

THE OLD MILL, MYDDFAI, CARMARTHENSHIRE: ARCHAEOLOGICAL WATCHING BRIEF

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Prepared by Dyfed Archaeological Trust
For: Mr Peter Barratt



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CARMARTHENSHERE:
ARCHAEOLOGICAL WATCHING BRIEF**

Gan / By

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SUMMARY

This report has been produced by Dyfed Archaeological Trust Field Services in response to a request from Mr Peter Barratt, to undertake an archaeological watching brief during groundworks associated with the renovation of The Old Mill, Myddfai, Carmarthenshire (NGR SN 77443 29797).

Dyfed Archaeological Trust was only commissioned to undertake a watching brief to identify and record any features of archaeological significance revealed during the groundworks associated with the renovation of the building. The watching brief has demonstrated that no significant archaeological remains have been disturbed by the digging of cuts for drainage pipes and a 'biodisc'. Apart from stone rubble derived from demolished former outbuildings, no archaeological features were exposed.

The developer had opted to undertake a photographic record of the building prior to development (specified as a condition of the planning consent). Nevertheless, the opportunity was taken to photograph some of the surviving mill machinery and other features of interest relating to the structure of the former mill, the adjoining corn dryer and the interior features of the mill these are included and briefly described in this report.

A date of 1865 was written in pencil on a repair to the millstone; however, other details of the mill mechanisms may suggest an 18th century date. The metal water inlet suggests that the mill was used to generate electricity, perhaps in the 1950s.

The gearing shows there must have been an overshot water wheel inside the building, coupled to a shaft that had a crown wheel linked to gearing right up near the third floor, which may have powered the sack hoist and flour dressers in the mill. Stone nuts suggest there were 2 pairs of stones. One was definitely a composite French burr the other a courser stone.

Very few if any other essentially intact mills and corn dryers are likely to survive in the region.

INTRODUCTION

Project Commission

Dyfed Archaeological Trust Field Services (DAT-FS) was commissioned to undertake an archaeological watching brief during groundworks associated with the renovation of the Old Mill (Y Felin Brân) at Myddfai (planning application no. 07/01083/FUL).

The condition stated that

'No development shall take place until the applicant, or their agents or successors in title, has secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation which has been submitted by the applicant and approved in writing by the local planning authority.'

A written scheme of investigation was expected to outline archaeological mitigation for both a watching brief, a photographic record of the buildings prior to the renovation work, and the production of a report.

The applicant undertook to fulfil that part of the condition requiring a photographic record of the building to be made. The applicant commissioned DAT-FS to undertake the watching brief element of the work.

An approved written scheme of investigation (WSI) for the watching brief on ground disturbing operations associated with the proposal was prepared by DAT-FS prior to works commencing on-site. A single visit to the development area was undertaken on 18th July 2011 to observe the excavation of drainage channels and the insertion of a 'bio-disc' waste system.

The photographic record of the mill complex prior to its renovation will be submitted to the archaeological advisors to the Carmarthenshire County Council Planning Department by the applicant and does not form part of this report.

Scope of the Project

Archaeological attendance and recording during groundworks associated with the development with the potential to expose, damage or destroy any underlying archaeological remains, if present. The project also included preparation of this report and an archive of the results.

Report Outline

This report describes the location of the site along with its archaeological background before summarising the watching brief results and the conclusions based on those results.

Abbreviations

Regional Historic Environment Record – HER; Primary Record Number (held by the Regional HER) – PRN; NPRN (held by the Royal Commission on the Ancient and Historic Monuments of Wales) – National Primary Record Number; National Grid Reference – NGR; Scheduled Ancient Monument – SAM.

Illustrations

Record photographs are included at back of the report. Printed map extracts are not necessarily reproduced to their original scale.

THE SITE

Location and Topography

The Felin Brân/Frân mill is located in Cwm Tynewydd, on the southeastern outskirts of Myddfai on the south side of the road leading to Talsarn, opposite Ysguborfawr Farm (SN77443 29797) and on the north side of the Afon Brân (Figure 2). A leat approximately 0.4km long, running from SN 77858 29837, feeds a mill pond on the north side of the mill building (Figures 3 and 4).

Archaeological Background

The regional HER, held by Dyfed Archaeological Trust, records Felin Brân as PRN 12749, although a later record identifies this number as the millrace, with no number attributed to the mill building itself. The record identifies a medieval mill, based on documentary sources. The NPRN record (NPRN 406417) identifies the site as a corn mill, again based on documentary sources. For both records, the documentary sources primarily appear to be maps, since there are no descriptions of the building, or comments on its condition.

The Myddfai parish tithe map of 1840 shows the mill building and pond.

The first edition Ordnance Survey (OS) map of 1886 (Figure 3) shows the mill building with its associated mill pond, mill race and leat. The second edition OS map (Figure 4) shows the same mill building, but with the addition of several outbuildings of unknown function.

It is unclear from where its medieval date attribution has been derived.

It is unfortunate that this mill appears never to have been visited, photographed or recorded by Cadw, RCAHMW, Brecon Beacons National Park or DAT, or other organisations such as 'Melin' the Welsh Mills Society. It is also unfortunate that it was not visited as a consequence of the planning proposal. As a result, the opportunity to ensure that a detailed record of this rare survival of an intact mill building with an intact interior and workings was unfortunately missed. It is hoped that the photographic survey undertaken by the applicant will provide a record of the structure prior to clearance.

ARCHAEOLOGICAL WATCHING BRIEF

Methodology

The archaeological watching brief consisted of a single visit being made to the site to observe groundworks associated with the mechanical excavation of a sewer run and the installation of a 'biodisc' system.

Results

Watching brief

At the time of the watching brief visit, the outbuildings represented on the second edition OS map (Figure 4) were no longer visible, although it is uncertain when they were demolished. The mill pond appeared to have been backfilled (although it is uncertain when this occurred).

Ground levels in front of the mill had already been reduced and drainage pipes were being laid. The soil removed appeared to be primarily loose mixed dark grey humic topsoil approximately 0.50m deep, and overlying yellow shale bedrock (Photo 1).

The excavation of a drain run in a southwesterly direction from the mill to the stream was observed (Photo 1). The trench was cut to a depth of approximately 1.0m at the southern end of the trench. At this depth, the top of the underlying shale bedrock was exposed, overlain by the same loose dark grey topsoil. Towards the stream, a considerable quantity of stone rubble was mixed in with the topsoil (Photo 2). This rubble is presumed to be derived from the demolished remains of the former outbuildings (Figure 4). No evidence of surviving building foundations floor or ground surfaces was visible in the exposed trench sides. No cut features were observed.

Approximately half way along the drain run, a larger hole was dug for the 'biodisc'. Below the level of the drain run, this hole was cut entirely within the underlying bedrock.

In short, no deposits of archaeological significance, or surviving evidence of former outbuildings was exposed within the excavated trench.

Mill building exterior

The exterior walls of mill building and the roof survive intact. The north side of the building is terraced into the slope (Photo 3), and is accessed at first floor height. The south side of the building is accessed at ground floor level (Photos 4 and 5).

The mill leat leading from the mill building to the stream was also no longer visible as a surface feature (Photo 6).

Mill building interior

The interior of the building was also examined. Unfortunately, a new concrete slab had already been laid on the ground floor, so it was not possible to ascertain or record the original floor plan of the building.

The first floor of the mill building had also been entirely removed. No doubt the mill machinery that was removed was in a precarious state, but it is unfortunate that a detailed record of the building before it was renovated was not requested as part of the planning condition.

The second floor of the interior appears to remain largely intact, although in a precarious condition. Mill machinery and equipment appears to survive in-situ, but was inaccessible. A rudimentary photographic record was made (Photos 7 to 10).

In the northwestern gable end wall of the mill building was a fireplace and the remains of a small bread oven at ground floor level (Photo 11). At first floor level was a fireplace that had been modified several times (Photo 12).

At the southeast end of the north wall an opening would have fed water from the mill pond to the waterwheel that powered the mill workings. A surviving metal lining to the water inlet (Photo 13) relates to the later use of the mill's water supply to power a turbine, possibly in the post war period (Chris Plummer pers. Comm.). When the turbine was installed, the waterwheel was removed, but is still in use somewhere north of Cilycwm (Chris Plummer pers. Comm.).

Corn dryer

An outbuilding adjoining the mill on its northwest gable end was also investigated. This was found to have been a corn dryer. At ground level, the corn dryer was accessed by a doorway in the southwest facing wall (Photo 5) leading to a small corridor or access chamber. The corn dryer chamber had a narrow entrance with two opposing tapering side walls (Photo 14) with brick supports for the original corn dryer floor (Photo 15). This may have been a metal frame supporting perforated tiles. The corn dryer floor was later replaced with wooden planks and the upper floor was used as a store shed, accessed at first floor level by a doorway on the north side of the building (Photo 3). Again, a rudimentary photographic record of the structure was made.

Mill mechanism

Worked timbers and mill machinery was piled up outside the standing building (Photos 16 to 21), close to the western side of the excavated drain run. These appeared to include the main grinding stones (Photos 18, 25 and 27), drive shaft, wheels and gears (22, 23 and 24 and 26), although the attending archaeologist has little technical knowledge of mill machinery. The opportunity was taken to photograph some of these items.

A date of 1865 is reported to have been written in pencil on a repair to the millstone. However, the gearing, a mix of wooden shafts and iron gears, may allow the corn mill to be dated closer to the C18th (Chris Plummer pers. Comm.).

From what survived in-situ, the configuration of the machinery was hard to envisage. But from the gearing shows there must have been an overshot water wheel inside the building, coupled to a shaft that definitely had a crown wheel which in turn linked to gearing right up near the third floor, which may have powered the sack hoist and any flour dressers etc. in the mill. Stone nuts suggest there were 2 pairs of stones. One was definitely a composite French burr the other a courser stone (Chris Plummer pers. Comm.).

CONCLUSIONS

No buried remains of archaeological significance were exposed during the excavation of the service trenches or the 'biodisc' system. Stone rubble revealed in the trench sides is presumably derived from the demolished outbuildings depicted on historic mapping, but no in-situ remains or floor surfaces were exposed.

A date of 1865 is reported to have been written in pencil on a repair to the millstone; however, other details of the mill mechanisms may suggest an 18th century date. The metal water inlet may suggest that the mill was used to generate electricity at some time.

It is understood that members of 'Melin'- the Welsh Mills Society have recently visited the site to undertake some recording of the surviving mill mechanisms. Hopefully from the remaining in-situ workings on the second floor and the mill machinery removed from the ground floor and first floor, it will be possible for them to record the former style of the mill workings and other useful details

Very few if any other essentially intact mills and corn dryers are likely to survive in the region.

SOURCES

Regional Historic Environment Record – held by DAT

National Monuments Record – held by RCAHMW

Maps

Myddfai Parish Tithe Map of 1840

Ordnance Survey 1886 1:2500 - Carmarthenshire

Ordnance Survey 1906 1:2500 – Carmarthenshire

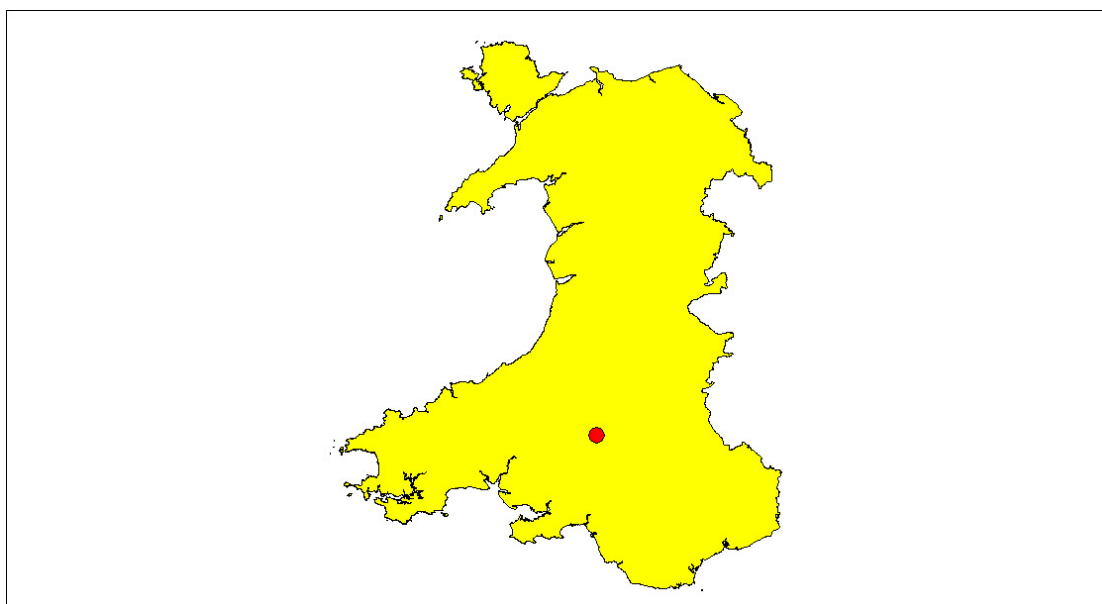


Figure 1: Location of Myddfai

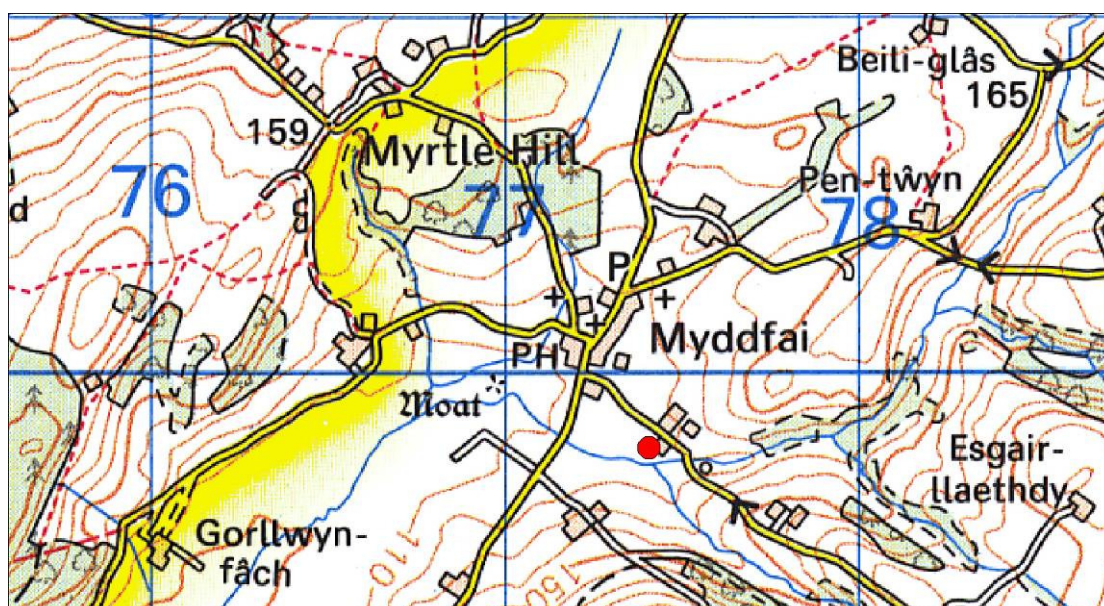


Figure 2: Location Felin Brân, Myddfai

Reproduced from the 1995 Ordnance Survey 1:50,000 scale Landranger Map with the permission of The Controller of Her Majesty's Stationery Office, © Crown Copyright Dyfed Archaeological Trust Ltd., The Shire Hall, Carmarthen Street, Llandeilo, Carmarthenshire SA19 6AF. Licence No AL51842A

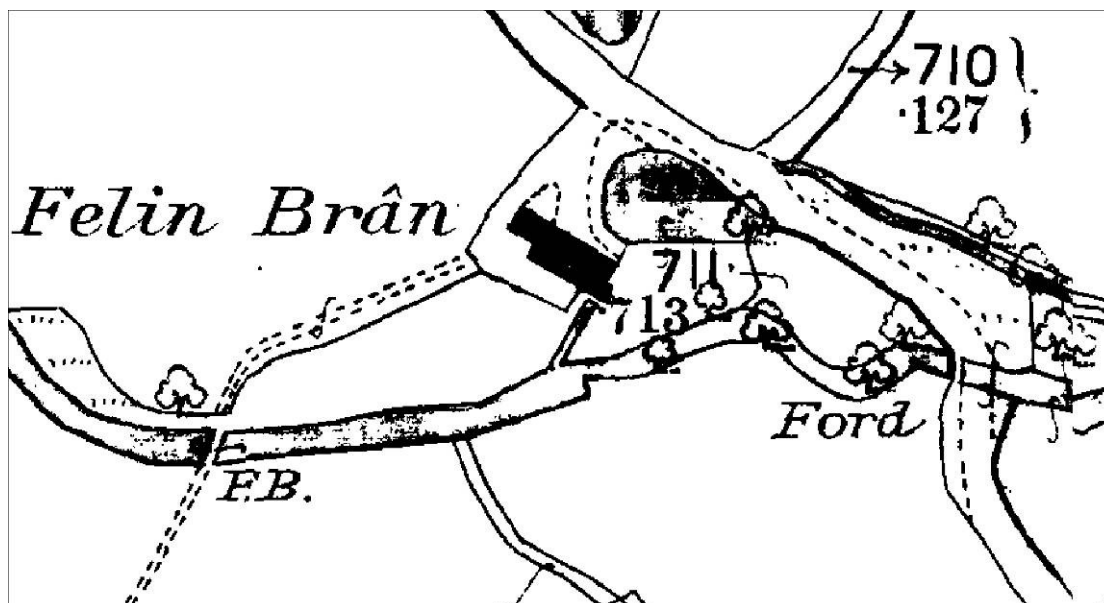


Figure 3: Extract from Ordnance Survey map of 1840

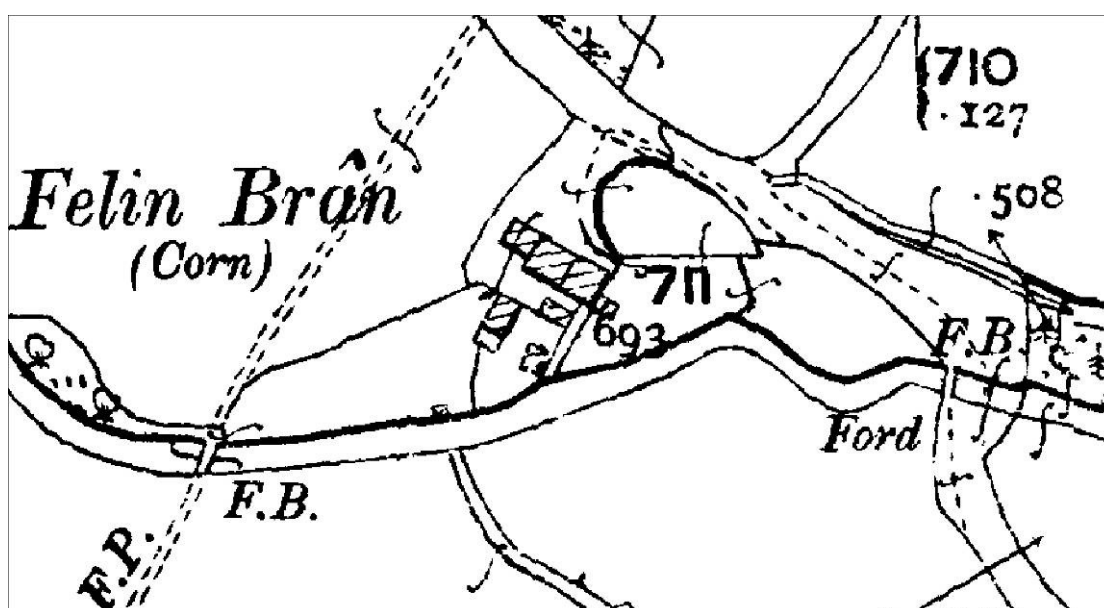


Figure 4: Extract from Ordnance Survey Map of 1906



Photo 1: Excavation for drains from mill to stream



Photo 2: Building rubble in drain cut section next to stream



Photo 3: North side of mill (corn drier to right)



Photo 4: View of mill from southeast



Photo 5: View of mill from southwest (corn drier on left)



Photo 6: Leat exit from mill



Photo 7: View of surviving machinery on the second floor



Photo 8: Detail of surviving mill machinery



Photo 9: Detail of surviving mill machinery



Photo 10: View of loft in roof space on second floor



Photo 11: Bread oven in south wall of mill building



Photo 12: Former fireplaces in south wall of mill building (ground and first floors)



Photo 13: North wall of mill building showing metal inlet from mill pond



Photo 14: View of the interior of the corn dryer showing tapering sides



Photo 15: View of the original supports for the drying floor



Photo 16: Timber from the mill interior



Photo 17: parts of the milling mechanism



Photo 18: Parts of the milling mechanism



Photo 19: Parts of the millstone



Photo 20: Part of the interior fixtures and fittings



Photo 21: Part of the milling mechanism



Photo 22: Part of the interior fixtures and fittings



Photo 23: Part of the milling mechanism



Photo 24: Part of the milling mechanism



Photo 25: Part of the milling mechanism



Photo 26: Part of the milling mechanism



Photo 27: Part of the milling mechanism



Photo 28: Part of the milling mechanism

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Date 18/08/2011

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Date 18/08/2011

Yn unol â'n nôd i roddi gwasanaeth o ansawdd uchel, croesawn unrhyw sylwadau sydd gennych ar gynnwys neu strwythur yr adroddiad hwn

As part of our desire to provide a quality service we would welcome any comments you may have on the content or presentation of this report

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