

# **NANTYGELLI FARM WIND TURBINE, CYNWYL ELFED, CARMARTHENSHIRE: ARCHAEOLOGICAL WATCHING BRIEF**



Prepared by Dyfed Archaeological Trust  
For: Mr John L. Thomas



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# **NANTYGELLI FARM WIND TURBINE, CYNWYL ELFED, CARMARTHENSHIRE: ARCHAEOLOGICAL WATCHING BRIEF**

Gan / By

**Hubert Wilson**

*Paratowyd yr adroddiad yma at ddefnydd y cwsmer yn unig. Ni dderbynnir cyfrifoldeb gan Ymddiriedolaeth Archaeolegol Dyfed Cyf am ei ddefnyddio gan unrhyw berson na phersonau eraill a fydd yn ei ddarllen neu ddibynnu ar y gwybodaeth y mae'n ei gynnwys*

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**BUDDSODDWR MEWN POBL**

Ymddiriedolaeth Archaeolegol Dyfed Cyf  
Neuadd y Sir, Stryd Caerfyrddin, Llandeilo, Sir  
Gaerfyrddin SA19 6AF  
Ffon: Ymholiadau Cyffredinol 01558 823121  
Adran Rheoli Treftadaeth 01558 823131  
Ffacs: 01558 823133  
Epost: [info@dyfedarchaeology.org.uk](mailto:info@dyfedarchaeology.org.uk)  
Gwefan: [www.archaeolegdyfed.org.uk](http://www.archaeolegdyfed.org.uk)

*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: [info@dyfedarchaeology.org.uk](mailto:info@dyfedarchaeology.org.uk)*  
*Website: [www.dyfedarchaeology.org.uk](http://www.dyfedarchaeology.org.uk)*

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**NANTYGELLI FARM, CYNWYL ELFED, CARMARTHENSHIRE:  
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**SUMMARY**

*A planning application was submitted to Carmarthenshire County Council for the erection of a wind turbine at Nantygelli Farm, Cynwyl Elfed, Carmarthenshire (Planning Ref: W/25805), on land centred on NGR SN 3888 3074. Due to the proximity of the development to a number of known historical and archaeological sites (including the Scheduled Ancient Monument of Crug Bach, a Bronze Age, round barrow earthwork), the location of the turbine was identified by the archaeological advisors to the Local Planning Authority as having good archaeological potential and recommended that a watching brief be undertaken during groundworks associated with the development. Dyfed Archaeological Trust Field Services were commissioned by Mr John L. Thomas of Nantygelli Farm to undertake the watching brief.*

*The watching brief took place on the 29<sup>th</sup> July 2013, during ground works in advance of the access track, turbine base, hardstand and assembly areas. The exposed soil profile demonstrated plough soils overlying natural ground, totalling a depth of between 0.20m and 0.24m. The area observed has been subject to no disturbance in the recent past.*

*The observed ground works associated with the wind turbine had a minimal impact on the buried archaeological resource in the area. No archaeological finds or features were recovered from the development site; however the potential for archaeological remains of Bronze Age and other periods to lie within the wider area cannot be discounted.*

## **1. INTRODUCTION**

### **1.1 Project Commission**

1.1.1 In response to a request from Mr John L. Thomas of Nantygelli Farm, Cynwyl Elfed, Carmarthenshire. Dyfed Archaeological Trust Field Services provided an archaeological watching brief during the ground works for the installation of a wind turbine on agricultural land northeast of Nantygelli Farm, Cynwyl Elfed, Carmarthenshire (Figures 1 and 2; centred on NGR SN 3888 3074).

1.1.2 An archaeological condition had been attached to planning permission for the development (planning application ref: W/25805) requiring an archaeological watching brief during ground works.

1.1.3 The proposed development lies amongst several sites of historical and archaeological interest. These date predominately from the post-medieval period but include sites ranging in date from the Bronze Age to medieval periods. Whilst these sites would not directly be affected by the development, they indicate a long period of occupation within the area.

1.1.4 The watching brief was intended to record any significant archaeological features that may be encountered during the ground works associated with the development. An approved written scheme of investigation (WSI) was prepared by Dyfed Archaeological Trust Field Services prior to the works commencing.

### **1.2 Scope of the Project**

1.2.1 The main scope of the project was laid out within the WSI as *'Archaeological attendance and recording during ground works associated with the erection of a wind turbine at Nantygelli Farm, Cynwyl Elfed, Carmarthenshire. Which may expose, damage or destroy any underlying archaeological remains if present.'*

1.2.2 The WSI also stated that the project objectives were:

- Provision of a written scheme of investigation to outline the methodology by which Dyfed Archaeological Trust Field Services will undertake the watching brief.
- To identify the presence/absence of any archaeological deposits.
- To establish the character extent and date range for any archaeological deposits affected by the proposed ground works.
- To produce an archive and report of any results.

### **1.3 Report Outline**

1.3.1 This report describes the location of the site along with its archaeological background, and provides a summary and discussion of the archaeological watching brief and its results.

### **1.4 Abbreviations**

1.4.1 Sites recorded on the Regional Historic Environment Record<sup>1</sup> (HER) are identified by their Primary Record Number (PRN) and located by their National Grid Reference (NGR). Dyfed Archaeological Trust Field Services – DAT-FS; Dyfed Archaeological Trust Heritage Management – DAT-HM; Scheduled Ancient

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<sup>1</sup> Held and managed by Dyfed Archaeological Trust, The Shire Hall, Carmarthen Street, Llandeilo SA19 6AF.

Monument – SAM; Written Scheme of Investigation – WSI; northeast – NE; southeast – SE; northwest – NW; southwest – SW; north-northeast – NNE; south-southeast – SSE; west-northwest – WNW etc.

## 1.5 Illustrations

1.5.1 Photographic images are to be found at the back of the report. Printed map extracts are not necessarily reproduced to their original scale.

## 1.6 Timeline

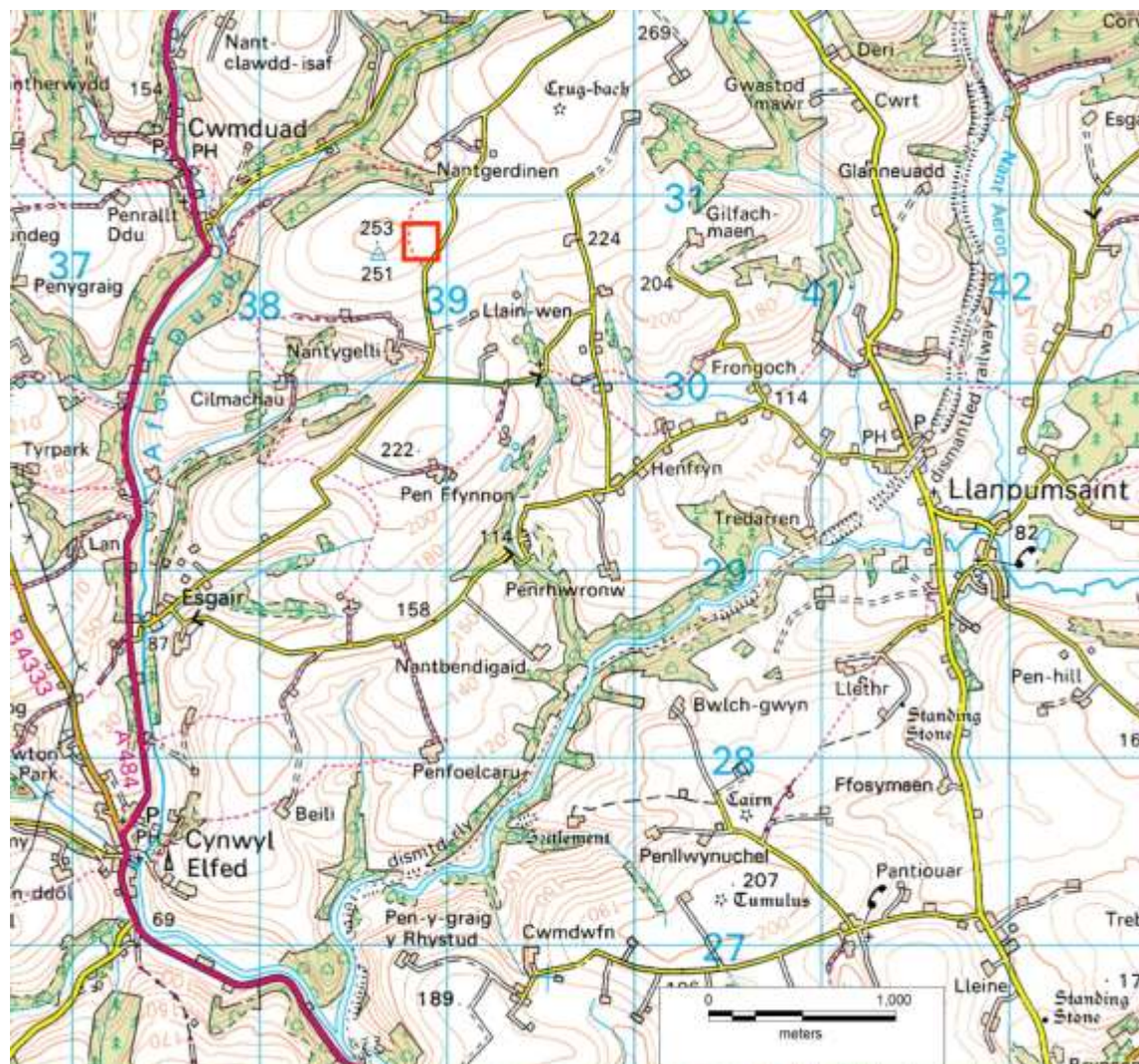
1.6.1 The following timeline is used within this report to give date ranges for the various archaeological periods that may be mentioned within the text (Table 1).

Period	Approximate date	
Palaeolithic –	c.450,000 – 10,000 BC	Prehistoric
Mesolithic –	c. 10,000 – 4400 BC	
Neolithic –	c.4400 – 2300 BC	
Bronze Age –	c.2300 – 700 BC	
Iron Age –	c.700 BC – AD 43	
Roman (Romano-British) Period –	AD 43 – c. AD 410	Historic
Post-Roman / Early Medieval Period –	c. AD 410 – AD 1086	
Medieval Period –	1086 – 1536	
Post-Medieval Period <sup>2</sup> –	1536 – 1750	
Industrial Period –	1750 – 1899	
Modern –	20th century onwards	

**Table 1:** Archaeological and Historical Timeline for Wales

<sup>2</sup> The post-medieval and industrial periods are combined as the post-medieval period on the Regional Historic Environment Record as held by Dyfed Archaeological Trust

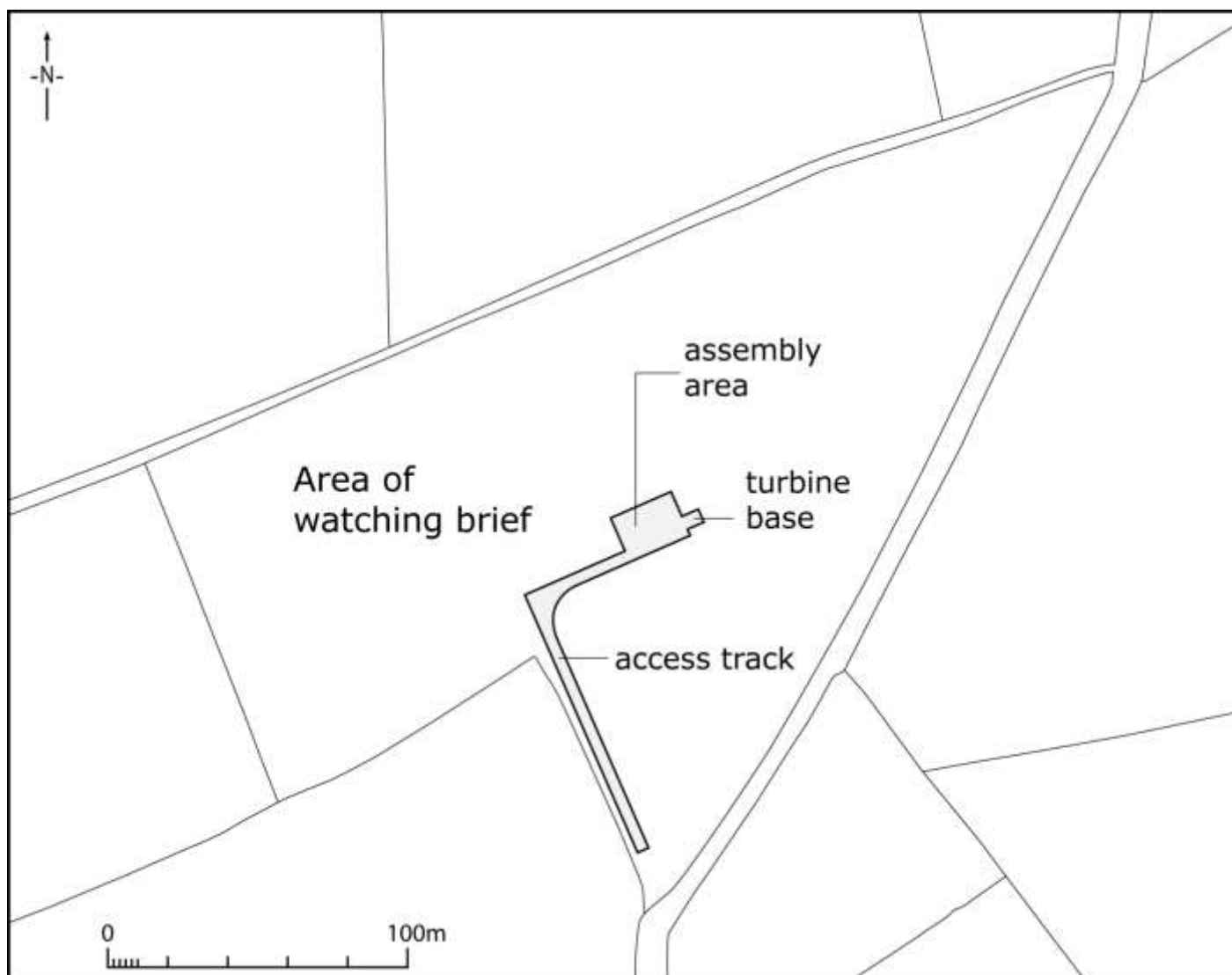




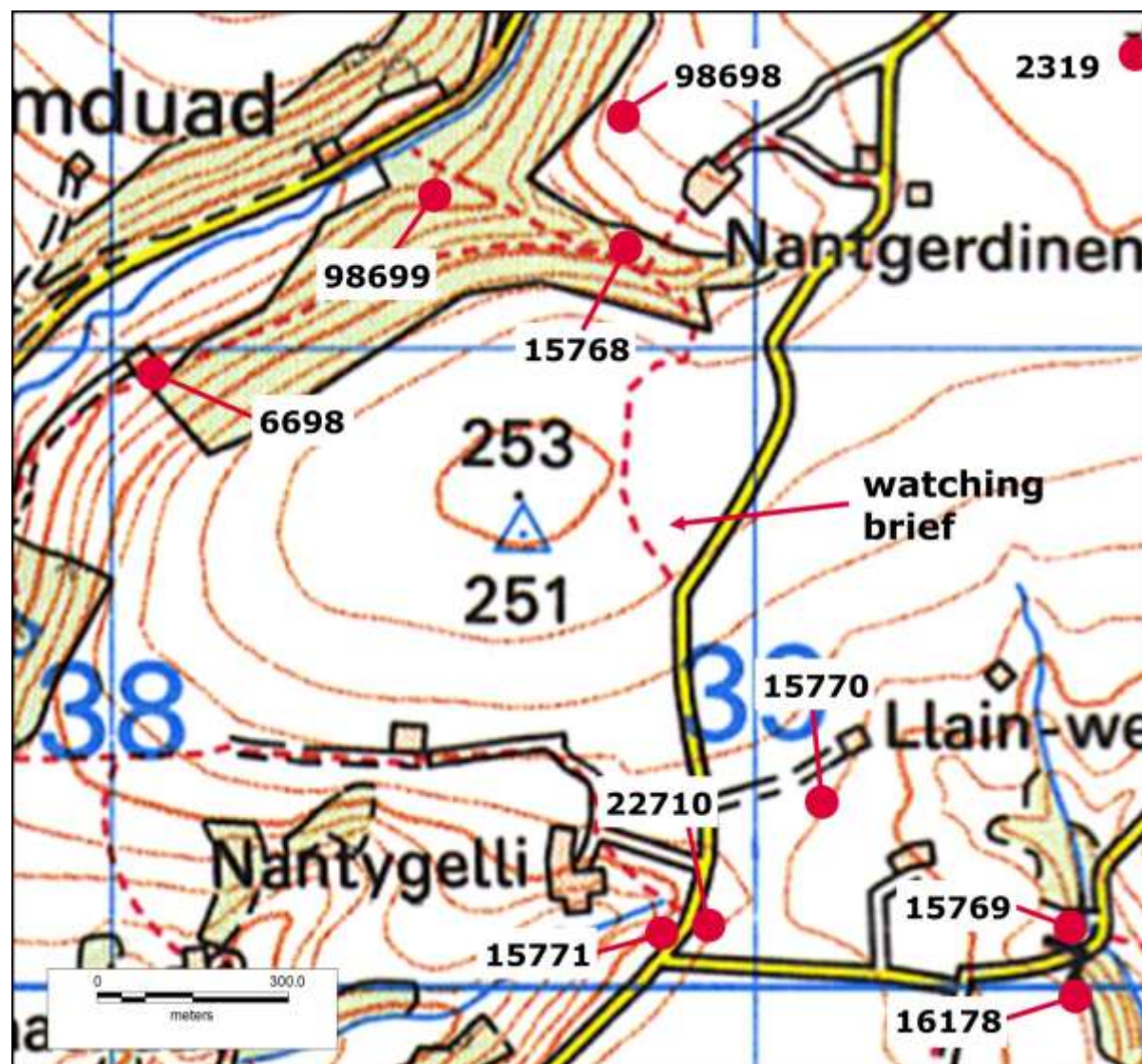
**Figure 1:** Site location map of watching brief site from the Ordnance Survey.

Reproduced from the 2003 Ordnance Survey 1:50,000 scale Landranger Map with the permission of The Controller of Her Majesty's Stationery Office, © Crown Copyright Dyfed Archaeological Trust, The Shire Hall, Carmarthen Street, Llandeilo, Carmarthenshire SA19 6AF. Licence No AL51842A





**Figure 2:** Site of watching brief



**Figure 3:** Known archaeological sites (red circles) in relation to the development site

## 2. THE SITE

### 2.1 Location

2.1.1 Situated between the 240m and 250m contour lines, the application area (centred on NGR SN 3888 3074) lies on a topographic ridge on gently sloping agricultural land. The Afon Duad valley lies 1km to the west and the village of Cynwyl Elfed 3.5kms to the southwest.

2.1.2 The underlying geology consists of mudstones known as Ashgill Rocks (undifferentiated).

### 2.2 Archaeological and Historical Background

2.2.1 The development site lies in close proximity to eight known archaeological sites recorded on the Dyfed Archaeological Trust Regional Historic Environment Record (Table 2). None of these sites would be directly affected by the groundworks, but the proximity of some of the sites is indicated on Figure 2.

PRN	Site Name	Description	Grid Reference	Period	Distance and bearing
2319	Crug Bach: Round barrow earthwork; Scheduled Ancient Monument CM118	Scheduled Ancient Monument CM118. Round barrow earthwork.	SN 8814 2767	Bronze Age	1km NE
6698	Llwyn y Gwair	Possible Medieval dwelling, used as a cowshed and by 1971 in a derelict state.	SN 3806 3097	Medieval	875m W
15768	Quarry	Visible as earthwork	SN 3880 3117	Post-medieval	435m N
15769	Capel Ffynnon-Henry, Chapel	Building	SN 3950 3010	Post-medieval	880m SE
15770	Blacksmith's workshop	Building	SN 391 303	Post-medieval	490m S
15771	Quarry		SN 38856 30095	Post-medieval	655m S
16178	Ffynnon Henry	Well	SN 395 300	Post-medieval	955m SSE
22710	Pitffald Cottage	Shown on 1907 6" OS map. Present condition unknown.	SN 3891 3010	Post-medieval	650m S
98698	Quarry	Recorded on 1 <sup>st</sup> ed. OS (1889)	SN 3879 3137	Post-medieval	630m N
98699	Building	1st ed. OS (1889) identifies a rectangular building, possibly a former cottage site. The present condition of the building is unknown.	SN 3850 3125	Post-medieval	645m NNW

**Table 2:** Known archaeological sites in proximity to the development site (Figure 3)

2.2.2 Of the 10 known archaeological sites recorded on the regional HER lying within a 1km radius of the proposed wind turbine location, only two lie within 500m radius of the site, a blacksmith's workshop (PRN 15770) and a quarry site (15768), both of post-medieval date. These are shown on the early Ordnance Survey maps of the area. Six of the remaining sites are of similar date and most identified from early mapping. During the post-medieval period the present field

systems would have been laid out, the proposed turbine site lying within the agricultural land.

2.2.3 Around 875m to the west is the recorded site of a possible medieval dwelling, Llwyn-Y-Gwair (PRN 6698) latterly used as a cowshed. The present condition of the site is unknown. It is also most likely that the proposed turbine location would have lain in agricultural land during the medieval period, possibly associated with the medieval precursor to Nantygelli Farm.

2.2.4 A Bronze Age barrow SAM (CM118) lies 1km to the northeast of the wind turbine site, Crug Bach (PRN 2319). . Bronze Age barrows (burial mounds) were often located on high points of land to maximising their visibility in the landscape. Crug Bach lies at the southwestern end of a topographic ridge, with a further barrow site (also a SAM) at the high-point at its northeastern end. Further SAMs lie to the northeast of these, also in prominent locations. All of these barrows lie on the high ground on the southeastern side of the Afon Duad valley. Directly to the west of the proposed turbine site is a further topographic peak, which would also be a likely spot for a Bronze Age barrow to be located (although none has been recorded).

2.2.5 The archaeological potential for the site area is highest for Bronze Age remains, possibly associated with burial activity on the high-points of land on the southeastern side of the Afon Duad valley. Such activity is likely to survive as below ground features such as pits or ditches lying at the interface between the plough disturbed soils and the undisturbed natural substrata beneath.

### **3. WATCHING BRIEF METHODOLOGY**

The detailed methodology for the watching brief was laid out within the WSI and is summarised as follows.

#### **3.1 Fieldwork**

3.1.1 A watching brief was undertaken during groundworks at the site in advance of the creation of an access track, assembly areas and turbine base. In total approximately 896sq m of topsoil was removed.

3.1.2 A tracked excavator using a 42inch toothed bucket was used to remove the topsoil.

3.1.3 The groundworks were reduced to a depth sufficient to ascertain the presence of buried archaeological features.

3.1.4 All archaeological deposits revealed during the groundworks were examined and recorded to an appropriate level.

3.1.5 Recording of all archaeological features or deposits conformed to best current professional practice and was carried out in accordance with the Recording Manual<sup>3</sup> used by Dyfed Archaeological Trust Field Services

#### **3.2 Post-Fieldwork Reporting and Archiving**

3.2.1 All data recovered during the fieldwork will be collated into a site archive structured in accordance with the specifications in *Archaeological Archives: a guide to best practice in creation, compilation, transfer and curation* (Brown 2007), and the procedures recommended by the National Monuments Record, Aberystwyth.

3.2.2 The results of the fieldwork have been assessed in local, regional and wider contexts. This report includes a desk-based research element to ensure that the site is placed within its wider archaeological context.

3.2.3 This report is fully representative of the results of the fieldwork.

#### **3.3 Timetabling of Fieldwork**

3.2.7 A single day was spent on-site to observe the ground works in advance of the creation of the access track, hardstand and assembly areas and turbine base. This was undertaken on the 29<sup>th</sup> of July 2013.

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<sup>3</sup> Dyfed Archaeological Trust Field Services have adopted the Recording Manual developed by English Heritage Centre for Archaeology. A copy will be available on-site for inspection if required.

## **4. RESULTS**

### **4.1 Access track**

4.1.1 Beginning at the southernmost corner of the field, a right-angled strip, 4m wide and 128m long in total was reduced down to the top of the natural superficial geology deposits.

4.1.2 The topsoil was situated directly above the natural geological deposits with no discernible intervening subsoil. A basic stratigraphic sequence was revealed within the area, comprising an average depth of 0.2m of topsoil consisting of a mid-brown, clay-silt with occasional small shale fragments, overlying an orangey-brown, silty-clay natural interleaved with degraded Ordovician Mudstones (Photo 1).

4.1.3 No archaeological features or deposits were revealed during the excavation and no finds were recovered.

### **4.2 Assembly area and turbine base.**

4.2.1 The assembly area formed a rectangle approx. 22m by 16m with the turbine base, measuring approx. 6m by 5m, attached to its eastern side.

4.2.2 The stratigraphic sequence revealed in this area comprised an average depth of 0.24m of topsoil consisting of a mid-brown, clayey-silt with occasional small shale fragments overlying an orangey-brown, silty-clay natural, interleaved with degraded Ordovician Mudstones.

4.2.3 No archaeological features or deposits were revealed during the course of the excavation and no finds were recovered.

## **5. CONCLUSION**

5.1 The archaeological watching brief has demonstrated that the construction of the wind turbine on land NE of Nantygelli Farm, Cynwyl Elfed has not impacted upon any archaeologically significant deposits or features.

5.2 It is possible that the lack of archaeological remains may be the result of intensive ploughing in the past which may have removed them from the record. Nevertheless, the lack of any archaeology within this area does not diminish the potential for archaeological remains to be present in the vicinity.

5.3 The ground works associated with the construction of the wind turbine have had a minimal impact on the buried resource in the area.

## **6. SOURCES**

Brown, D. 2007 *'Archaeological Archives: A guide to best practice in creation, compilation, transfer and curation'* Institute of Field Archaeologists

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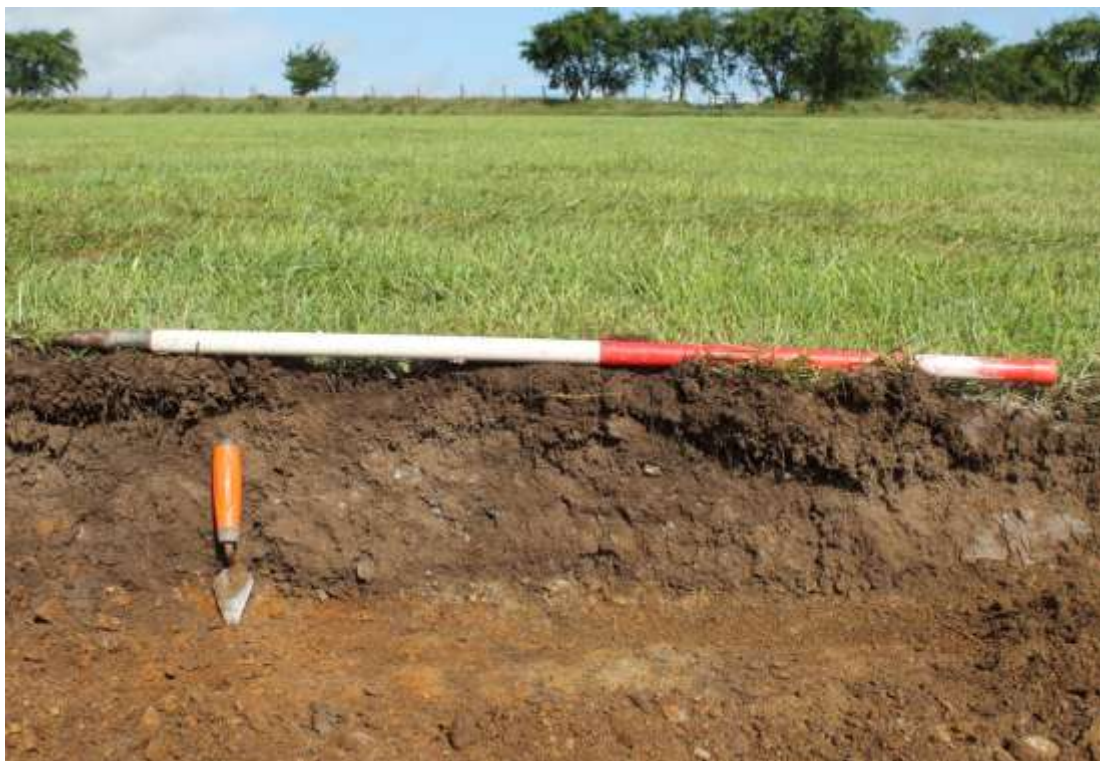
## PHOTOGRAPHS



**Photo 1:** Looking east: representative soil profile of access track.



**Photo 2:** Looking south along access track.



**Photo 3:** Looking north: representative soil profile at assembly area.



**Photo 4:** Looking north east along assembly area.





**Photo 5:** Looking south west toward assembly area with access track in background.

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Paratowyd yr adroddiad hwn gan /  
This report has been prepared by: **HUBERT WILSON**

Swydd / Position: **ARCHAEOLOGIST**

Llofnod / Signature

Dyddiad / Date 04/12/2013

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

ar ran Ymddiriedolaeth Archaeolegol Dyfed Cyf. /  
on behalf of Dyfed Archaeological Trust Ltd.

Swydd / Position: **PROJECT MANAGER**



Llofnod / Signature

Dyddiad / Date 04/12/2013

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