# PROPOSED EXTENSION TO BRYNCIR QUARRY, NEAR CAERNARFON

# ARCHAEOLOGICAL ASSESSMENT

**REPORT NO 80** 

91165

Ymddiriedolaeth Archaeolegol Gwynedd Gwynedd Archaeological Trust

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# ARCHAEOLOGICAL ASSESSMENT

for RMC Limited.

Gwynedd Archaeological Trust Report No. 80

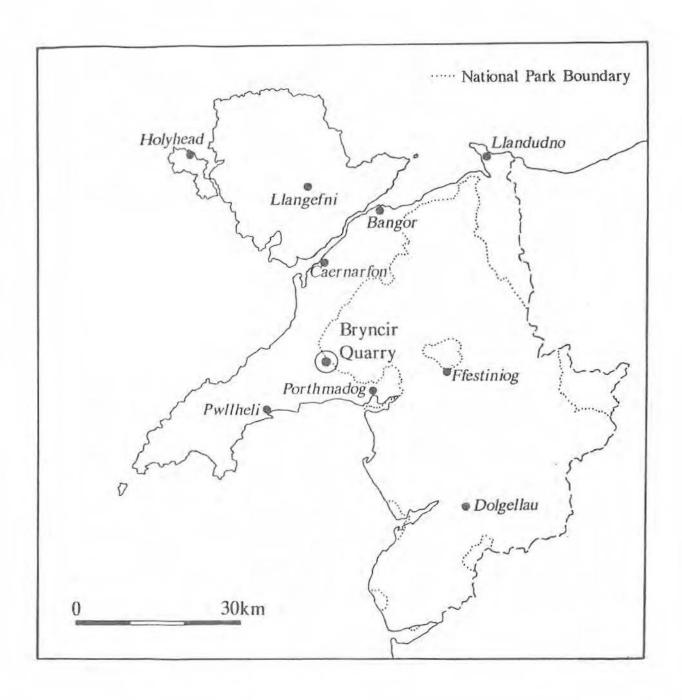


Fig. 1 Location map.

# PROPOSED EXTENSION TO BRYNCIR QUARRY, NEAR CAERNARFON

#### 1. INTRODUCTION

Planning permission is to be sought by RMC Ltd. for an extension to its existing quarrying operations on land to the north-east of Bryncir, near Caernarfon. The area in question comprises two adjoining fields of pasture land at SH48554560. The area contains a large glacial drumlin at its centre, with low lying ground, some of it marshy, around its edge.

The application area covers c. 3-4ha of sand and gravel deposits and lies just under 1km to the north-east of Pen Llystyn Roman fort. The area around contains several other important archaeological sites, and has yielded several stray finds.

The application area was included in a rapid survey of the area of sand and gravel resources centred around Bryncir undertaken by the Gwynedd Archaeological Trust in 1992. Observations on ten geological test pits dug by machine across the area of the present application failed to find information of archaeological interest.

#### 2. ASSESSMENT BRIEF

The basic requirement was for a desk-based assessment to collate the existing written and graphic archaeological information on the area in order to identify the likely character, extent, quality and worth of the known or potential archaeological resource within the area to be affected by the proposed development.

A field visit would be undertaken in order to assess the impact of the proposals on the archaeological and heritage features within or in the immediate area of the proposed quarry extension. The importance and condition of known archaeological remains were to be assessed and areas of archaeological potential and new sites to be identified and recommendations made.

Gwynedd Archaeological Trust's proposals for fulfilling these requirements were, briefly, as follows:

- a) to identify and record the cultural heritage of the area to be affected by the proposals;
- b) to evaluate the importance of what was identified (both as a cultural landscape and as the individual items which make up that landscape); and
- c) to recommend ways in which damage to the cultural heritage can be avoided or minimised.

This report covers documentary research and a site visit of the area to be effected, mitigatory measures to safeguard the archaeological resource.

# 3. METHODS AND TECHNIQUES

#### 3.1 Desk-top Study

Consultation of maps, computer records, written records and reference works, which make up the Sites and Monuments Record, was undertaken at Gwynedd Archaeological Trust. Records (including early Ordnance Survey maps, tithe maps and schedules, estate maps and papers and reference works - see bibliography) were also consulted in the library and the archives of the University College of North Wales, Bangor, and the County archives at Caernarfon. Aerial photographs were inspected at the offices of the County Archives at Caernarfon and the Countryside Council for Wales.

#### 3.2 Field Search

This was undertaken on the 5th February, 1994. The whole area of the proposed quarry extension was walked where possible. Conditions were fair for fieldwork, light and visibility were good for the time of year.

Sites identified were marked on copies of 1:2,500 OS. maps as accurately as possible without surveying. Forms were filled in assessing each site, and detailed notes made of the more important. Photographs were taken of all potential sites identified.

# 3.3 Report

All available information was collated, and transferred onto a single set of maps at a scale of 1:2,500 for convenience. The sites were then assessed and allocated to the categories listed below. These are intended to give an idea of the importance of the site, and the mitigatory measure though appropriate.

The criteria used for allocating sites to categories are based on those used by the Secretary of State when considering ancient monuments for scheduling; these are set out in Annex 3 to Planning Policy Guidance 16 (Wales): Archaeology and Planning.

# 3.4 Categories

The following categories were used to define the importance of the archaeological resource.

Category A - Sites of national importance.

Scheduled Ancient Monuments, Listed Buildings and sites of schedulable or listable quality, i.e. those which would meet the requirements for scheduling (ancient monuments) or listing (buildings) or both.

Sites which are scheduled or listed have legal protection, and it is recommended that all Category A sites remain preserved and protected in situ.

Category B - Sites of regional or county importance.

Sites which would not fulfil the criteria for scheduling or listing, but which are nevertheless of particular importance within the region.

Preservation in situ is the preferred option for Category B sites, but if damage or destruction cannot be avoided, appropriate detailed recording might be an acceptable alternative.

Category C - Sites of district or local importance.

Sites which are not of sufficient importance to justify a recommendation for preservation if threatened.

Category C sites nevertheless merit adequate recording in advance of damage or destruction.

Category D - Minor and damaged sites.

Sites which are of minor importance or so badly damaged that too little remains to justify their inclusion in a higher category.

For Category D sites, rapid recording, either in advance or during destruction, should be sufficient.

Category E - Sites needing further investigation.

Sites whose importance is as yet undetermined and which will require further work before they can be allocated to categories A - D are temporarily placed in this category, with specific recommendations for further evaluation. By the end of the assessment there should be no sites remaining in this category.

#### 4. RESULTS OF ASSESSMENT

#### 4.1 Introduction

Archive material consulted during the desk-top study provided dating evidence for known sites and maps of successive dates allowed an appreciation of the development of the landscape. Estate maps and papers were mostly of relatively recent date and offered little to further knowledge of the area. The Tithe map coverage of the area was incomplete and omitted the holdings of Llystyn-gwyn and Llystyn-gwyn-bach. Ordnance Survey maps however proved useful, in particular enabling the identification of former field boundaries.

Lists supplied by Cadw: Welsh Historic Monuments gave information about listed buildings and scheduled ancient monuments, of which there are none within the immediate area of the proposal. Aerial photographs both confirmed the positions of known sites and showed up some 'new' sites.

The sites established through previous fieldwork and documentary work were examined on the ground, which enabled them to be allocated to the appropriate category and recommendations made for mitigation measures.

# 4.2 The Archaeological Background

This section provides a summary of the archaeology and history of the surrounding area so that the findings of the assessment can be put into a wider context.

#### 4.2.1 Prehistoric

There are numerous sites and findspots in the region around Llystyn-gwyn-bach dating from the Prehistoric period. Some level of Neolithic activity in the area is suggested by the find of a type IV polished axe of the Great Langdale series near Tafarn Faig to the north. To the south at Pen Llystyn concentrations of Bronze Age pottery have been located, including a find of 10 burial urns in 1821 (SH47494490). These were found arranged in a line, each urn lying within a stone cist, the whole contained within a circular area 15ft in diameter described by a low stone bank. Also of note was the find of a Bronze Age Lunula at Llecheiddor Uchaf, the only example found in Wales, and most likely imported from Ireland.

The most numerous type of Prehistoric site found in the area around Llystyn-gwyn-bach are the enigmatic burnt mounds thought to belong to the Bronze Age. These sites are essentially crescentic or horseshoe-shaped mounds of stone with evidence of burning, usually located near marshy areas or streams. Excavation usually reveals a hearth, frequently associated with a wooden or clay lined tank located within a central depression. Experimental evidence has indicated that these features could be the result of prolonged cooking activity, using hot stones for either roasting or boiling.

There are four known and one unlocated burnt mound sites in the region just west of Cefntrefor-isaf. Two possible further sites exist, one of which lies within the area of the proposed quarry extension, the other is located to the south east of Blaen-y-cae.

Funary monuments of the period are also present in the locality. A small cairn with a possible cist burial, also dating from the Bronze Age, is to be found just west of Cefntrefor-isaf close to the four known burnt mounds mentioned above.

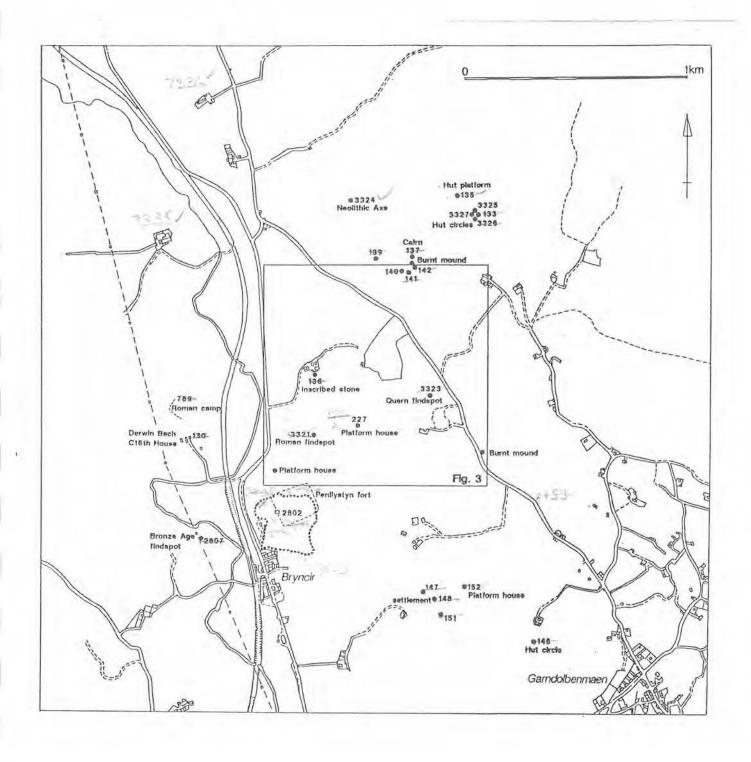


Fig. 2 Location of archaeological and historical sites in area.

#### 4.2.2 Roman

Sites from the Roman period fall into two groups, native and military. The native settlement sites appear to lie in a satellite fashion to the north and south of the former Roman fort of Pen Llystyn. A group of four round huts, possibly associated with a contemporary fieldsystem is located north east of LLystyn-gwyn-bach at Cefntrefor-uchaf. These are undated and could equally belong to the Pre-Roman period. Another settlement concentration lies to the south near Llystyn-ganol, this time mainly of an enclosed type, dating from the 2nd. to 4th. Century AD

Pen Llystyn Roman fort, located just to the south east of Llystyn-gwyn-bach on one of the proposed Roman routes from Segontium to Tomen-y-mur has been almost completely destroyed by gravel extraction. This site also produced evidence for unfortified settlements of the Pre-Roman and late Roman period. The military occupation of the site, however, falls into three phases, starting with the construction of the Flavian auxilliary fort of 1.8ha. and annexe of c.1.2ha. The fortifications consisted of a turf faced rampart, with a fill of gravel and two ditches apart from the side of the annexe where only one ditch was found. The gateways, towers and turrets were all of timber. The arrangement of the internal buildings generally followed the layout customary to auxilliary forts, and the chief structures were constructed of clay reinforced with timber uprights and wattling. The fort's water-supply is known to have entered through the north east gateway.

The initial occupation of the fort lasted about a decade from 80AD and was followed, after an interval, by a short lived attempt to create a reduced fort of about 1.1ha. The final phase lasted from about 100AD, to no later than 150AD, and consisted of a fortlet of 0.5ha, constructed over the northern quarter of the original structure. It is likely that the fortlet, with its axial roadway and internal buildings, mainly open sheds, represents a storage depot with a reduced garrison.

A temporary Roman camp lies near the farm of Derwin-bach at SH47574535 showing up as an earthwork, the best preserved section being towards the north west end consisting of a rampart 3m. wide by 0.3m high and the remains of a ditch some 2.5m wide.

The military road between the forts at Segontium (Caernarfon) and Tomen-y-mur is considered to lie somewhere in the area, but has never been definitely located. It has been assumed in the past that the road followed a course through Beddgelert, continuing to Maentwrog by way of the Aberglaslyn pass and Croesor. However, the evidence now points to the route following a course from Caernarfon via Llanllyfni, Dolbenmaen and Tremadog, where a Roman bathhouse has been located. Confirmation of this lies at Pen Llystyn where short stretches of the Roman road exist to either side of the fort. From the alignment of a stretch running just to the south of Llystyn-gwyn it is possible that the Roman Road may lie immediately to the north west of the proposed quarry extension, perhaps under or near the existing track at c. SH48504572C.

Finds from the area include a Roman Patera or skillet discovered in a peat bog at Gweirglodd Bryn Cawnog just south of Llystyn-gwyn at SH48234523.

#### 4.2.3 Medieval and later

Settlement of the surrounding area during the Medieval period is fairly well documented, though this is not so for Llystyn-gwyn-bach itself.

The holdings of Llystyn-gwyn and Llystyn-gwyn-bach lie within the Medieval Commote of Eifionydd, west of the Afon Dwyfor, within the bounds of Uwch Dwyfor and appear to have been that part of the land belonging to the 'free' township of Penyfed, which formed the north west portion of the former Parish of Dolbemaen.

Sites of the period are well represented in the area. Of particular interest is the inscribed stone embedded by a gateway at SH48284529, since removed to the farmyard at

Llystyn-gwyn. Its Latin inscription reads: ICORI FILIVS / POTENTI/NI ('Icorix, son of Potentius'); while on its edge inscribed in Ogam: ICORIGAS ('of Icorix'). The inscription dates from the 6th. century. The proximity of its original position to a possible stretch of the Roman road suggests a comparison with sites in South Wales, where there is evidence of stones being set up along Roman routes. The Ogam inscription hints at some level of Irish influence in the region.

The Medieval settlements more or less mirror the location of their Romano-British fore-runners. To the north are two sites, part of the medieval township of Nantcall, on land which formed part of a grange of the Cistercian Abbey of Aberconwy. These sites, picked up on the Llystyn rapid survey of 1982, are a small rectangular structure at SH48944623 and the remains of a farmstead complex comprising two rectangular structures (SH47484696).

To the south near Blaen-y-cae at SH48424527 lie the foundations of a platform house, with a paddock encircling the site. This site is possibly Tyddyn Sion, a smallholding in the Llystyn district. Two further Medieval settlement sites are to be found not far from the enclosed hut group at Llystyn-uchaf mentioned above. These are both of the long-hut type, one at SH48924455 is in poor condition, while the other, at SH48864631, may represent the remnants of a more extensive farmstead.

Many of the existing houses and farms in the region date from at least the late 16th century onwards, some of them being buildings of intrinsic merit and some having group value with their associated outbuildings and walls. The two-storeyed 16th, century house at Derwyn Bach is not unusual for the region. The walls are of boulder construction with massive quoining and bonding stones. An early example of the gable-end-chimney plan, this house retains its original openings, fireplace with chamfered bressummer and chimney stair. The roof is of collar-beam truss construction.

The buildings at Llystyn-gwyn-bach consist of a late 19th Century stone built barn/cowshed under a slate roof with attached 'Dutch' barn of wood and corrugated iron (now collapsed). These buildings form a complex with two rectangular enclosures attached to the south. There is evidence of earlier activity on the site: comprising a small rectangular structure with earth and stone banks slightly scarped into the slope and possibly representing a long-hut of Medieval date. This is situated to the east of the present standing buildings in the angle of the field corner at SH48464554. The farmstead of Llystyn-gwyn, in its present form, dates from the 18th Century, though the site is probably of a considerably earlier date.

#### 4.2.4 Industrial

A small series of quarry pits and scoops, the remains of old gravel workings, lie within the area of the proposed quarry extension. As far as it is possible to ascertain, these date from some time prior to the turn of the Twentieth Century.

#### 4.2.5 Conclusions

The region around Llystyn-gwyn and Llystyn-gwyn-bach holds a great number of sites of archaeological and historical interest belonging to all periods. There is evidence for continued settlement of the area over a considerable time period starting in the Neolithic. The Bronze Age, late Prehistoric and Roman Periods are particularly well represented.

# 4.3 Archaeology of proposed extension area

# 4.3.1 Introduction (N.B. the numbers in brackets refer to the site numbers in the gazetteer)

The area proposed for quarrying is currently fairly well drained pasture overlying glacially derived gravels. The south east corner is wet and marshy. The land forms part of the Llystyn Gwyn holding, and consists of two fields enclosed by stone-faced earth banks (6) of uncertain but probable 18th or 19th century date. A track (3) runs from Llystyn-gwyn-bach northwards, inside the area to be quarried. Three features of uncertain function have been noted, a low circular bank (1), a mound and denuded bank (2) and a stone feature (5). A former quarry(4) lies on the north side of the site. These six sites are all described in the gazetteer below.

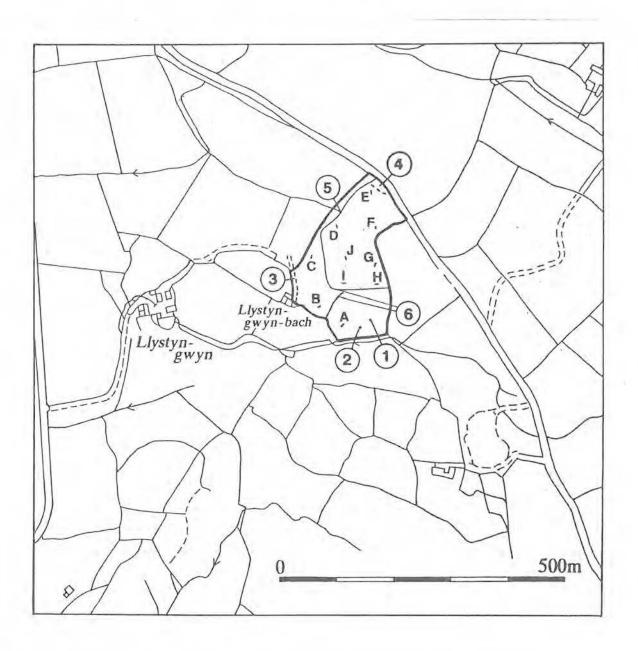


Fig. 3 Location of archaeological sites listed in gazetteer (1-6) and geological test pits (A-J).

# 4.3.2 Gazetteer of Archaeological Sites

1. Circular feature SH48304550C Category D

An unusual large sub-circular feature comprising a ditch like depression encircling a marshy interior of sphagnum peat. Situated on a gentle slope in the south east of the area of interest. This is possibly a natural glacial feature.

2. Sub-circular mound SH48564550 Category D

A low sub-circular grass covered feature with large boulder on west side and a denuded linear feature, possibly an early field bank which runs up slope in a northerly direction from the mound.

3. Hollow way SH48454557C Category D

Linear feature running alongside field boundary leading north from the farm buildings at Llystyn-gwyn-bach. Comprises a sunken trackway on a north south alignment cut into the foot of a steep slope. Shown as a trackway on the OS. map of 1918, leading from the buildings at Llystyn-gwyn-bach to the present tarmacadamized lane to the north

4. Former quarry SH48614573 Category D

A series of interconnecting gravel diggings located in the north east corner of the area of the proposed quarry extension. This is an area of circular and semi-circular quarry pits and scoops dug into the north east facing slope of the drumlin at Llystyn-gwyn-bach. These are known to have existed before 1918.

5. Sub-rectangular feature SH48544570 Category D

A small sub-rectangular feature of grassed over bank situated within the angle of two field boundaries. Could be clearance material or small pen.

6. Field boundaries Category D

The field boundaries within and surrounding the area of the proposed quarry extension consist mainly of earth banks faced with glacial boulders and drystone walls constructed of similar material. There are examples of slate being utilised for fence posts to carry fencing wire, on top of some of the earthen field banks. A particularly good example of a revetted field bank (SH48614576 - SH48614557) traverses the site, partially running along the crest of the drumlin from the north-west to south-east.

# 4.3.3 Summary of sites by category

Category A - National importance None.

Category B - Regional importance None.

Category C - Local importance None,

Category D - Minor and damaged sites

- 1. Circular feature
- 2. Sub-circular mound
- 3. Hollow way
- 4. Former quarry
- 5. Sub-rectangular stone feature
- Field boundaries

Category E - Sites needing further investigation None.

#### 5. RECOMMENDATIONS

# 5.1 Recommendations for mitigatory measures

It is recommended that the archaeological features noted be recorded by photograph and description, and that sites 1, 2 and 5 are examined by trial trenching. A continuous watching brief should be maintained during the soil stripping operation.

Recommended mitigatory measures for each of the sites are as follows:

- 1. Circular feature. This feature should be examined by trial trenching in advance of top soil stripping.
- 2. Sub-circular mound. This feature should be examined by trial trenching in advance of top soil stripping.
- 3. Hollow way. This site could be left out of the area of gravel extraction. It closely follows the field boundary that forms the western limit of the area of the proposed quarry extension. However, should this not be possible, the site should be surveyed and recorded by photograph and description.
- 4. Former quarry. Recording by photographic and written description.
- 5. Sub-rectangular feature. This feature should be examined by trial trenching in advance of top soil stripping.
- **6. Field boundaries.** It is recommended that the boundary to be completely removed inside the area is recorded by photograph and description, including measured profiles.

A photographic and descriptive record is recommended where a significant length of any other field boundaries, such as walls, field banks or slate fences are to be destroyed.

# 5.2 Recommendations for areas of unknown archaeological potential

Previous results from similar projects have shown that many sites can only be detected by excavation, particularly in areas such as this where surface indications are slight due to ploughing. It is recommended that a continuous watching brief is undertaken during soil stripping. This is an important part of the mitigatory strategy, with potential for discovering sites which would otherwise go unrecorded.

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#### 7. NON TECHNICAL SUMMARY

An initial assessment of the proposed quarry extension has identified a number of actual and potential new sites. Recommendations are proposed for further assessment to clarify the nature of the potential sites and trail trenching should fulfil this requirement. Recommendations are also proposed for mitigatory strategies for known sites ranging from preservation *in situ* where possible to the provision of a continuous watching brief during soil stripping operations.

The actual sites identified within the area are mainly agricultural features of a fairly late date. The earliest being the hollow way (3) and apparently contemporary field boundaries (6) of 18th or 19th Century date. The former quarry (4) appears on a map of 1918 and probably relates to the adjacent road, the material quarried being used for road mending.

It is recommended that certain features are examined by digging trial trenches across them. This applies to the circular feature (1), the sub-circular mound (2), and the sub-rectangular stone feature (5). In addition, the following mitigatory measures have been suggested: the hollow way (3) could be preserved in situ, but failing this, the site should be surveyed and recorded by photograph and description; the former quarry (4) should be recorded by photograph and description; and it is recommended that the field boundary (6) within the area, which is to be completely removed is recorded by photograph and description, including measured profiles. Where a significant length of any other field boundary is to be destroyed it is recommended that they be recorded by photograph and description.

As with all schemes of this nature, the potential for further discoveries once soil removal commences is a possibility. Taking into account the wealth of archaeological remains in the locality (outlined in 4.2 The Archaeological Background) it is recommended that a continuous watching brief be undertaken during soil stripping operations.

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