

JULY 2001 (1)



# TY-CANOL, NEWPORT, PEMBROKESHIRE

ARCHAEOLOGICAL EVALUATION,  
JULY 2001



A R C H A E O L O G Y

CAMBRIA

A R C H A E O L O G Y

Report No. 2001/46

Report Prepared for:  
MEICA

**TY-CANOL, NEWPORT, PEMBROKESHIRE**  
**ARCHAEOLOGICAL EVALUATION, JULY 2001**

**REPORT NUMBER 200146**

**JULY 2001**


This report has been prepared by Neil Ludlow

Position Archaeologist

Signature  Date 17/08/01

This report has been checked and approved by Gwilym Hughes on behalf of Cambria Archaeology, Dyfed Archaeological Trust Ltd.

Position Director

Signature  Date 17/8/01

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

CAMBRIA ARCHAEOLOGY

REPORT NO. 2001/46  
PROJECT RECORD NO. 43145

JULY 2001

TY-CANOL, NEWPORT,  
PEMBROKESHIRE

ARCHAEOLOGICAL EVALUATION, JULY 2001

By

Neil Ludlow

*Cambria Archaeology is the marketing name of the Dyfed Archaeological Trust Limited.*

*The report has been prepared for the specific use of the client. The Dyfed Archaeological Trust Ltd can accept no responsibility for its use by any other person or persons who may read it or rely on the information it contains.*

ARCHAEOLEG CAMBRIA  
Ymddiriedolaeth Archaeolegol Dyfed Cyf  
Ncuadd y Sir, Stryd Caerfyrddin, Llandeilo, Sir Gaerfyrddin SA19 6AF  
Ffôn: Ymboliadau Cyffredinol 01558 823121  
Adran Rheoli Trefladaeth 01558 823131  
Ffacs: 01558 823133  
Epost: cambria@acadat.com Gwefan: www.acadat.com

CAMBRIA ARCHAEOLOGY  
Dyfed Archaeological Trust Limited  
The Shire Hall, Carmarthen Street, Llandeilo, Carmarthenshire SA19 6AF  
Tel: General Enquiries 01558 823121  
Heritage Management Section 01558 823131  
Fax: 01558 823133  
Email: cambria@acadat.com Website: www.acadat.com

*The Trust is both a Limited Company (No. 1198990) and a Registered Charity (No. 504616)*  
CADEIRYDD CHAIRMAN: B.C. BURNHAM, MA PHD FSA MIFA. CYFARWYDDWR DIRECTOR: E G HUGHES BA MIFA

**TY-CANOL, NEWPORT,  
PEMBROKESHIRE**

**ARCHAEOLOGICAL EVALUATION,  
JULY 2001**

**PROJECT RECORD No. 43145**

**CONTENTS**

<b>Summary</b>	<b>3</b>
<b>Introduction</b>	<b>3</b>
Project background	3
Site location and topography	4
<b>Archaeological background</b>	<b>5</b>
<b>Objectives</b>	<b>8</b>
<b>Methodology</b>	<b>9</b>
The development	9
Assessment methodologies	9
Evaluation methodologies	10
<b>Results</b>	<b>11</b>
The trenches	11
The displaced standing stone	20
The field boundaries	23
<b>The finds</b>	<b>29</b>
<b>Discussion</b>	<b>30</b>
<b>Archive deposition</b>	<b>31</b>
<b>Acknowledgements</b>	<b>31</b>
<b>References</b>	<b>32</b>

## FIGURES

Fig. 1 -	Site location	4
Fig. 2 -	Llwyngwair estate map, 1758	5
Fig. 3 -	Newport tithe map, 1841	5
Fig. 4 -	Location of evaluation trenches, boundaries and other features	7
Fig 5 -	Sketch drawing of standing stone PRN 43144	21
Fig. 6 -	Sections of fields boundaries affected by the scheme	28

## PLATES

Plate 1 -	Trench 1 from the southwest	11
Plate 2 -	Trench 2 from the southeast	12
Plate 5 -	Trench 5 from the southeast	13
Plate 4 -	Trench 4 from the southwest	14
Plate 5 -	Trench 5 from the southeast	15
Plate 6 -	Trench 6 from the southeast	16
Plate 7 -	Trench 7 from the east	17
Plate 8 -	Trench 8 from the northwest	18
Plate 9 -	Trench 9 from the southwest	19
Plate 10 -	The hollow from which standing stone PRN 43144 was recovered	20
Plate 11 -	Two views of standing stone PRN 43144	22
Plate 12 -	Boundary 1 from the southeast	23
Plate 13 -	Boundary 2 from the northeast	23
Plate 14 -	Boundary 3 from the southwest	24
Plate 15 -	Boundary 4 from the southwest	24
Plate 16 -	Boundary 5 from the west	25
Plate 17 -	Boundary 6 from the southeast	26
Plate 18 -	Boundary 7 from the southwest	26
Plate 19 -	Boundary 8 from the southwest	27

## APPENDIX 1

Copy of project specification

## SUMMARY

*A proposed Sewage Treatment Works, Waste Water Treatment Works and an associated pipeline was located within an archaeologically sensitive area just west of Newport, Pembrokeshire, and was therefore subject to an archaeological evaluation. The presence of a number of monuments suggested that the area was an important ritual landscape during the neolithic and bronze age periods. The results of the evaluation were, however, largely negative. Of the nine trial trenches, only one revealed any evidence of human activity in the form of a hearth or fire-setting. In most of the remainder of the trenches, the ploughsoil lay directly above the shale bedrock. The present pattern of field boundaries is possibly roughly contemporaneous with the ploughsoil and both may relate to 18<sup>th</sup> and 19<sup>th</sup> century activity. However, a displaced, bronze age standing stone lay recumbent within a former trackway. It may have formed a stone pair with the in situ Carreg Hir standing stone which lies close to the site and is a Scheduled Ancient Monument.*

## INTRODUCTION

### Project background

This report details the results of an archaeological assessment and evaluation undertaken during the development of a Sewage Treatment Works, Waste Water Treatment Works and an associated pipeline just west of Newport, Pembrokeshire. An initial desk-based archaeological assessment, undertaken by Jim Hunter of CgMs Ltd (Hyder Environmental 1997, 12.1–12.4), did not identify any sites or features within the pipeline route corridor. Nevertheless, a condition for an archaeological programme of work was placed on the planning consent on the basis of the surrounding archaeological sites and features. The programme comprised an archaeological assessment and evaluation, with a condition for a further scheme of works following the consideration of the results of the programme.

The purpose of the assessment was to assess the potential impact of the proposed works by developing an understanding of the surviving archaeological remains on site. It would inform the targeting of the evaluation trenching.

The purpose of the evaluation was to record the depths at which the archaeological deposits were encountered and also investigate a sample of those deposits in order to understand what activities and processes have taken place on the site in the past. The results of the evaluation would be used to draw up mitigation strategies for the development.

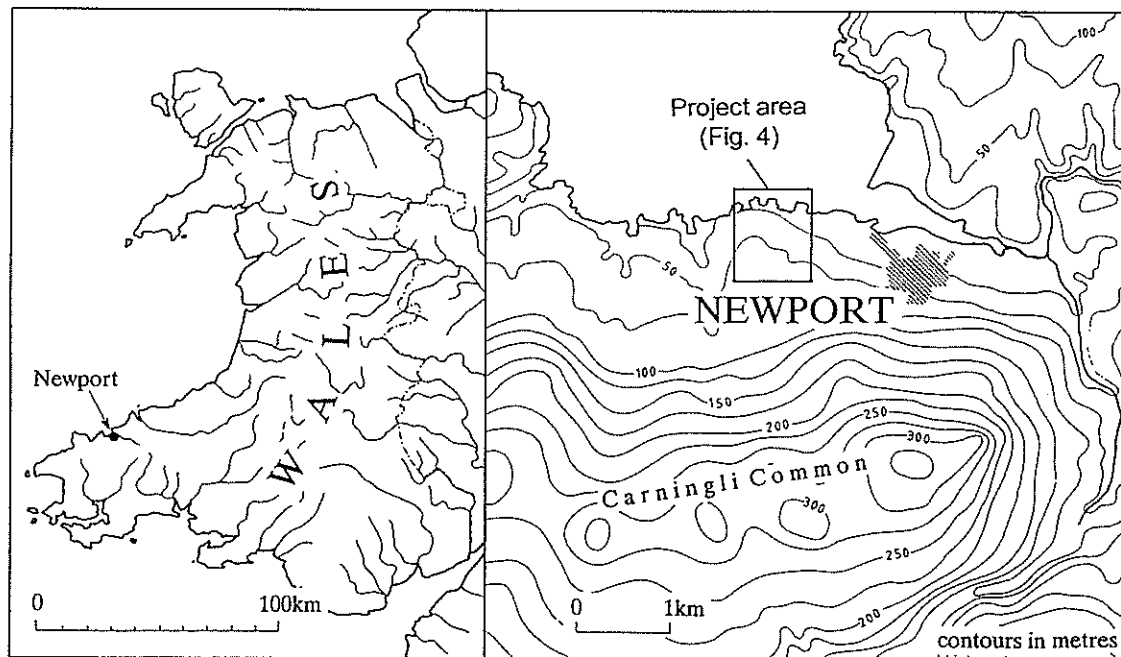
Cambria Archaeology Heritage Management Section drafted a brief for the assessment and evaluation for Hyder on 21 June 2001. Cambria Archaeology Field Operations accordingly submitted a bid and were awarded the contract. The work was mainly undertaken 2 - 6 July 2001.

### Site location and topography (Fig. 1)

The pipeline corridor lies within grid square NGR SN 35 00 on the northern Pembrokeshire coast, 2 km west of the town of Newport and immediately north of the A487(T). It is located within the gently rolling coastal strip that lies between the elevated Mynydd Carningli Common and Newport Bay, which here exhibits a downhill slope to the north between 60 metres and 40 metres above sea-level. At its east end, the corridor descends 30 metres into a steep combe occupied by a north-flowing stream, *Y Cwm*, which exits into Newport Bay.

The solid geology is represented by Ordovician shales, of the Ashgill and Llandeilo Series, which are steeply-dipped to the northwest (British Geological Survey, 1994). These are in the main soft and easily weathered, but occasionally more durable strata form 'bosses' which are a distinct feature of the corridor. The bedrock lies very close to the surface, overlying deposits being limited to a very thin (and occasionally absent) clay-loam topsoil. Within *Y Cwm* the bedrock lies beneath a slopewash deposit.

*Fig. 1 - Site location*



## ARCHAEOLOGICAL BACKGROUND (Figs. 2, 3 & 4)

The corridor landscape is defined by a pattern of long, rectangular fields, both arable and pasture, divided by earthen boundaries supporting hedges that are at best only semi-mature. It is clear from the map evidence that in its present form, the landscape is a fairly recent creation, most of the boundaries having been established between 1758 (NLW, Llwyngwair Collection, Maps 7 and 11) and 1844 (NLW, Newport tithe map) – see Figs. 2 and 3). So although superficially it appears from the long, narrow shape of the fields, that their boundaries respect, and ‘fossilise’, the pattern of a system of medieval strip-fields, the late date of enclosure, and its pattern on the 18<sup>th</sup> century maps, suggests that the area may not always have been arable. The very shallow topsoil (ploughsoil), moreover, does not appear to exhibit evidence of a long history of ploughing.

Fig. 2 - Llwyngwair estate map, 1758

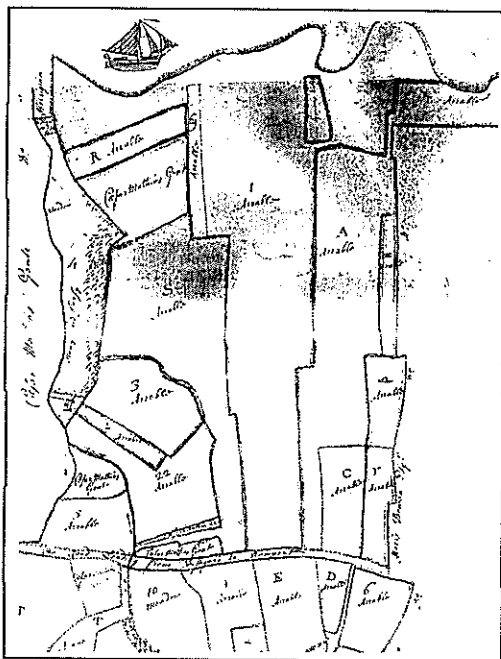
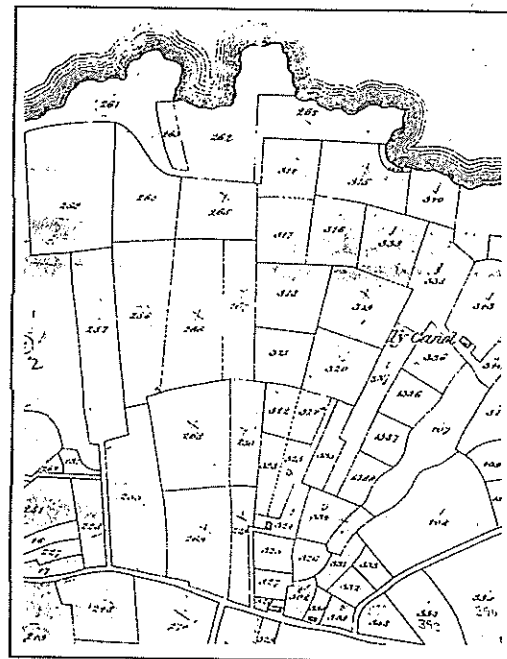


Fig. 3 - Newport tithe map, 1844

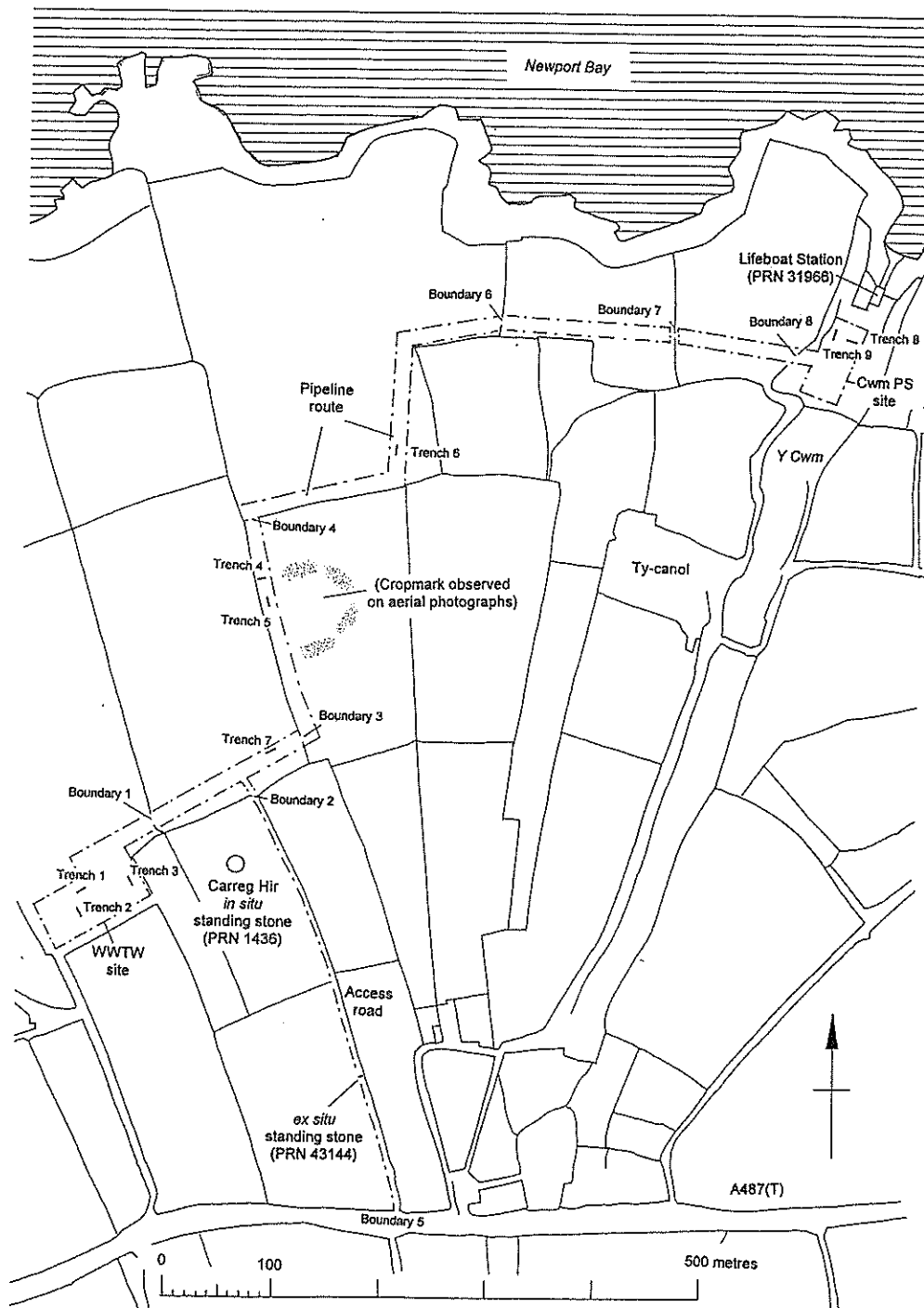


The landscape has, however, been defined as both historic and of national importance by its inclusion within area HLW (D) 15, Newport and Carningli, of the Cadw/Icomos, *Landscapes of Special Historic Interest in Wales*, 2001. In the area of the corridor itself, the historic significance is represented by a concentration of prehistoric sites. In particular, Carreg Hir (PRN 1436), a bronze age standing stone, lies only 50 metres from the corridor at NGR SN 0395 3932 (Fig. 4). The presence of a concentration of such sites suggested that the corridor may cross a prehistoric ‘ritual’ landscape, ie. a landscape which may have featured further, below-ground archaeological sites in association with the known ritual sites.



An apparent cropmark was observed at NGR SN 0400 3950 (Fig. 4) on an aerial photograph belonging to Pembroke Coast National Park (Mapimages, SN 03 NW). The form of the cropmark suggested that it might represent either a ritual segmented enclosure of late neolithic-bronze age date, or an iron age defended settlement.

*Fig. 4 - Location of evaluation trenches,  
boundaries and other features*



## **OBJECTIVES**

The objective of the assessment was to -

- assess the character, extent, significance and vulnerability of the archaeological resource within the project area, namely a 15 metre wide corridor along the midline of the proposed route
- to identify new archaeological sites, features and deposits within the project area, and to assess their character, significance and vulnerability
- to identify sites, features and deposits that require further archaeological investigation to fully assess their character, extent, significance and vulnerability
- the preparation of a report fully representative of the information recovered, which places the archaeological resource of the project area within its local, regional and national contexts, and the preparation of a project archive

The objective of the evaluation was to -

- determine the nature, extent, character, date and survival of any archaeological features and deposits identified during the assessment area so that an informed decision could be made about any mitigation strategies that may have been considered necessary.
- the preparation of a report fully representative of the information recovered, which places the archaeological resource of the project area within its local, regional and national contexts, and the preparation of a project archive

## **METHODOLOGY**

### **The development**

The development consisted of two building areas, a Waste Water Treatment Works (WWTW) to the southwest and a Pumping Station (Cwm PS) to the northeast, connected by a pipeline and access road. In addition, a new access road was created between the A487 and the WWTW site, while new cuts were made through four field boundaries.

- In the area of the WWTW, a 5000 square metre area was topsoil stripped, to an average depth of 0.30 metres. Although primarily an above-ground building, the foundations were to be c.1 metre deep and the building also features deeper excavation in the area of its three tanks, control building and pipeline inlet.
- In the area of Cwm PS, a 2100 square metre area was topsoil stripped, to an average depth of 0.30 metres. Within the stripped area was to be a further excavation for a storage tank measuring 15.5 metres by 5 metres at the base and 9 metres deep.
- The pipeline corridor was topsoil stripped, to an average depth of 0.30 metres, for a total width of 15 metres throughout. Within this stripped area, a 1 metre wide trench was excavated for the pipeline itself.
- The access road from the A487 was topsoil stripped to an average depth of 0.20 metres. In this area the base of the topsoil was removed only in limited places.

### **Assessment methodologies**

The assessment included -

- a search of the County Sites and Monuments Record and the National Monuments Record for information of known sites within and around the project area
- a search of cartographic sources held in national and county records offices and other repositories for archaeological information
- a search of primary historic documents held in national and county records offices and other repositories
- a search of secondary, published sources
- the examination of relevant aerial photographic coverage

## Evaluation methodologies

### *Trench locations, excavation and recording (Fig. 4)*

According to the plans as initially submitted to Cambria Archaeology, a total of 4575 square metres were to be excavated below topsoil (ploughsoil) level and the percentage of the corridor to be archaeologically evaluated was calculated on that basis. The required 4% sample of the route was calculated as 180 square metres and was represented by nine trenches measuring 10 metres x 2 metres. All stages of topsoil stripping were also monitored.

- The trenches (T1-T9) were positioned to provide as comprehensive a coverage of the route as possible. In some cases their positions were chosen to investigate specific features identified during the assessment of the route, while others were located within areas where deeper disturbance was proposed, and some were positioned to 'fill in the gaps' and complete the coverage.
- The WWTW site, Cwm PS, the pipeline route and the access road were all mechanically stripped to the base of the topsoil (ploughsoil), ie. an average depth of 0.30 metres, prior to the excavation of the evaluation trenches.
- The trenches were hand-cleaned in order to determine the character and extent of any archaeological deposits. Bedrock was exposed in all trenches except T8, which featured a slopewash deposit.
- Trench numbers (T1-T9) follow the order in which they were excavated rather than linear order.

### *Field boundary recording (Fig. 4)*

New cuts were made through four field boundaries (Boundaries 1, 4, 5 and 6). Both cut sections were photographed, and one section of each was drawn. In addition Boundaries 2, 3, 7 and 8 were photographed in the area of their pre-existing entrances.

## RESULTS

### The trenches

#### *Trench 1(NGR SN 0380 3930)*

Aligned northeast-southwest: 10m x 2m.

This trench was positioned to investigate an area of burning that was visible after the topsoil strip in the area of the proposed Waste Water Treatment Works site (WWTW). A small spread of burnt material, measuring 0.50 metres in diameter and 0.05 metres thick, lay towards the west end of the trench, but its nature is unknown. It probably represents a fire-setting rather than a formalised hearth. A sample (S1) was taken for possible future analysis.

The remainder of the trench was typical of the trenches as a whole in that the topsoil, which was 0.30 metres thick, lay directly above the shale bedrock. In this area the bedrock was steeply-dipped towards the west, in thin strata, and was very friable. However, a north-south running band of lighter, crushed shale also showed up after the topsoil strip but upon investigation proved to be a natural stratum in the steeply-dipped bedrock.

*Plate 1 – Trench 1 from the southwest*





*Trench 2 (NGR SN 0379 3925)*

Aligned northwest-southeast: 10 x 2m.

This trench was positioned to sample an area of the proposed WWTW site within which a c. 3 metre depth of material was to be removed for the proposed filter bed. A former field boundary is also shown on the line of the trench on 19th - mid-20th century maps.

Unlike the majority of the trenches, the topsoil, which was 0.30 metres thick, lay upon a possible buried soil horizon, comprising a mid-brown friable clay loam. However, the soil was entirely unstructured and no archaeological features relating to any form of human activity, including the field boundary, were noted.

*Plate 2 – Trench 2 from the southeast*



*Trench 3 (NGR SN 0385 3925)*

Aligned northwest-southeast: 10 x 2m.

This trench was positioned to sample an area of the proposed WWTW site within which the proposed sludge holding tank and control kiosk were to be sited.

Unlike the majority of the trenches, the topsoil within the southern half, which was 0.30 metres thick, lay upon a possible buried soil horizon, comprising a mid-brown friable clay loam. However, the soil was entirely unstructured and no archaeological features relating to any form of human activity were noted. The northern half was typical of the trenches as a whole in that the ploughsoil lay directly above the shale bedrock.

*Plate 3 – Trench 3 from the northwest*





*Trench 4 (NGR SN 0395 3950)*

Aligned east-west: 10 x 2m.

This trench was positioned within the pipeline corridor to sample an area that lay on the projected line of the possible cropmark enclosure observed on aerial photographs (see above), and was located in an area where the soilmark (of a possible ditch) did indeed appear to show up after the initial ploughsoil strip. However, the soilmark proved to be more remnant topsoil which, typically, lay directly above the shale bedrock and no archaeological features were observed.

*Plate 4 – Trench 4 from the southwest*



*Trench 5 (NGR SN 0395 3945)*

Aligned north-south: 10 x 2m.

This trench was, like T4, positioned within the pipeline corridor to sample an area which lay in the projected interior of the possible cropmark enclosure observed on aerial photographs (see above). It was located in an area where the apparent soilmark of a ditch appeared to show up after the initial topsoil strip. However, the soilmark proved to be more remnant topsoil which, typically, lay directly above the shale bedrock, and no archaeological features were observed.

*Plate 5 – Trench 5 from the southeast*





*Trench 6 (NGR SN 0410 3965)*

Aligned northeast-southwest: 10 x 2m.

This trench was positioned within the pipeline corridor to 'fill in the gaps' and complete the coverage. It was typical of the trenches as a whole in that the topsoil, which was 0.30 metres thick, lay directly above the shale bedrock. No archaeological features were observed.

*Plate 6 – Trench 6 from the southeast*



*Trench 7 (NGR SN 0400 3937)*

Aligned east-west: 10 x 2m.

This trench was positioned within the pipeline corridor to 'fill in the gaps' and complete the coverage. It was typical of the trenches as a whole in that the topsoil, which was 0.30 metres thick, lay directly above the shale bedrock. No archaeological features were observed.

*Plate 7 – Trench 7 from the east*





*Trench 8 (NGR SN 0450 3968)*

Aligned northwest-southeast: 10 x 2m.

This trench was positioned to sample an area of the proposed Cwm Pumping Station (PS) site within which was to be a further excavation for a storage tank measuring 15.5 metres by 5 metres at the base and 9 metres deep.

Unlike the majority of the trenches, the topsoil, which was 0.20 metres thick, lay upon a slopewash deposit associated with *Y Cwm*, the steep-sided valley within which the PS site lies. The deposit comprised mid-brown silty clay loam of a very mottled appearance, and somewhat plastic texture. No archaeological features were observed.

*Plate 8 – Trench 8 from the northwest*



*Trench 9 (NGR SN 0448 3969)*

Aligned northeast-southwest: 10 x 2m.

This trench was also positioned to sample the proposed Cwm PS site, but unlike T8 was typical of the trenches as a whole in that the topsoil, which was 0.20 metres thick, lay directly above the shale bedrock. No archaeological features were observed.

*Plate 9 – Trench 9 from the southwest*





### **The displaced standing stone, PRN 43144 (Fig. 5, Plates 10 & 11)**

During construction of the access road from the A487 to the site, a large recumbent slab of dolerite was observed on the line of the road at NGR SN 0410 3915. The slab measured 3.60 metres by 1.30 metres, and lay within a shallow depression (possibly not a cut – Plate 10). On the removal of the stone from this depression, it was possible to identify a second cut within which the stone lay, again recumbent, at an earlier period.

*Plate 10 – The hollow in the trackway from which standing stone PRN 43144 was recovered, and the earlier cut, from the northwest*



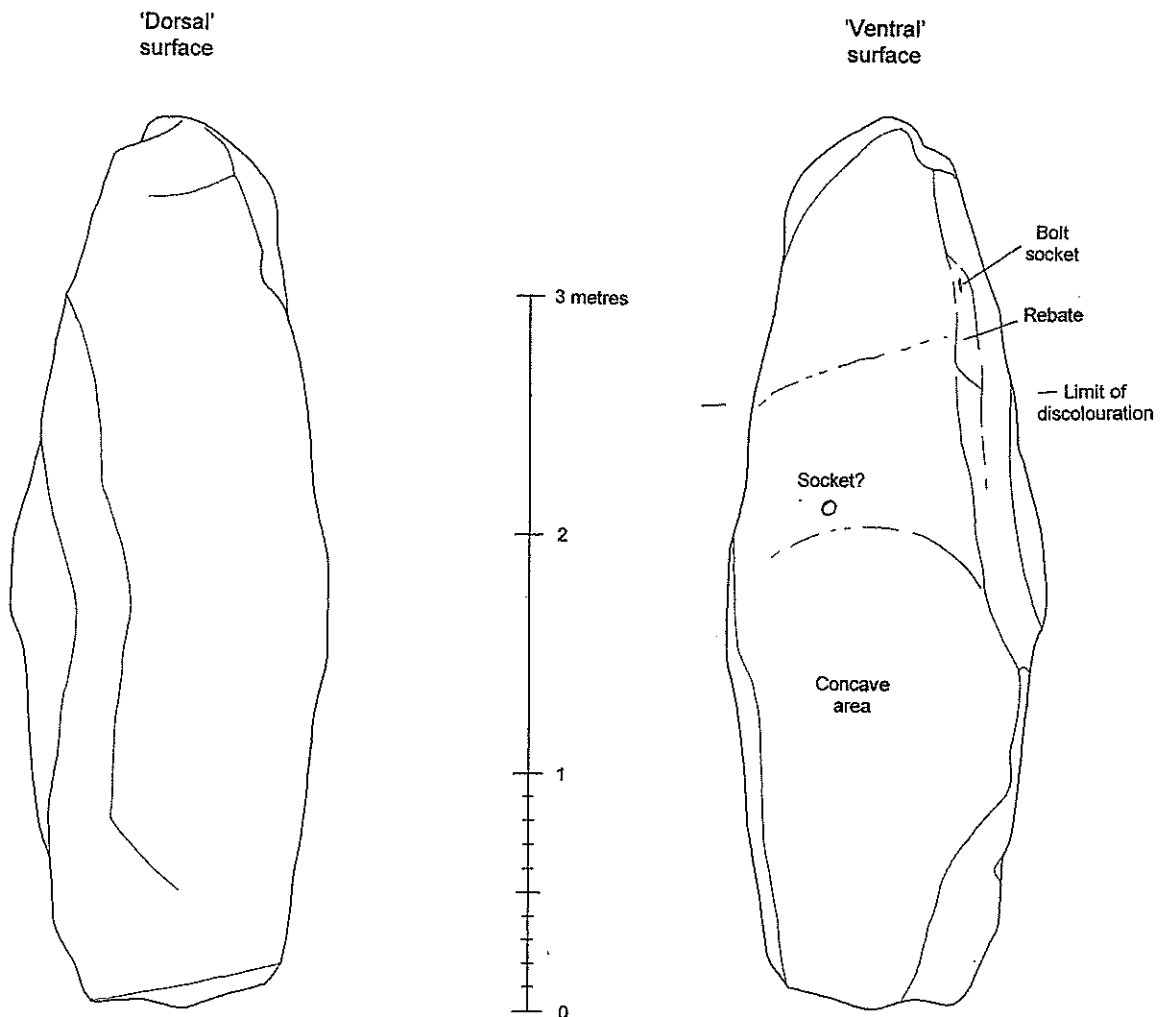
The stone was strongly fusiform in shape, but with well-defined ‘dorsal’ and ‘ventral’ surfaces. The former was markedly convex, almost ridge-like, while the latter surface exhibited a well-defined concavity. It clearly represents a bronze age standing stone. Its shape appears largely to be the result of natural cleavage, although the dressing and deliberate shaping of standing stones is by no means unknown (Williams 1988, 12).

However, it is apparent that the stone has been moved at least three times since the bronze age. Its original, bronze age location is unknown, as no feature suggestive of a stone-socket was observed during the topsoil strip, nor was anything significant present on the aerial photographs. It may be that the stone formed an association with Carreg Hir, the nearby *in situ* standing stone at NGR SN 0395 3932 (PRN 1436), to form a stone pair. The latter stone is much squatter in shape and it has been noted that in Pembrokeshire stone pairs, ‘one stone tends to be larger and square-topped’ - like Carreg Hir - ‘the other being slighter and often tapering’ (Williams 1988, 12).

A pronounced rebate and socket on one of the sides of the stone demonstrates that it has been used as a gate-post. Again, no socket was revealed during the evaluation, and certainly none where the stone was found. However, a difference in its (dis)colouration suggests that about two-thirds of the stone was buried at this time. It possibly stood somewhere within the line of the access road which is depicted as a trackway on historic maps (Figs. 2 & 3), although no field boundary is marked anywhere near the final location of the stone.

The stone was moved a second time, to occupy the earlier of the two cuts described above, and a third time into its present location, before being removed and taken to the WWTW site. At the time of writing, future possibilities for the preservation of the stone are under discussion. *(It has subsequently been moved to Castle Howell where it has been re-erected).*

Fig. 5 - Sketch drawing of standing stone PRN 43144





48346 = PRN for the stone  
now at  
CASTELL MOWLETS

CAMBRIA ARCHAEOLOGY  
*Ty-canol, Newport, Pembrokeshire: archaeological evaluation, July 2001*

*Plate 11 – Two views of standing stone PRN 43144 after removal from trackway*





**The field boundaries (Fig. 6)**

*Boundary 1 (NGR SN 0388 3945) – Fig. 6, Plate 12*

3.30 metres x 1.05 metres. Earthen, with 10% medium-sized angular stones. Blackthorn/hawthorn hedge, some bramble. Marked on estate map of 1758.

*Plate 12 – Boundary 1 from the southeast*



*Boundary 2 (NGR SN 039 393) – Fig. 6, Plate 13*

Not affected by scheme. Mortared stone gate pillars. Not included in estate map of 1758.

*Plate 13 – Boundary 2 from the northeast*



*Boundary 3 (NGR SN 040 394) – Fig. 6, plate 14*

Not affected by scheme. Mortared stone gate pillars. Not included in estate map of 1758.

*Plate 14 – Boundary 3 from the southwest*



*Boundary 4 (NGR SN 0395 3955) – Fig. 6, Plate 15*

3.60 metres x 1.10 metres. Stepped profile. Earthen, with less than 10% medium-sized angular stones. Gorse 'hedge'. Not included in estate map of 1758.

*Plate 15 – Boundary 4 from the southwest*





*Boundary 5 (NGR SN 0415 3895) – Fig. 6, Plate 16*

1.60 metres x 1.30 metres. Earthen, with drystone facing throughout in medium-large angular stones. Blackthorn/hawthorn hedge. Marked on estate map of 1758 but 20th century in its present form (after road-widening).

*Plate 16 – Boundary 5 from the west*



*Boundary 6 (NGR SN 0420 3968) – Fig 6, Plate 17*

4.80 metres x 0.90 metres. Stepped profile. Earthen, with less than 10% medium-sized angular stones. Blackthorn/hawthorn hedge. Not included in estate map of 1758.

*Plate 17 – Boundary 6 from the southeast*



*Boundary 7 (NGR SN 043 396) - Fig 6, Plate 18*

Not affected by scheme. Concrete gate pillars. Marked on estate map of 1758.

*Plate 18 – Boundary 7 from the southwest*



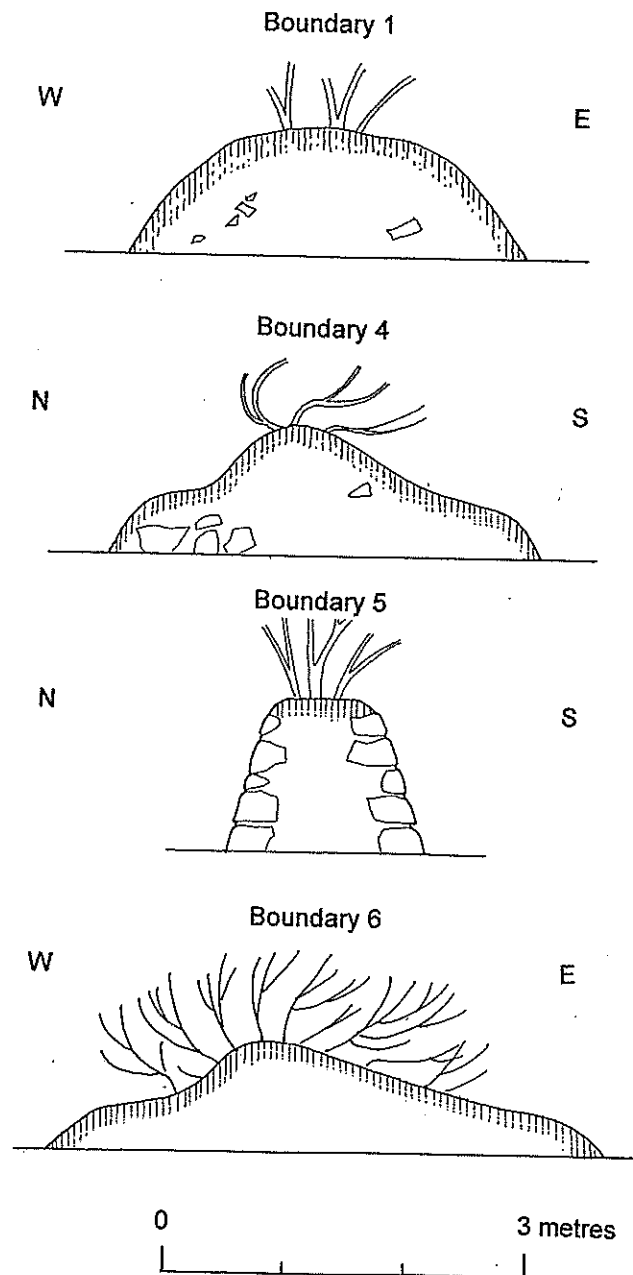


*Boundary 8 (NGR SN 044 396) - Fig 6, Plate 19*  
Hedge only, no physical boundary. Marked on estate map of 1758.

*Plate 19 – Boundary 8 from the southwest*



Fig. 6 - Sections of field boundaries affected by the scheme



## **THE FINDS**

Finds comprised a small number of sherds of 19<sup>th</sup> century pottery, mainly transfer-printed ware, and a small number of clay-pipe stems. In addition, two small sherds of Romano-British pottery (a red-ware ?bowl of British manufacture) were recovered from the turf-strip at the WWTW site.



## DISCUSSION

The results of the evaluation were largely negative. Of the nine trial trenches, only one revealed any evidence of human activity in the form of a hearth or fire-setting. This could not be closely dated and can only be said to pre-date the ploughsoil. In the remainder of the trenches, the ploughsoil lay directly above the shale bedrock. It appears that the corridor and its environs could have only supported a short turf until the formation of the present ploughsoil sometime – probably later - in the historic period. The present pattern of field boundaries is possibly roughly contemporaneous with the ploughsoil and both may relate to deliberate attempts at arable farming, possibly under the Llwyngwair and Wonallt estates during the 18<sup>th</sup> and 19<sup>th</sup> centuries. The boundaries are simple, of earth, with immature hedges, and many are not shown on 18<sup>th</sup> and early 19<sup>th</sup> century maps.

However, a positive archaeological discovery was that of a displaced bronze age standing stone, which lay recumbent within a former trackway. There is evidence that it has been moved at least three times from its original setting. It may have formed a stone pair with the *in situ* Carreg Hir standing stone which lies close to the site and is a Scheduled Ancient Monument. The presence of the stones, and other surrounding monuments, suggests that the area was an important ritual landscape during the neolithic and bronze age periods.

In addition, two small sherds of Romano-British pottery were noted during the topsoil strip.

The cropmark which appeared to be visible on an aerial photograph where it appeared to represent either a ritual segmented enclosure of late neolithic-bronze age date, or an iron age defended settlement, could not be identified during the evaluation. It may be that in the field east of the route, where the cropmark was observed, a group of ‘bosses’ in the natural bedrock (as noted in the introduction) were arranged in such a way as to appear artificial.

## **ARCHIVE DEPOSITION**

The archive, which will be indexed according to the National Monuments Record (NMR) material categories, is held by Cambria Archaeology, Llandeilo, and contains the following:-

- A. Copy of the final report and disk
- B. Field notes
- C. Copies of planning specifications and site drawings
- D. Colour photographs (disk)
- E. List of finds
- G. List of references
- J. Final drawings
- L. General administrative notes
- M. Project correspondence

There is no material for classes F, H, I, K and N.

## **ACKNOWLEDGEMENTS**

Overall site management was undertaken by Meica and Cambria Archaeology gratefully acknowledges their assistance, and that of S+E Contracting, Carmarthen, during the topsoil strip. The archaeological fieldwork was undertaken by Neil Ludlow and Duncan Schlee. Project management was undertaken by Gwilym Hughes (Director, Cambria Archaeology).

## REFERENCES

### Map Evidence

British Geological Survey, 1:250000, 'The Rocks of Wales: Geological Map of Wales', 1994.

National Library of Wales, Llwyngwair Collection, Maps 7 and 11, by Henry John, 1758.

National Library of Wales, Ordnance Survey 1:2500, First Edition, Sheet V.11, 1889.

National Library of Wales, Ordnance Survey 1:2500, Second Edition, Sheet V.11, 1907.

National Library of Wales, Parish of Newport, Tithe Map, 1844.

Rees, W., 1932 *South Wales and the Border in the XIVth century*.

### Aerial photographs

Pembrokeshire Coast National Park, 7/161, 7/162, 8/53, 8/54, 1983.

Pembrokeshire Coast National Park, Mapimages, SN 03 NW (disk copy).

Sites and Monuments Record for Carmarthenshire, Ceredigion and Pembrokeshire, Meridian airmaps SN 03 NW, 1955.

### Published works

Hyder Environmental 1997, Newport (Pembrokeshire) Waste Water Treatment Works: Environmental Statement, August 1997.

### Published works

Cadw/ICOMOS, 2001 *Landscapes of Historic Interest in Wales, Part 2.2: Landscapes of Special Historic Interest*.

Williams, G., 1988 *The Standing Stones of Wales and South -West England* (BAR 197).

# **NEWPORT WWTW SPECIFICATIONS FOR AN ARCHAEOLOGICAL FIELD EVALUATION**

## **1. PROJECT OBJECTIVES**

- 1.1 To assess through means of archaeological evaluation the date, character and extent of surviving deposits across the site.
- 1.2 To collate the data collected through the execution of 1.1 and to prepare a project archive structured in accordance with guidelines laid out in the *Management of Archaeological Projects*, Appendix 3 (English Heritage 1991).
- 1.3 To prepare a report based on the results of 1.1.

## **2. DESK TOP ASSESSMENT**

- 2.1 Collate and assess information held in the Regional SMR, information on historic and modern maps and aerial photographs. Assess the topography and land-use of the site.

## **3. FIELDWORK**

- 3.1 The topsoil strip will be archaeologically monitored. At selected locations at the site of the proposed sewage works, on the course of the pipeline and on the site of the new pumping station the topsoil will be carefully stripped and the resulting exposed ground surface archaeologically cleaned and examined. The location of these areas will be decided by the archaeological contractor, the archaeological curator and the site agent.
- 3.2 Following mechanical excavation all trial trenches will be cleaned by hand in order to determine the presence and extent of any archaeological deposits.
- 3.3 The minimum number of features required to determine the character of any archaeological deposits will be excavated and recorded.
- 3.4 Features containing deposits of environmental or technological significance will be sampled.
- 3.5 In the event of the discovery of human remains they will, where possible, be left in situ, if removal is necessary it will only take place following the granting of permissions by the relevant authorities.
- 3.6 A section of each area will be excavated through the archaeological interests to establish that the natural horizons are reached and proven.

3.7 Field boundaries where cut through will be recorded.

#### **4. Recording**

4.1 All deposits will be recorded by archaeological context record sheet; scale drawing; photography; site notebooks. All deposits will be numbered using the open-ended numbering system in accordance with ACA Field Operations' Recording Manual. All significant deposits will be recorded by scale drawing (no less than 1:20); drawn plans will be related to Ordnance Datum and, where possible, known boundaries, and photography (35mm, colour slide and monochrome).

#### **5. Finds**

- 5.1 All artefacts, ecofacts and samples will be retained and, where possible, related to the contexts from which they derived. Sensitive material will be stored in appropriately stable conditions.
- 5.2 Samples will be taken from deposits with potential for palaeoenvironmental material and an initial assessment of the potential of the deposits carried out in-house.
- 5.3 Should any human remains be encountered the District Coroner's Office and the Police will be notified immediately. All human remains will, where possible, be left in situ. Where their removal is unavoidable it will only be carried out following the receipt of all statutory permissions.
- 5.4 All finds, excepting those deemed to be Treasure Trove, shall remain the property of the landowner.

#### **6. Post-fieldwork**

- 6.1 Collation and cataloguing of fieldwork Data to form a site archive, in accordance with guidelines laid out in the Management of Archaeological Projects, Appendix 3 (English Heritage 1991). The archive will be deposited with an appropriate body (to be arranged); it may be temporarily held by ACA Field Operations. Any material held by ACA Field Operations would be available for examination.
- 6.2 Assessment of Data collected during the execution of Sections 2-5.
- 6.3 Preparation of a report fully representative of the Data collected during the execution of Sections 2-5.
- 6.4 Copies of the final report will be sent to the client who will circulate copies to the relevant bodies.

- 6.5 Preparation of a summary of the project results for wider dissemination (e.g. Archaeology in Wales and special interest and period-specific journals).

## **7. Monitoring**

- 7.1 It is expected that the Archaeological Curator will monitor the project. A timetable for the project, including monitoring visits, will be agreed before commencement.

## **8. Staff**

- 7.1 The project will be managed by G Hughes, who has wide-ranging archaeological experience, including this type of project. The project supervisor will be N Ludlow.
- 7.2 Excavation staff will be drawn from the team of archaeologists regularly employed by ACA Field Operations.