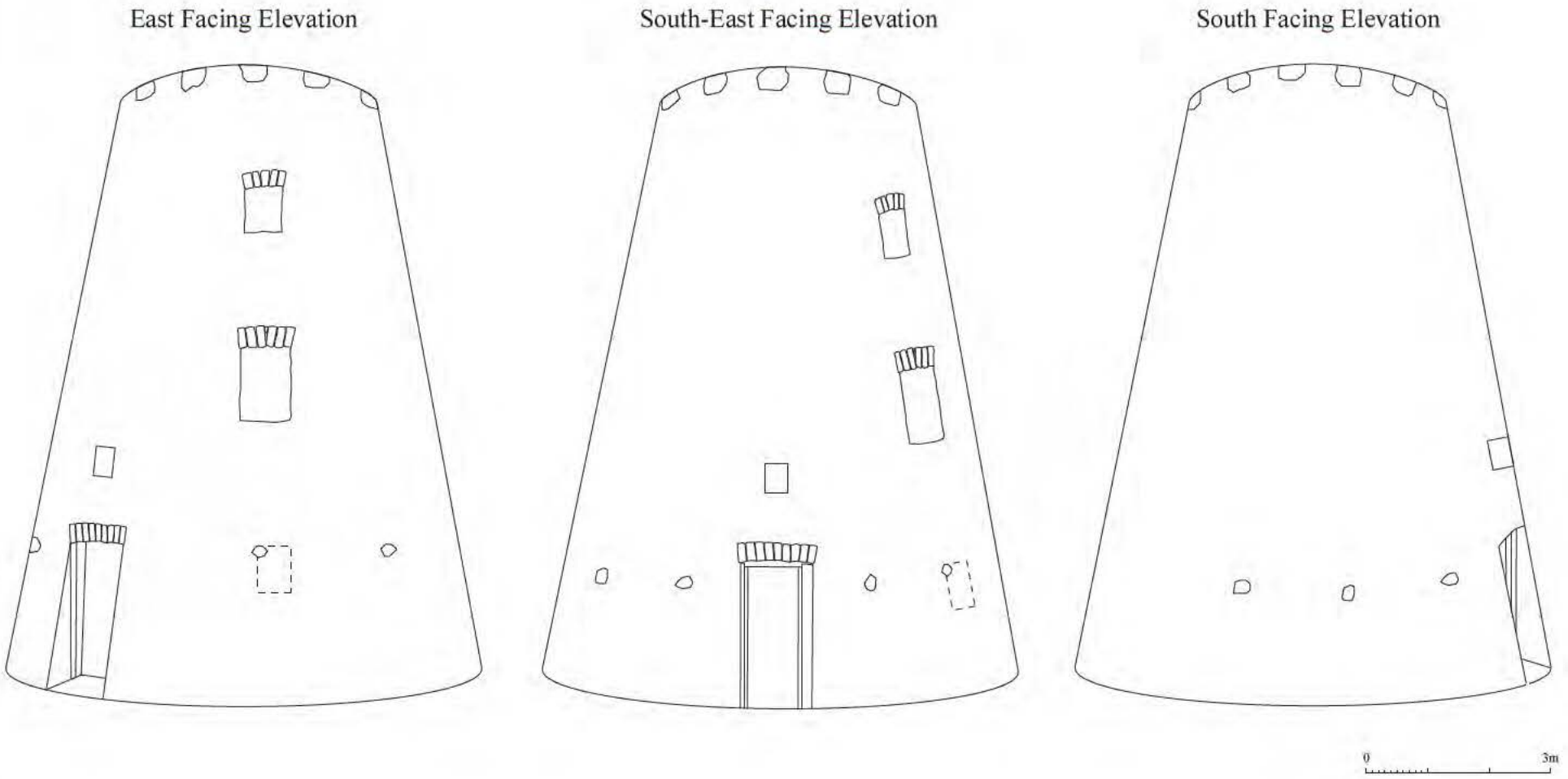


Figure 21. Windmill Tower Elevations East - South Facing. Scale 1:100. Drawn by C. Rees

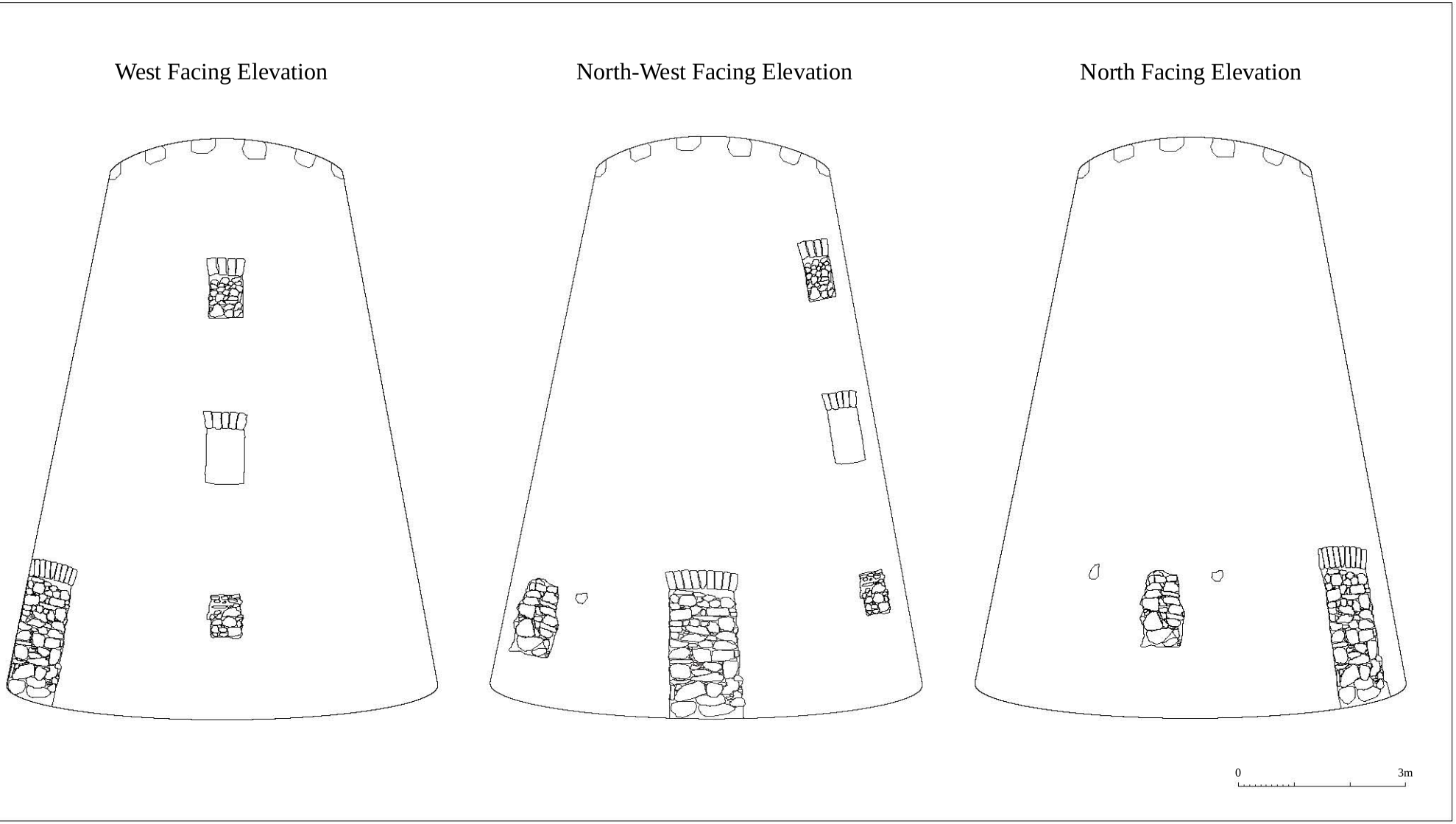


Figure 22. Windmill Tower Elevations West - North Facing. Scale 1:100. Drawn by C. Rees

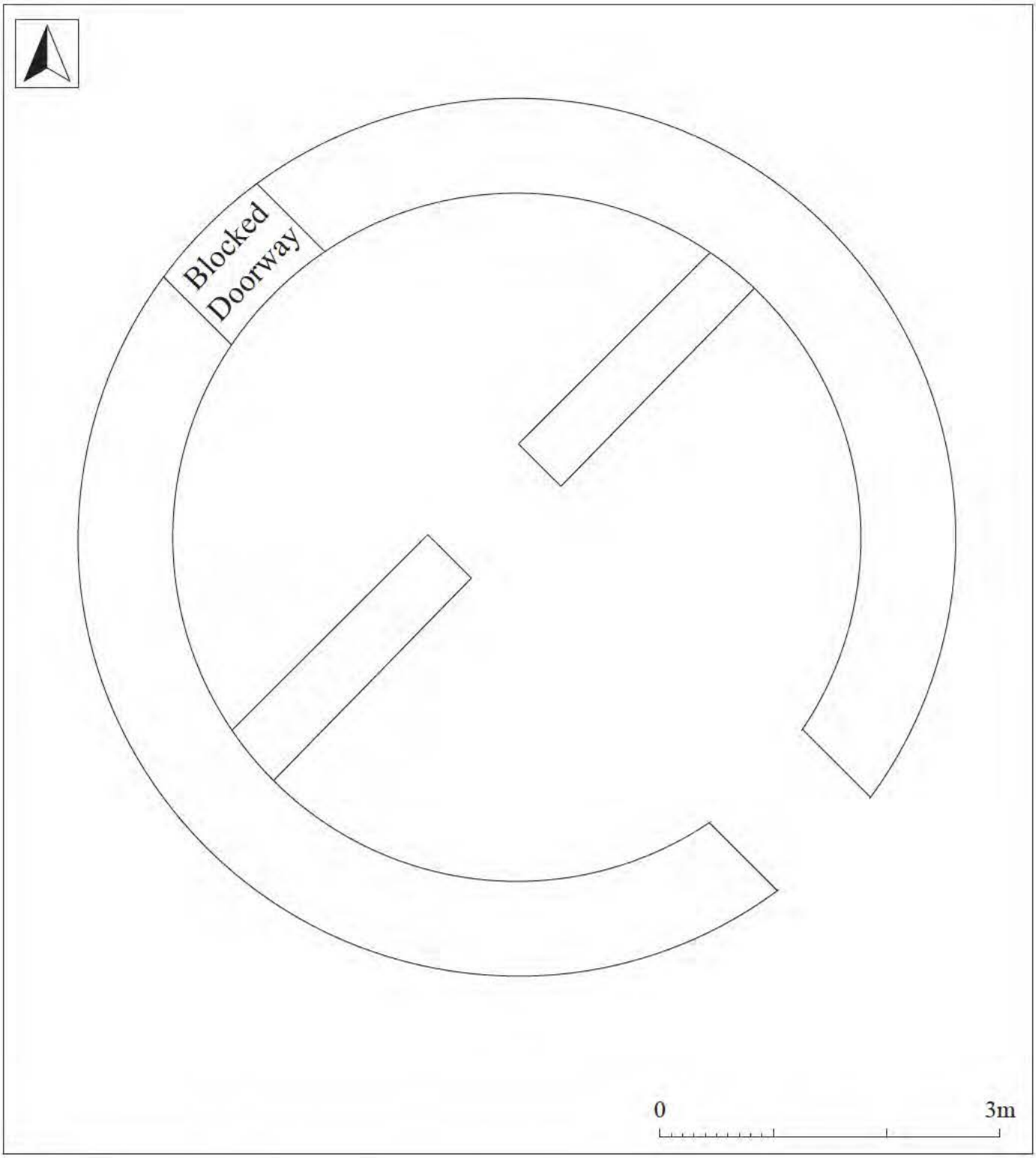


Figure 23. Plan of Windmill Tower at Ground-floor Level. Scale 1:50. Drawn by C. Rees.
Please Note that the Wall Thickness is not Uniform and Narrows Towards the Top of the Windmill
As can be seen at Melin Llynnon (Figure 27) and by Comparing Plates 20 & 24

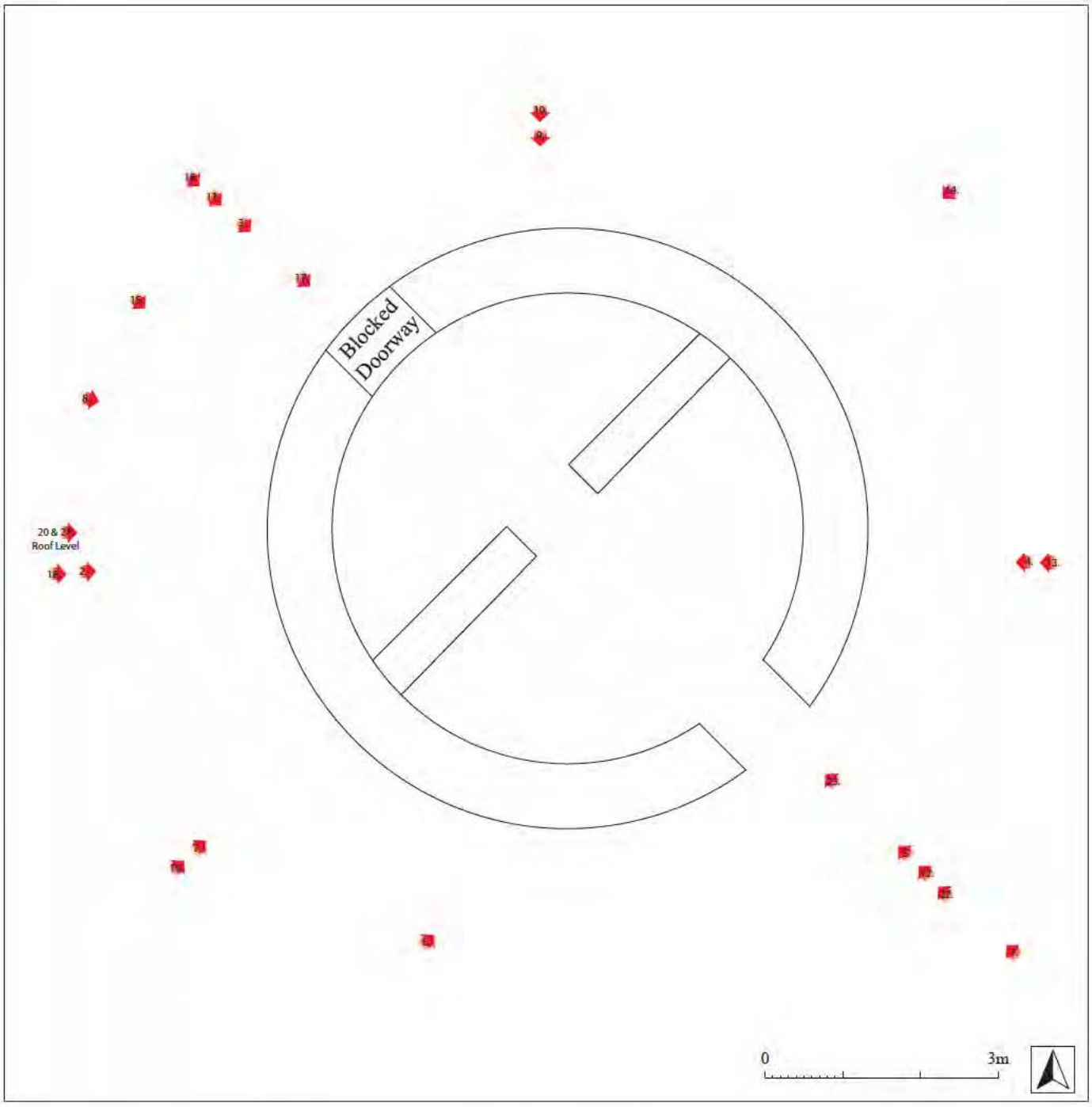


Figure 24. Location Plan Showing Photograph Positions for Plates 1 - 23

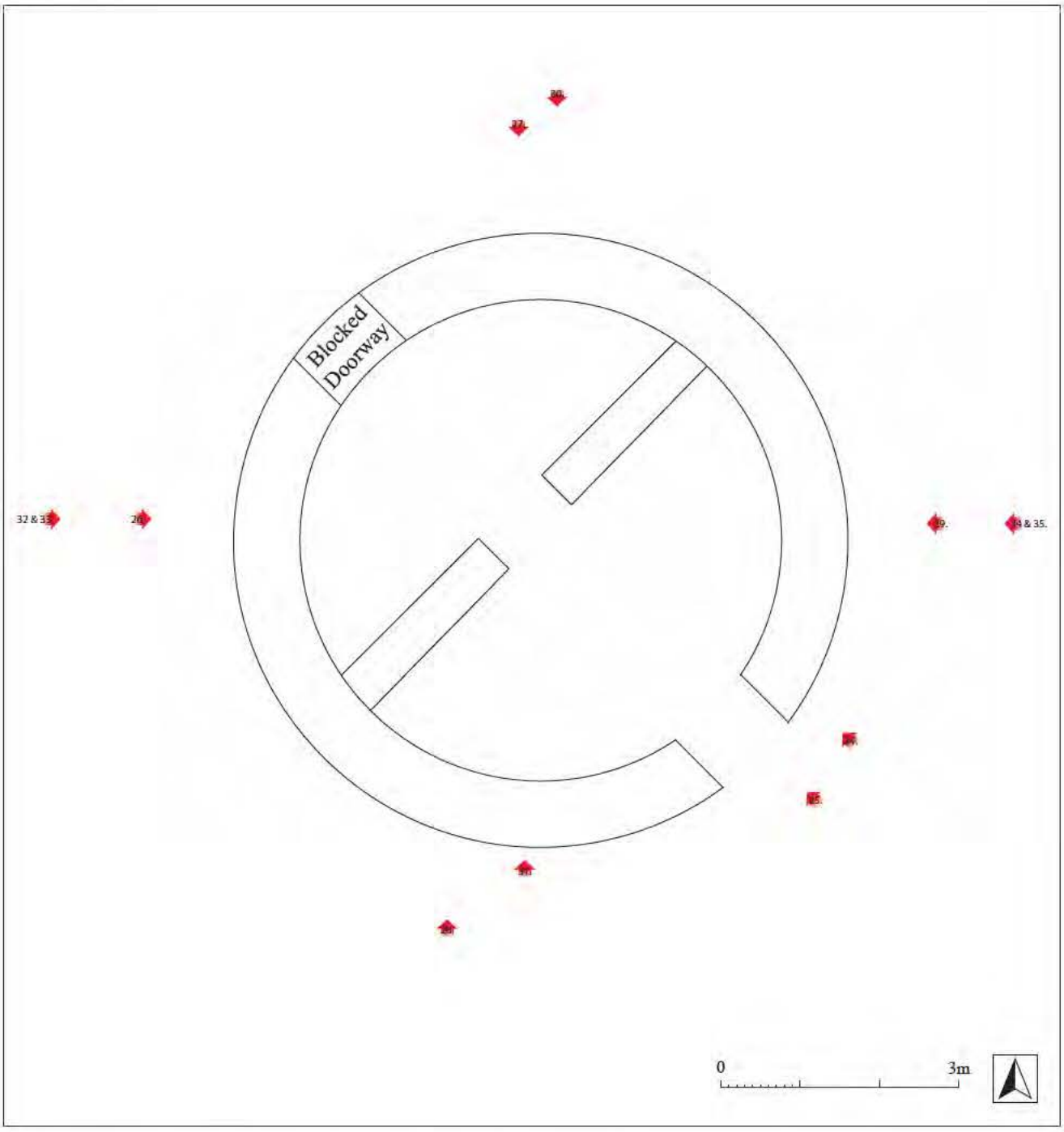


Figure 25. Location Plan Showing Photograph Positions for Plates 24 - 35

Seven window openings were observed in the exterior of Melin Llidiart. These were arranged in three groups. Two sets of three windows were grouped vertically at ground, first and second floor levels with a single outlying window at ground floor level located to the left of the north-western door. The two sets of windows are opposite each other in the eastern and western building elevations. On close examination these two sets of windows are similar in size and shape but are not identical.

In both elevations the lower or ground floor windows have been blocked, as had the larger window in the northern elevation. This blocking had been carried out using the same red sandstone as the main structure. The blocking in the eastern elevation has been carried out more carefully and with more precision than in the other two windows. It is almost impossible to distinguish the blocked window from the surrounding masonry in the exterior elevation but the episode is more clear when viewed internally. This blocking was undertaken when the windmill was still in use as is evidenced by the remains of a wooden cleat in the top left hand corner of the window.

The windows at ground floor level are less elaborate than at the upper levels and do not share the grey limestone arches. These arches were built using different numbers of stone pieces in each of the windows. The smaller, upper window in the eastern elevation has five stones in the arch whilst the opposite western window has four. The lower window in the western elevation with five stones is also slightly smaller than it's eastern counterpart which was built using six stone pieces.

These arches are also evident above the doorways and the same grey limestone has been utilised at roof level. The two doorways, like the windows are arranged directly opposite one another, with one in the south-eastern elevation and the other in the north-western. Unlike the windows the doorways are the same size and design with each incorporating nine limestone blocks into the archway above. The north-western doorway has been blocked in the same manner as northern and western ground floor windows and it is possible that all three openings were blocked in a single event undertaken when the windmill was converted to house animals following the loss of the cap and sail.

There is a small opening which does not continue through to the mill interior above the south-eastern doorway. It is unclear what function this performed but it may have once held a date plaque similar to that recorded at Bodfford (Guise & Lees 2010: 76) which has unfortunately been removed.

Plate 1. General Shot of Melin Llidiart and Mill House

Plate 2. Melin Llidiart General Shot Western Elevation

Plate 3. Melin Llidiart General Shot North-western Elevation

Plate 4. Melin Llidiart General Shot Eastern Elevation

Plate 5. Melin Llidiart General Shot South-east Elevation

Plate 6. Melin Llidiart General Shot Southern Elevation From Above

Plate 7. Melin Llidiart General Shot South-western Elevation From Above

Plate 8. Melin Llidiart General Shot Western Elevation

Plate 9. Melin Llidiart General Shot Northern Elevation From Above

Plate 10. Melin Llidiart General Shot Northern Elevation

Plate 11. Melin Llidiart General Shot North-western Elevation From Above

Plate 12. South-eastern Elevation

Plate 13. Eastern Elevation

Plate 14. North-eastern Elevation

Plate 15. North-western Elevation

Plate 16. North-western Elevation

Plate 17. Blocked Doorway in North-western Elevation

Plate 18. Western Elevation

Plate 19. South-western Elevation

Plate 20. Windmill from Above Showing Surviving Runners

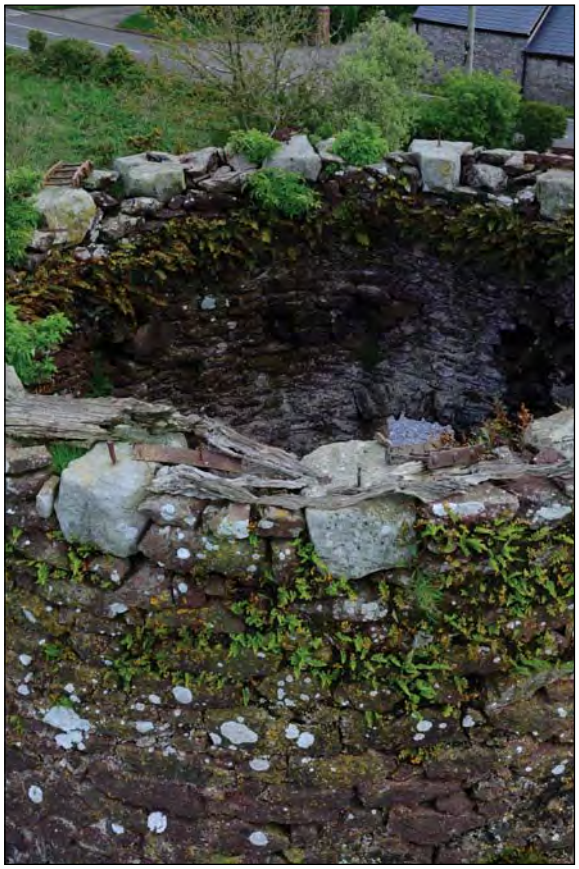


Plate 21. Windmill from Above Showing Surviving Runners Detailed Shot

Plate 22. South-eastern Elevation Detailing Around Doorway

Plate 23. South-eastern Doorway Detailed Photograph

Plate 24. South-eastern Doorway Showing Wall Thickness

Plate 25. South-eastern Doorway Showing Limestone Detailing

Plate 26. Blocked Window Lower Level Western Elevation

Plate 27. Blocked Window in Northern Elevation

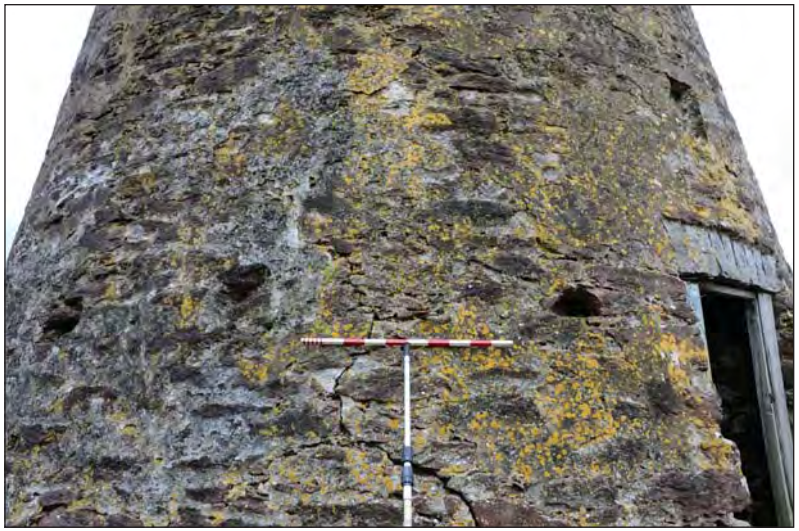


Plate 28. Detailed Shot Showing Location Of Cleat Holes on the Southern Elevation of the Tower

Plate 29. Detailed Shot Showing Lower Blocked Window and Cleat Hole in Eastern Elevation

Plate 30. Detailed Shot Showing Blocked Window and Cleat Holes in Northern Elevation

Plate 31. Damage at Base of Tower (Southern Elevation) As Recorded by RCAHMW

Plate 32. Blocked Second Floor Window in Western Elevation

Plate 33. Second and First Floor Windows in Western Elevation

Plate 34. Second Floor Window In Western Elevation

Plate 35. Second and First Floor Windows in Eastern Elevation

The limestone utilised at the top of the windmill structure is evenly spaced around the circumference of the tower and it is evident from the aerial photographs that this stone was preferentially chosen to house the iron fixings which were used to attach the rails on which the cap would rotate. Although little of the wooden and iron rail system survives enough remains to allow for an accurate reconstruction should it be required.

Although now missing the windmill cap was likely to have been the wooden, clinker built boat-shaped structure which is found on similar structures throughout Anglesey. A wooden fringing petticoat would have overlapped the top of the tower and afforded protection for the curb or rack on which the cap revolved. The most common number of sails found on the island was four.

6.2.2 Mill Interior (Plates 36 - 51)

The interior of the mill was photographed with and without photographic scales from a variety of heights and positions. A series of photographs was also taken using a wide angle lens. This allowed a detailed record of the interior to be compiled and selected photographs are included in plates 36 – 51. Figure 26 shows the positions of the photographs/plates. This information was used to generate a 3-D model which is included on the accompanying CD as Appendix E.

In order to best illustrate the description of the internal workings of the mill detailed below figure 27 has been included to show how the interior of Melin Llidiart would have appeared when operational. It also shows the likely appearance of the mill cap and sails.

The remains of three floors were observed inside the mill. These were primarily evidenced by the wall openings which would once have held the wooden floor joists. The third floor level or dust floor (llawr llwch) was not used in flour production but rather served to allow access to the machinery in the mill cap and to prevent dirt and dust from entering the level below (www.llansadwrn-wx.co.uk).

There are a number of partially surviving timbers at second floor level. It is evident from the surviving openings that there were two much larger timbers used at second floor level. These large joists would have run between the north-eastern and south-western walls. There was a second set of joists below this level and the central spur wheel would originally have been located.

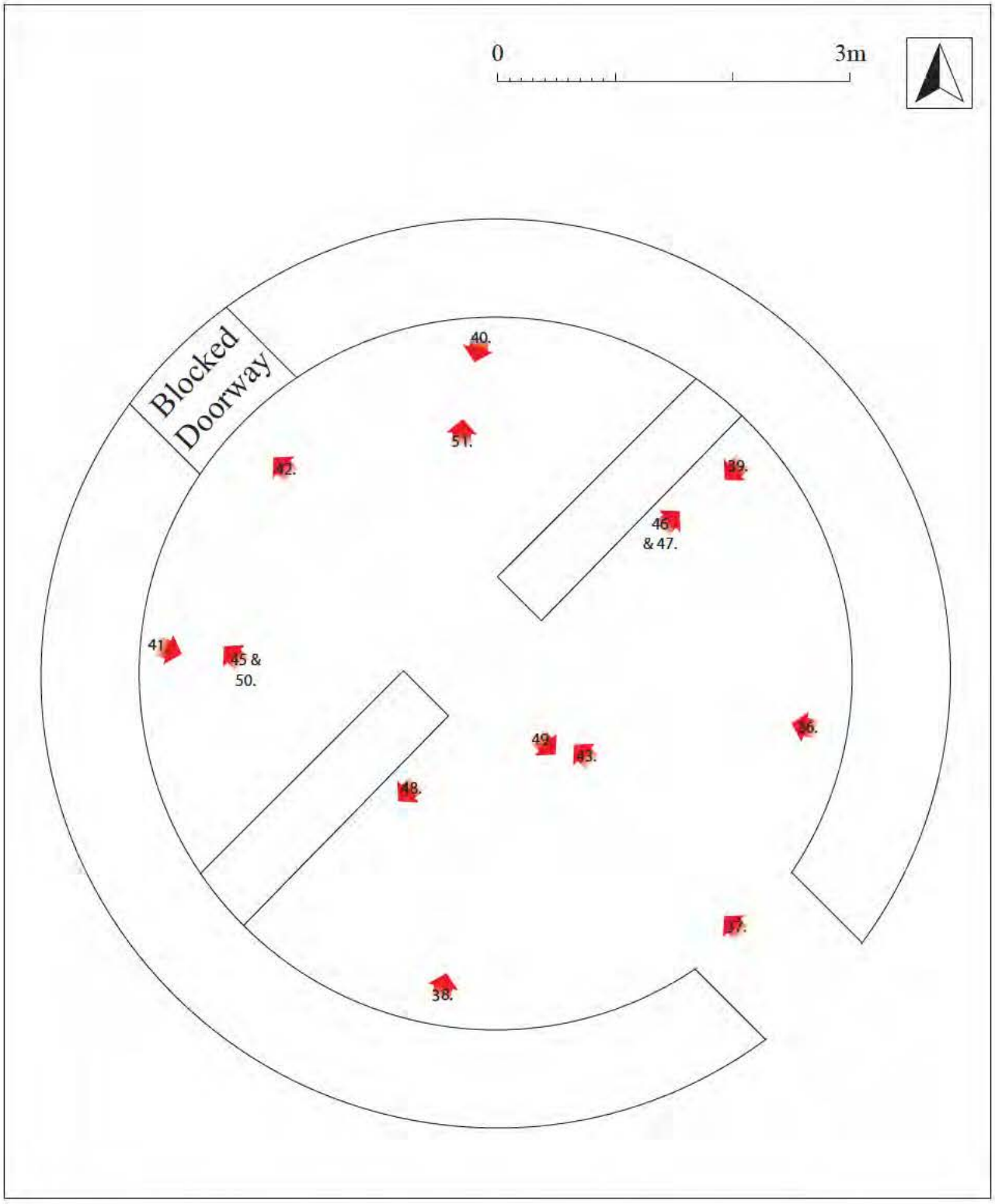


Figure 26. Location Plan Showing Photograph Positions for Plates 36 - 51
Plate 44 was Taken from the Centre of the Structure Looking Straight Upwards

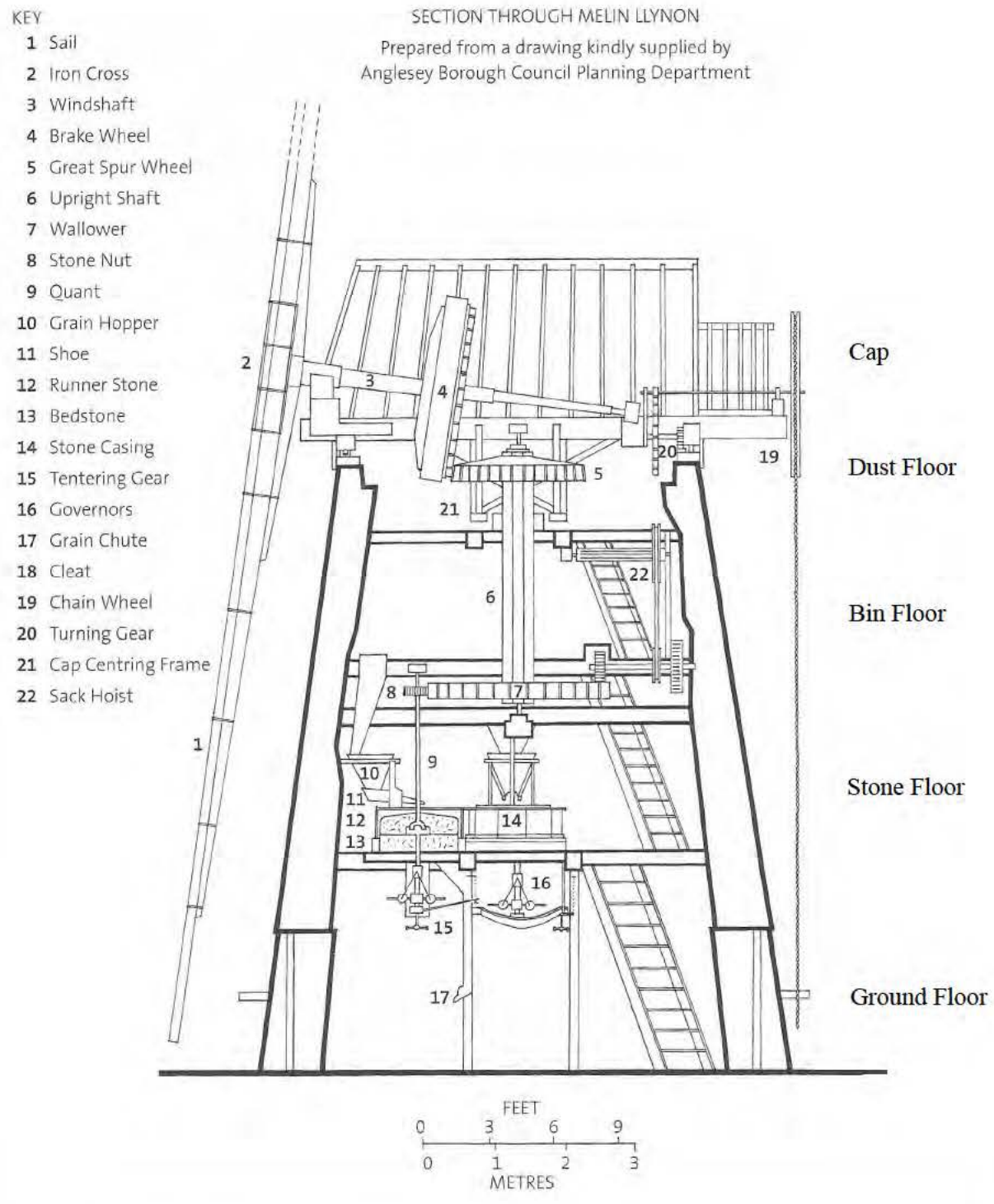


Figure 27. Section Through Melin Llynon (Taken fron Guise & Lees 2010: 58)
The Internal Arrangement at Melin Llidiart Would Have Been Very Similar to that Shown Above

The second floor at Melin Llidiart, as with similar examples found elsewhere, was the bin floor (y yist flawd). This floor was used for grain storage and the grain would be lifted to this floor using the sack hoist in preparation for milling (www.llansadwrn-wx.co.uk). Above the south-eastern doorway the wooden opening into which the sack hoist shaft would have fitted is still surviving. At this level there are also the remains of three set sets of two iron rings. The rings are mounted on wooden posts and built into the mill walls. These rings were used to hold open the trapdoors which led to the grain hoppers on the level below and from their survival we are able to deduce that this mill would have housed three pairs of mill stones when operational.

The first or stone floor (llawr carreg) would once have housed the hoppers and three pairs of mill stones (maen melin) which would have ground the grain into flour (www.llansadwrn-wx.co.uk). Other windmills on the island where the stones have survived housed one pair of French Burrstonesand and two pairs of coarser Welsh stones. The harder French stones were used to grind wheat (Guise & Lees 2010: 17).

The ground floor level (llawr isaf) would have received the flour after it had passed through the stones and it would be channelled through a chute into the flour dresser. This consisted of an inclined cylinder inside which were revolving brushes which swept the meal across a wire gauze allowing the different grades of grain to be sorted (Guise & Lees 20).

At ground floor level there is a brick and stone central division which has a centrally placed entrance. This addition was built c.1900 when the mill had fallen out of use and is associated with the use of the structure to house animals. This feature is marked on the windmill plan (figure 23). A further later feature at ground floor level is the modern blocking of a small hole near the tower base which had been filled with modern breeze blocks. This damage was recorded by the RCAHMW in 2003 and the mill was placed on the Buildings at Risk Register. This damage is likely to have been as a result of the lowering of the ground level around the mill which has had a destabilising effect. This change in level is particularly evident in plates

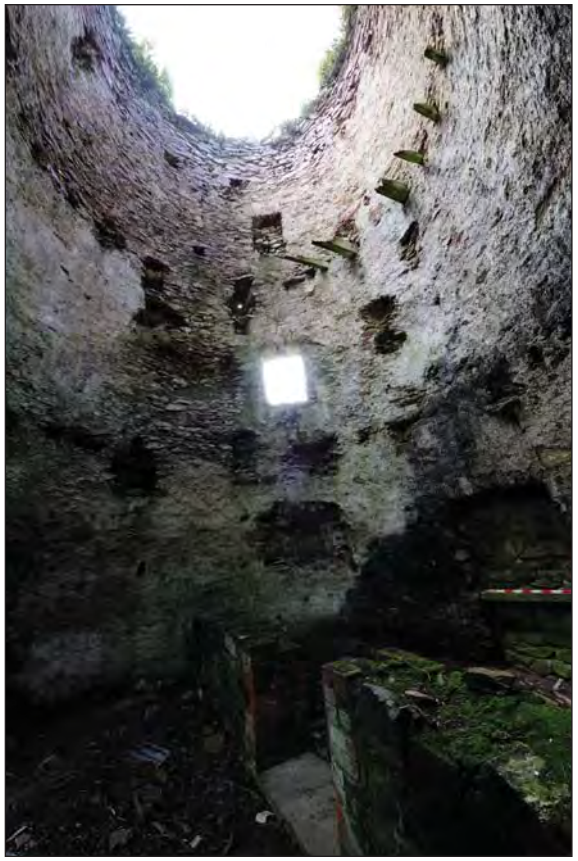


Plate 36. Windmill Interior Taken Using Wide Angle Lens. Facing West

Plate 37. Windmill Interior Taken Using Wide Angle Lens. Facing North-west

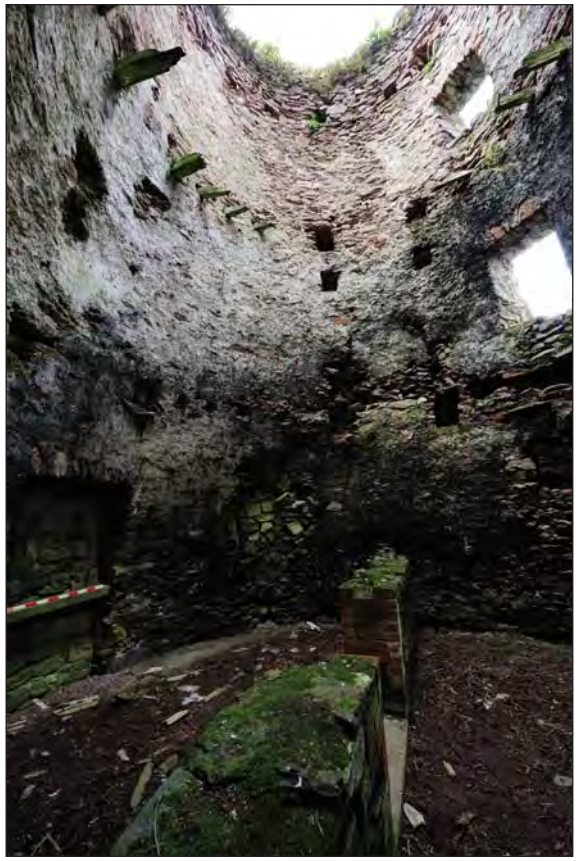


Plate 38. Windmill Interior Taken Using Wide Angle Lens. Facing North

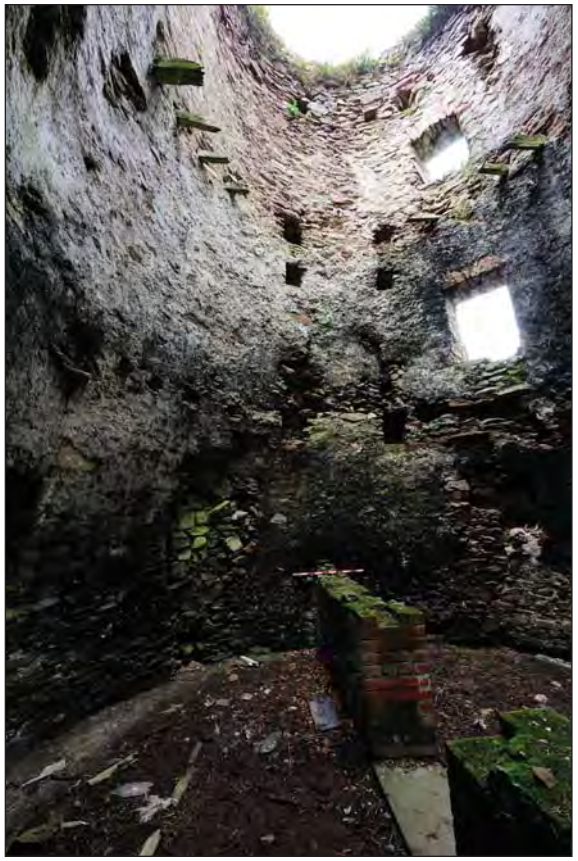


Plate 39. Windmill Interior Taken Using Wide Angle Lens. Facing South

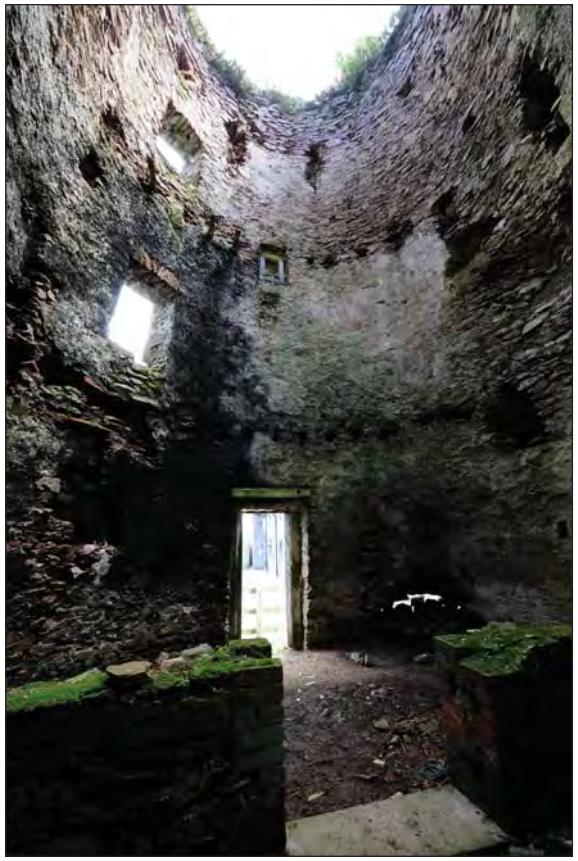


Plate 40. Windmill Interior Taken Using Wide Angle Lens. Facing South-east

Plate 41. Windmill Interior Taken Using Wide Angle Lens. Facing East

Plate 42. Windmill Interior Showing Blocked North-west Facing Doorway

Plate 43. Windmill Interior Facing North-west Showing Later Internal Division

Plate 44. Windmill Interior Showing Surviving Wooden Floor Joists at Second Floor Level

Plate 45. Joist Holes for Third Floor Level. This Level Would Have Been Inside the Windmill Cap

Plate 46. Wall Openings.
Photograph Taken Facing North-East

Plate 47. Wall Openings.
Photograph Taken Facing North-East.
Note Iron Ring for Trap-door Above

Plate 48. Upper Wall Openings in Detail Mirroring Those Shown in Plate 47. Facing South-west

Plate 49. Remains of Sack Hoist Above Door
Photograph Taken Facing South-east

Plate 50. Blocked Window at Second Floor Level.
Photograph Taken Facing West

Plate 51. Surving Joists and Iron Ring. Second Floor Level. Photograph Taken Facing North

7.0 Conclusion

Documentary research has confirmed that Melin Llidiart is one of the oldest windmills on Anglesey. Little evidence of the mills early history could be found and there is a gap of over a hundred years between the account of the building of the mill in 1738 and the next record of the mill in the 1841 Tithe records. From 1841 until the mill went out of use c.1900 we have been able to identify the millers at Llidiart (later renamed Bryn Felin).

The mill tower is largely intact and survives to it's full height of c.9.30m. This is quite remarkable given that the building has been without a roof for over 100 years. A number of outbuildings associated with the milling complex are evidenced on cartographic and photographic sources although not all survive.

Careful examination of the building has revealed traces of the disappeared machinery and internal workings of the mill and aerial photography demonstrated the survival of rails on the building roof.

8.0 Bibliography

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

GAPS. 2012. ***Design Brief for Archaeological Building Record***

Guise B & G Lees. 2010. ***Windmills of Anglesey.*** Oxford. Information Books

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Archive Material (Sourced from Anglesey Archives, Llangefni)

1841 Tithe Map and Returns for Llanfihangel Tre'r Beirdd

1883 Slater's Directory

1895 Slater's Directory

1889 First Edition Ordnance Survey Map

1920 Second Edition Ordnance Survey Map

WCC/43/1 1954 Windmill Condition Survey

WM2177 Windmills on Anglesey Photographic Survey Taken 2nd August 1977

WM/673 Windmills and Watermills – Northwest 1981

Websites (All Websites were Consulted on 19/05/2012)

www.anglesey.info/capel-coch-windmill.htm

www.anglesey.gov.uk/Journals/2011/09/08/Anglesey-Landscape-Strategy-Update-2011.pdf

www.britishlistedbuildings.co.uk/wa-5389-melin-llidiart-llanddyfnan

www.coflein.gov.uk/en/site/40332/details/CAPEL+COCH+WINDMILL%3B+MELIN+LLIDART/

www.kent.ac.uk/library/specialcollections/mills/r.php/23598/zoom.html

www.llansadwrn-wx.co.uk/gwynt/llynnon.html

Appendix A. Sites of Archaeological Interest in the Vicinity of Melin Llidiart (Area Searched 1000m Radius of Site)

Identifying Registration	Site Name	Brief Description	Period	Designation
PRN 7768	-	Flint Core	Prehistoric	-
PRN 2197	-	Flint Core	Prehistoric	-
PRN 11779	-	Flint Core	Prehistoric	-
NPRN 265388	Llidiart – Twrcelyn Gardens, Capel Coch	Country House Garden	Post Medieval	-
PRN 7768	Ty Mawr	Non-conformist Chapel	Post Medieval	-
PRN 27898	-	Well to the East of Ty Mawr	Post Medieval	-
PRN 27896	-	Building Structure North of Ty Mawr	Post Medieval	-

Appendix B.

Design Brief for Archaeological Building Record Prepared by Gwynedd Archaeological Planning Service

DESIGN BRIEF FOR ARCHAEOLOGICAL BUILDING RECORD

Gwynedd Archaeological Planning Service

Site: The Old Mill, Capel Coch, Ynys Môn

Date: 10th April 2012

National Grid Reference: 245769, 382003

Planning reference: 23C80G

Client: Lynn Hanson.

This design brief is only valid for six months after the above date. After this period Gwynedd Archaeological Planning Service should be contacted.

It is recommended that the contractor appointed to carry out the archaeological assessment visits the site of the proposed development and consults the Regional Historic Environment Record (HER) for north-west Wales before completing their specification. Gwynedd Archaeological Planning Service cannot guarantee the inclusion of all relevant information in the design brief.

Key elements specific to this design brief have been highlighted.

1.0 Site Location and Description

1.1 For the purposes of this brief the site comprises The Old Mill / Melin Llidiart, Capel Coch, Ynys Môn.

1.2 The property is situated to the south of the village of Capel Coch on the west side of the main road.

1.3 Capel Coch is located 2 miles north of Llangefni, Ynys Môn.

2.0 Archaeological Background

2.1 Melin Llidiart / Capel Coch Windmill is a grade II listed building (reference 5389).

2.2 The three storey tower dates to the mid-18th century and is thought to be one of the oldest surviving windmills on Anglesey.

2.3 It survives to almost full height although little of the interior fittings or machinery is extant.

2.4 The mill was one of over 40 windmills on Anglesey when it went out of use towards the end the 19th century. Today only 18 survive and few of these retain their full height.

2.5 The reports below must be consulted in relation to this brief.

2.6 Documentation

English Heritage, 2006. Understanding Historic Buildings *A guide to good recording practice*. English Heritage, London.
Guise, B. & Lees, G. 1992. Windmills of Anglesey. Attic Books, Wales

3.0 The nature of the development and archaeological requirements

3.1 The building is to be renovated and converted. A large extension is to be added to provide additional living accommodation.

3.2 This is a *design brief* for a programme of archaeological works to mitigate the impact of the development to be undertaken following planning consent, according to guidelines set out in Welsh national planning guidance (*Planning Policy Guidance Wales 2011*) and Welsh Office Circular 60/96 (*Planning and the Historic Environment: Archaeology*). The programme of works will comprise a **building record** to be made in advance of the proposed conversion.

3.3 This *design brief* should be used by the archaeological contractor as the basis for the preparation of a detailed written archaeological *specification*. The specification must be submitted to the Gwynedd Archaeological Planning Service for approval before the work commences.

3.4 The *specification* should contain, as a minimum, the following elements:

- Non-technical summary.
- Details of the proposed works as precisely as is reasonably possible, indicating clearly on a plan their location and extent.
- A research design which sets out the site-specific objectives of the archaeological works.
- Reference to the relevant legislation.
- Health and Safety considerations.
- Monitoring procedures.
- Field methodology.
- The level and grade of all key project staff.
- A timetable for the proposed works including contingency costs (if appropriate).
- The intended method of publication.
- Archive deposition.

4.0 Mitigation detail

4.1 The programme of archaeological works to **mitigate** the impact of the development will consist of a programme of building recording.

4.2 Some of this work may only be achievable once scaffold has been erected whilst other elements must be complete before any scaffold obscures the appearance of the building.

4.3 Building record detail

4.4 The building record should be roughly commensurate with the English Heritage '*Understanding Historic Buildings: a guide to good recording practice'* (2006) Level 3 and should include the following elements:

• written account	1-3, 5-9, 11-13, 22;
• drawings	2-9;

- photographs 1-9.

4.5 Before new records are prepared, existing sources of information should be found and examined for their adequacy. Such information may be found in drawings, photographs, published and unpublished accounts.

4.6 The **written account** should draw on a range of available resources and discuss the building's significance, origins, development and use. The Historic Environment Record, the University of Bangor and the local archive, held at Llangefni County Record Office, should be visited.

4.7 The **drawings** must include measured plans and elevations recording phasing or developmental changes as well as the position and nature of structural or architectural details. Sections illustrating relationships within the building should be included.

4.8 **Photographs** should be detailed and must record all features, room spaces and elevations to illustrate the building's appearance and structure and to support an historical analysis. Each print should be clearly labelled with the subject, orientation and the date taken, and cross-referenced to its negative and or digital file (see 4.9 & 4.10).

4.9 Both black-and-white and colour photography should be used where appropriate.

4.10 If utilising digital technology, high resolution images (preferably in tiff. format) must be produced. These should be presented within the report as a hard copy and a compact disc must be included as an archive to accompany the report.

4.11 The archaeological contractor will ensure that sufficient resource is made available for the programme to result in an archive report.

4.12 The report should specifically include the following:

a) a copy of the design brief and agreed specification,

b) a location plan,

c) a plan illustrating the location and direction of any photographs or drawings,

d) full dimensional and descriptive detail, a full bibliography of sources consulted,

e) An archive compact disc.

5.0 General requirements

5.1 The archaeological recording and watching brief must be undertaken by an appropriately qualified individual or organisation, fully experienced in work of this character.

5.2 Details, including the name, qualifications and experience of the project director and all other key project personnel (including specialist staff) should be communicated to the Gwynedd Archaeological Planning Service and all written work attributed to an author(s).

5.3 Contractors and subcontractors are expected to conform to standard professional guidelines. The following are of particular relevance in this instance:-

- English Heritage, 1991. *Management of Archaeological Projects (MAP2)*.

- English Heritage, 2006. *Understanding Historic Buildings: A guide to good recording practice.*
- English Heritage, 2006. *Management Of Research Projects in the Historic Environment (MORPHE).*
- The Institute for Archaeologists, 1985 (revised 2010). *Code of Conduct.*
- The Institute for Archaeologists, 1990 (revised 2008). *Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology*.
- The Institute for Archaeologists, 1994 (revised 2009) *Standard and Guidance for Archaeological Desk-Based Assessment*.
- The Institute for Archaeologists 1996 (revised 2008). *Standard and Guidance for the Archaeological Investigation and Recording of Standing Buildings or Structures*.
- The Institute for Archaeologists, 1994 (revised 2008). St*andard and Guidance for Archaeological Field Evaluation*.
- The Institute for Archaeologists, 2001 (revised 2008). *Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials*.
- The Institute for Archaeologists, 2008. St*andard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives*.
- Museum and Galleries Commission, 1994. *Standards in the Museum Care of Archaeological Collections.*
- United Kingdom Institute for Conservation, 1990. *Guidelines for the preparation of excavation archives for long-term storage.*

5.4 Many people in North Wales speak Welsh as their first language, and many of the archive and documentary references are in Welsh. Contractors should therefore give due consideration to their ability to understand and converse in Welsh.

5.5 The archaeological contractor must satisfy themselves that all constraints to groundworks have been identified, including the siting of live services, Tree Preservation Orders and public footpaths. Gwynedd Archaeological Planning Service bears no responsibility for the inclusion or exclusion of such information within this brief.

5.6 Any changes to the specifications that the archaeological contractor may wish to make after approval by this office should be communicated to Gwynedd Archaeological Planning Service and approved.

5.7 Care must be taken in dealing with human remains and the appropriate environmental health regulations followed. Gwynedd Archaeological Planning Service and the local Coroner must be informed immediately human remains are discovered.

5.8 Arrangements for the long-term storage and deposition of all artefacts must be agreed with the landowner and Gwynedd Archaeological Planning Service before the commencement of investigation.

5.9 The involvement of Gwynedd Archaeological Planning Service should be acknowledged in any report or publication generated by this project.

5.10 A full archive including plans, photographs, written material and any other material resulting from the project should be prepared in accordance with standard guidance. All plans, photographs and descriptions should be labelled, cross-referenced and lodged in an appropriate place (to be agreed with Gwynedd Archaeological Planning Service) within six months of the completion of the project.

5.11 Two copies of the bound report must be sent to the address below, one copy marked for the attention of the Development Control Archaeologist, the other for attention of the HER Officer, who will deposit the copy in the HER.

6.0 Curatorial monitoring

6.1 The project will be monitored by Gwynedd Archaeological Planning Service to ensure the fulfilment of the brief and specifications. The Development Control Archaeologist will normally review the progress of reports and archive preparation. The archaeological contractor must inform Gwynedd Archaeological Planning Service in writing of the proposed start dates for the project and any subsequent phases of work.

7.0 Glossary of terms

7.1 *Archaeological Contractor*
A professionally qualified individual or an organisation containing professionally qualified archaeological staff, able to offer an appropriate and satisfactory treatment of the archaeological resource, retained by the developer to carry out archaeological work either prior to the submission of a planning application or as a requirement of the planning process.

7.2 *Archaeological Curator*
A person, or organisation, responsible for the conservation and management of archaeological evidence by virtue of official or statutory duties. In north-west Wales the archaeological advisor to the Local Planning Authorities is the Development Control Archaeologist, who works to the Welsh Archaeological Trust's Curators' Code of Practice.

7.3 *Archive*
An ordered collection of all documents and artefacts from an archaeological project, which at the conclusion of the work should be deposited at a public repository, such as the local museum.

7.4 *Brief*
The Association of County Archaeological Officers (1993) defines a *brief* as an outline framework of the planning and archaeological situation which has to be addressed, together with an indication of the scope of works that will be required.

7.5 *Historic environment Record (HER)*
A documentary record of known sites in a given area. In north-west Wales the HER is curated by the curatorial division of the Gwynedd Archaeological Trust.

7.6 *Specification*
The Association of County Archaeological Officers (1993) defines a

specification as a schedule of works outlined in sufficient detail to be quantifiable, implemented and monitored.

7.7 *Watching brief*
A formal programme of observation during non-archaeological excavation works in order to identity, investigate and record any archaeological remains which may be present, in accordance with the Archaeological Standards.

8.0 Further information

8.1 This document outlines best practice expected of an archaeological assessment but cannot fully anticipate the conditions that will be encountered as work progresses. If requirements of the brief cannot be met they should only be excluded or altered after gaining written approval of the Gwynedd Archaeological Planning Service.

8.2 Further details or clarification of any aspects of the brief may be obtained from the Development Control Archaeologist at the address below.

Ashley Batten
Uwch Archaeolegydd Cynllunio – Senior Planning Archaeologist

GWASANAETH CYNLLUNIO ARCHAEOLEGOL GWYNEDD - GWYNEDD ARCHAEOLOGICAL PLANNING SERVICE
Craig Beuno, Ffordd Y Garth, Bangor, Gwynedd LL57 2RT
Ffon/Tel: 01248 370926 Ffacs/Fax: 01248 370925 ashley.batten@heneb.co.uk

Appendix C.

Specification for Archaeological Works at The Old Mill, Capel Coch, Ynys Môn

Specification for Archaeological Works at

The Old Mill, Capel Coch, Ynys Môn

NGR SH 45776 82004

C.R Archaeology
Compiled by Catherine Rees
on Behalf of Mr & Mrs Hanson

Specification for Archaeological Works at

The Old Mill, Capel Coch, Ynys Môn

Planning Reference Number:	23C80G
National Grid Reference:	SH 45776 82004
Client:	Mr & Mrs Hanson
Report Author:	Catherine Rees
Report Number:	CR09-2012
Date:	27/04/2012

Contents

1.0 Introduction

C.R Archaeology have been instructed by Mr & Mrs Hanson to conduct archaeological works at the above property in compliance with planning conditions placed on the development (Planning Reference 23C80G).

This specification has been written following a discussion with Development Control Archaeologist Ashley Batten of GAPS (25th April 2012) as a methodology for a programme of works relating to a "Design Brief for Archaeological Building Record" prepared by GAPS on the 10th April 2012.

The Old Mill, Capel Coch (also known as Melin Llidiart and referred to by this name from this point onwards) is thought to be one of the oldest surviving windmills on Anglesey, and is believed to date from the mid Eighteenth Century (www.coflein.gov.uk). It is a Grade II listed building (Cadw building ID 5389) and is recorded on the RCAHMW database (NPRN 40332).

The site is situated in a rural, inland location on the outskirts of the villiage of Capel Coch near Llangefni (Figure 1). Planning permission is being sought to restore the windmill and to add a two storey extension to allow the structure to be converted for residential use. The exact design has yet to be formalised but is envisaged that the extension will be c.7m x 11m and will be joined to the mill via a glass linking structure.

2.0 Project Aims

The programme of works proposed for Melin Llidiart aims to create a Level 3 Historic Building Record and thus its aims are two-fold.

The first aim of this scheme of works is to undertake desk based historical research exploring the history of the windmill. This information will include a map progression, photographic illustrations and archival research in order to compile a coherent narrative history of the site.

The second aim of this archaeological investigation is to create a comprehensive level 3 photographic record of the site. Emergency works were conducted by the RCAHMW in 2003 which included structural and justification reports, plans and elevations. It was not therefore felt necessary to replicate this work but the results will be included in the report. C.R Archaeology will however record any alterations or decay that has occurred since this work was undertaken.

3.0 Brief Historical Background

The following section is, through necessity, very brief and is intended to merely place Melin Llidiart in context. A more detailed history of the site will form a key element in the proposed works.

Melin Llidiart is a grade II listed Georgian windmill located within the parish of Llanddyfnan, Ynys Môn. The mill is thought to have been built c.1738 as a corn grinding mill and ceased to operate as such c.1900 (www.anglesey.info/capel-coch-windmill.htm). After this date the structure was used as an outbuilding. The windmill survives to its full height (9.3m) of three stories although it is now roofless and without its sails and internal mechanism (www.coflein.gov.uk).

4.0 Scheme of Works - Methodology

The Melin Llidiart works will be conducted in three sections and each is detailed separately below.

The methodology employed will conform to the requirements of a level 3 analytical building record as specified in *Understanding Historic Buildings: A Guide to Good Recording Practice* (English Heritage 2006) and The Institute for Archaeologists: *Standard and Guidance for the Archaeological Investigation and Recording of Standing Buildings or Structures* (Revised 2008).

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

The record created for Melin Llidiart will consist of:

Written Account	Points 1-3, 5-9, 11-13, 22
Drawings	Points 2-9
Photography	Points 1-9

4.1 Desk Based Research

A complete and coherent history of the site will be compiled utilising information sourced from Anglesey Archives, Bangor University Archives and local libraries. The Welsh Mills Society will be contacted to establish if any relevant material is held by the society or its members. A full map progression will be undertaken along with a search of tithe records and census returns.

The Gwynedd Historic Environment Record will be consulted but this will be limited to the area immediately surrounding the windmill as a detailed archaeological assessment of the site is not required in this project brief.

The works will be carried in accordance with the IfA Standards and Guidance for historic environment desk-based assessment (IfA 2009) and will include the information required to fulfil points 1-3, 5-9, 11-13 & 22 as specified in *Understanding Historic Buildings: A Guide to Good Recording Practice* (English Heritage 2006).

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

4.2 Drawn Survey

A survey of the windmill was conducted by RCAHMW in 2003 as part of an emergency recording programme (case reference RCS2/1/550). The work undertaken includes structural and justification reports, plans and elevations. It was not felt necessary to replicate existing works and copies of these documents (catalogue number C435792/ accession number NA/GEN/2009/011e) have been requested and will be incorporated into and discussed in the text.

These drawings will fulfil points 2-7 as specified in *"Understanding Historic Buildings: A Guide to Good Recording Practice"* (English Heritage 2006). Location plans and historical material will be produced/sourced by C.R Archaeology to fulfil criteria 8-9 in the aforementioned document.

4.3 Photographic Survey

A photographic survey of Melin Llidiart is to be undertaken by professional photographer Adam Stanford of Aerial-Cam. This work will consist of:

1) A photographic survey of the windmill
2) Low level aerial photography of the site and surrounding area.

4.3.1 Equipment

A photographic survey of the windmill will be undertaken using a 16 mega-pixel Nikon D7000 digital camera with a variety of standard and other lenses. Images will be captured in RAW format for later processing into high resolution JPG and TIF files.

To produce as full a record as possible the camera can be mounted on three different apparatus: a vehicle mounted telescopic mast, a hand held telescopic mast and a tripod. The masts can be erected to a maximum height of 22m.

All exterior and interior elevations of the building will be photographed with scales from ground level. Additional photographs will be taken detailing important architectural features. This record will be supplemented with a series of photographs taken using telescopic masts. These photographs will illustrate the landscape setting of the site and the relationships between the the windmill and neighbouring buildings. Mast photography will also allow a detailed record of the upper building elements to be created without the need to erect scaffolding therefore allowing them to be examined as part of the structure as a whole. It will also allow the roof support area to be viewed from above.

The methodology employed conforms to the requirements of photographic recording to the equivalent of a level 3 survey, as specified in *Understanding Historic Buildings: A Guide to Good Recording Practice* (English Heritage 2006) and will include works specified in points 1-9.

If deemed necessary to supplement the drawn record created by the RCAHMW rectified photography will also be undertaken.

4.3.2 Timetable for Proposed Works

It is envisaged that works at Melin Llidiart will commence as soon as possible. Site work is to take place over two days, with a further 5 days allotted for archive research, report compilation and site archiving. Gwynedd Archaeological Planning Services will be informed of the exact site days to allow monitoring of works.

4.4 Staffing

The project will be managed by Catherine Rees (BA (Archaeology), MA (Archaeology), PgDip (Historic Environment Conservation). All staff will have a skill set equivalent to the IfA AIfA level. C.Vs for all staff employed on the project can be provided on request.

The photographic survey will be undertaken by professional archaeological photographer Adam Stanford of Aerial-Cam (MIfA).

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

4.4.1 Additional Site Personnel

The owner of Melin Llidiart has requested to be present during the photographic survey due to an interest in the Aerial-Cam equipment to be used. Mr Hanson will not be participating in the work but will be made aware of all Health and Safety considerations associated with the work. C.R Archaeology will provide Mr Hanson with a hard hat and hi-visibility vest which it is required he wear whilst on site.

4.5 Monitoring

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

4.6 Health and Safety

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

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

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

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

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

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

4.7 The Report

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

As specifically detailed in the Design Brief supplied by GAPS the report will include:

- A copy of the design brief and agreed specification,
- A location plan,
- A plan illustrating the location and direction of any photographs or drawings
- Full dimensional and descriptive detail, a full bibliography of sources consulted
- An archive compact disc

A copy of the report in Adobe PDF format will be sent to the appropriate monitoring archaeologist for approval before formal submission. A bound paper copy and PDF digital copy of the report will be submitted as part of the formal submission. A digital Adobe PDF version and a bound paper copy of the final report and will be lodged with the Gwynedd Historic Environment Record within six months of completion of fieldwork, and following consultation with Anglesey Archives a PDF version will be sent for deposition in their Llangefni offices.

A short article will be submitted to the Archaeology in Wales Journal and the site archive including copies of all photographs in RAW and Tiff format will be deposited at Oriel Mon.

4.7.1 Copyright

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

5.0 Bibliography

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

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

GAPS. 2012. ***Design Brief for Archaeological Building Record***

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

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

The Institute for Archaeologists. 1994 (Revised 2009). ***Standard and Guidance for Archaeological Desk-Based Assessment***

The Institute for Archaeologists. 1996 (Revised 2008). ***Standard and Guidance for the Archaeological Investigation and Recording of Standing Buildings or Structures***

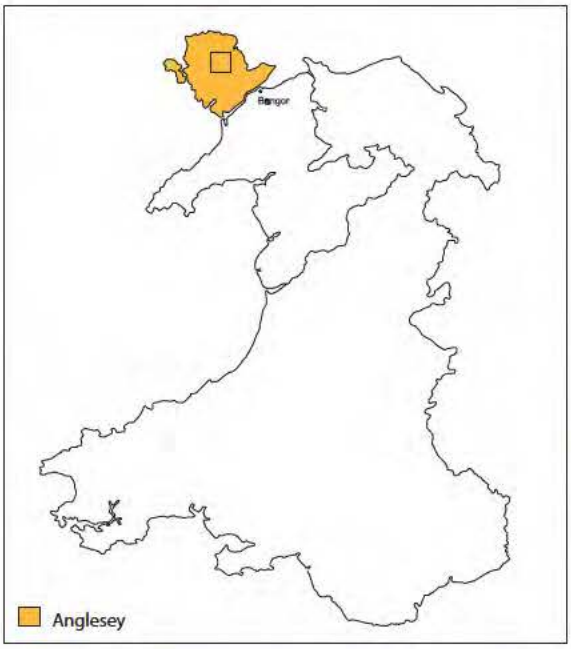
The Institute for Archaeologists. 2008. ***Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives***

Websites (All Websites were Consulted on 27/04/2012)

www.anglesey.info/capel-coch-windmill.htm

www.britishlistedbuildings.co.uk/wa-5389-melin-llidiart-llanddyfnan

www.coflein.gov.uk/en/site/40332/details/CAPEL+COCH+WINDMILL%3B+MELIN+LLIDART/



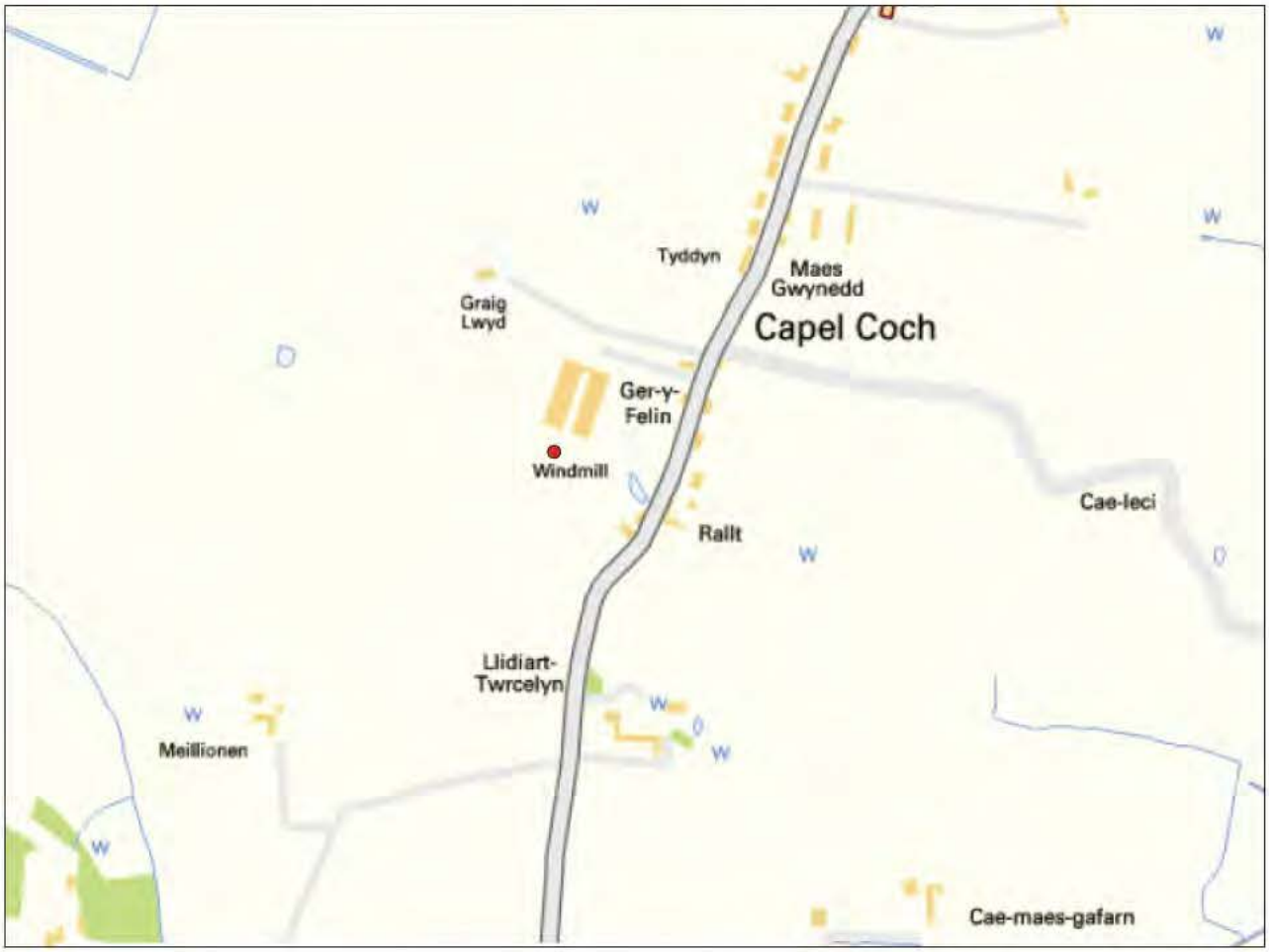


Figure 1. Melin Llidiart, Capel Coch Location Map (Source OS Open Data Mapping)