

BOLTONHILL QUARRY PEMBROKESHIRE

Interim Evaluation Report

RHIF YR ADRODDIAD / REPORT NO. 2004/96
RHIF Y PROSIECT / PROJECT RECORD NO. 51226

Hydref 2004
October 2004



Paratowyd gan Archaeoleg Cambria
Ar gyfer F H Gilman & Co
Prepared by Cambria Archaeology
For F H Gilman & Co



ARCHAEOLEG CAMBRIA ARCHAEOLOGY

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Gan / By

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Paratowyd yr adroddiad hwn gan / This report has been prepared by Pete Crane

Swydd / Position: Senior Archaeologist

Llofnod / Signature Dyddiad / Date 3/12/2004

Mae'r adroddiad hwn wedi ei gael yn gywir a derbyn sêl bendith
This report has been checked and approved by

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Swydd / Position: Principal Archaeologist

Llofnod / Signature Dyddiad / Date 3/12/2004

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

BOULTONHILL QUARRY: INTERIM EVALUATION REPORT

Initial archaeological observation of test pits, undertaken by the quarry for geotechnical purposes, has concluded that these are unlikely to allow adequate inspection of any archaeological features. It is not intended to give a full, integrated report at this time or to repeat the summary of the archaeological resource which is in an earlier report (Page and Wilson 1999).

Cambria Archaeology Field Operations were commissioned by F H Gilman & Co to undertake observation of geotechnical test pits, in anticipation that this could form part of the archaeological evaluation of a large area, 76 hectares, for extensions close to their existing quarry.

The main evidence for potential archaeology is a group of four burnt mounds PRN 3339-42 centred on SM92251138 and two more, PRN 3349-50 (see map). Where similar burnt mounds have been dated they are normally Bronze Age in period (c. 2000BC to 750BC), although they can date to as late as the medieval period. These mounds are invariably associated with springs or streams. The mounds around Johnston were first recorded in 1911 by Cantrill and Jones. The Ordnance Survey in 1965 described the group of four (PRN 3339-42) together with one other mound (PRN 3349), as almost certainly natural, and that the last mound, PRN 3350, had possibly been flattened by ploughing. In a pilot study on burnt mounds in 1995 (Williams), permission to visit the group of four mounds was refused, and the other two mounds could not be found. One of these mounds, PRN 3339, is plotted well within the proposed development area (see map), but its grid reference, SM 92191128, would in fact place it on the area's edge. In a later study on burnt mounds (Manning and Crane 1998) it became clear that a large number of mounds recorded by Cantrill and Jones (1911), but later dismissed by the Ordnance Survey, were found to be still extant. The conclusion was that Cantrill and Jones knew what they were looking for and should normally be relied upon, and these mounds appear to have been visited by Cantrill rather than simply reported to them. Later archaeology maybe indicated by the two field names of North Castle and South Castle, PRN 7940, located in the proposed extension to the southwest of the current quarry (see map).

The area of the proposed development is high and reasonably level ground with good topsoil, which would be ideal for prehistoric farming. With extensive open views, much of this location would also be topographically suitable for prehistoric burial mounds, which are frequently positioned on the skyline. There is no evidence for any such prehistoric activity but Bronze Age occupation rarely shows on aerial photographs or geophysical surveys. These fields, although now rough pasture, have been extensively ploughed, at least in the recent past, and this will have reduced any artificial mounds, if any existed.

The first test pit observed was undertaken on 21st June 2004 approximately at grid reference SM 92316 11131. Unfortunately a toothless bucket for the machine (as mentioned in the letter of 3rd November 2003 from Cambria Archaeology Heritage Management officer Lucy Bourne) was not available. The test pit was c. 6m wide by 12m long. The topsoil and turf was rapidly stripped to just above the subsoil, although use of a toothed bucket obscured the surface of the subsoil, where archaeologically features might otherwise have been seen. The topsoil contained limestone flecks

indicating that this land had been agriculturally improved by liming, and therefore also likely to have been ploughed. The machine then dug into the subsoil. No features, unless they were very large or dissimilar to the topsoil or subsoil would have been noticeable. The decision was therefore taken, with the approval of the Development Control Officer, that no further observation of test pits would take place until a toothless bucket was available.

The second and third test pits were observed on 9th September 2004. These pits were approximately 75m apart at approximate grid references SM 922284108370 and SM 9225710851 and were both 6.5m wide by 12m long. The topsoil, c. 250mm deep of grey brown silty clay again with flecks and lumps of limestone, was very roughly machine dug, this time using a toothless bucket, albeit narrow (c. 1m wide), and then further down to c. 0.5m below ground surface into the subsoil. The subsoil consisted of light orange brown silty clay with some granite stones. There was very little chance of seeing any small features should they occur. The subsoil was then sloped down to c. 2.25 at the northwestern end of the trench so the drilling machine could enter to drill further into the subsoil and into the bedrock. The conclusion was that this method of test pitting is not compatible with effective archaeological evaluation: the machining was too rough and fast and two pits per day is not efficient use of an archaeologist on site. Therefore, although more test pits were planned no further watching brief has taken place.

Suggestions for future work

It is now necessary to identify the best way forward for evaluation of this very large area of proposed development. First it will be necessary to know what areas are still proposed for quarrying or covering and the methods that will be employed. If smaller scale extraction is intended, then an alternative mitigation strategy may be appropriate.

In the 1999 assessment (Page and Wilson) only one group of aerial photographs were studied (Meridian 1955). It is therefore suggested that a search is made for other large-scale photographs, possibly in colour, to look for crop marks, as any earthworks would probably have been ploughed down beyond recognition. The Pembrokeshire Coast National Park Authority may hold such photographs, taken for caravan spotting; the Potato Marketing Board is another possible source. One or two days should be sufficient to undertake this search. However, again such small features such as postholes will not be discernable and the recent agricultural practice of rough or long hay pasture may mask even large cropmarks.

The varied upper geology is unlikely to give a large number of anomalies on any geophysical survey. Any small features such as postholes are extremely unlikely to be indicated by such a survey. On another project nearby at Waterston a large area was geophysically surveyed and a large number of anomalies were recorded, but these proved difficult to identify within narrow evaluation trenches. Most of these anomalies were subsequently demonstrated to be natural or agricultural but only after a good proportion of the area was stripped of topsoil. (It should be noted, however, that the remains of a Bronze Age roundhouse were found which was neither indicated on the geophysical survey nor visible on aerial photographs.) Undertaking any such large scale geophysical survey here would seem inappropriate as an evaluation method, but geophysical survey using magnetometry could be used to locate the

burnt mound PRN 3339 on the edge of the proposed development area, if the vegetation is not too high or it cannot be ascertained from surface evidence.

If archaeological evaluation were to be targeted, then the area of development adjacent to the burnt mounds should form a focus, as should the potential later archaeology suggested by the field names of North and South Castle fields.

The best chance of locating any archaeology on this site would be for areas to be stripped of topsoil under archaeological control and then the surface of the subsoil observed for archaeological features. A window in the development programme would be needed to excavate any archaeological features. If the topsoil were not stripped under archaeological control there is a great chance of the subsoil being obscured by remaining topsoil or machine trample, and therefore this is not recommended.

Sources

Cantrill T C and Jones O T 1911 Prehistoric cooking-places in South Wales, *Archaeologia Cambrensis* 6th series, vol VI p17-34

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