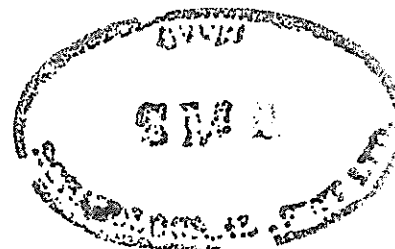


MARCH 1994

SMR Copy



# THE ROMAN ROAD WEST OF CARMARTHEN

D.A.T. P.R.N. 14277

## INTERIM REPORT

March, 1994

EVENT PRN 33902

Commissioned by: Cadw

Report by: C.Fenton-Thomas,  
Dyfed Archaeological Trust,  
The Old Palace, Abergwilli,  
Carmarthen, Dyfed.  
SA31 2JG. Tel. (0267) 231667

The Trust is a Registered Company (1198990) and a  
Registered Charity (504616)

## CONTENTS

page

|                                      |    |
|--------------------------------------|----|
| 1.Introduction                       | 1  |
| 2.Aims                               | 2  |
| 3.Methodology and Techniques         | 2  |
| 4.The Nature of the Monument         | 6  |
| 5.Future Plans and Further Questions | 9  |
| Acknowledgements                     | 10 |
| Bibliography                         | 10 |
| Appendix                             | 11 |

## Figures:

1. The course of the road
2. Bryn Farm
3. Section Drawings, Bryn Farm
4. Excavation Plan, Bryn Farm
5. Resistance Data, Area B
6. Gradiometer Data, Area A
7. Plan of Cutting, Zabulon
8. Plan of Terrace, Dolecoed

## THE ROMAN ROAD WEST OF CARMARTHEN

### INTERIM REPORT ON FIELDWORK OCTOBER 1993-MARCH 1994

#### 1. INTRODUCTION

Detailed study of aerial photographs, carried out by Terry James of the Dyfed Archaeological Trust, identified the course of a linear feature running west from Carmarthen which appeared to be a Roman road (T.James, 1990). Prior to this discovery there was no concrete evidence for the presence of a Roman road in this area. There had, however, been speculation as to its existence based upon topographical and place-name sources (Fenton, 1903; Jones, 1971). Barri Jones' road ran west from Carmarthen, north of the valley bottom around Meidrim but could only be traced for about 8km. This route is different from that recognised on air photographs by James with which our work has been concerned but lies only 3km to the north.

The descriptions of Richard Fenton, however, clearly show that a significant proportion of the road was already known to him in the late 19th century. There is little doubt, for example, that Fenton described the same road when he wrote,

*"The first portion shewn (sic) me was near Glanryd, entering a boggy piece of ground called Corssyched, ... and thence inclining still northward until it is lost in the present high road leading from Glanryd.... It is most generally known by the name of Fordd Helen, though some call it the road of Howel Dda, and others limit its commencement to Whitland Abbey. The peasants will track it without a fault for miles;... it is more known by a line which is traditionally preserved, than by any determined appearance."* (Fenton, 1903 263)

Modern archaeologists have tended to disregard any reference made by Fenton to Roman roads because he associated his findings with the apparently spurious "Via Julia" which supposedly led to St. David's. From this example it is clear that the knowledge he drew upon did not emanate from academic sources. Nevertheless, the route was evidently deeply entrenched in local tradition.

The extent of the course of the road was enhanced by further air photographs taken by Chris Musson of the Royal Commission for the Ancient and Historical Monuments of Wales. It can now be traced from Llanllwch, just west of Carmarthen, running for a distance of about 30km to the Eastern Cleddau, to the north-east of Llawhaden (fig.1).

The existence of a Roman road here has significant implications for the history of Roman settlement and occupation in Carmarthenshire and Pembrokeshire, but it is also very pertinent to the landscape history of the area from the post

Roman period to the present day.

A programme of fieldwork was thus devised to follow up these discoveries on the ground. The project is a joint venture between the Dyfed Archaeological Trust and Trinity College, Carmarthen and has been running since October, 1993. The fieldwork was carried out by 2nd year students studying Archaeology at Trinity College, under the supervision of Mr. Chris Fenton-Thomas, Dr. Mark Patton and Dr. Trevor Kirk.

## **2. AIMS**

The general aims of the project were set out in the Project Design. The project aims to fulfill both academic and curatorial objectives. It involves 3 main tasks:

1. Investigation of the road on the ground to fill in gaps in its known course and to understand the construction of the monument.

2. Assessment of the condition and state of preservation of the road.

3. Compilation of data regarding landowners along the course of the road and their plans for land-use in the future.

## **3. METHODOLOGY AND TECHNIQUES**

### **3.1 Documentary Research**

The initial stage of the project was concerned with the collation of the air photographic archive and the mapping of this information to create a master plan of the known course of the road (fig.1). The air photographs used were the monochrome verticals taken by Meridian in 1955; colour verticals taken by J.A. Storey for the Pembrokeshire Coast National Park in 1983 and a series of obliques taken over the last few years by Chris Musson of the Royal Commission for Ancient and Historical Monuments in Wales.

Further documentary research involved study of early maps which cover the known course of the road from Carmarthen to Llawhaden. The earliest sources used were the maps associated with the tithe survey of the early nineteenth century. Others include the first edition of the Ordnance Survey at both six inch and twenty five inch scales. Estate maps have not been studied.

In some cases it was clear from the maps that the line of the road had been preserved in more recent landscape features such as hedge-lines and tracks. Otherwise it was useful to show that the line of the road was not recognised as part of the 19th century landscape and so must be earlier. Occasionally place

names and field names were noted, such as Sarnau, Pontcowin or Fford glas that hinted at the former presence of a road or the point at which it crossed a river.

### 3.2 Surface Investigation and recording

The majority of the fieldwork time has been taken up with tracing the course of the road on the ground and observing the condition of the monument and its state of preservation. The condition criteria used in the recording of sites for the Dyfed SMR was adopted and this distinguishes between 'intact', 'damaged', 'destroyed', or 'restored' monuments. At this stage landowners and farmers were contacted and information gathered as to the land-use regimes of the fields crossed by the road. Special note was made of proposals by farmers for ploughing sections of the road.

It is not possible to record linear features such as this in the same way as more traditional archaeological sites. It covers a very large area with many different landowners and types of land-use. The condition of the road and the way in which it is visible is also constantly changing along its course. Whilst it is still necessary to treat the road as one monument it is important to appreciate its variety and to subdivide it into manageable portions.

Field visits were made along the entire course of the road and a detailed record was made of all the locations visited. Initially this recording was organised on a field by field basis. The record contains information on landownership, land-use, the form in which the road is visible (earthwork, hedge, modern road-line, etc.), its condition, results of relevant documentary research and information from air photographs. When the data is added to the SMR the road will be subdivided into portions based on the continuity of visible features. A map will be produced at 1:10,000 which will show the location of the road and the form in which it is manifest.

### 3.3 Excavation

It was decided at an early stage that some small-scale excavation would be necessary in order to understand the methods employed and the materials used in the construction of the road: excavation would also help in verifying whether the road was indeed of Roman date.

The road crosses a piece of boggy ground at Bryn Farm, Llandewi Velfrey, at SN 15551827 and here the raised causeway, or agger, so distinctive of Roman roads, is clearly visible as an earthwork. A trench was cut across the agger at this point (fig 2). Richard Fenton had already noted the presence of the earthwork here and had recognised the feature as part of a Roman road (see above). It is particularly well preserved and survives as a low mound some 15m wide and 90m long. The camber of the edges of the raised agger is clearly and distinctly visible for

most of its course, although in places the earthwork is more spread and the cambered edges more gently sloping. The course of the feature is made more striking because of the way in which the raised and well draining agger encourages the growth of grass, compared to the surrounding land which is very boggy and densely covered with rushes. The low grade of this agricultural land has favoured the preservation of the monument as it has probably never been ploughed. Only recently has the field been subject to attempts at drainage and the waterlogged history of the site has helped to preserve organic deposits associated with the road.

The excavation trench was positioned at right angles to the earthwork of the agger and measured 15.80m x 1.90m. It extended some 2m beyond the edges of the earthwork to either side of the raised causeway. The excavations here took place over a period of 4 weeks during November, 1993. To some extent, the progress of the work was hampered by bad weather and the problem of pumping out ground water from the excavation trench.

The structure of the road, as revealed by excavation, was fairly simple (figs.3-4). The causeway was made up of a foundation layer of large boulders. These were of various rock types but mainly a felspathic sand stone probably originating from the carboniferous millstone grit series. Other boulders were veined quartz and igneous micro-diorite. All the boulders could be glacial erratics and could have been picked up from the bed of the river Taf which runs about 300m to the north of the site. The boulder layer had been laid directly upon and had preserved the old land surface, an organic rich woody peat.

Above the boulders the agger comprised a layer of shale chippings, on top of which had been laid the cobbled surface of the road itself. This surface was between 0.40m and 0.50m above the buried peat layer. The metalled road surface occurred between 0.10 and 0.30 m below the modern ground level. It was preserved only partially as in some places the shale layer underneath was immediately encountered below the top-soil (fig.4). Two sunken gulleys, probably wheel ruts, were noted within the cobbling (see plan, fig.4). The ruts were parallel to the line of the road and lay about 1m apart. It was only possible to trace them half way across the trench as the cobbling was not fully preserved. The ruts were too close together to have been used by the same vehicle and so may reflect the existence of two carriageways, or alternatively two phases of traffic use. There was no evidence of re-surfacing of the cobbled road and the depth of the metalling layer was so insubstantial that it did not show up in section.

On either side of the shale/boulder causeway were deposits of orange sand and greyish silt. These had effectively been used to fill in small scoop ditches which were discernible in section on either side of the agger. The lower layer was in all cases made up of grey silt and was overlain by the orange sand. Together, these two deposits acted as a stabiliser for the inner core of the road (fig.3). It is difficult to know how long after the construction of the inner core that these deposits were laid.

The function of the ditches is also open to question. They are unlikely to have served a drainage purpose as they were cut into peat. It is possible, however, that they were originally dug before the construction of the road as part of a preliminary stage concerned with marking out the line that the road was to take. The road could then have been constructed between them.

The peat beneath the road did not extend into the rest of the field. A series of cores were taken in the area and no traces of further peat deposits encountered. Below the road, the peat layer was only about 0.50m deep, and appeared to have been protected by the agger from erosion and/or drying. Two monoliths were taken from the organic buried soil and are awaiting analysis at St. David's University College, Lampeter.

A number of test-pits were also excavated to examine a series of linear banks that seem to divide the larger modern field up into smaller blocks. None of these divisions are present on the 1830 tithe map of the area. When recorded and plotted they can be seen to run parallel to the agger of the road on both sides. They probably formed the boundaries for fields contemporary with the road's use. The test-pits revealed that these divisions were made up of low banks of silt-clay. They need not of course belong to the Romano-British period but could date from any time when the road was being used.

### 3.4 Geophysical Survey

The use of geophysical survey techniques was seen as an important part of the project strategy for two reasons. Firstly, as an experiment, to observe how well certain known stretches of road showed up under resistance and magnetometer survey and secondly, to use these results to prospect for lengths of road that were not otherwise visible on air photographs or from the ground.

The main area of survey was at Bryn Farm and was carried out over two days in January, 1994 by Geophysical Surveys Ltd. of Bradford. The results are outlined in detail in their report but can be summarised here. Two areas were chosen within Bryn Farm for study. A 40m square (Area B) that straddled the upstanding earthwork and an area 100 x 40m (Area A, which was laid out to the west of the earthwork), where there was no surface trace of the road but where it is visible from the air as a parch mark (fig.2). Area B showed positive results from both techniques and the rubble and stone agger was revealed as an area of high resistance and high magnetism (fig.5). In area A neither technique showed conclusive results. The gradiometer data showed up a series of linear marks on the same line as the road which may be interpreted as side ditches or even quarry ditches (fig.6). According to the specialist report, however, it seems also possible that they reflect magnetic differences within the underlying geology.

For future reference it was noted from this survey that the gradiometer is more likely to yield results on sites where the

agger has been levelled and only ditches remain. Where the agger has survived, resistance is seemingly the best technique to adopt.

### 3.5 Survey

As part of the aim to assess the state of preservation and the character of the monument, a number of surveys were undertaken at various locations where preservation of features was high and traces of the road structure were visible on the surface. Hachure surveys were used as there was insufficient time to carry out contour surveys. Two plans are included in this report as a sample (figs.7,8). Seven sites have so far been recorded in this way and it is hoped to carry out more in future.

## 4. THE NATURE OF THE MONUMENT

### 4.1 The course of the road

The road can be traced in a variety of forms. Its eastern limit lies at SN 355193, on the A40 to the west of Traveller's Rest. Between this point and Carmarthen, the presumed eastern destination of the road, is a distance of about 5km. There are no traces of the former course of the road in this zone and it is assumed that the road lies beneath the present A40. The western limit of the road's course, as it is understood at the moment, lies at SN 081185, on the eastern bank of the Eastern Cleddau river.

Between these two points the extent of the road and its course is fairly well known. Most of this information comes from parch marks and crop marks visible on air photographs. In places, however, the course of the road has been preserved by the lines of hedges, tracks and modern roads. For instance between Glan Rhyd and Great Vaynor, to the south of Clunderwen (SN 1018 - SN 1418) the modern road-line aligns very closely with that of the parch marks to east and west. At Pontcowin (SN 3319), the line of the road is also fossilised in the line of hedges and tracks to the east of the farm.

There are two areas where there is some doubt as to its exact route, specifically, west of Pwll Trap (SN 2516-2616) and the area around Wenallt farm (SN 3218). These are both places where the road changes direction and there are several possibilities for its course. It is hoped to carry out geophysical survey here in order to identify the route more precisely.

### 4.2 Preservation and Threat

The preservation of the monument has obviously been adversely affected by destructive agricultural activity associated with re-seeding and ploughing. For most of its course it is only visible from the air. Sometimes the agger is visible



as a very low, obscure mound (eg Fforest farm SN 224168; Ysgubor-fawr farm SN 203172). At Hendre (SN 163181) the farmer reported that persistent ploughing over many years had brought to the surface large quantities of quartz boulders, and only from the area of the field crossed by the line of the Roman road. On inspection these boulders were identical to those revealed in excavation at Bryn Farm and so at Hendre the upper layers of the monument have now been obliterated.

Only in exceptional circumstances is the monument clearly visible on the ground as an upstanding archaeological feature. Most of these locations are on land of very low agricultural value where there has been little ploughing and where land-use is not as intensive as elsewhere. As outlined above (3.3) the only real threat to such sites is the drainage of the land, which would eventually dry out the organic deposits with which they may be associated. In places, the road has been used for the alignment of field boundaries and this practice has served to protect certain stretches from damage by the plough.

At Llwyn-drissi farm (SN 180176), the surface of the road is clearly visible in the river bank. Here, the road structure is about 15m wide and is made up of a matrix of compacted shale and other rocks to form a very hard surface. On top of this structure is a layer of cobbles.

At present, most of the land crossed by the road is permanent grassland which is seldom ploughed. There are notable zones, however, where ploughing or re-seeding activities do take place every few years and which increase the damage already done to the monument. In these areas the road is sometimes visible in section, as a raised mound within a hedge.

#### 4.3 Construction

Despite the low level of preservation of the monument it has been possible to identify at least three different methods of construction. In most cases the road has been constructed in the traditional way as a raised mound or agger. This kind of construction was evident at Bryn Farm and here, excavations showed the make-up of the agger in detail (see 3.3). The presence of parallel ditches on either side of the agger has not yet been shown by excavation or geophysical survey, but is possibly present in area A at Bryn Farm. The lower field at Bryn, is now so wet and boggy that ditches dug for drainage would serve very little purpose. The presence of the peat below the agger of the road would suggest that conditions in this vicinity were not radically different in the first century AD. There is no conclusive evidence from aerial photographs for the presence of ditches, although such traces do exist for the Roman road running east from Carmarthen to Llandeilo (H.James, 1991).

Other notable sites where similar forms of agger are clearly visible and have been preserved quite well are at Pwll-y-hwyaid farm (SN 199173) and Parc y teg farm (SN 158182). At Dolecoed, Whitland there is a large lynchet-like feature which lies on the

line of the Roman road (fig.8). Here the road appears to have run along a level platform. It seems likely that this terrace was constructed for the road although it has been used as a field boundary in historical times.

Three sections of the road involve cuttings and all these are located immediately to the east of river and stream crossings. At Zabulon farm alongside the river Fenni (SN 238168) there is a large hollow which continues the alignment of a parch mark on the higher ground, 20m to the east (fig.7). It seems that the road ran along the bottom of this depression down towards the river, 10m to the west. The feature is too large to have been worn down by centuries of traffic, as a hollow way, and is more likely to have been cut deliberately at the time of the road's construction. The natural gradient of the slope leading down to the river at this point is steep and the cutting would have levelled the slope out considerably, so giving the road a much smoother descent towards the river crossing.

At Llanlliwe farm lies another much larger cutting, this time immediately to the east of the river Taf (SN 180178). Here again the gradient of the slope down towards the river would have required such a cutting. There is also evidence of continued use of the crossing point as three hollow ways, separate from the raised road, converge and at least one of them can be seen to cut the agger of the original road.

The third cutting so far recognised lies at Pont nant-yr-allwyn, to the east of Whitland (SN 218169). Here a farm track still follows the line of the road along the bottom of the hollow as it rises eastwards from the river. Significantly, the A40 also crosses the stream at this point, although the line of the two roads is not the same.

Field observation of the topography of the route shows that many of the major changes of direction are sited at commanding viewpoints. In such places it would be possible to see distant points in both directions and so the line of the road under construction could be adjusted. The best example is at Fforest farm (SN 224168) where it is possible to see in both directions for up to 10km and where there is a clear change of direction.

#### 4.4 Survival

The route did not fall completely out of use in the middle of the 1st millenium AD. Several stretches are still used as roads today, although the modern road sometimes wanders off the original straight line. The road can also be identified in hedge-lines.

In several areas the road runs directly through a string of farmyards, one after the other. It is in these areas also that the route is often followed by hedge-lines and modern tracks. The main examples lie from Great Vaynor to Glan Rhyd; from Llanlliwe to Llwyn-drissi; from Penycoed to Penybank and from Derry Hall to Pontcowin. Between these 'zones of survival' lie areas where

the route is not followed by hedges and tracks and where it does not run through existing farmyards. The reason for the tendency for survival in the special areas is unclear but the persistence of the use of crossing points such as at Pontcowin, Ddyryd, Glan rhyd and Penygraig could well have contributed to the continuance of both the settlements and the tracks. Many of the names of these farms have preserved the importance of their siting at crossing points as they often denote bridges or fords. It is clear that the route survived longer in the zones of survival than it did in other areas. It is also probable that the farms through which the route runs are contemporary with the use of the road.

## 5 FUTURE PLANS AND FURTHER QUESTIONS

The next phase of work will address further questions concerning the Roman road west of Carmarthen. Work will continue on the stretch of road between Carmarthen and Llawhaden. This will involve the excavation of another trench across the road to gain additional information about its construction. It is also hoped that we will be able to target excavations on parts of the road with different constructional character, so that the cuttings and the terrace-like features will be looked at as well as the traditional agger. The importance of the Roman road for environmental studies is great as the road provides a well dated context, as a transect across the landscape, from which environmental samples can be taken. Sampling of this kind will continue as part of the excavation programme. Several locations, already visited and studied, are considered to be worthy of scheduling and more specific recommendations will be made on this matter in future.

The two areas where the course of the road is uncertain will be targetted for study and here geophysical survey will be used to try and identify the line of the road (see 3.4). The western destination of the road is at present unknown and a major part of the next phase of the project will be to prospect for the course that the road takes to the west of the Eastern Cleddau river.

The final project report will contain detailed results of the work from both phases. A map will be produced at this stage presenting the line of the course of the road as a series of conventions showing the different ways in which it is manifested (earthwork, parch mark, hollow, hedge, track, etc.). The photographic record and site archives from all excavations will be lodged with the project archive at Dyfed SMR, as will all the record forms recording details of the management and preservation of the monument.

## ACKNOWLEDGEMENTS

Special thanks go to the many landowners who have allowed access onto their land, principally Mr. Dave Reynolds (Bryn Farm), Mr. Gibbon (Pwll-y-hwyaid), Mr. Howells (Dolecoed), Mr. and Mrs. Morse (Zabulon), Mr. Roberts (Llwyn-drissi) and Mr. Phillips (Llanlliwe). Transport and office space was provided by Dyfed Archaeological Trust and the Department of Archaeology, Trinity College, Carmarthen. Equipment was borrowed from Dyfed Archaeological Trust, St. David's University College, Lampeter and the Dept. of Archaeology at the University of Sheffield. Thanks go also to Terry James and Chris Musson for access to aerial photographs; Astrid Casseldine for advice on environmental sampling; the many 2nd year Archaeology students at Trinity college, Carmarthen who carried out all the fieldwork and finally to Trevor Kirk and Mark Patton who helped to supervise this.

## BIBLIOGRAPHY

- R. Fenton (1903) *A Historical Tour Through Pembrokeshire Hereford.*
- H. James (1991) *The Roman Roads of Carmarthenshire*, in H. James (ed) *Sir Gar: Studies in Carmarthenshire History.*
- T. James (1990) *A Roman Road West of Carmarthen? Archaeology in Wales* <sup>3</sup> ~~25~~, 1-2.
- B. Jones (1971) *Fieldwork and air photography in Carmarthenshire Carmarthenshire Antiquary* 7, 3-16.

Chris Fenton-Thomas for Dyfed Archaeological Trust

# APPENDIX: CONTEXTS AT BRYN FARM

| Context no. | Type               | Description     |
|-------------|--------------------|-----------------|
| 1           | top-soil           | fine sandy loam |
| 4           | layer(sub-soil)    | silt loam       |
| 5           | layer              | sandy clay loam |
| 6           | road surface       | cobbles         |
| 8           | road surface       | cobbles         |
| 9           | fill               | silt loam       |
| 10          | layer(buried soil) | peat            |
| 11          | layer              | shale fragments |
| 12          | road surface       | cobbles         |
| 13          | road surface       | cobbles         |
| 15          | layer              | silty clay loam |
| 16          | layer              | boulders/rubble |
| 20          | ditch cut          |                 |
| 21          | ditch cut          |                 |
| 22          | fill               | silt loam       |

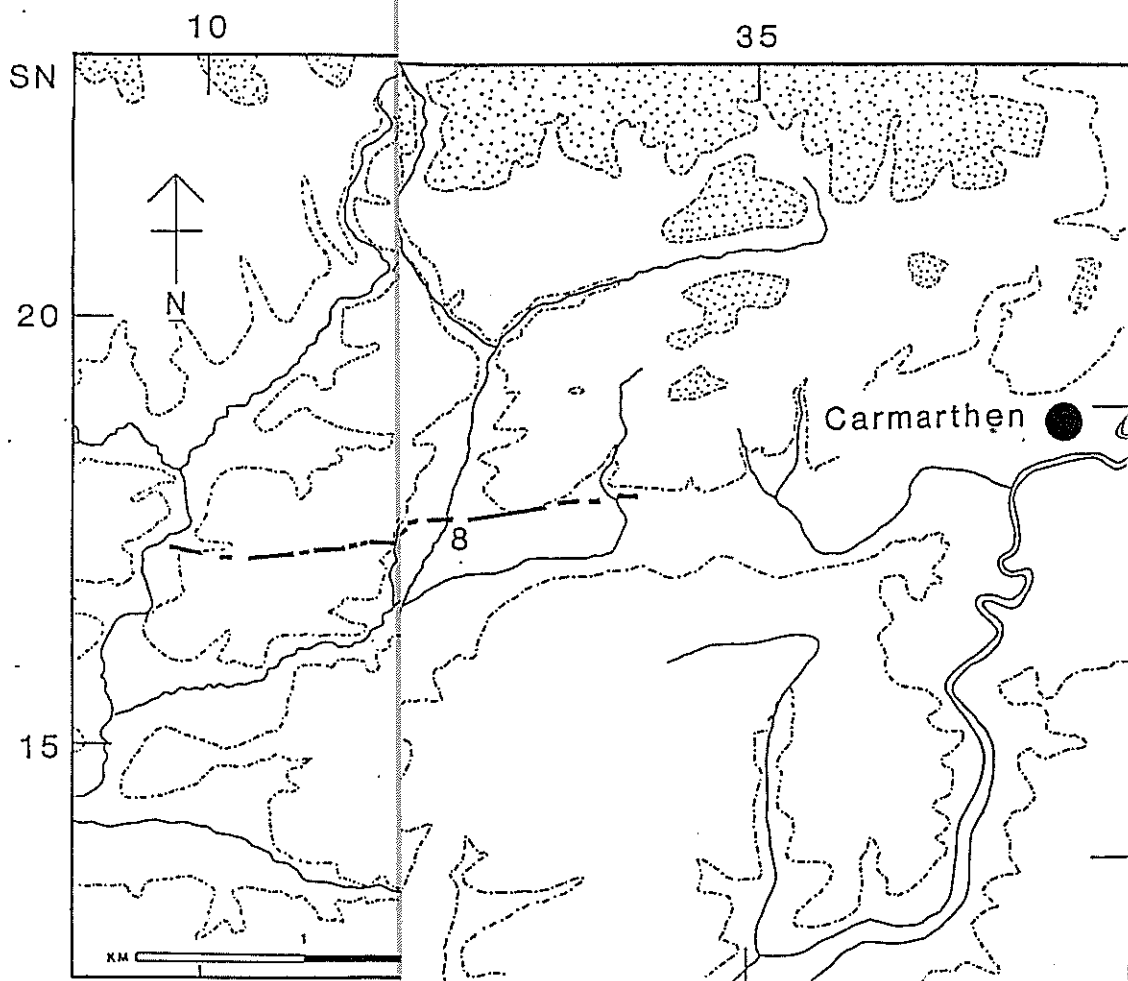


Fig.1 The known cou  
earthworks and  
1.BRYN FARM 2  
4.PWLL-Y-HWYAL  
7.ZABULON 8.F  
Contours show

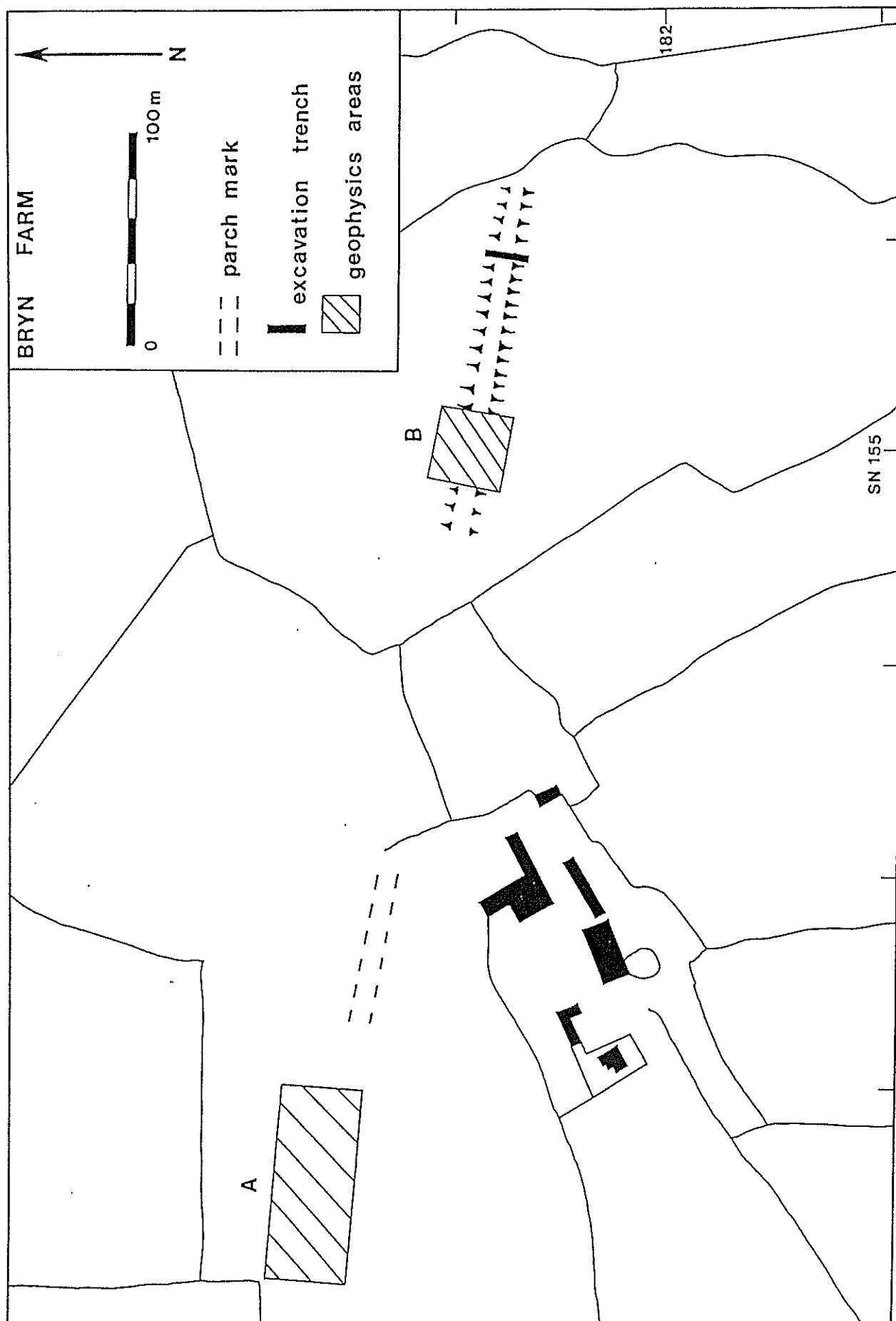


Fig.2 Areas of survey and excavation at Bryn Farm

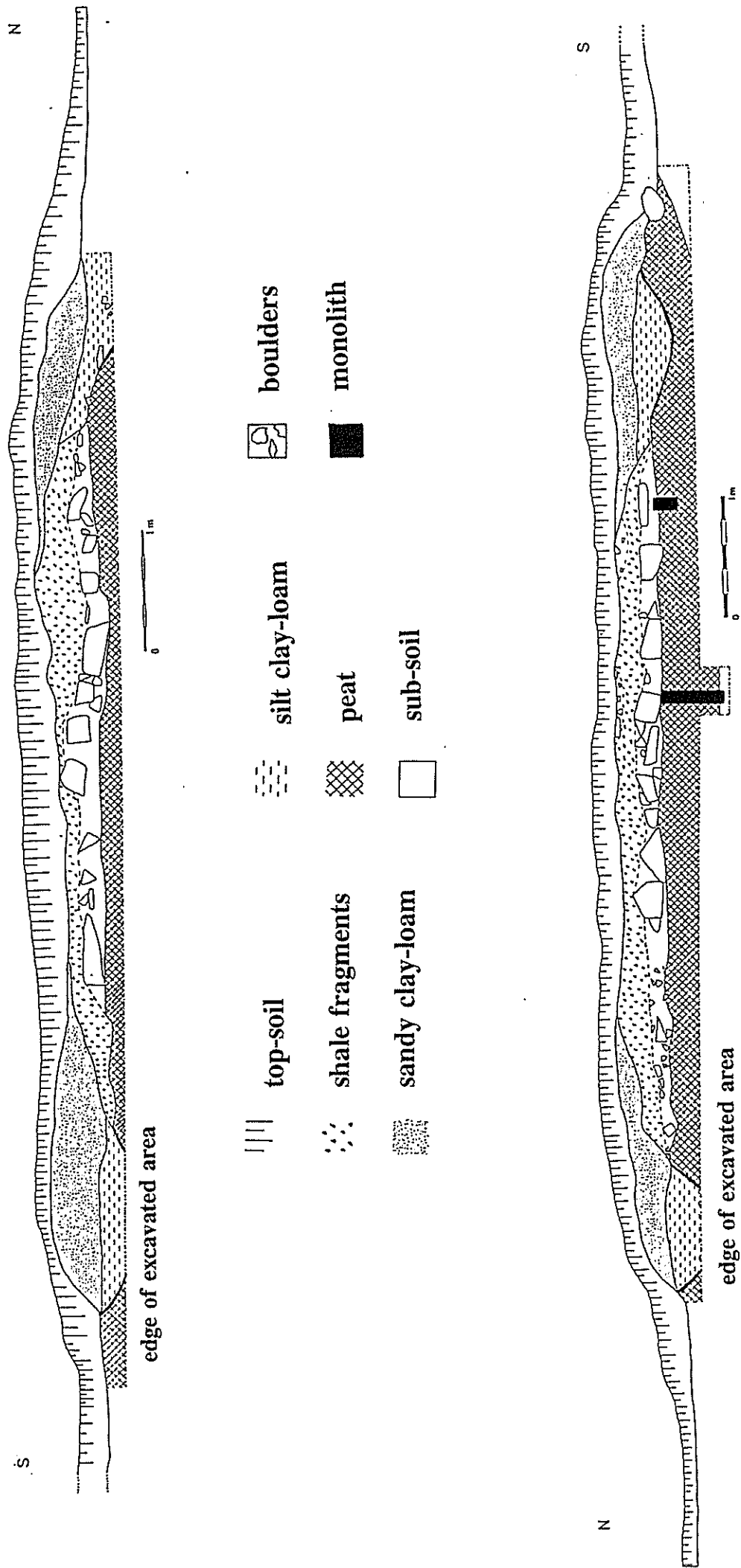


Fig.3 Bryn Farm excavation: section drawings



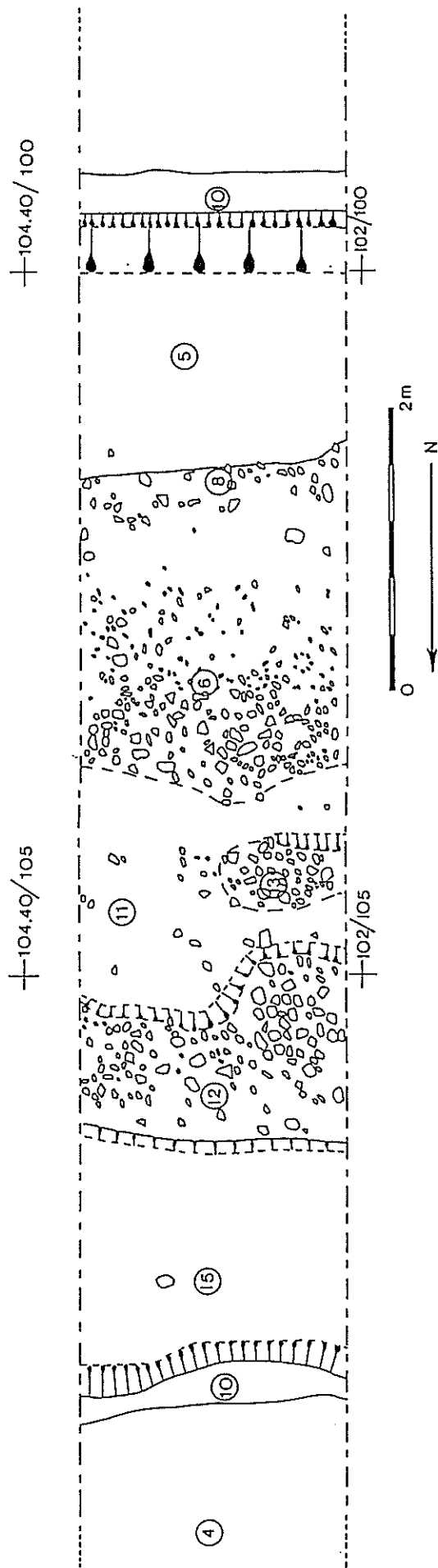


Fig.4 Plan of the excavation at Bryn Farm after the removal of the top-soil. Context numbers refer to contexts listed in appendix

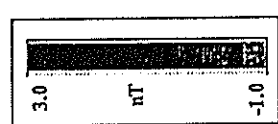
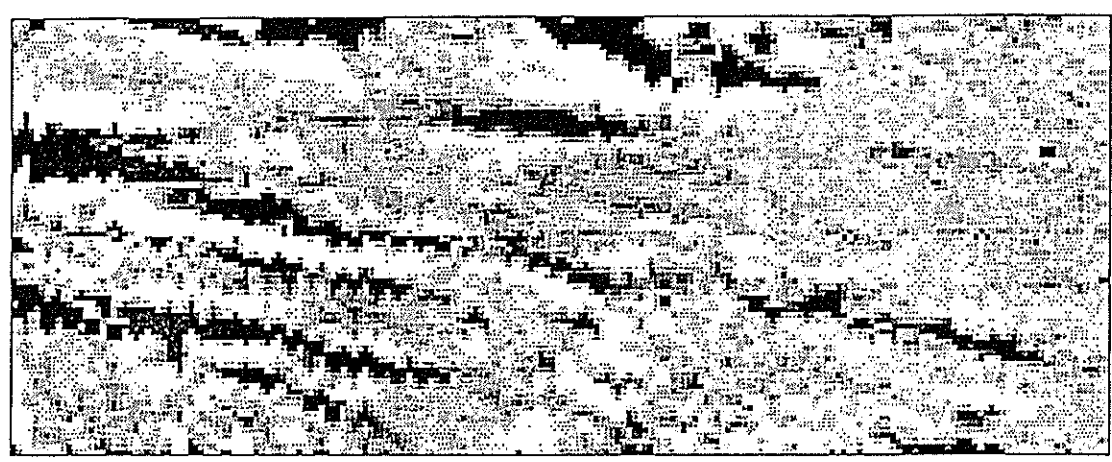
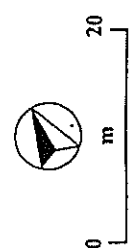
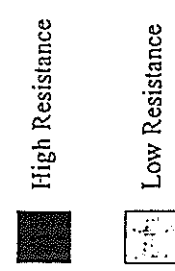
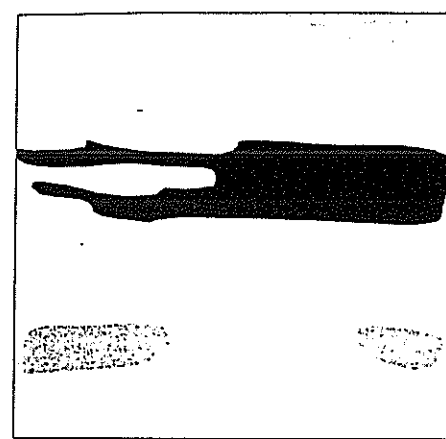
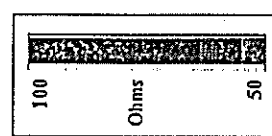
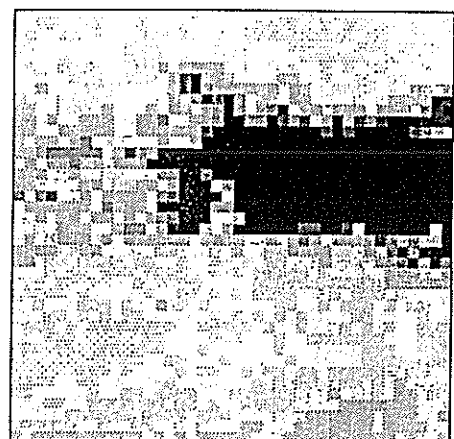


Fig.5 Resistance data from area B; Bryn Farm

Fig.6 Magnetic data from area A, Bryn Farm

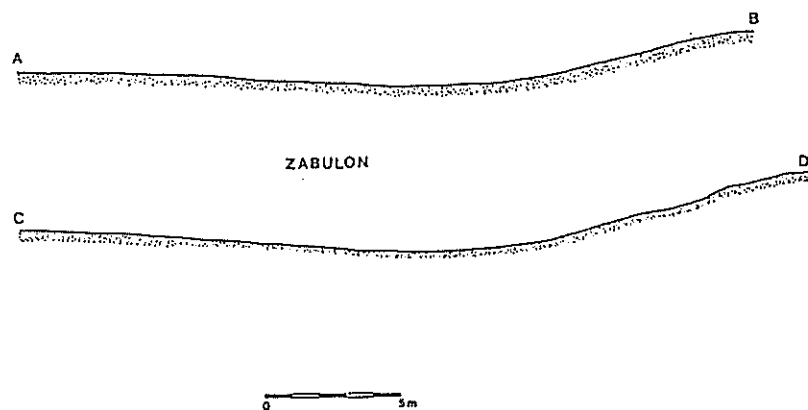
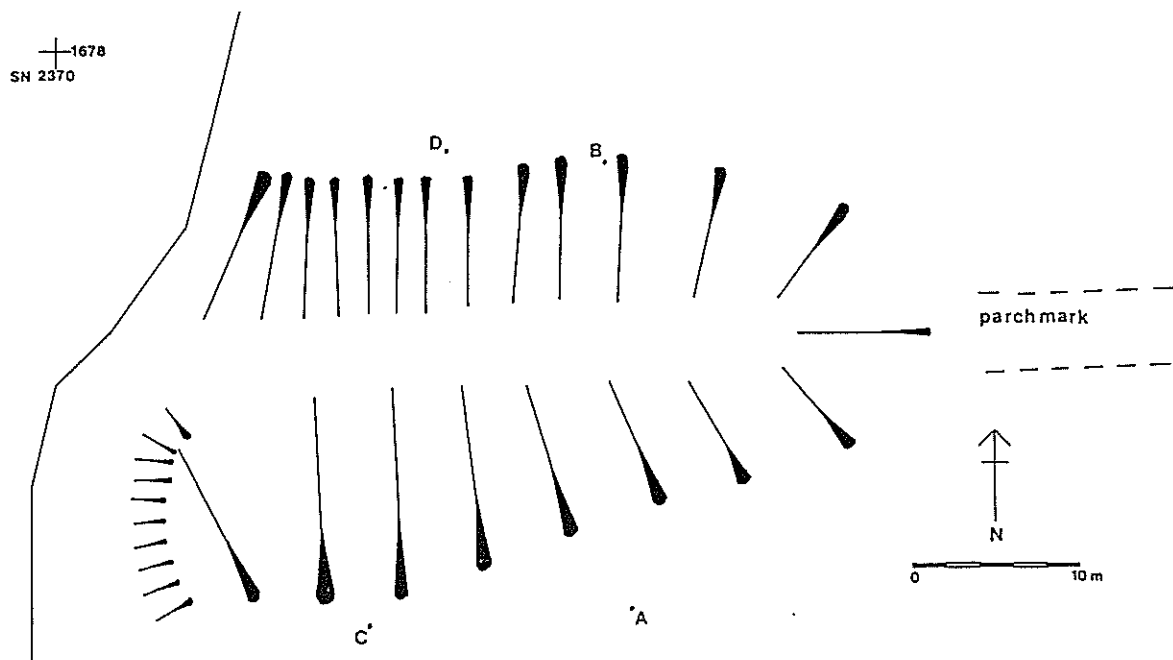


Fig.7 Plan and profiles of the cutting at Zabulon Farm

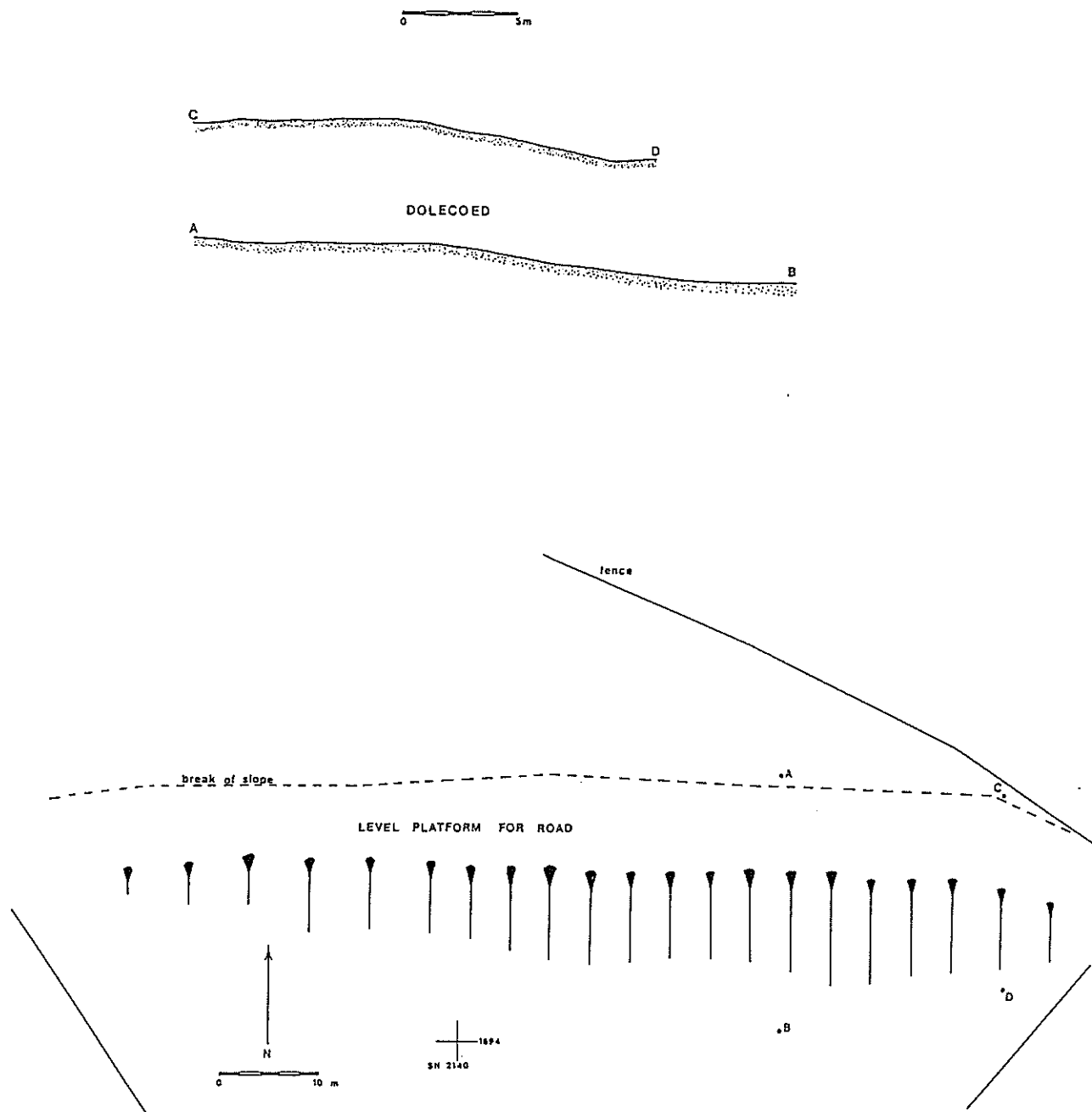


Fig.8 Plan and profiles of the terrace at Dolecoed