

15/04/94

DYFED ARCHAEOLOGICAL TRUST LTD

REPORT ON THE ARCHAEOLOGICAL WATCHING BRIEF ON THE YSBYTTY  
RESERVOIR-PENYGOYALLT WATERMAIN, 1993-94  
PRN 32487.

Client: Dwr Cymru

Project Officer: K Murphy

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Dated: 15 April 1994

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RESERVOIR - PENYGOYALLT WATERMAIN, 1993-94

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## 1.0 INTRODUCTION

Details of the Ystbytty reservoir - Penygoyallt watermain were forwarded to the Curatorial Section of Dyfed Archaeological Trust by Dwr Cymru/Welsh Water for comment in February 1992.

Following the initial comments made by the Curatorial Section of the Trust, Dwr Cymru were advised of the need for a detailed archaeological desk top assessment of the project to be prepared in order for detailed mitigatory measures to be drafted. This desk top assessment was produced by Dyfed Archaeological Trust in May 1992. Dwr Cymru accepted the recommendations in the report and commissioned a watching brief to be carried out on any archaeological sites affected by the scheme prior to and/or during the work, as part of the mitigation strategy. An archaeological report on the results of the watching brief was also commissioned. Subsequent revisions to the route of the watermain were forwarded to Dyfed Archaeological Trust by Dwr Cymru on 8 September 1993. Recommendations for a watching brief on these revisions were accepted by Dwr Cymru.

## 1.1 Content and scope of the watching brief

An archaeological watching brief is defined by the Institute of Field Archaeologists as a formal programme of observation and investigation conducted during an operation carried out for non-archaeological reasons - normally a development or other construction project - within a specified area where archaeological deposits may be disturbed or destroyed. The programme will result in the preparation of a report.

The watching brief will be intended to allow, subject to resources, the preservation by record of archaeological deposits in advance of their disturbance or destruction and to provide an opportunity, if necessary, for the watching archaeologist to alert all interested parties to the presence of an archaeological find for which the resources allocated to the watching brief are insufficient to support satisfactory treatment.

The watching brief is not intended as a substitute for contingent excavation.

The client will be supplied with 3 copies of an archaeological report of the results of the watching brief. The report will be fully representative of all the information recovered. Normally it should be read in conjunction with the desk top assessment for the scheme which provides the historical framework for the watching brief. A copy of the report will also be deposited with Dyfed Archaeological Trust's Sites and Monuments Record.

## 1.2 Purpose and methodologies of the watching brief

The purpose of the watching brief is to undertake as complete a record as possible of any archaeological features affected by the client's scheme of works. In the case of larger archaeological sites it will seldom be possible or necessary to undertake a record of the entire site; the record will be undertaken only on those areas of the site that may be affected.

The primary stage of the watching brief for any scheme normally involves consultation of the desk top assessment for the scheme and/or consultation of Dyfed Sites and Monuments Record, which is maintained by Dyfed Archaeological Trust's Curatorial Section, for those sites affected by the scheme.

The client will normally advise Dyfed Archaeological Trust's Field Section of any changes in the proposed works resulting from their consultation of the desk top assessment, and of any sites which may still be affected by the scheme. The client will also provide the Field Section with a proposed schedule of works in order that a full field study may be performed on any affected site prior to the commencement of the works.

Work on or around those affected sites will be subject to the watching brief. The work will be closely observed by an archaeologist from the Field Section who will also undertake a full drawn, written and photographic record of any archaeological features which may be disturbed by the scheme, and any artefact or find exposed during the works. Recording will be carried out where necessary and when convenient: it is the Field Section's aim to minimise any disruption to the client's schedule. However, if archaeological features may be lost during the scheme, it may be necessary for the Field Section to request a postponement of the works in order that the archaeology may be recorded. Larger areas affected may require fuller excavation and/or survey.

## 2 RESULTS OF THE ARCHAEOLOGICAL WATCHING BRIEF

Two important classes of information were obtained from the watching brief. Firstly, features observed during the topsoil strip around the service reservoir demonstrated that the area of archaeological interest around round barrows/burial mounds is quite considerable. This was confirmed when two further round barrows were identified in the vicinity of the service reservoir during the course of the watching brief. Second, observations made of sections through hedgebanks provided data on the landscape history of the area. In particular, in the two areas described below, it is clear that two episodes of field enclosure are present and that these probably occurred at widely different times for different economic reasons.

The following catalogue of sites recorded during the watching brief is arranged sequentially from W-E starting at Ystbytty reservoir. The numbers referred to in the text are record numbers on Dyfed Archaeological Trust's Sites and Monuments Record. During the watching brief notes were made on character of the hedgebanks sectioned. Detailed descriptions of every hedgebank are not included here, though general descriptions are together with their archaeological and historical landscape implications.

1720 - Crug, round barrow/burial mound (Maps 1-3). The site of the new service reservoir was occupied by a small pond defined by a low stone and earth bank which included many large quartz boulders. Its position between two known bronze age round barrows (1720 and 1721) suggested that important archaeological features might be preserved within the area to be excavated for the reservoir and therefore a watching brief was conducted during topsoil stripping.

The land owner provided information regarding the recent history of the site. The pond had been created only some 6 years previously, as a water-hole for cattle, in order to make use of a wet and boggy corner of the field, though a small pond had existed there originally, fed by a natural spring. The vegetation of the site reflected its wet nature, being rough pasture with some reed growth around the pond area. The topsoil was generally dark brown and rather peaty in nature, 18cm deep on average. However, there was a noticeable change in the topsoil at the south western corner of the site, where it became a reddish-brown, humic, plough soil, c.18cm deep, also becoming rather stony. It is possible that these stones were derived from the round barrow of Crug (1720) which was only some 10m to the west, being moved by plough action. The stone content in the topsoil decreased rapidly away from the round barrow.

There were noticeable variations in colouration of the subsoil. In the south eastern corner of the site it was an orange stony-clay, turning yellow-orange to the north and green-yellow at the north eastern corner of the site. The rest of the site had a

greyish yellow stony-clay, apart from the pond area itself, where the subsoil was a very light greyish yellow gravelly-clay, less compact than elsewhere. These differences were geological in origin.

Of archaeological interest were several small pockets of blackened earth, flecked with charcoal, revealed beneath the topsoil to the north and west of the pond, the largest measuring c.1.0m by 0.40m. There were also frequent charcoal flecks in the subsoil along the western side of the site (Map 3).

A small, flint flake was found at the south western corner of the site, some 10m from round barrow 1720, in soil turned over by the wheels of heavy machinery entering the site at that point.

Field walking in neighbouring fields located two other possible round barrow sites (12802 and 12803 - the latter of the W. edge of Map 2). Both have been reduced by ploughing and consist of low, circular, earth mounds c.40m in diameter. They are positioned on the boundary between Abergwili and Llanllawddog parishes.

It is usual for controlled archaeological excavations on round barrows/burial mounds to concentrate on the earthwork itself and ignore the surrounding areas. At Ystbytty, the construction of the reservoir allowed for an area close to a burial mound to be examined for elements of archaeological interest. Charcoal-filled pits are hollows are now increasingly recognised as common features on burial mounds. Their function is unclear, but analysis of the charcoal has demonstrated that often charcoal from only a single species of tree was deposited in any one pit. Charcoal from more than one species was rarely mixed together in one pit. The meaning of this is again not at the present clear, but it seems to suggest that areas around burial mounds were used for ceremonial purposes. The evidence from the watching brief at Ystbytty is of importance as it demonstrates that evidence associated with burials mounds may be found over a wide area. The identification of two further burial mounds during the watching brief reinforces the archaeological importance of the hilltop on which the reservoir was built.

No features of archaeological interest were seen between the reservoir and the road to the east. There was no evidence for the cottage 25530 (Map 1). Here the topsoil was observed to be a dark brown, well sorted, humic plough soil, averaging 18cm in depth and overlying a yellowish stony clay subsoil, which again showed colour variations of geological origin.

No features of archaeological significance were observed along the route of the watermain to the E. of the road E. of the cottage 25530. The only man-made feature disturbed being a small brick built clay pigeon shooting catapult at SN46472633. The vegetation here was typically of heather and gorse, with a dark brown peaty topsoil, averaging 0.25m in depth. Underlying this

was a compact yellowish stony clay subsoil. Colour variations within the subsoil were geologically derived.

The desk top assessment identified areas where buried traces of earlier boundaries may be found on Mynydd Ystyfflau Carn (p4, 5ii). No such traces of earlier boundaries were seen. All the existing field boundaries were examined and described where they were sectioned. The boundaries were of a remarkably consistent character - 2.5-3m wide and 1m high and constructed from upcast subsoil mixed with topsoil with occasional large stones over a 20cm thick black silty loam buried soil which in turn overlay a reddish-brown 'C' horizon over shattered shale bedrock - suggesting contemporaneous construction. No difference was observed between those boundaries that lay between field and field and those between fields and roads. In other areas of SW. Wales it has been demonstrated that a black silty loam buried soil beneath hedgebanks indicates enclosure of open moorland within the last 200 years.

25530, 25531 - sites of cottages. The watermain passed these sites in the roadside verge and was therefore not inspected during construction.

25532 - site of cottage. This site was only examined after the watermain was in the ground. An examination of spoil was made but no artefacts were recovered and nothing else of interest seen.

1724 - possible iron age enclosure (Map 4). First recorded in the 1950s when identified on aerial photographs. Subsequent field-workers have been unable to identify any definite remains of this site. It is clear, however, that there are slight earthworks in a field immediately to the S. of the watermain, but whether these are of an iron age enclosure is uncertain. The trench for the watermain passed close to these earthworks, but not through them. Nothing of archaeological interest was recorded. The subsoil in the area comprised a grey-brown silty clay with many medium-sized stones.

1725 - possible iron age enclosure (Map 4). First recorded in the 1950s when identified on aerial photographs. This appears to be a mis-identification. The topography consists of a large natural hollow which could easily be mistaken for the earthwork banks of an iron age enclosure on aerial photographs. The subsoil comprised a grey-brown silty clay with many medium-sized stones with surface lenses of black silty clay with a high peat content. Nothing of archaeological interest was recorded. This site should be removed from Dyfed Archaeological Trust's Sites and Monuments Record.



25534 - clearance cairn (Map 5). This site was examined after the topsoil strip. It consisted of a dump of boulders in a corner of a field. There was no structure to it and there is no reason to suppose that it was anything other than a clearance cairn of relatively recent date.

All the hedgebanks between sites 1724, 1725, above, and between Goyallt Fach farm, 21250, below, were examined in section where cut through by the watermain trench (Map 5). All the hedgebanks were remarkably similar and generally comprised a dump of subsoil mixed with topsoil and occasional stones. They ranged in size from 2m - 3m in width and were on average 1m high. The buried soil beneath the hedgebanks consisted of a *circa* 20cm thick mid brown silty loam with a very distinct interface with the shattered shale bedrock beneath. This is possibly a plough soil. No dating evidence was obtained from the hedgebanks and so the period of enclosure is not known. It is clear, however, that this area was enclosed by the hedgebanks when the land was under cultivation. This is in contrast with the land at Mynydd Ystaf-flau Carn which was moorland at the time of the enclosure.

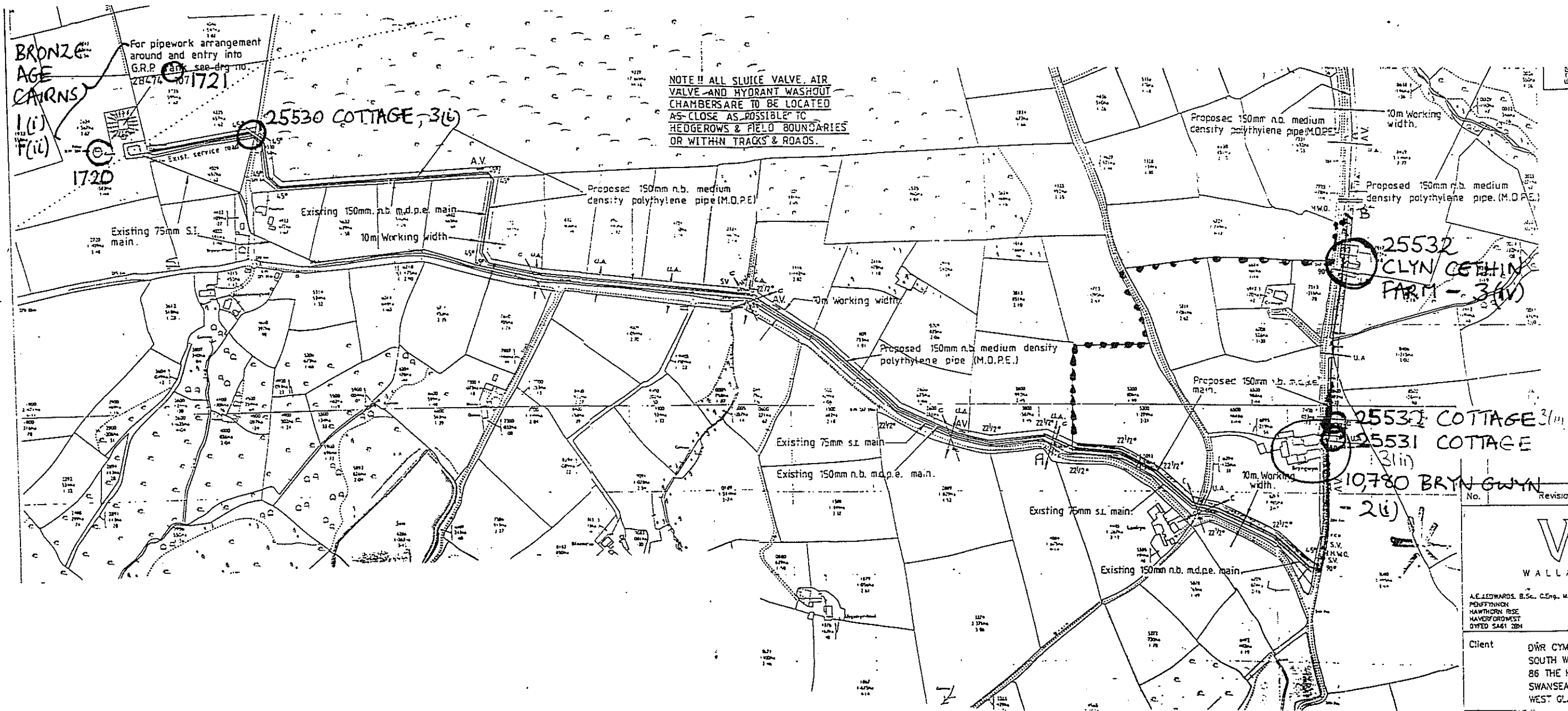
21250 - Goyallt Fach farm (Map 5). At the time of the field examination much earth-moving had taken place over the ruins of this farm to facilitate machine access. The remains of walls of several buildings were visible, but these had been mostly covered with rubble and earth to form a rough track. The watermain was scheduled to cut through this track. No watching brief was therefore carried out on this site.

#### 4.0 THE FINDS

The find of a small flint flake and the samples of charcoal from the pits close to the burial mound 1720 were not retained.

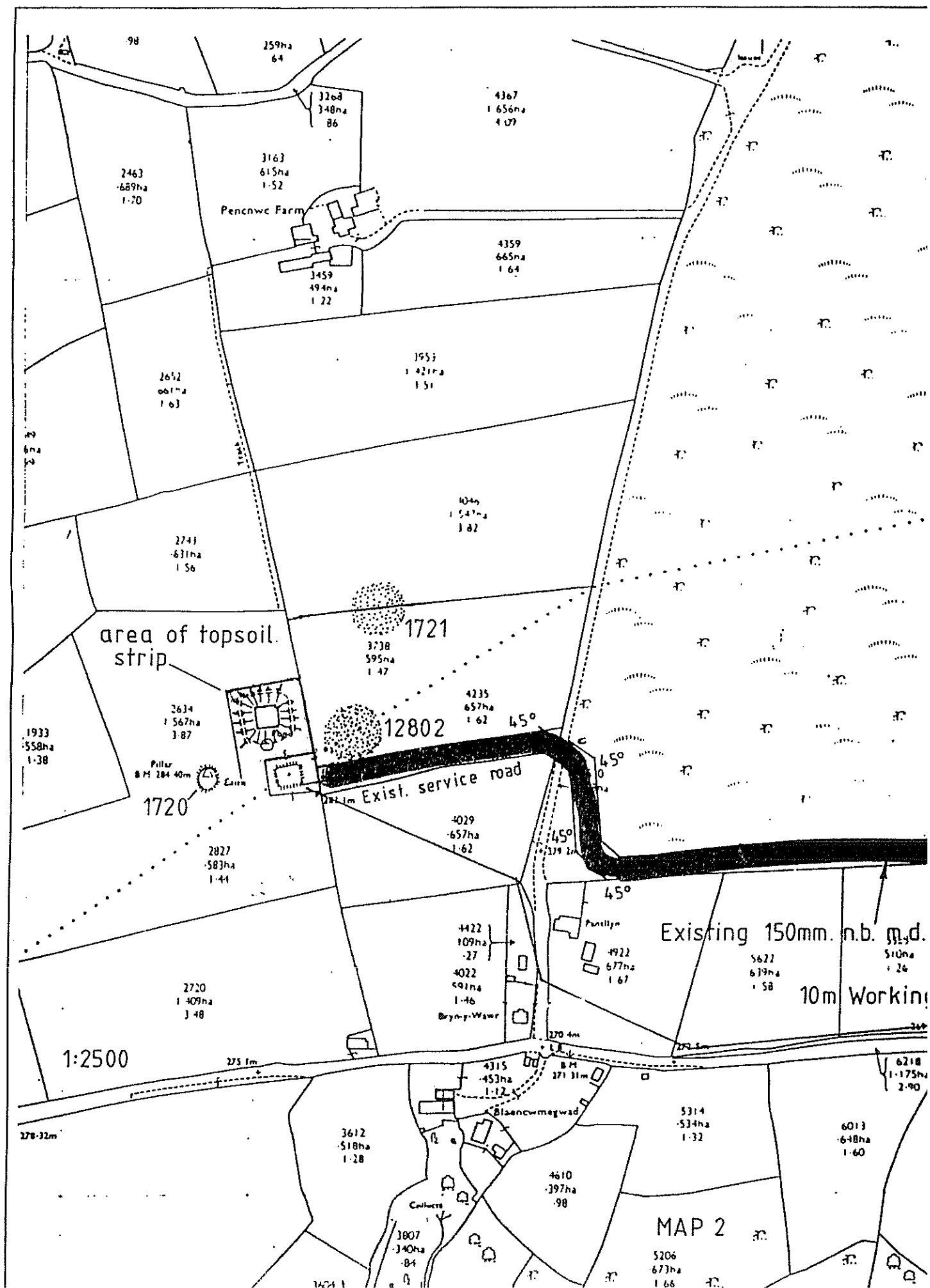
## 5.0 ACKNOWLEDGEMENTS

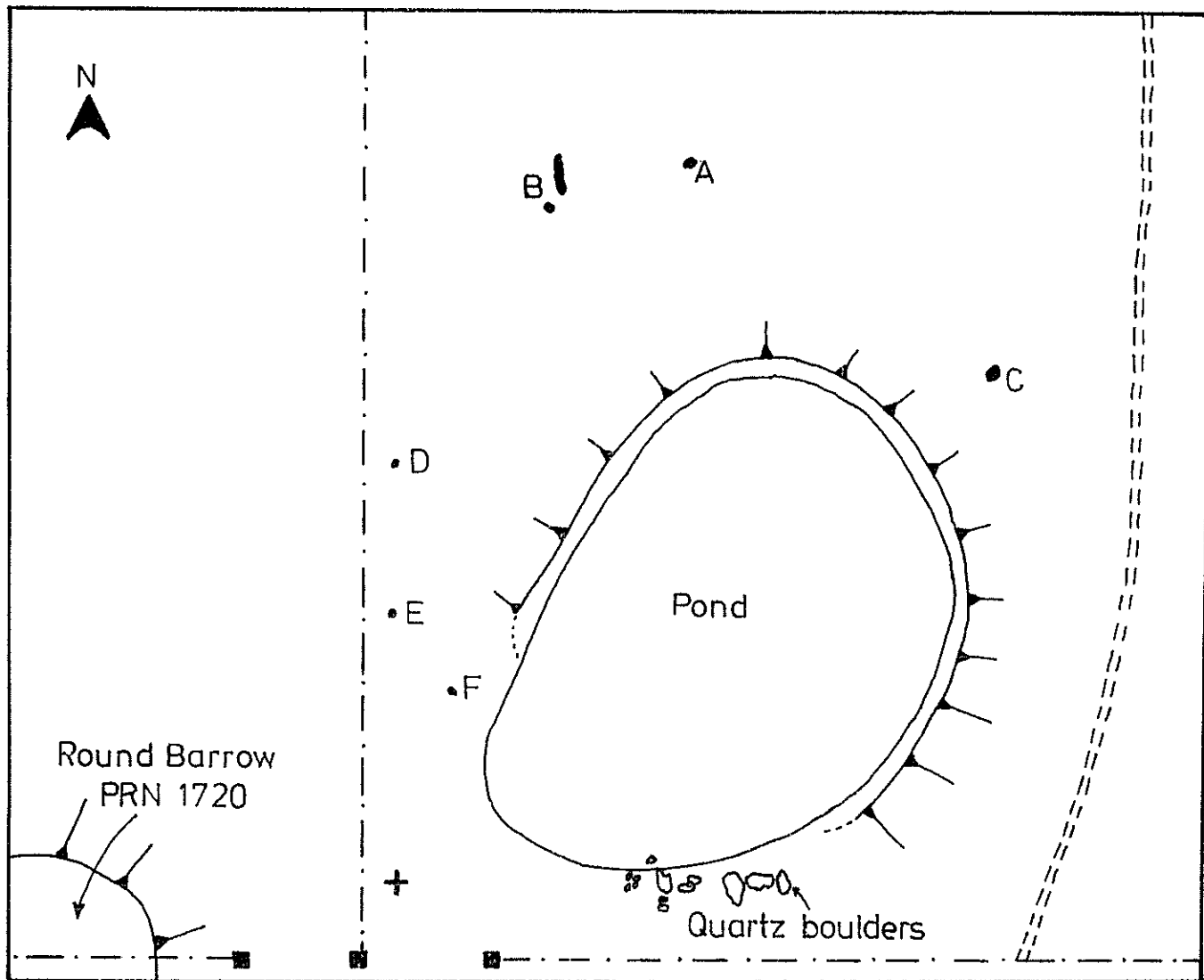
Dyfed Archaeological Trust's Field Section acknowledges the invaluable assistance provided by ~~the~~ the Curatorial Section, in particular Emyr Morgan. Thanks are offered to Richard Finch, Wallace Evans, for his help and assistance during this watching brief.



NOTE !! ALL SLUICE VALVE, AIR VALVE AND HYDRANT WASHOUT CHAMBERS ARE TO BE LOCATED AS CLOSE AS POSSIBLE TO HEDGEROWS & FIELD BOUNDARIES OR WITHIN TRACKS & ROADS.

No.	Revision
V WALLA	
A.E. EDWARDS, B.Sc., C.Eng., M. PEOFFITION HAWTHORN, BSSE HAVERFORDWEST DYFED SA61 2BN	
Client	DWR CYM SOUTH W 86 THE K SWANSEA WEST GLA





0 10m

Charcoal ●  
A-F

Flint +

Fence - - - -

Recent trench =====

