ARCHAEOLEG CAMBRIA ARCHAEOLOGY FIELD OPERATIONS

PROPOSED GRADE SEPARATED JUNCTION at TRAVELLER'S REST CARMARTHENSHIRE

GEOLOGICAL TEST PITTING ARCHAEOLOGICAL OBSERVATION

Project Record No. 34423

Report prepared by

N A Page

for

KENNEDY & DONKIN LIMITED



ARCHAEOLOGICAL MONITORING TRAVELLER'S REST, CARMARTHEN

CONTENTS	PAGE
Summary	2
Acknowledgements	2
1. Introduction	3
2. The site	4
3. Summary of watching brief results	5
4. Recommendations	8
Appendix One: Catalogue of watching brief archive	9
Bibliography	10
Figure One: Location plan	
Figure Two	

SUMMARY

As part of the environmental assessment of the potential impact of the proposed grade separated junction on the A40 at Travellers Rest, Carmarthenshire Kennedy & Donkin Limited commissioned Cambria Archaeology to carry out an archaeological assessment of the site (Page 1997). This revealed that an area known since the medieval period as Llanllwch Pool was to be affected and a recommendation was made to observe the geological test pitting to assess the palaeoenvironmental potential of any deposits exposed.

Four test pits were observed; two contained thick peat deposits overlying silty alluvial clays. Visual inspection of the peat showed that preservation of plant material was excellent. The deposits present on the site contain a valuable record of past use and changes to the landscape. A programme of sampling should be implemented prior to road construction to retrieve and analyse that record. It should be possible to coordinate the sampling with the works recommended in the earlier assessment to maximise resources and minimise disruption.

ACKNOWLEDGEMENTS

The project was carried out by N A Page, Project Manager, Archaeoleg Cambria Archaeology Field Operations. Archaeoleg Cambria Archaeology are grateful to Mr. Darren Gill of Kennedy & Donkin Limited for supplying the test pit data.

1. INTRODUCTION

1.1 PROJECT COMMISSION

1.1.1 Following a Stage II Archaeological Assessment of proposed site of the A40 Grade Separated Junction at Traveller's Rest, Carmarthen, a recommendation was made that the geological test pits in the area of Llanllwch Pool be archaeologically monitored. That recommendation was accepted and Kennedy & Donkin Limited commissioned Archaeolog Cambria Archaeology to carry out the project.

1.2 SCOPE OF PROJECT

1.2.1 The project was designed to monitor the excavation of a number of geological test pits in the area of Llanllwch Pool. It was not intended to carry out any sampling at this stage, but to provide a visual inspection of the material from the pits to assess the likely potential of the area for palaeoenvironmental sampling and analysis. A report containing recommendations for further work was prepared on the basis of the field observations.

1.3 REPORT OUTLINE

1.3.1 This report describes the physical environment of the site (Section 2) before summarising the observation results (Section 3) and recommendations (Section 4) arising from the results of Sections 2 and 3.

1.4 ABBREVIATIONS

- 1.4.1 Sites recorded on the county Sites and Monuments Record (SMR) will be identified by their Primary Record Number (PRN) and located by their National Grid Reference (NGR). Any new sites discovered during the course of the project will be allocated a new PRN and identified by their NGR.
- 1.4.2 Archaeological features and contexts will be referred to using the continuous three-figure numbering system (e.g.001) employed by Archaeoleg Cambria Archaeology Field Section.

2. THE SITE

2.1 LOCATION

2.1.1 The assessment area, as defined on drawing no. HHICF007/019 (supplied by Kennedy & Donkin Limited), was the field on the east of the road to Llanllwch. It concentrated on the area known as Llanllwch Pool. This area is frequently flooded and it was suspected that it contained potentially significant palaeoenvironmental deposits (Page 1997, 8). The field lies generally at c.25m OD, rising at its southeast corner to closer to 27m OD.

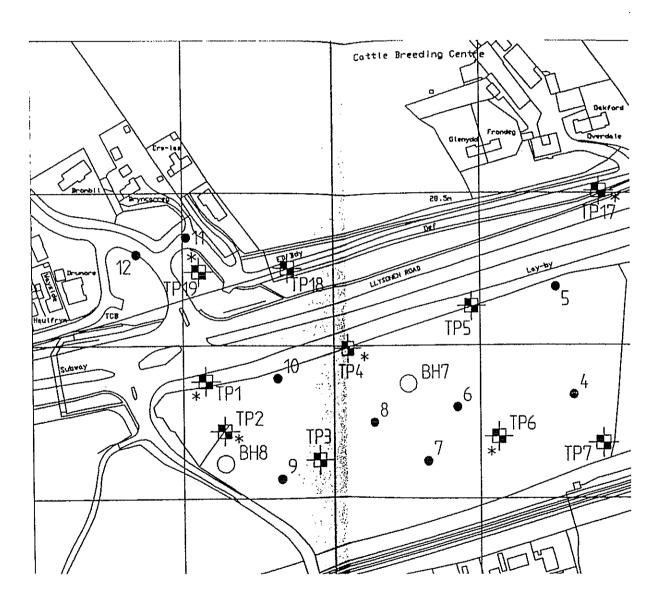


Figure One: Location plan, showing locations of Test Pits

3. SUMMARY OF OBSERVATION RESULTS

3.1 METHODOLOGY

- 3.1.1 The fieldwork comprised a site visit to visually inspect a number of trial pits during geotechnical survey works on the route of the proposed new road layout. A visual inspection was made of the spoil from the pits and notes kept on the nature of the deposits encountered.
- 3.1.2 Descriptions of the deposits are taken from the test pit logs supplied by Kennedy & Donkin Limited.

3.2 TEST PIT DATA

Test Pit 3

Depth (m)	Description	Level OD (m)
0.00	Loose black clayey silt with rootlets, topsoil	24.99
0.40		24.59
0.40	Very soft to soft dark brown fibrous to amorphous	24.59
1.80	plastic peat	23.19
1.80	Very soft to soft pale grey very silty clay with	23.19
3.10	occasional rounded gravel	21.89
3.10	Loose grey fine sand and silt	21.89
4.00		20.99

Test Pit 4

Depth (m)	Description	Level OD (m)
0.00	Made ground, soft to firm brown very silty clay with	25.35
0.75	occasional to some fine to coarse subangular to	24.60
	subrounded gravel	
0.74	Made ground, loose to medium dense brown silty	24.60
1.80	clayey sand and fine to coarse subangular to rounded	23.55
	gravel	

Test Pit 5

Depth (m)	Description	Level OD (m)
0.00	Loose black clayey silt with rootlets, topsoil	24.56
0.15		24.41
0.15	Soft to firm brown mottled orange brown slightly silty	24.41
0.70	clay	23.88
0.70	Very soft to soft dark brown to black plastic	23.88
1.80	amorphous peat	22.76
1.80	Soft pale grey sandy silty clay	22.76
2.70		21.86

Test Pit 6

Depth (m)	Description	Level OD (m)
0.00	Loose black clayey silt with rootlets, topsoil	24.21
0.35		23.86
0.35	Very soft grey sandy silty clay	23.86
140		22.81
1.40	Very soft pale grey sandy silty clay	22.81
3.30		20.91

Test Pit 7

Depth (m)	Description	Level OD (m)
0.00	Loose black clayey silt with rootlets, topsoil	26.95
0.20		26.75
0.20	Firm brown silty clay with some fine to coarse	26.75
0.40	subangular to subrounded gravel and occasional	2655
	cobbles	
0.40	Loose to medium dense brown slightly clayey sandy	26.55
2.70	fine to coarse subrounded to angular gravel with some	24.25
	cobbles and isolated boulders	
2.70	Medium dense black stained fine to coarse sand and	24.25
3.40	gravel with occasional to some cobbles	23.55

3.3 DISCUSSION

- 3.3.1 The depth of the peat and the presence of alluvial clays in some of the pits is of significant archaeological interest. A visual inspection of the peat showed that the preservation of plant remains was excellent with whole identifiable leaves and hazel nuts surviving in the upper levels at least.
- 3.3.2 The plant and insect remains and the pollen contained in the peat and possibly the underlying clays, are an important record of the development, past use and changes to the landscape. This area is of particular interest as it lies only a few kilometres from the historic town of Carmarthen and within a natural corridor that has been the primary route west from at least the Roman period.
- 3.3.3 Investigations carried out in the 1960s of the pollen contained in Llanllwch Bog, some 0.5km to the southwest, has given some idea of how the landscape developed and how the growth of Carmarthen affected the region (Thomas 1965). Several distinct episodes of woodland clearance were identified and each was followed by an increase in grassland plants. This suggests that the woodland was periodically cleared to provide grazing land and is indicative of a largely pastoral economy. Evidence from elsewhere in southwest

- Carmarthenshire supports the idea that a pastoral economy was in operation west of Carmarthen, at least until the medieval period.
- 3.3.4 It has been suggested that this cycle of woodland clearance and grazing, probably started in the Bronze Age, continued until the Norman settlement of Carmarthen, when there was a marked increase in the cultivation of cereals (Thomas *ibid.*). However, with no reliable dating evidence for much of the Llanllwch Bog sequence this interpretation must remain a supposition.
- 3.3.5 Peat deposits also have the potential to contain exciting archaeological features as well as palaeoenvironmental evidence. Discoveries in peat from around Britain range from waterlogged wooden artefacts, buildings and boats, through textiles and leather objects to human bodies. It is that range of possibilities that makes peat deposits so archaeologically important.
- 3.3.6 Whilst the potential for preservation in peat deposits is very exciting it must be noted that they are also very fragile, with preservation dependent upon the stability of conditions within the peat. Therefore, the construction of a road across the peat could have a range of effects. Besides the obvious threat of complete removal, other operations such as laying new drains, piling, even the movement of heavy plant across the site all have significant implications.
- 3.3.7 There is little doubt that the peat deposits at Llanllwch Pool could add greatly to our knowledge of the landscape and its development and they should be sampled and analysed.

4. RECOMMENDATIONS

4.1 Introduction

4.1.1 The peat deposits have high archaeological potential and should be investigated before the peat is removed, or damaged. This could be achieved via a two-phased programme of works, comprising pre-construction sampling and a watching brief during construction.

4.2 PRE-CONSTRUCTION SAMPLING

- 4.2.1 Samples should be taken from at least two places, with laboratory assessment and analysis proceeding immediately after the fieldwork.
- 4.2.2 A schedule for the sampling including the final positions and number of samples and a timetable will be agreed prior to the works.

4.3 THE WATCHING BRIEF

4.3.1 As well as the palaeoenvironmental potential of the peat deposits, there is a real possibility of archaeological features being present across the site. Therefore it is recommended that a watching brief be carried out on all ground works in this area.

4.4 PROPOSED TIMETABLE

- 4.4.1 The works outlined above could be combined with those recommended in the earlier Stage 2 Assessment (Page 1997, 11 section 5) to minimise delays to the development.
- 4.4.2 The sampling could be combined with the evaluation of the Kennel Cottages' site and the watching brief should form part of the overall watching brief recommended for the whole scheme.

APPENDIX ONE: CATALOGUE OF WATCHING BRIEF ARCHIVE

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

- A. Copy of final report.
- B. Site records, including pages from site notebook.
- G. List of references, including primary and secondary sources.
- I. Archive report and draft copies of final report.
- J. Publication drawings.
- M. Miscellaneous correspondence.

There is no material in categories C, D, E, F, H, K, L and N.

The archive is currently held by Archaeoleg Cambria Archaeology Field Operations, Llandeilo, Dyfed as project number 34423.

BIBLIOGRAPHY

- Page N A 1997 Proposed Grade Separated junction at Traveller's Rest, Carmarthenshire: Stage 2 Archaeological Assessment. ACA report. Project No. 34423. Llandeilo.
- Thomas K W 1965 The Stratigraphy and Pollen analysis of a Raised Peat Bog at Llanllwch, near Carmarthen. New Phytologist 64, p101-117.