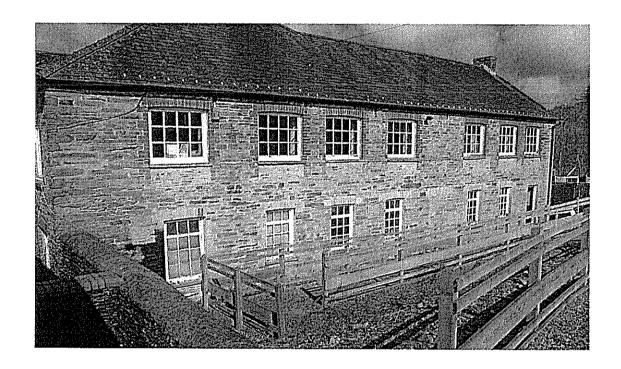


MUSEUM OF THE WELSH WOOLLEN INDUSTRY

ARCHAEOLOGICAL EVALUATION OF THE GAS PLANT



Report No. 2002/16

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CAMBRIA ARCHAEOLOGY

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Museum of the Welsh Woollen Industry archaeological evaluation

By

Nigel Page

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ARCHAEOLEG CAMBRIA
Ymddiriedolaeth Archaeolegol Dyfed Cyf
Neuadd y Sir, Stryd Caerfyrddin, Llandeilo, Sir Gaerfyrddin SA19 6AF
Ffon: Ymholiadau Cyffredinol 01558 823121
Adran Rheoli Treftadaeth 01558 823131
Ffacs: 01558 823133

Ebost: cambria@acadat.com Gwefan: www.acadat.com

CAMBRIA ARCHAEOLOGY
Dyfed Archaeological Trust Limited
The Shire Hall, Carmarthen Street, Llandeilo, Carmarthenshire SA19 6AF
Tel: General Enquiries 01558 823121
Heritage Management Section 01558 823131
Fax: 01558 823133
Email: cambria@acadat.com Website: www.acadat.com

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Museum of the Welsh Woollen Industry Archaeological evaluation

MUSEUM OF THE WELSH WOOLLEN INDUSTRY ARCHAEOLOGICAL FIELD EVALUATION

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SUMMARY

The Museum of the Welsh Woollen Industry at Dre-fach Felindre (PRN 22585; NGR SN3551\$909) is undergoing a programme of re-organisation, which includes a new extension on the southeast end of Mill (south), in an area formerly occupied by the mill's gas plant. Geotechnical test pitting provided an opportunity to examine the area to assess the extent and condition of any structural remains that may survive beneath the modern ground level.

The test pits revealed substantial archaeological remains of the gas plant, which was an important element of the original Cambrian Mill, constructed in 1902 and demolished in the 1960s. Enough of the gas plant seems to survive to allow a reconstruction of how it supplied power to the mill, which will aid the understanding of the original mill layout and its operations.

1. INTRODUCTION

1.1 PROJECT PROPOSALS

Plans to construct an extension on the southeast elevation of Mill (south) at the Cambrian Mills site in Dre-fach Felindre, Carmarthenshire, had archaeological implications because the site chosen for the extension was formerly occupied by the mill's gas plant. An opportunity arose during geotechnical ground investigations to examine the test pits to determine if there were any surviving structural remains associated with the gas plant or any earlier buildings. Cambria Archaeology was commissioned by the National Museum and Galleries of Wales to undertake rapid recording of the test pits.

1.2 REPORT OUTLINE

This short report has been prepared based on the rapid recording undertaken in March 2002. It summarises the findings of the fieldwork and makes suggested recommendations for the further investigation of the site.

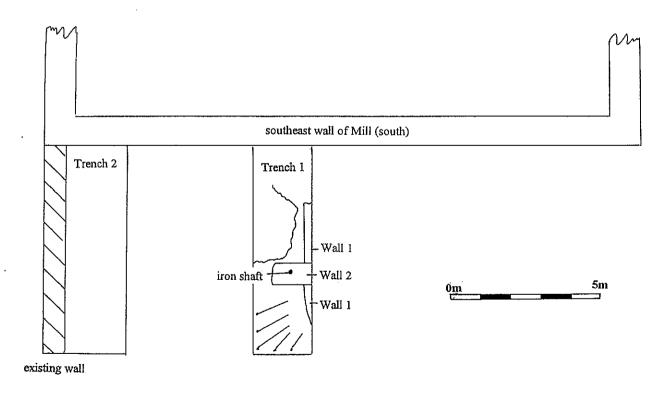


Figure 1: Location plan of trial trenches

2. FIELDWORK RESULTS

2.1 TRIAL TRENCH LOCATIONS AND METHODS

As originally built, or soon after construction, the 1902 Mill (south) featured a gasplant house lying against the southern half of the east wall, its lean-to roof lying at first floor window-sill level. The scar from the gas-plant roof is still visible on the southeast elevation. The upper windows in the wall had been partially blocked and their sills raised to the height of the gas-plant roof. The gas-plant seems to have worked in association with the later $Ty \ Pen \ Pownd$, and may not have been rebuilt after a fire in 1919. A scar in the stonework from a small wheel, c.0.5m diameter, at the southwest end of the southeast wall indicates a belt-drive, which roughly lines up with a vertical slit in the wall of $Ty \ Pen \ Pownd$. Two small blocked openings and a blocked doorway provide some evidence of how the gas-plant was connected to Mill (south).

Two trial trenches (T1 and T2) were mechanically excavated perpendicular to the southeast elevation of Mill (south); they were positioned to cross the area formerly occupied by the gas plant. The original purpose of the trenches was for geotechnical ground investigations, but because of the high archaeological potential of the area it was considered necessary to have an archaeologist on site to record any exposed structures and features.

2.2 TRENCH 1 (Fig 1 and 2; plate 1)

Trench 1 was positioned perpendicular to a blocked opening in the southeast wall of Mill (south). The trench was positioned to investigate any surviving structures or features associated the drive that formerly fed through the blocked opening. Cleaning of the deposits following mechanical stripping revealed parts of two walls and associated floor levels and spreads of collapsed masonry.

Wall 1 was aligned northwest – southeast and constructed from rubble blocks bonded with a grey/white mortar. The southeastern end appeared to curve slightly eastwards, but it extends beyond the trench edge so its continued alignment is unclear. This wall was apparently cut by another wall (Wall 2), which extended c.1.2m from the northeast edge of the trench. Wall 2 was constructed from squared stone blocks bonded with a grey cement mortar. An upright metal shaft, 1.3m high, survived bedded into the top of Wall 2. A cement or concrete floor was recorded to the southeast of Wall 2, whilst the area north of Wall 2 appears to be a filled in machine pit.

2.2.1 Trench 1 discussion

Because of the small size of the area examined and the unstable nature of the overlying deposits, which precluded detailed recording at the southeastern end of the trench, some of the relationships between the various structural elements are unclear. However, the results from the trench have confirmed that there are extensive and substantial surviving remains of the gas plant and possibly an earlier structure (Wall 1). The possible machine pit to the northwest of Wall 2 may be associated with the blocked opening in the southeast wall of Mill (south).

2.3 TRENCH 2 (Figs 1 and 3)

Trench 2 was positioned against an existing wall at the southwest end of the southeast wall of Mill (south). Part of a blocked doorway, c.1.8m wide, was noted in the existing wall. Only the threshold and the lower 0.6m of the southeast door-jamb survived. Traces of a possible floor were noted but unfortunately they were removed before they could be properly recorded.

2.3.1 Trench 2 discussion

The existing wall has been rebuilt on the lower levels of the original wall of the gas plant after it was demolished in the 1960s. The double doorway was used for raking out the horizontal boiler, which must have been positioned somewhere between Trench 1 and Trench 2.

2.4 CONCLUSIONS AND RECOMMENDATIONS

The trial trenches have revealed substantial standing archaeology relating to the former gas plant and possibly an earlier structure represented by Wall 1 in Trench 1. This evaluation was very small scale, but it appears that much of the footprint of the gas plant and most of its internal structures survive beneath the modern terracing.

The gas plant was an integral part of the Cambrian Mills and its remains can provide important evidence for how power was delivered to the mill, which will help to understand the internal layout of the original mill and how it operated. More detailed investigation of the gas plant site will aid the interpretation and understanding of the early history of the mill.



Plate 1: Trench 1 showing Wall 1 and the cross wall (Wall 2) with the shaft bedded in the top.

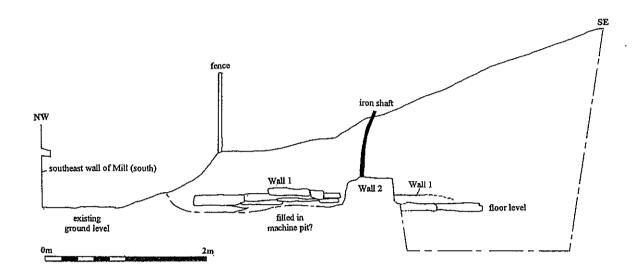


Figure 2: Southwest facing section of Trench 1.

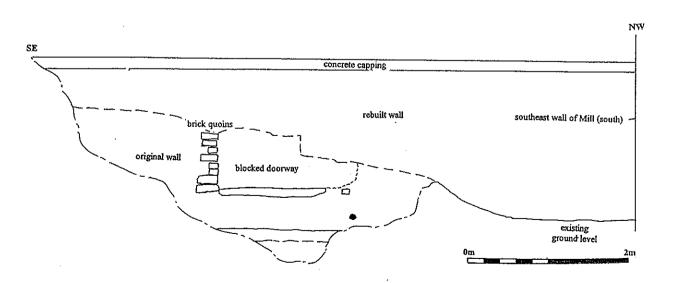


Figure 3: Northwest facing section of Trench 2.

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This report has been prepared by Nigel Page

Position Project Manager

Signature Date 14/3/02

This report has been checked and approved by Ken Murphy on behalf of Cambria Archaeology, Dyfed Archaeological Trust Ltd.

Position Principal Archaeological Officer - Field Operations

Signature Kanada Date 14 March 2002

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