

PROPOSED RAGWORM FARM AT PENDINE, CARMARTHENSHIRE

ARCHAEOLOGICAL DESK-BASED ASSESSMENT

Paratowyd gan Archaeoleg Cambria
Ar gyfer Arup
Prepared by Cambria Archaeology
For Arup



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PROPOSED RAGWORM FARM AT PENDINE, CARMARTHENSHIRE

Gan / By

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**PROPOSED RAGWORM FARM
AT
PENDINE, CARMARTHENSHIRE**

SUMMARY

Proposals to construct a ragworm farm on part of Laugharne Marsh at NGR SN28400830 required an Environmental Impact Assessment. The proposed development site lies within an area listed on the 'Register of Landscapes of Outstanding Historic Interest in Wales'. Laugharne Marsh was reclaimed through a programme of embankment and drainage, initiated by Sir Sackville Crow in the mid-17th century. During his reclamation works Crow constructed at least two embankments, one of which still remains just beyond the western boundary of the proposed development site.

Prior to the construction of Crow's embankment the proposed development area consisted of marsh and salt marsh that was subjected to frequent tidal inundation, especially during the winter months. It was finally drained, and the present layout of fields and drains had been established by the 19th century. West House farm, which is the only farm within the proposed development site boundaries, appears to have been built sometime during the early 19th century.

The extent of buried archaeological remains within the site is at present unknown, but all coastal wetland areas have the capacity to contain extensive and important archaeological deposits.

Most of the proposed works are above ground and should, therefore, have minimal impact on the integrity of the historic landscape or on the individual archaeological sites and features it contains. However, the full implications of the scheme will not be known until the final design plans, including detailed construction methods, are produced.

1. INTRODUCTION

1.1 PROJECT PROPOSALS AND COMMISSION

Proposals to construct a ragworm farm on part of Laugharne Marsh (Fig.1) at Pendine, Carmarthenshire, required an Environmental Impact Assessment (EIA) and this report forms part of that assessment. The report was commissioned by ARUP, Cardiff.

1.2 SCOPE OF THE ARCHAEOLOGICAL ASSESSMENT

The assessment reviewed the current state of knowledge of the historic development and past land-use of the study area and its environs in order to provide base-line data against which the potential impacts of the proposed scheme can be properly assessed. Much of what follows in this report is based upon the findings expressed in the previous archaeological assessment for the proposed ragworm farm at the Little Burrows site in 2002 (Page 2002).

1.3 REPORT OUTLINE

This report describes the physical environment of the study area (Section 2) before summarising the archaeological resource (Section 3) and the likely impact of the proposed scheme on that resource (Section 4). Recommendations based on the results of Sections 3 and 4 are given in Section 5. Detailed supporting data are presented in a series of appendices.

1.4 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). New sites have been assigned a PRN and located by their NGR. References to primary cartographic and documentary evidence and published sources are given in brackets. Full details of these reference sources are contained in Appendix Two.

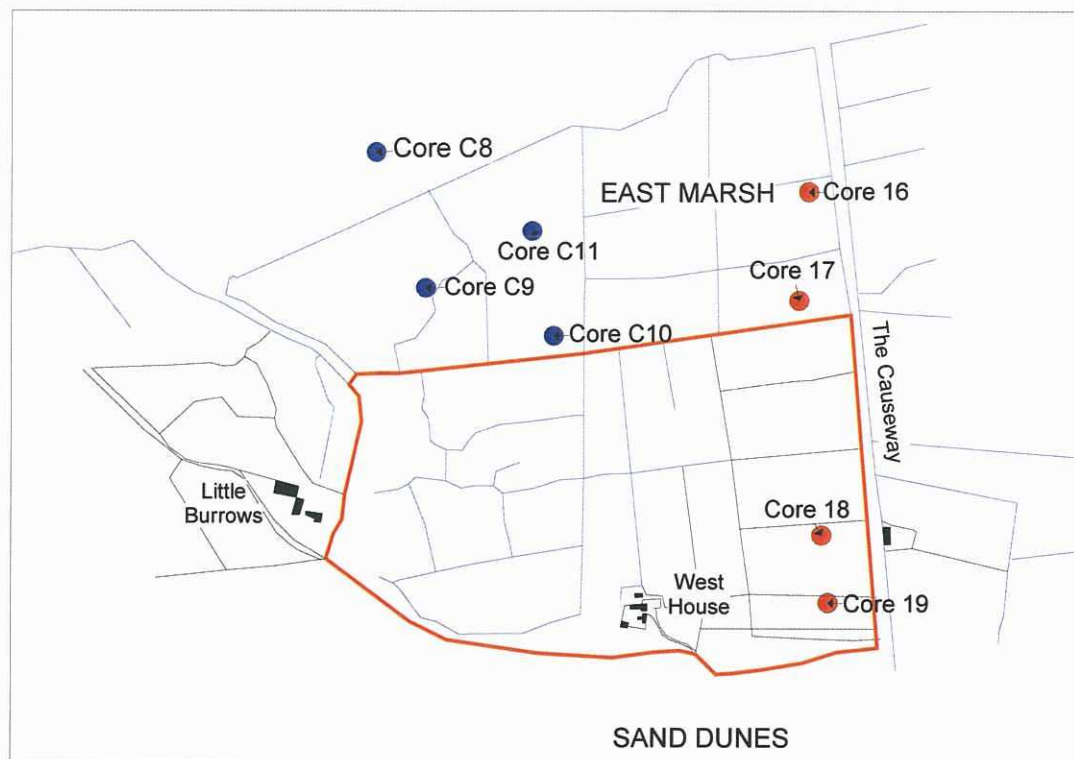


Figure 1: Location plan: Proposed development is within red boundary

2. THE STUDY AREA

2.1 LOCATION

The proposed development area is located on an area of reclaimed marshland at NGR SN28400830 (Fig. 1). It covers a roughly rectangular 50 hectare (c.123.5 acres) parcel of pasture land on the East Marsh, which is a component part of the more extensive Laugharne Marsh. The land is divided by a series of straight drainage channels into a number of pasture fields. The area is bounded on its north side by similar well drained pasture and fronts onto sand dunes and marsh throughout the length of its southern boundary. Its east side follows the straight line of a modern road, The Causeway, giving access from the A4066 Pendine to Laugharne trunk road to West House Farm and Bannister on the southern edge of the reclaimed marshland. The Laugharne Marsh forms part of the Taf and Tywi Estuary, one of 36 landscapes listed in the *Register of Landscapes of Outstanding Historic Interest in Wales* (Cadw 1998, 40-42).

2.2 LANDSCAPE HISTORY

Laugharne Marsh has developed as a consequence of both natural and human actions. The natural development of the marsh has been discussed in depth elsewhere (James 1991). New research (Walley 1996) has increased the knowledge, *via* the use of geophysical and borehole data, of the early development of the area during the Holocene period; although the results of the borehole data revealed only naturally derived deposits with no evidence of anthropogenic material (Fig.1 shows location of core samples). The following discussion will focus on the later history and the processes that led to the creation of the landscape of the proposed development site.

Most of the landscape of Laugharne Marsh is the result of post-medieval enclosure and drainage of the coastal marshes for agricultural use. During the medieval period, and earlier, the area was saltmarsh with patches of rough pasture and by at least the later 16th century it was used for large-scale sheep grazing (Murphy and Ludlow 2000). Embankment and drainage began in 1659-1660 when Sir Sackville Crow initiated a scheme to reclaim the marsh, which included the construction of the embankment (PRN 44700) that lies to the northwest of the proposed development site.

At that time the proposed development area lay outside the sea wall and was a tidal lake fed by Witchett Brook. It was during the later 18th century or early 19th century that drainage of the site began with the present layout of fields and boundaries becoming established by the mid 19th century. On the parish tithe maps for Llansadurnen (1841) (Fig.3) and Laugharne Township (1845) (Fig.2) the field names reflect the nature of the area, with all the fields within the proposed development site – that is the area defined by, but outside, the 17th century sea wall - having such names as 'saltmarsh piece', 'part of marsh' or simply 'saltmarsh'. The tithe maps show that the majority of the fields in the proposed development area were cultivated as arable with a few left as meadow or under pasture. A late 18th century or early 19th century sale catalogue for Brook Farm, which included land in close proximity to the proposed development site, has most of the site marked simply as saltmarsh.

The area as a whole remained largely unchanged until the establishment of the Ministry of Defence research and testing facility during the 20th century.

3. SUMMARY OF THE ARCHAEOLOGICAL RESOURCE

3.1 DRAINAGE

The embankment (PRN 44700) that lies to the northwest of the proposed development site dates from Sir Sackville Crow's drainage of Laugharne Marsh in 1659-1660. The bank was built according to Crow's instructions '*six foot high in earth and eighteen foot deep in the sole*' (NLW Llwyngwair 14264) and ran for a length of 1.5km. Only a short length of the bank remains, some way to the northwest of the proposed development site, while the rest has been incorporated along the line of modern access roads and little or no trace remains.

Although the area of the proposed development was initially drained by Sir Sackville Crow in the mid 17th century, the present drainage arrangements actually evolved during the 19th century. Some of the drains are shown on the tithe map, but it was not until the later 19th century that the present layout of fields and drains became established. The drains, which effectively act as field boundaries, are mostly straight channels or ditches some of which are accompanied by low parallel hedge-like vegetation. Aerial photographs clearly show how the artificial drainage system (PRN 44702) was imposed on the underlying natural, dendritic pattern of former saltmarsh creeks.

3.2 AGRICULTURE AND CULTIVATION

Prior to the construction of the first sea defences in 1659-1660 the marsh was used as pasture. After the construction of the sea defences the whole area of the proposed development, as indeed for the whole of East and West Marsh, was cultivated using ridge and furrow (Murphy and Ludlow 2000). This very extensive field system (PRN 39280) is characterised by the division of each field by drainage ditches some of which have low scrubby hedges running along side them.

The only farm within the proposed development site is West House (PRN 53656) situated on the south side of the site. West House is an early 19th century, or earlier, farmhouse established on the southern edge of the drained marsh at NGR SN 2845 0805. On the Llansadurnen tithe map the site is referred to as West Farm, a name that continues to be used on the first edition Ordnance Survey 6 inch map of 1891 but had been changed to West House by 1908 when the 2nd edition was published.

A footpath that runs north to south from Coygan Quarry to West Farm, complete with a footbridge and adjoining path leading due east to the causeway at Nine Acres, is marked on the 6 inch Ordnance Survey map of 1889 (Fig.4) but is no longer shown on the 2nd edition of 1908 (Fig.5) or later editions. However, the 2nd edition map does show a new footbridge located at NGR SN 28440830.

3.3 LATER LAND USE HISTORY

The 20th century saw radical and significant changes to the character of the area, with the establishment of the M.O.D. research and testing facility, which occupies large areas of Laugharne Marsh and the Burrows to the southwest, west and northeast of the proposed development site. The use of marginal areas on the coastal fringe for military activity is not unusual in this region, with the Pembrey Air Weapons Range approximately 1km away on the opposite side of Carmarthen Bay. The Pendine establishment now fringes the proposed development site on three sides.

South of the burrows, Pendine Sands was the site of various attempts to break the national and international land speed records. The most famous attempts were undertaken by John Parry-Thomas in his car 'Babs' during 1926 and 1927. In 1926 Parry-Thomas broke the world land speed record on two occasions but in the following year whilst practising in order to regain the title he was tragically killed. Following this, 'Babs' remained buried in the dunes until 1969 when it was re-excavated and painstakingly restored over the next fifteen years or so. The restored car is now housed in the Museum of Speed in Pendine.

4. POTENTIAL IMPACTS OF THE PROPOSED SCHEME ON THE ARCHAEOLOGICAL RESOURCE

4.1 GENERAL IMPACTS OF DEVELOPMENT ON WETLAND ENVIRONMENTS

Developments in wetland environments can have a number of fundamental impacts on the archaeological resource. Foremost amongst these is the impact upon palaeoenvironmental evidence invariably present at such sites. This often fragile evidence includes preserved organic materials not usually found preserved on dry land sites such as, wood, leather, textiles, and pollen and plant remains. Any groundwork operations, whether on dry or wetland areas, have the potential to uncover new archaeological sites, but whereas dry land sites can be reasonably easily dealt with - even to the extent of leaving them for future investigation - wetland sites and their fragile evidence begin to deteriorate once the surrounding soil conditions have been altered.

As well as suffering the immediate impacts of direct development, wetland areas can also be affected by developments undertaken some distance away. For example, any changes to drainage arrangements may lead to a lowering of the water table and the drying out of waterlogged deposits over quite a wide area. This can be a consequence of so-called 'improved' drainage that is frequently part of modern development, where water is channelled straight into streams or main drains bypassing many intermediate drains and channels. The upshot of this is that, even though the same volume of water is being drained and channelled, it is more confined and is removed from the area more quickly, with the result that less water soaks into the ground, again leading to a drying out of the surrounding deposits and the loss of potentially valuable archaeological information (Coles 1995, 19).

4.2 THE PROPOSED WORKS

The main element of the proposed works for the ragworm farm is the construction of ponds covering the whole of the proposed site. The ponds will be constructed above ground using pond lining material fixed to post and timber frames. Each pond will be aerated by pump, and they will have up to c.18 cms of substrate in the base. The substrate to be used in the base of the ponds, which could be as much as 40,000 - 80,000 cubic metres, may be extracted from shallow excavations in or around the development site.

The final design plans, including the proposed construction and extraction methodologies, need to be seen before the archaeological implications can be fully assessed. However, it is likely that the construction of the ponds will require topsoil stripping to provide a level surface, and it is also possible that some sections of the existing drainage system may require infilling. If the provision of the quantity of substrate required for the pond bases is to be taken from within the development area itself, this would have a significant impact on the site.

Access tracks across the site are to be constructed from gravel and will be designed to take 'quad-bike' traffic only. It is not clear at present whether this will require the removal of the topsoil, or whether the gravel can be laid on the existing ground surface. In any event, new crossings over the drains, or new openings between the fields may be required and these would have a significant impact on the site.

4.3 THE POTENTIAL IMPACT OF THE PROPOSED WORKS USING SIGNIFICANCE CRITERIA

The following table outlines the potential impact of the proposed works against set criteria in order to assign each archaeological site to a category, which can be used to determine the level of response necessary to mitigate the effects of the proposals.

The significance criteria¹ are:

Severe – Only adverse effects are assigned this level of importance as they represent key factors in the decision-making process. These effects are generally, but not exclusively, associated with sites and features of national importance and resources/features which are unique and which, if lost, cannot be replaced or relocated.

Major – These effects are likely to be important considerations at a regional or district scale but, if adverse, are potential concerns to the project, depending upon the relative importance attached to the issue during the decision making process. Mitigation measures and detailed design work are unlikely to remove all of the effects upon the affected communities or interests.

Moderate – These effects, if adverse, while important at a local scale, are not likely to be key decision making issues. Nevertheless, the cumulative effect of such issues may lead to an increase in the overall effects on a particular area or resource. They represent issues where effects will be experienced but mitigation measures and detailed design work may ameliorate/enhance some of the consequences upon affected communities or interests. Some residual effects will still arise.

Minor – These effects may be raised as local issues but are unlikely to be of importance in the decision making process. Nevertheless, they are of relevance in the detailed design of the project and consideration of mitigation or compensation measures.

Negligible – No effects, or those which are beneath levels of perception, within normal bounds of variation or within the margin of forecasting error.

PRN	NGR	Impact significance
53656 West House	SN28450805	Minor/Negligible
39280 Ridge and Furrow	Centred on – SN28440830	Moderate/Minor
44702 Drainage System	Centred on – SN28440830	Moderate/Minor

Table 1: Impact significance of the proposed development.²

4.4 THE POTENTIAL VISUAL IMPACT OF THE PROPOSED WORKS

The proposed development site lies within an area listed on the 'Register of Landscapes of Outstanding Historic Interest in Wales' and as a result it may be subject to a staged process for the assessment of the significance of the impact of development on historic landscape areas – ASIDHOL. The visual impact of the proposed development on the landscape, for example, may be a factor in deciding whether or not an ASIDHOL assessment needs to be carried out as part of the planning and development process.³

¹ These significance criteria definitions were supplied by Arup.

² The table was compiled without having the full design plans, and some sites may be re-categorised once the final design plans are available.

³ See 'Guide to Good Practice on Using the Register of Landscapes of Historic Interest in Wales in the Planning and Development Process' Cadw 2003

5. RECOMMENDATIONS

5.1 MANAGEMENT OF THE ARCHAEOLOGICAL RESOURCE IN WETLAND ENVIRONMENTS

Because of the complex nature of the wetland archaeological resource its management is often more difficult than for dry land sites. Therefore, it is important that archaeology is fully integrated into any development proposals at an early stage of the project. Without the final design plans and proposed construction details it is not possible to be unequivocal about the final archaeological response. Therefore, the following mitigation measures are suggestions only at this stage and they should be firmed-up once the final design plans are available.

5.2 GENERAL CONSIDERATIONS

Current access into the proposed development site appears good, and the existing entry points to the site should be maintained and incorporated into the final design plans.

Where possible, all boundaries and drains should be retained to preserve the existing field and drainage pattern which is characteristic of a reclaimed coastal wetland landscape.

5.3 PRE CONSTRUCTION RECORDING

Where identified structures or features are to be affected, pre-construction recording should be carried out, this particularly relates to the buildings at West House farm (PRN 53656).

If the buildings at West House are to be affected at any stage of the development, they should be recorded by photographic and descriptive survey, to at least Level 2 as defined in *Recording Historic Buildings: a Descriptive Specification* (1st edition issued by Royal Commission on the Historical Monuments of England 1990).

5.4 WATCHING BRIEF DURING CONSTRUCTION AND EXTRACTION WORKS

All large-scale earth-moving operations, in particular if it were to be proposed that the substrate for the bases of the ponds is to be extracted from within the development site, should be monitored for archaeological interests. In the event of archaeological features or deposits being encountered, time should be made available for an archaeologist to record them and to assess their vulnerability to the rest of the proposed works.

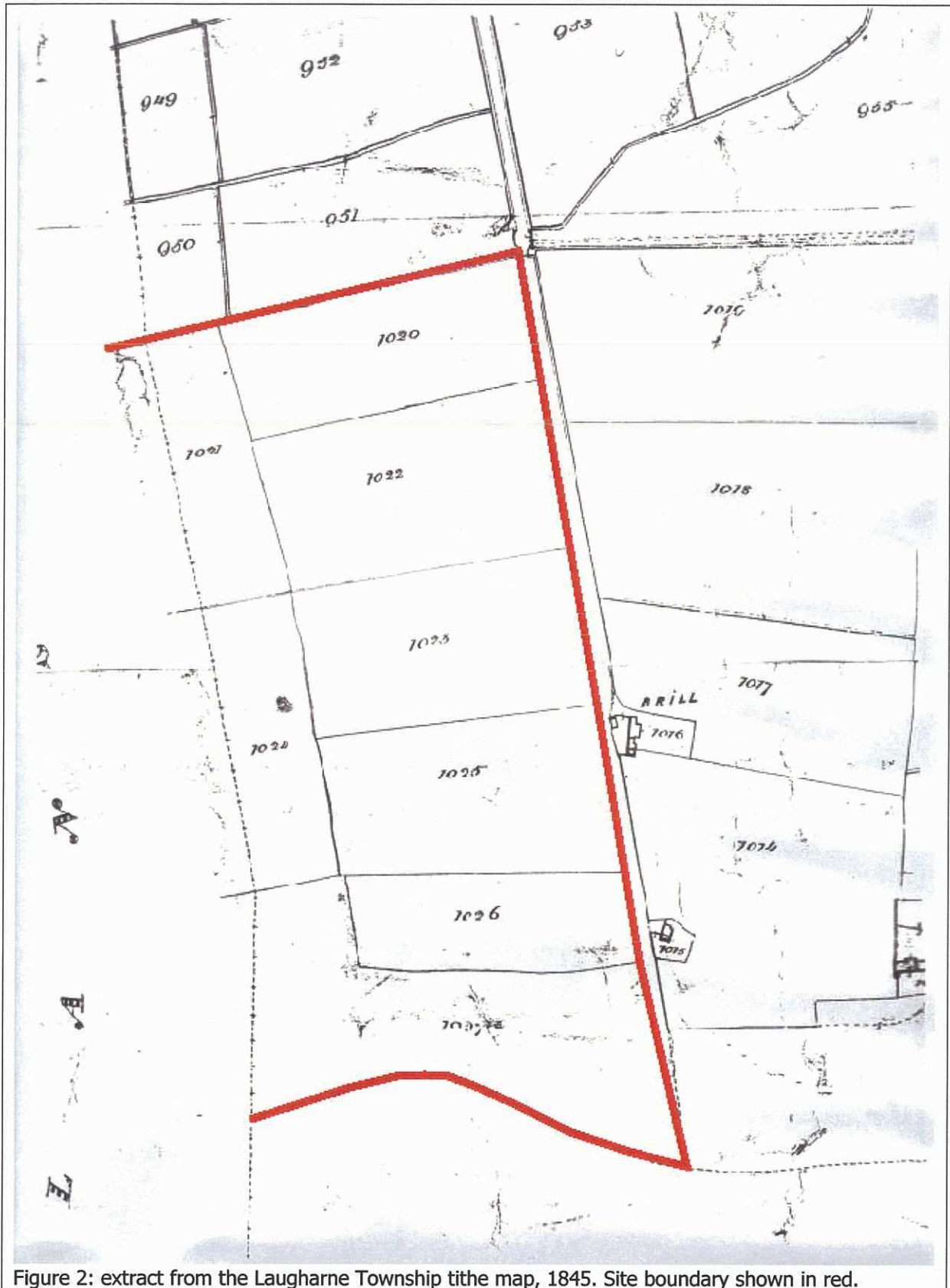


Figure 2: extract from the Laugharne Township tithe map, 1845. Site boundary shown in red.

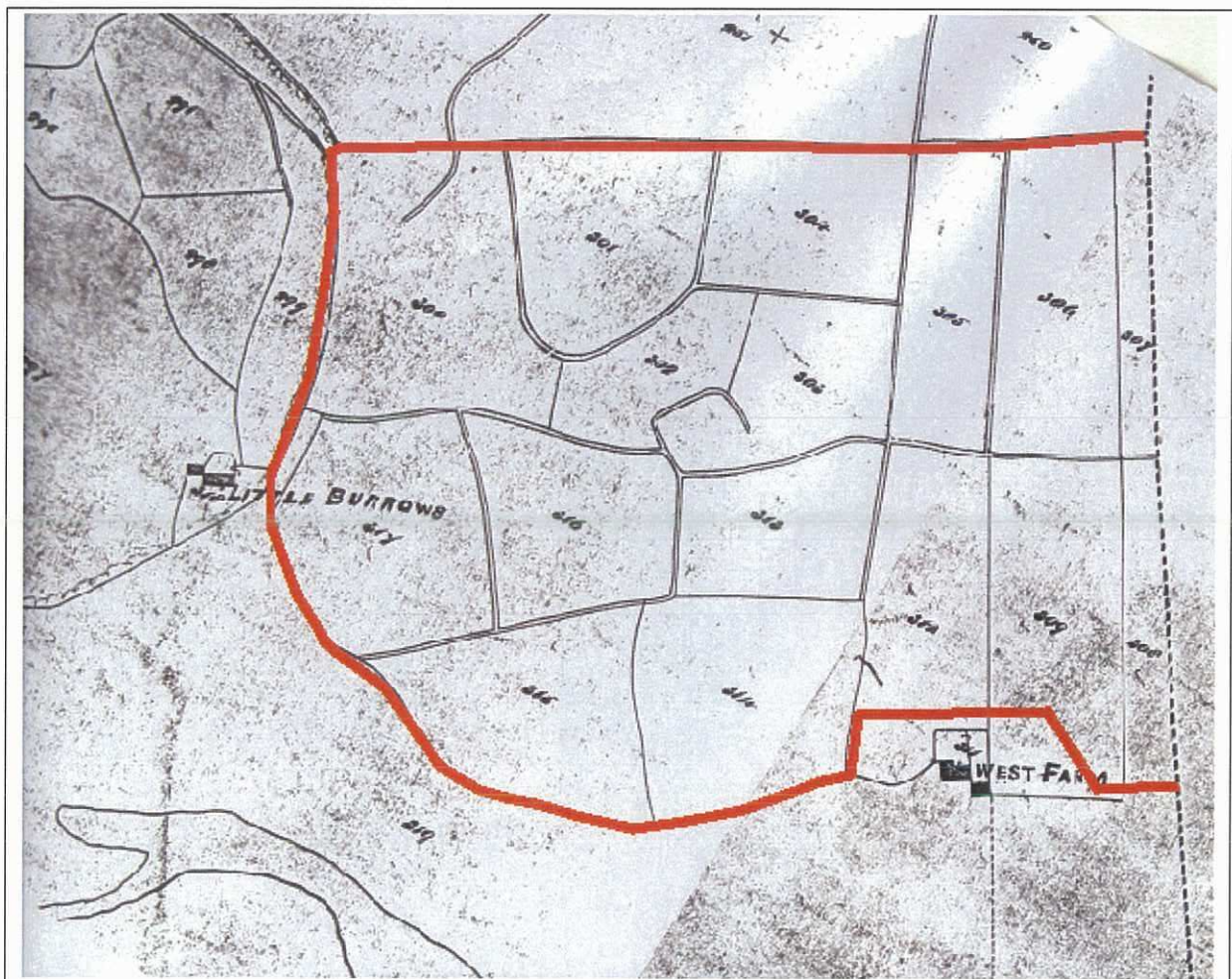


Figure 3: Extract from the Llansadurnen tithe map, 1841. Site boundary shown in red.

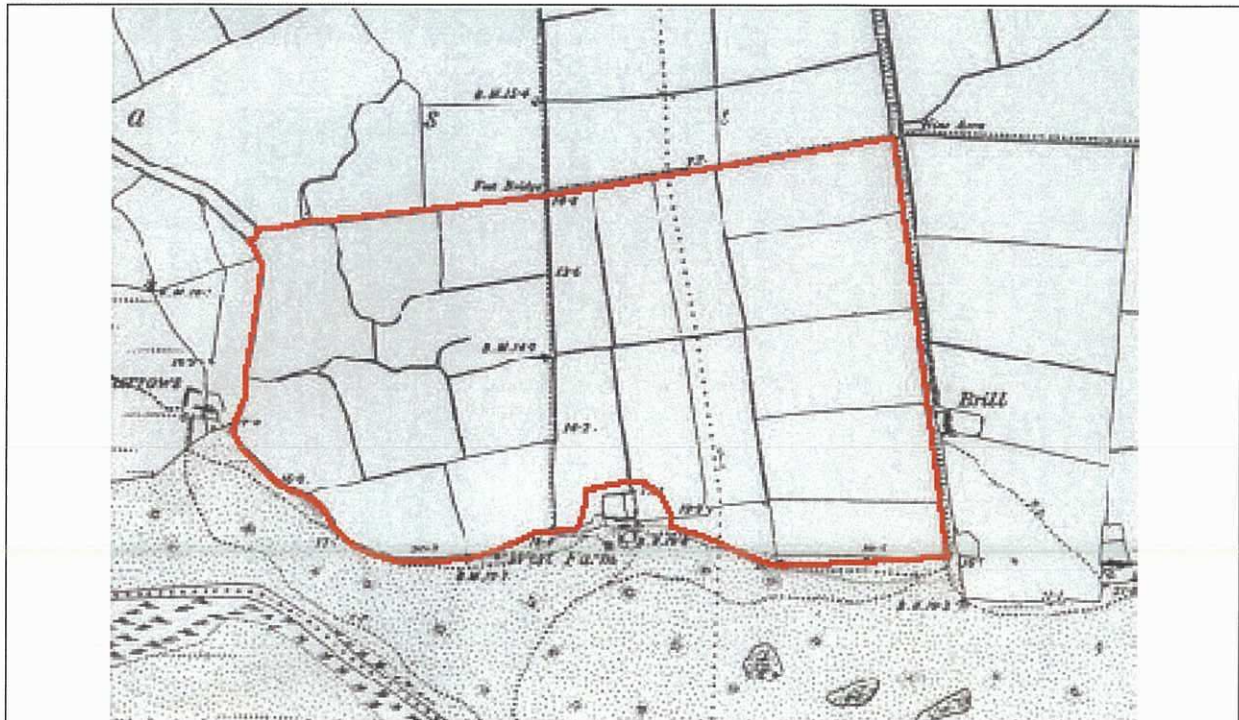


Figure 4: Extract from the Ordnance Survey 1st edition 1:10560 map, 1891. Site boundary shown in red.

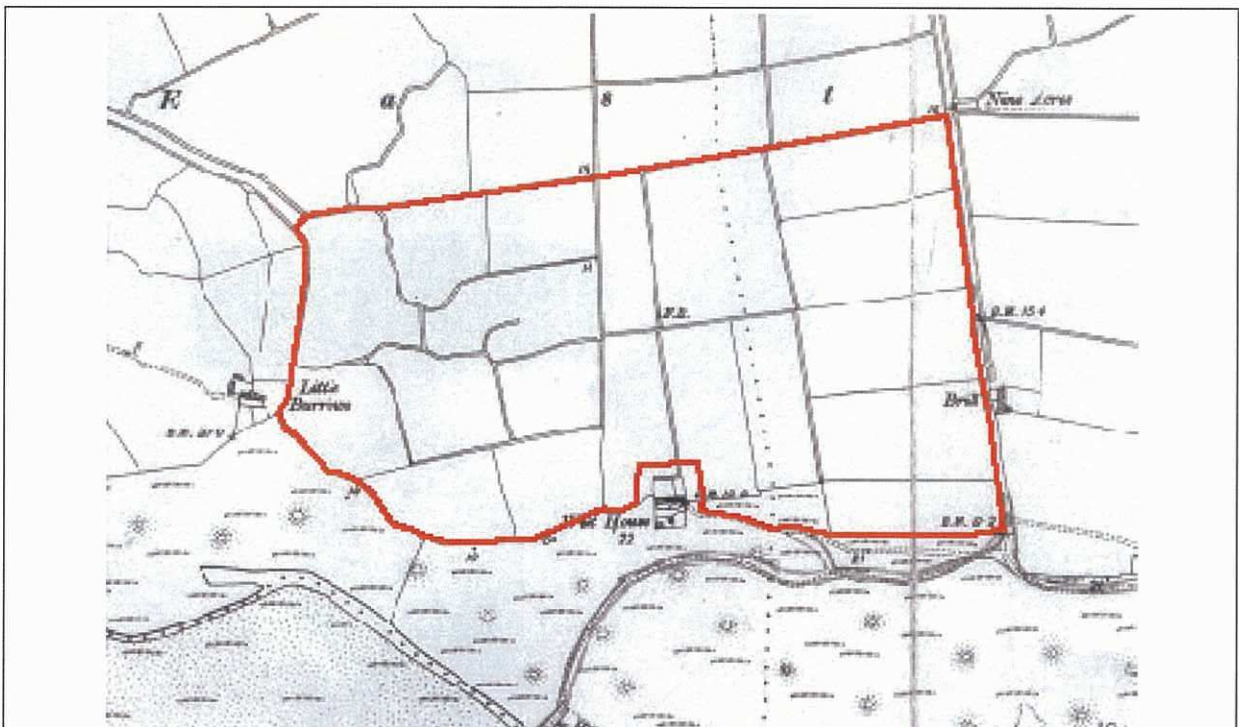


Figure 5: Extract from the Ordnance Survey 2nd edition 1:10560 map, 1908. Site boundary shown in red.

APPENDIX ONE: EXTRACTS FROM HISTORIC LANDSCAPE CHARACTERISATION REPORT

The extracts below are from the historic landscape characterisation project covering the area of the Taf and Tywi Estuary, one of 36 landscapes on the *Register of Landscapes of Outstanding Historic Interest in Wales* (Cadw 1998, 40-42), undertaken by Cambria Archaeology (Murphy and Ludlow 2000) and grant-aided by Cadw: Welsh Historic Monuments. For more information on the historic landscape characterisation project visit Cambria Archaeology's website at www.cambria.org.uk.

LAUGHARNE AND PENDINE MARSH

GRID REFERENCE: SN 281086

AREA IN HECTARES: 958.00

Historic Background

From the later prehistoric period until Medieval times, this area probably comprised salt marsh and patches of rough pasture on marginally higher ground, interspersed with fresh and brackish-water lagoons. In a borough charter of 1278-82 (Williams n.d.) it is stated that Sir Guy de Brian granted certain privileges and rights to the burgesses of Laugharne 'in the marsh of Talacharn called Menecors'. However, it is clear that Sir Guy kept the greater part of the marsh in his own hands as part of the demesne of the Lordship of Laugharne, as on his death in 1307, 1000 acres of pasture in 'le Marcis' were recorded in an *Inquisition post Mortem* (National Library of Wales 10118E Vol. 1). In 1595, the first record of habitations occurs, when the 'dairies' of Hurst House, East House and Brook House were noted in a survey (Laugharne Corporation). These three dwellings are either on the fringes of the marsh or on islands of higher ground. The term dairy indicates pasture, perhaps on a seasonal basis, as it is likely that the marsh was subjected to flooding and tidal inundation in the winter months. Prior to 1595, Sir John Perrot, Lord of Laugharne, cheated the burgesses of Laugharne out of their share of their marsh, adding it to the demesne established by Guy de Brian. Sir John used the marsh for large-scale sheep farming. However, a small part of the marsh known as 'The Lees' remained in the hands of the burgesses and was later cultivated using an open- or strip-field system (Davies, 1955). The Lees is still owned by Laugharne Corporation, though in character it is indistinguishable from the rest of the marsh. It was not until 1660 when Sir Sackville Crow came into possession of the marsh that a scheme of drainage was initiated with the construction of sea walls (Murphy, forthcoming). Drainage allowed for the establishment of new farms - a process that was complete by the tithe survey of the 1840s - and by the late 18th-century Laugharne Marsh comprised the best farmland in the county. Charles Hassall (1794, 15) described how the land could be made more productive by ridging-up the land by the use of the Dutch Plough. Drainage work continued in the 19th century. A large sea-wall armoured with stone, and a quay, were constructed at the east end of the marsh in 1800-10 by George Watkins of Broadway and connected to Coygan Quarry by a tramway (James 1991, 150), and in c. 1840 a wall across the Witchett Brook was built. Watkins's work seems to have been part of wide-ranging improvements as most of the farms (all part of Broadway estate) were rebuilt in c.1820 in a 'Georgian' style and provided with good ranges of outbuildings. A Ministry of Defence research establishment has been founded across part of the south and southeast portion of this historic landscape character area.

Description and essential historic landscape components

This historic landscape character area consists of flat land some 6km by 1.5km just a few metres above sea level. It is characterised by regularly-shaped fields of pasture. These fields are divided by drainage ditches which are usually accompanied by wire fences, though in the central area of the Marsh, south of Coygan Quarry, low hedges parallel some of the ditches. Towards the eastern end of the Marsh fields become less regular and tend to reflect the dendritic pattern of the pre-drainage salt marsh. Two phases of sea wall separate this area from the salt marsh to the east. Pasture is the dominant land use, mostly improved, but with pockets of unimproved ground. There is limited arable and no old woodland. Towards the western edge the land is becoming neglected and rushes are growing. Ridge and furrow, or rather in this instance ridge and drain, is everywhere apart from between the two phases of sea wall at the eastern edge. This ridge and furrow is a distinct

component of the historic landscape. The settlement pattern is of dispersed farms. Farm buildings are generally two-storey and stone built. Farmhouses are in a 'Georgian' style and farms were provided with large ranges of outbuildings which were usually located formally around a yard. These early 19th-century estate farms lend a distinctive architectural signature to the area. Farms have modern agricultural buildings associated with them. The Ministry of Defence research establishment across part of the southern portion of this historic landscape character area has erased many landscape components. Many new buildings and tracks and have been constructed and the planting of shelter belts and scrubby woodland to shield the establishment from view have further altered the character of part of the area.

All recorded archaeological features relate to the reclamation and land-use described above.

There are some distinctive buildings. Date stones on several of the farms indicate a major period of rebuilding in c. 1820 by the Broadway estate. Hurst House and its farm buildings are both Grade II listed.

This is a very distinct character area with clear boundaries between it and its neighbours.

LAUGHARNE AND PENDINE BURROWS

GRID REFERENCE: SN 280074

AREA IN HECTARES: 730.60

Historic Background

An area of sand dunes fronting Laugharne Marsh, which probably began to form in the second millennium BC in common with other coastal areas of South Wales (Higgins, 1933). The discovery early in the 20th century of shell middens in the dunes, seemingly associated with prehistoric finds, supports an early date for sand incursion (Cantrill, 1909). The dunes lay within the Lordship of Laugharne during the Medieval period, but were clearly of little economic use. The present system of an unbroken chain of dunes from Pendine to the Taf estuary is fairly modern. Terry James (1991, 148-51) has demonstrated that the Witchett Brook opened out through the dunes as late as the 1830s, when a dam and engine house were constructed across it. Since the Second World War a Ministry of Defence research establishment has used the dunes for tests, and many installations have been constructed within them.

Description and essential historic landscape components

This is a very extensive system of sand dunes, running for over 9 km from Pendine in the west to the Taf estuary in the east. It is 1km to 1.5km wide between Laugharne and High Water Mark. Historic landscape components are confined to the modern period and comprise many installations, buildings and tracks associated with the Ministry of Defence research establishment.

Recorded archaeology similarly mainly relates to the Ministry of Defence and to Post-Medieval drainage schemes but there is a possible settlement site, of unknown date (prehistoric?) and several findspots and middens.

Distinctive buildings are confined to the recent Ministry of Defence structures.

This is a distinct landscape area, and effectively separates Pendine beach and foreshore from the area to the north.

APPENDIX TWO: SOURCES

Cartographic sources

- nd. Composite map of Laugharne Marsh and Laugharne Burrows compiled by Ken Murphy, to show the embankment and extent of cultivation.
- 1841 Llansadurnen parish tithe map and apportionment.
- 1845 Laugharne Township parish tithe map and apportionment.
- 1891 Ordnance Survey 1st edition (6 inch) 1:10560 map, sheet Carms.LII.NW.
- 1908 Ordnance Survey 2nd edition (6 inch) 1:10560 map, sheet Carms.LII.NW.

Aerial photographs

- 1946 RAF/106G-UK-1629 frames 3069-3072.
- 1955 Meridian Airmaps frames 37599-37603 (northern edge of site only).

Unpublished sources

- | | | |
|--------------------------|------|--|
| Murphy K
and Ludlow N | 2000 | <i>Carmarthenshire Historic Landscape Characterisation of four Landscapes on the Register of Landscapes of Outstanding Historic Interests in Wales: Black Mountain and Mynydd Myddfai; Tywi Valley; Dolaucothi; Taf and Tywi Estuary.</i> Unpublished Cambria Archaeology report for Cadw: Welsh Historic Monuments. |
| Page N | 2002 | <i>Proposed Ragworm Farm at Pendine, Carmarthenshire: an archaeological Assessment</i> Unpublished Cambria Archaeology Report for ARUP |
| Walley S | 1996 | <i>Holocene Evolution of a Coastal Barrier Complex, Pendine Sands</i> Unpublished PhD Thesis University of Wales Bangor |

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| James H (Ed.) | 1991 | <i>Sir Gâr: Studies in Carmarthenshire History.</i> Carmarthenshire Antiquarian Society. Monograph Series, Volume 4. Carmarthen. |
| James T | 1991 | 'Where Land Meets Sea'. In H James (Ed.) 1991, p143-166. |

APPENDIX THREE: 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 44698.

**PROPOSED RAGWORM FARM
AT
PENDINE, CARMARTHENSHIRE**

RHIF YR ADRODDIAD / REPORT NUMBER 2005/16

**Chwefror 2005
February 2005**

Paratowyd yr adroddiad hwn gan / This report has been prepared by Richard Ramsey

Swydd / Position: Archaeologist

Llofnod / Signature Dyddiad / Date 07/02/2005

Mae'r adroddiad hwn wedi ei gael yn gywir a derbyn sêl bendith
This report has been checked and approved by

Ken Murphy

ar ran Archaeoleg Cambria, Ymddiriedolaeth Archaeolegol Dyfed Cyf.
on behalf of Cambria Archaeology, Dyfed Archaeological Trust Ltd.

Swydd / Position: Principal Archaeologist – Field Services

Llofnod / Signature Dyddiad / Date 07/02/2005

Yn unol â'n nôd i roddi gwasanaeth o ansawdd uchel, croesawn unrhyw sylwadau sydd
gennych ar gynnwys neu strwythur yr adroddiad hwn
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