

PROPOSED EXTENSION AT TREFIGIN QUARRY, PEMBROKESHIRE

ARCHAEOLOGICAL DESK-BASED ASSESSMENT



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Project Record No. 54626

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CAMBRIA ARCHAEOLOGY

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By

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REPORT NUMBER 2005/62

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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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PROPOSED EXTENSION AT TREFIGIN QUARRY, PEMBROKESHIRE ARCHAEOLOGICAL DESK-BASED ASSESSMENT

SUMMARY

Proposals to extend Trefigin Quarry, Pembrokeshire, required an Environmental Impact assessment (EIA). RPS commissioned Cambria Archaeology Field Operations to carry out an archaeological desk-based assessment to fulfil the cultural heritage element of the EIA.

This assessment revealed archaeological interests within the proposed quarry extension area that will be affected should quarrying in this area proceed. The interests are a possible round barrow and the site of former cottage.

Too little is known about the possible round barrow at present to make an informed decision regarding the potential impacts of the scheme. Further archaeological works have been recommended to investigate and assess the nature and condition of the possible round barrow.

INTRODUCTION

Project proposals and commission

Proposals to extend the existing Trefigin Quarry (NGR SN13884362) required an Environmental Impact Assessment (EIA). RPS commissioned Cambria Archaeology Field Operations to undertake the cultural heritage element of the EIA during May 2005.

Scope of the project

This assessment has examined existing written, cartographic and pictorial sources for evidence relating to the development of the pre-quarry landscape and its later industrial use in order to assess the likely impacts of the proposed extension on the archaeological resource. The assessment consisted of a Stage 2 assessment as defined in the DMRB Volume 11, part 2 Cultural Heritage (paras.8.14-8.25). It was carried out in accordance with the *Standard and Guidance for Archaeological Desk-Based Assessments* (Institute of Field Archaeologists (IFA), 1994, revised 1999).

Report outline

This report describes the physical environment of the study area before summarising the archaeological resource and the likely impact of the proposed scheme on that resource. Recommendations for further archaeological works are based are included.

Abbreviations used in this report

All sites recorded on the county Sites and Monuments Record are identified by their Primary Record Number (PRN) and located by their National Grid Reference (NGR). Any new sites are assigned a PRN and located by their NGR. References to primary cartographic and documentary evidence and published sources will be given in brackets, full details will be found in the bibliography.

THE STUDY AREA

Site location and topography

Trefigin Quarry is located c.3.3km (c.2 miles) south of Cardigan, in Monington parish, north Pembrokeshire. The present quarry covers an area of c.29ha (72.5 acres) and the proposed extension will increase this by a further c.43.5ha (17.6 acres). The site slopes from the northeast, with steep wooded slopes leading down to a small stream valley along the western and southern site boundaries. The site is currently pasture, with earthen field boundary banks some topped with hedges (Plate 1).

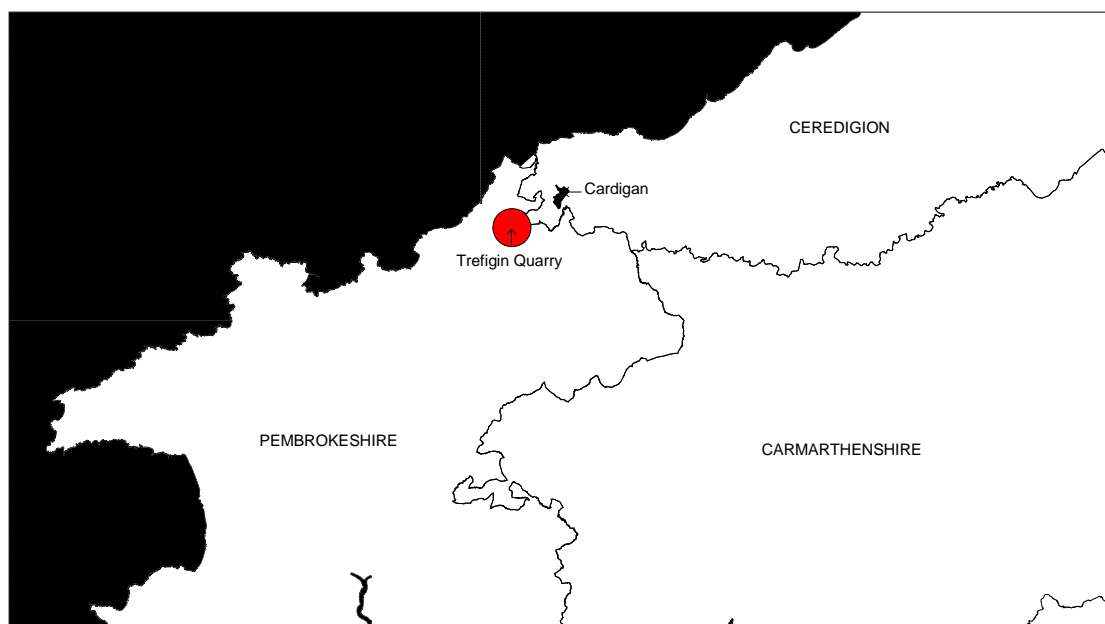


Figure 1: Location plan

Historical development of Trefigin Quarry

Gravel extraction at Trefigin has a reasonably long history, although the early workings were small scale and industrial scale quarrying only began during the mid 20th century. A gravel pit shown just to the northwest of the site, between the site boundary and St. Nicholas' Church, on the Monington parish tithe map of 1838 had gone out of use by 1889 and was marked as 'Old Gravel Pit' on the Ordnance Survey (OS) 1st edition map. Although not necessarily the most accurate guide, there was little difference in size of the pit shown on the tithe and the OS maps, which suggests that the pit was for limited local use, was never developed and may have been abandoned shortly after the tithe map was published.

By 1907, when the OS 2nd edition map was published the 'Old Gravel Pit' was depicted as an earthwork but no longer labelled and an active gravel pit was shown at SN13864373 (PRN 19849), which was located inside the site boundary and has since been lost to the present quarry. It appears that this small gravel pit was the beginning of the present quarry. The 1st edition map also shows a small gravel pit towards the western boundary of the site at SN13584346, which has now also been incorporated into the present quarry. This edition also showed quarries just outside the western (SN13354322) and southern (SN13784287) boundaries of the proposed quarry extension area. Neither was shown on the 2nd edition of 1907.

It seems that the quarry was expanded and worked commercially during the mid 20th century, possibly to provide gravel for the construction of military structures during WWII, or the reconstruction carried out during the post-war years.

The pre-quarry landscape (Fig 2)

Prior to the expansion of the quarry the area was farmed from several holdings, the main one being Trefigin, located a short distance to the east. The first known mention of Trefigin, as *Trefvegyn*, was in 1345 (Charles 1992, 112), indicating that it has medieval origins. Another possible suggestion of the medieval landscape is the name of a field, *Llainyffotas*, which was shown on the Monington parish tithe map just east of the church, close to the small gravel pit noted above. The Llain element refers to a strip of land, which may be a remnant of an open strip field system typical of medieval farming.

The pre-quarry field pattern had been established by the mid-19th century and probably dated from at least a century earlier. This landscape remained settled, with only a few old boundaries being removed were the only development until the expansion of the quarry in the mid 20th century. The tithe map (1838) showed a number of cottages within and close to the existing quarry boundary and within the proposed extension area that had been abandoned by the later 19th century.

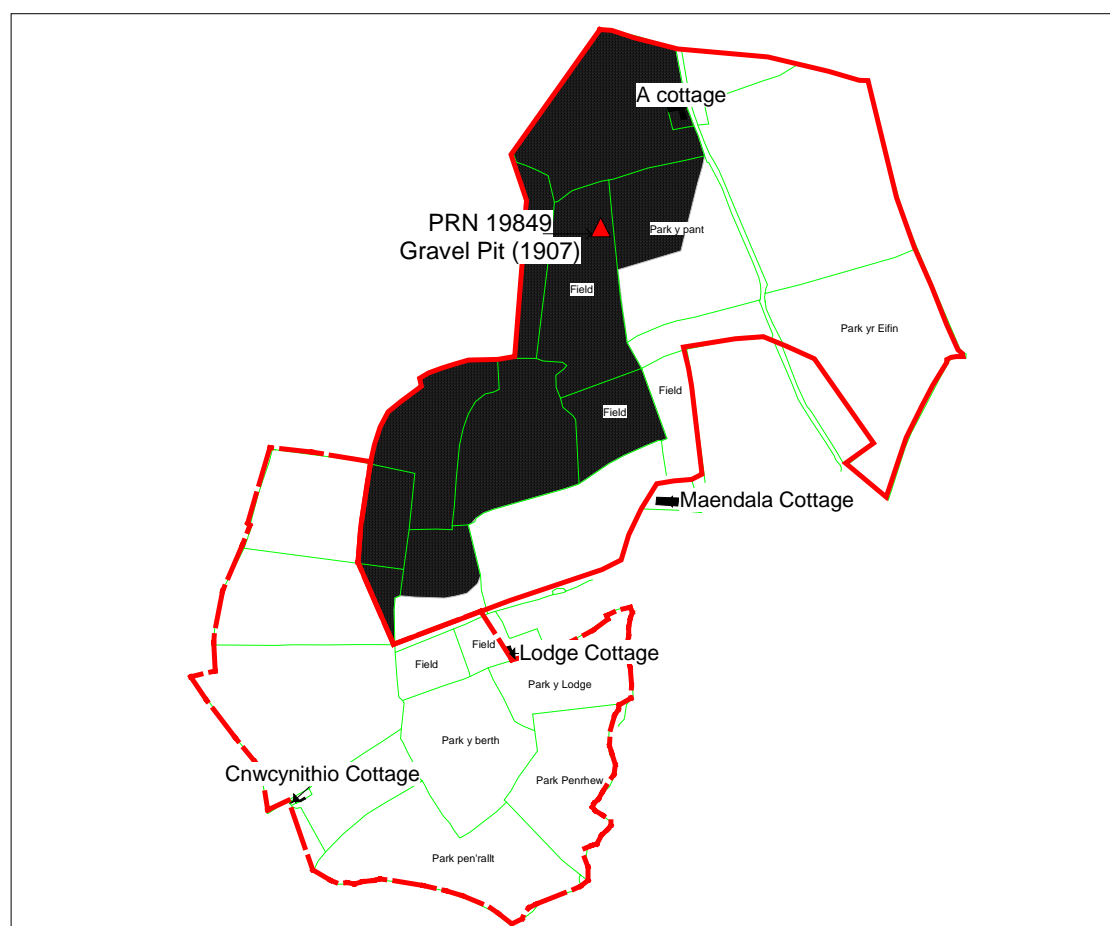


Figure 2: The pre quarry landscape with field boundaries and names taken from the Monington parish tithe map (1838) and apportionment (1837). The existing quarry boundaries are shown as a solid red line and the proposed extension is shown as a dashed red line. The current quarried area has been shaded.

SUMMARY OF THE ARCHAEOLOGICAL RESOURCE

Known archaeological sites and features within the proposed extension area

There are two known sites of archaeological interest within the proposed extension area, a possible round barrow and the site of a former cottage, Cnwcynithio Cottage.

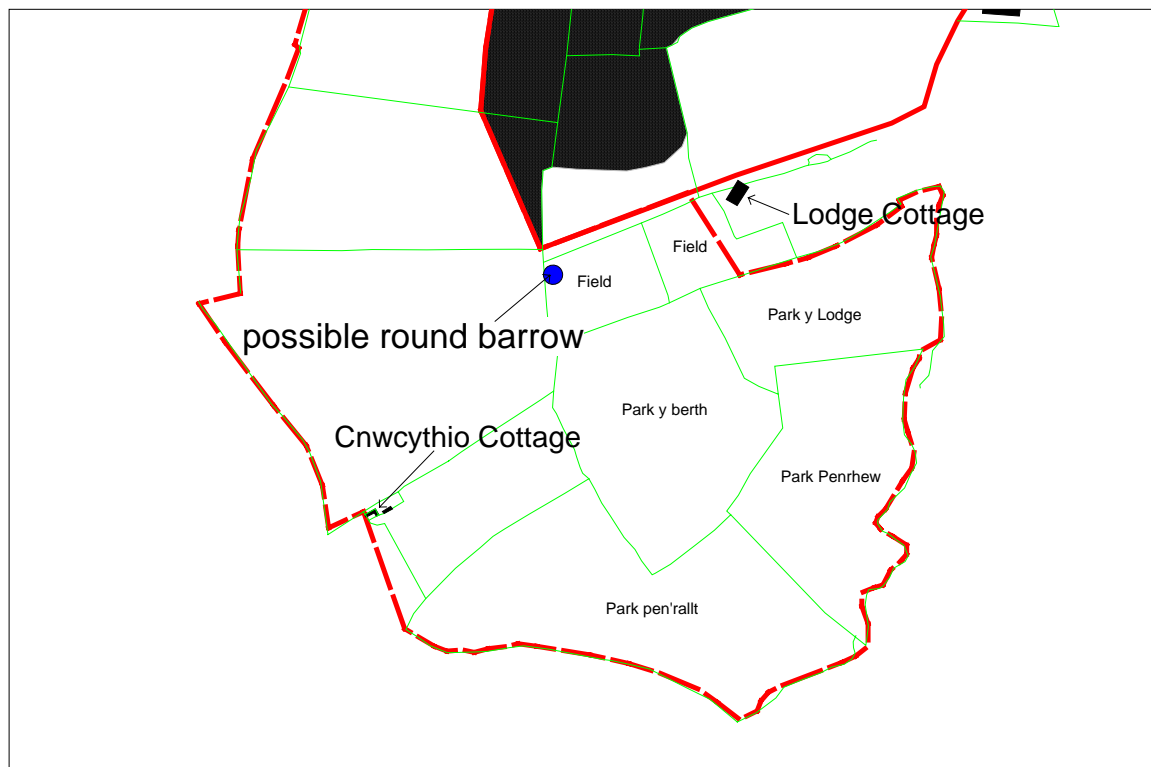


Figure 3: The locations of the two known archaeological sites within the proposed extension area.

Possible round barrow (Fig. 3; Plate 1)

A low circular, nettle-covered mound occupies the highest point of the site at SN13624312 in a field called Park y Berth in the Monington parish tithe apportionment (1837). The mound is c.18m diameter and stands to c.1m high. The mound has a thick covering of vegetation; nettles, which favour disturbed ground, were dominant towards the centre of the mound whilst the outer edges were grass covered.

The form and location of the mound are typical of Bronze Age round barrows (burial mounds), which tend to be located in prominent positions and are often visible from some distance. However, the true nature of this feature is uncertain and an alternative explanation is that the mound is the result of some form of agricultural clearance.

Former cottage site (Fig. 2; Plate 2)

Cnwcynithio Cottage was marked on the Monington parish tithe map (1838), but it had been abandoned by the late 19th century. The name is made up from two

elements: *cnwc* = a lump or mound and *nithio* = to winnow. Therefore, a reasonable translation would be '*the winnowing mound*', giving good evidence that arable farming was practiced there during the early to mid 19th century.

The cottage was sited on the western edge of a large field, just above the steep wooded slopes leading down to the Nant Ceibwr at SN13484302. The tithe map showed the cottage and an associated building sitting within a rectangular enclosure in the northwest corner of a larger field. By 1891 only the enclosure survived and today there is little, if any visible trace of either the buildings or the enclosure. The site is now grassed over and it appears that the buildings and enclosure may have been bulldozed over the edge of the valley slope. It is not known if there are any below ground remains on the site.

The potential archaeological resource

As well as the known archaeological interests there is a possibility of encountering currently unknown and unknowable archaeological interests below ground once quarrying begins.

Prehistoric burial monuments frequently form part of a monument group and are known to have sometimes been constructed close to sites from earlier periods, so there may well be buried features in the vicinity of the possible round barrow.



Plate 1: Possible round barrow.



Plate 2: The site of Cnw cynithio Cottage

Assessing the archaeological resource

Various criteria have been used to assess the known archaeological resource, including aspects of each site or feature such as current condition, significance and state of knowledge.

The sites have been assessed using a classification system that assigns each site to one of five categories for their condition and value and one of three categories for the state of knowledge. The categories are:

Condition

- A – Intact.
- B – Substantially intact, but with some damage or loss.
- C – Largely destroyed, but with some surviving elements.
- D – Destroyed, no above ground remains.
- E – Unknown potential, buried sites in particular.

Significance

- A - National importance: Scheduled Monuments; Listed Buildings or sites worthy of consideration for Scheduling or Listing.
- B - Regional importance: sites not considered worthy of scheduling or listing, but which should be retained where possible.
- C - Local importance: sites which are considered important to an understanding of the development of a local area, or are characteristic of that particular area.
- D – Sites which are heavily damaged, or where too little remains for inclusion in a higher category.

E – Sites of unknown potential, including potential buried sites, which should be subject to further assessment to determine whether or not they should be assigned to a higher category.

State of knowledge

A – There is good existing information about an archaeological site or feature, which may in some cases include previous archaeological work.

B – There is some information regarding a particular archaeological site or feature, but there are few readily available sources.

C – Little or nothing is known about a particular archaeological site or feature.

Archaeological interests	NGR	Condition	Significance	State of knowledge
Possible round barrow	SN13624312	B/C	E	C
Site of Cnwcynithio Cottage	SN13484302	D	D	C

IMPACT OF PROPOSED SCHEME ON THE ARCHAEOLOGICAL RESOURCE

Significance of impact

The significance of impact of this scheme on the archaeological resource has been assessed using a number of available guidelines. These included:

Guidance on the Methodology for Multi-Modal Studies (GOMMMS), published by the Department of Transport (2000),

Scottish Transport Appraisal Guidance (STAG) developed by the Scottish Executive.

Quality of Life Capital, a joint development of the Countryside Agency, English Nature, English Heritage and the Environment Agency.

All of these guidelines are aimed at establishing a coherent framework for the provision of consistent advice across the range of environmental factors affecting large-scale infrastructure projects, but their methodologies can be adapted to suit any development.

An eight-point scale has been used, with seven of the categories and the terminology taken from STAG, with the addition of an Unknown category that will include sites or features where their true nature is uncertain and to reflect the unknown and unpredictable buried archaeological resource.

The scale is as follows:

- No impact
- Small (positive/negative)
- Moderate (positive/negative)
- Major (positive/negative)
- Unknown

Archaeological interest	Significance of impact
Possible round barrow	Unknown
Site of Cnw cynithio Cottage	Small negative
Buried archaeological resource	Unknown

The overall significance of impact of the scheme on the archaeological resource

It is not possible, given the current state of knowledge, to reliably assess the significance of impact of the proposed quarry extension on the individual elements of the archaeological resource, which means that the overall impact is also difficult to assess at this stage.

Further archaeological works are required to evaluate the nature of the possible round barrow and to determine the presence or otherwise of any buried features within its vicinity.

RECOMMENDATIONS

It has not been possible to provide unequivocal advice on the potential impacts of the proposed quarry extension, principally because of the unknown nature of the possible round barrow.

Further archaeological works

Evaluation of the possible round barrow

The possible round barrow requires archaeological evaluation to determine, if possible, its true character and to assess the potential for buried features in its vicinity. This will be achieved through the excavation of an agreed number of archaeological trial areas on and close to the mound.

The information gained from the evaluation would inform the extension application and would form the basis for any mitigation measures required in this part of the site.

Watching brief on the site of the former Cnwcynithio Cottage

A targeted watching brief should be carried out during quarrying activities on and close to the site of the former Cnwcynithio Cottage in order to record any archaeological interests exposed by the works.

An archaeologist will be present during all works in this area of the site until the archaeological interests are adequately recorded, or it is proven that any remains of the cottage and its associated activity had been removed in the past. Time must be made available to the visiting archaeologist to allow appropriate recording.

General watching brief

A general watching brief should be maintained across the site during initial quarrying works, such as topsoil stripping in order to record any archaeological interests exposed by the works.

An archaeologist will visit the site to monitor topsoil stripping as new areas of the extension are opened.

APPENDIX ONE: CATALOGUE OF RESEARCH ARCHIVE

The project archive has been indexed and catalogued according to National Monument Record (NMR) categories and contains the following:

- A.** Copy of the report.
- B.** Notes from site visits.
- D.** Site photographs - catalogue, colour slides, B/W contact sheets.
- G.** Documentary data, including primary and published sources.
- I.** Draft copies of report.
- J.** Publication drawings.
- M.** Miscellaneous correspondence

There is no material for classes **C**, **E**, **F**, **H**, **K**, **L** and **N**.

The project archive is currently held by Cambria Archaeology Field Operations, Llandeilo, Carmarthenshire, as project number 54626.

SOURCES

Cartographic sources

1838 – Monington parish tithe map and apportionment (1837).

1891 - Ordnance Survey 1st edition 1: 10560 sheet Pembs.II.SE

1891 - Ordnance Survey 1st edition 1: 10560 sheet Pembs.VI.NE

1907 – Ordnance Survey 2nd edition 1: 10560 sheet Pembs.II.SE

1907 – Ordnance Survey 2nd edition 1: 10560 sheet Pembs.VI.NE

Aerial photographs

1946 – 106G UK 1424 3070-71

Published sources

Charles B G 1992 *The place-names of Pembrokeshire*. Aberystwyth. National Library of Wales.