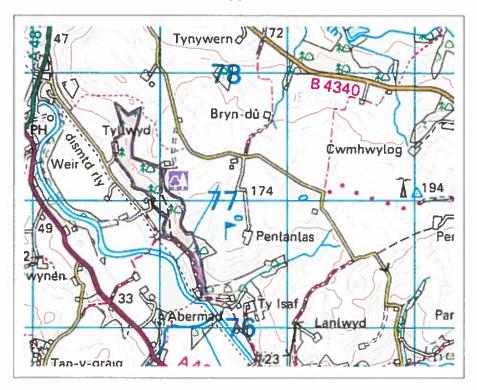
Penlanlas Farm, Rhydyfelin Ceredigion

Archaeological Appraisal & Site Visit



By

Chris E Smith BA (Hons) MA MIfA Report No. 1138

Archaeology Wales Limited, Rhos Helyg, Cwm Belan, Llanidloes, Powys, SY18 6QF Tel: +44 (0) 1686 440371 Email: admin@arch-wales.co.uk

Penlanlas Farm, Rhydyfelin Ceredigion

Archaeological Appraisal & Site Visit

Prepared For:

Fisher German LLP

Authorised by:
Signed:
Position:
Date: 29/4/17

By

Chris E Smith BA (Hons) MA MIfA

Report No: 1138

Date: July 2013

Archaeology Wales Limited, Rhos Helyg, Cwm Belan, Llanidloes, Powys, SY18 6QF Tel: +44 (0) 1686 440371 Email: admin@arch-wales.co.uk

CONTENTS

1		Introduction	
	1.1	Location and scope of work	1
	1.2	Geology	l
	1.3	Site Description	l
2	HER	SAM & LB Data	2
	2.2	SAM data	2
	2.3	LB data	2
3	Man	Regression	2
_	3.1	1840s Tithe Map	3
	3.2	1 st Edition OS 1890	3
	3.3	2 nd Edition OS 1906	3
4	Aeri	al Photographs	3
5	Site	Visit	۵
		cussion and conclusions	
·	6.1	HER, SAM & LB data	4
	6.2	Map Regression	4
	6.3	Aerial Photographs	4
	6.4	Potential	
7	Sou	• • • • • • • • • • • • • • • • • • • •	4

List of Figures

Figure 1	General Location Map
Figure 2	Site Location Map
Figure 3	1840s Tithe Map
Figure 4	1890 1st Ed OS
Figure 5	1906 2 nd Ed OS

List of Plates

Plate 1	1946 RAF AP
Plate 2	1950 RAF AP
Plate 3	1978 OS AP
Plate 4	2013 Google Earth Image
Plates 5-9	Site walkover photos

List of Appendices

Appendix 1	Figures
Appendix 2	Plates
Appendix 3	Specification
Appendix 4	Archive Cover Sheet

Copyright Notice:

Archaeology Wales Ltd. retain copyright of this report under the Copyright, Designs and Patents Act, 1988, and have granted a licence to Fisher German LLP, to use and reproduce the material contained within.

The Ordnance Survey has granted Archaeology Wales Ltd a Copyright Licence (No. AL 52163A0001) to reproduce map information; Copyright remains otherwise with the Ordnance Survey.

Non-Technical Summary

An archaeological appraisal was carried out on the site of a proposed wind turbine on land at Penlanlas Farm, Rhydyfelin, Ceredigion. The aim of the work was to assess the archaeological potential of the area and thereby assist Dyfed Archaeological Trust in determining whether further archaeological work is required.

The HER data revealed no recorded sites within a 250m radius of the site, although a previously unrecorded quarry of minor significance was identified within the site during the Site Visit. Aerial photographs revealed the presence of cropmarks of likely significance to the east of the site. Three SAMs and 17 listed buildings exist within a radius of 2km, although none of these were within 250m of the site. The archaeological potential of the site is considered moderate.

1 Introduction

1.1 Location and scope of work

- 1.1.1 In June 2013 Archaeology Wales Ltd (AW) was commissioned by Gemma Field of Fisher German LLP to carry out an archaeological appraisal of a proposed wind turbine site at Penlanlas Farm, Rhydyfelin, Ceredigion (NGR SN 61052 77034 Fig 1). The archaeological work follows recommendations from Dyfed Archaeological Trust Heritage Management.
- 1.1.2 The appraisal includes a brief assessment of data recorded on the HER held by Dyfed Archaeological Trust, a brief map regression analysis, a brief assessment of aerial photographs held by the RCAHMW and a Site Visit. The work did not include an assessment of the potential significance of the site in the local, regional and national context, nor did it include an assessment of the visual impact of the proposed turbine on scheduled ancient monuments or listed building in the local area. Both of these lie outside the scope of the current work, but should be assessed as part of a full desk based assessment if considered necessary.

1.2 Geology

1.2.1 The underlying solid geology of the area is comprised of undifferentiated Llandovery rocks. This is comprised of interbedded sandstone and conglomerate (Geological Survey Map, 2001).

1.3 Site Description

1.3.1 The proposed development site is located 3km to the south-east of the village of Rhydyfelin and 4km south east of the larger town of Aberystwyth. The site is located adjacent to the Penlanlas golf course and is currently in use as upland pasture within an irregularly shaped field, located at 173m above ordnance datum.

2 HER, SAM & LB Data

2.1 HER data

2.1.1 A search of the regional HER (Llandeilo) revealed no recorded sites of archaeological interest within a 250m radius of the proposed turbine.

2.2 SAM data

2.2.1 A total of three SAM sites exist within a radius of 2km of the proposed turbine site. These include; Old Warren hillfort (CD168) located 1.7km to the north, Pant Mawr hillfort (CD170) located 1.3km to the south and the post-medieval Nanteos kennels/eyecatcher located 1.4km to the north east.

2.3 LB data

- 2.3.1 A total of 17 listed buildings exist within a 2km radius of the proposed turbine site. These include I grade I building, 14 grade II buildings and 2 grade II* buildings. These are listed below:
 - 10710 Plas Abermad GII*
 - 10711 Henblas GII
 - 81969 Craig y Bwch GII
 - 81977 Outbuilding at Braig y Bwch GII
 - 81983 Ty Isaf GII
 - 82493 Coach gouse and stable at Glanpaith GII
 - 82497 Entrance gates at Glanpaith GII
 - 82501 Glanpaith GII
 - 82509 Nanteos Lodge GII
 - 82510 Stable court at Nanteos GII*
 - 82512 Dairy at Nanteos GII
 - 82514 Dovecote at Nanteos GII
 - 82516 Tyllwyd and outbuildings GII
 - 82518 Wall east of Nanteos GII
 - 82520 Walled garden at Glanpaith GII

- 4.1.3 A dark area located immediately to the west of the turbine site is likely to represent the disused quarry shown on the 1st edition OS map. No further features of historic or archaeological significance are depicted on the map.
- 4.1.4 The 1950 RAF aerial photograph (Plate 2) shows the proposed turbine site in good clarity. The rectangular area of improved pasture, containing the proposed turbine site and shown on the 1946 AP, has, by 1950, seemingly been divided into two smaller rectangular fields.
- 4.1.5 Several cropmarks, including the likely route of the footpath depicted on the OS maps, are visible to the east of the site. Aside from that of the footpath, these are potentially of archaeological interest as they are not depicted by features on the earlier mapping. One small roughly rectangular cropmark immediately to the east of the proposed turbine site may represent a small enclosure.
- 4.1.6 The 1978 Ordnance Survey aerial photograph (Plate 3) is, unfortunately, reasonably indistinct in the detail shown. This is due to the greater altitude from which the original was taken. No detail is thus discernible.
- 4.1.7 The 2013 Google Earth satellite image (Plate 4) shows the site in very clear detail. The quarry is clearly visible to the west of the proposed turbine location. The area containing cropmarks of likely archaeological significance, as seen on the 1950 aerial photograph, is now covered by a pond, located to the east of the proposed turbine site.
- 4.1.8 No further features of historic or archaeological significance are depicted.

5 Site Visit

- 5.1.1 A rapid walkover of the proposed development area was carried out in dry and sunny conditions on the 2nd July 2013 (Plates 5-9).
- 5.1.2 The site of the proposed turbine is located within a roughly rectangular field of improved pasture. The site of the disused quarry is immediately evident to the west of the proposed turbine site. It comprises a shallow scoop into the gentle slope of the southern facing hillside. It measures approximately 17x14m and had exposed bedrock around its lip, suggestive of the soil depth above the bedrock being particularly shallow.
- 5.1.3 No further features of historic or archaeological interest were noted.

6 Discussion and conclusions

6.1 HER, SAM & LB data

- 6.1.1 The SAM and LB data has shown that, whilst SAMs and LBs do exist within a 2km radius of the site, none are located within the proposed development area itself and thus will suffer no physical impact.
- 6.1.2 The HER data has shown that no previously recorded sites of archaeological or historic interest are located within a 250m radius of the assessment area.

6.2 Map Regression

6.2.1 The map regression analysis has shown that the proposed turbine site was previously an area of unimproved pasture/marsh. A quarry, likely disused sometime between 1890 and 1906, is located adjacent to the proposed turbine site.

6.3 Aerial Photographs

6.3.1 Aerial photograph analysis has shown that, between 1906 and 1946, the proposed turbine area was turned into improved pasture. The 1950 aerial photograph shows that potentially significant cropmarks were located to the east of the turbine site. The 2013 satellite image has shown, however, that these cropmarks have since been destroyed by the digging of a pond in that location.

6.4 Potential

- 6.4.1 Taking the results of the SAM, LB and HER data, the map regression, aerial photographs and site walkover into account, it is felt that the area of proposed development has a moderate potential to contain previously unrecorded archaeological features.
- 6.4.2 This is largely due to the site being located equidistant between a post-medieval quarry to the west and potentially significant, though subsequently removed, cropmarks to the east

7 Sources

Data sources

- HER for 250m radius from turbine site (Dyed Archaeological Trust)
- SAM & LB data for 2km radius from turbine site (Cadw)

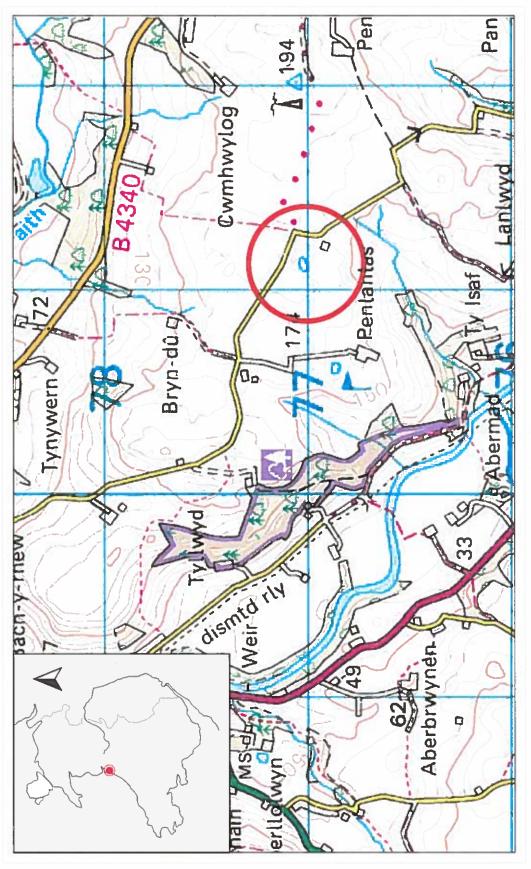
Cartographic Sources

- 1840s Tithe Map of Llanbadarn Fawr Parish (NLGW)
- 1890 1st Ed OS (NLGW)
- 1906 2nd Ed OS (NLGW)

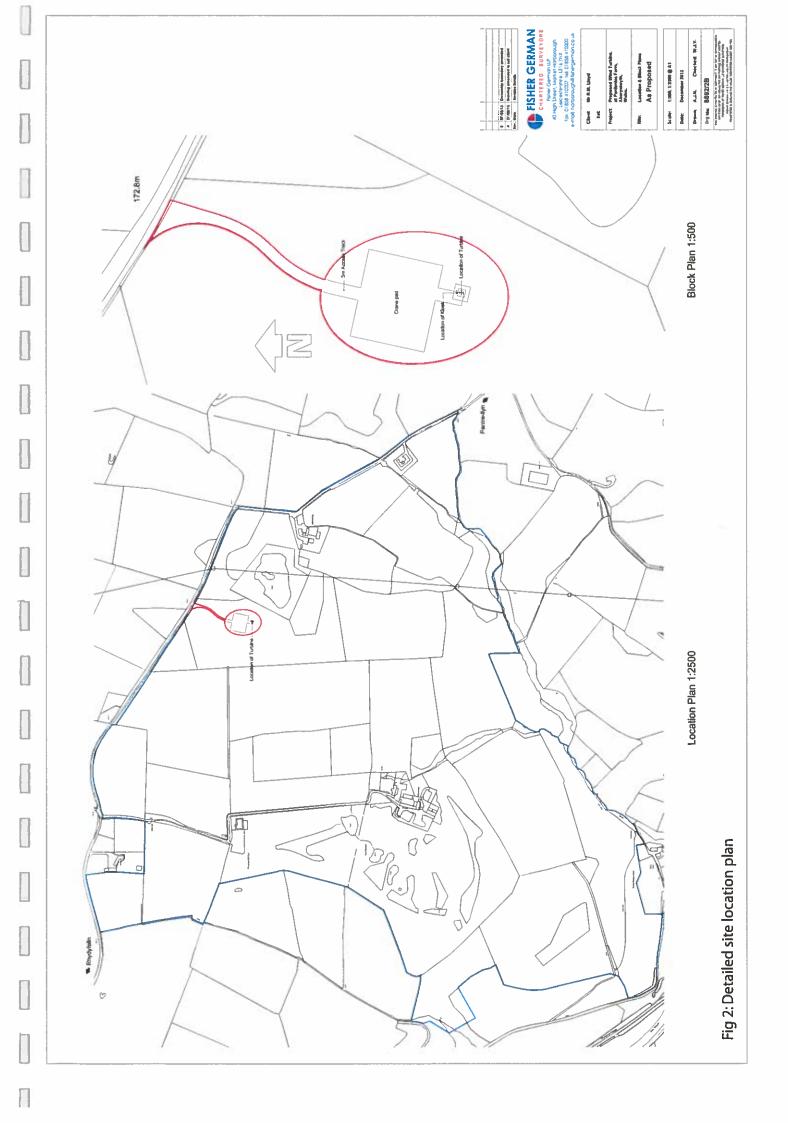
Aerial Photographs

- 106G/UK/1457 02/05/1946 3271 (RCAHMW)
- 541/464 27/03/1950 1048 (RCAHMW)
- 78-231 092/108 (RCAHMW)
- 2013 Google Earth Satellite image

APPENDIX I: Figures



Rg 1: Map showing location of assessment area



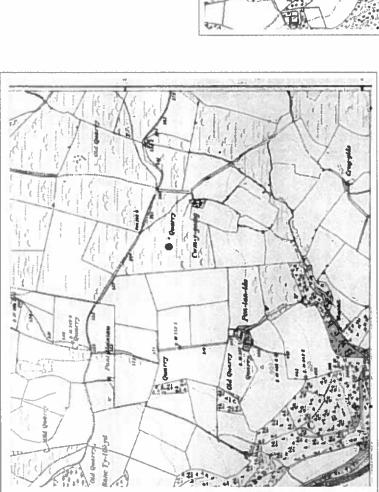


Fig 4:1890 1st Edition 6 Inch OS map showing location of turbine at Penlanlas

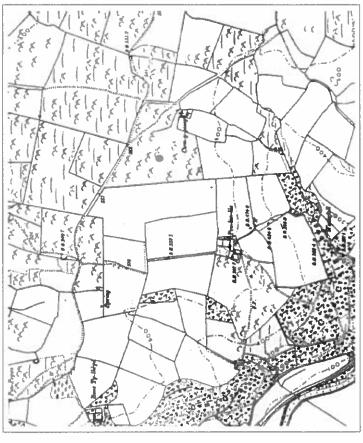


Fig 5: 1906 2nd Edition 6 Inch OS map showing location of turbine at Penlanlas

APPENDIX II: Plates



Plate 2: 1950 RAF AP showing location of turbine at Penlanlas

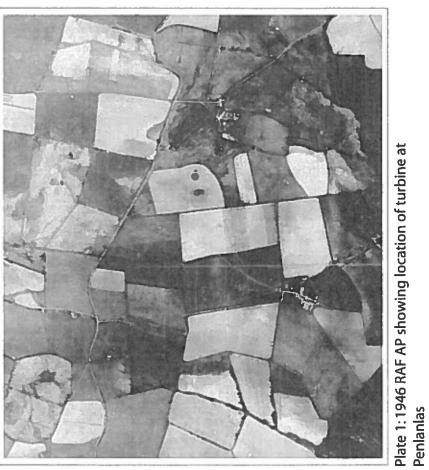




Plate 3: 1978 OS AP showing location of turbine at Penlanlas

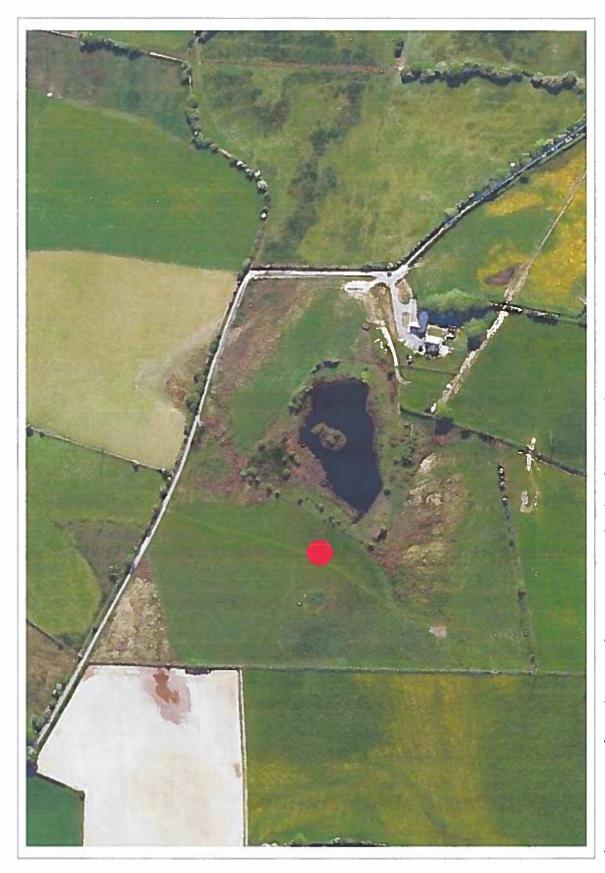


Plate 4; 2013 Google Earth image showing proposed turbine location with quarry to west



Plate 5: View of proposed turbine site from north east



Plate 6: View of proposed turbine site from south west



Plate 7: View of proposed turbine area, looking north west

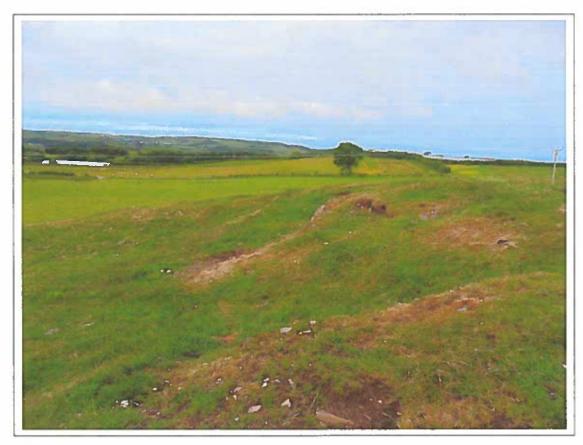


Plate 8: View of quarry area, looking west



Plate 9: View of quarrying area, looking south



Plate 9: View of quarrying area, looking south

APPENDIX III: Specification



Archaeology Wales LtdRhos Helyg, Cwm Belan, Uanidloes, Powys SY18 6QF

T 01686 440371 E info@arch-wales.co.uk www.arch-wales.co.uk

Written Scheme of Investigation For Archaeological Appraisal:

Penlanlas Farm, Rhydefelin, Ceredigion

Prepared for: Gemma Field

Project No: 2136

June 2013

Archaeology Wales Limited Rhos Helyg, Cwm Belan, Llanidloes, Powys, SY18 6QF

Tel: +44 (0) 1686 440371 Email: admin@arch-wales.co.uk



NON TECHNICAL SUMMARY

This Written Scheme of Investigations details the proposal for an archaeological appraisal associated with the proposed construction of a single wind turbine and associated infrastructure at Penlanlas farm, Rhydefelin, Ceredigion. It has been prepared by Archaeology Wales Ltd for Gemma Field of Fisher German LLP.

1. Introduction

The proposed development comprises plans to construct a single wind turbine, and associated infrastructure at Penlanlas farm, Rhydefelin, Ceredigion (Henceforth – the site), NGR SN 61052 77034. Information on the development has been supplied by Fisher German LLP. The local planning authority is Ceredigion County Council (Henceforth – CCC). The planning application number is A130208.

This WSI has been prepared by Chris E Smith (MIfA), Project Manager, on behalf of Archaeology Wales Ltd (Henceforth - AW) at the request of Gemma Field of Fisher German LLP. It provides information on the methodology that will be employed by AW during an archaeological appraisal.

The purpose of the proposed archaeological appraisal is to provide CCC with the information they have requested in respect of the proposed development, the requirements for which are set out in Planning Policy WALES, November 2012, Section 6.5, and Welsh Office Circular 60/96.

The details set out in this specification follow a Brief supplied by Mike Ings of Dyfed Archaeological Trust (Henceforth - DAT). DAT, in its capacity as archaeological adviser to CCC, has recommended that an archaeological appraisal be undertaken.

This appraisal is **not** a full desk-based assessment of the potential historic environment resource, as defined by the Standard and Guidance of the IfA. Rather, it is a more rapid piece of work involving readily available information to assess historic environment potential. This work will inform whether further assessment or evaluation will be required as part of the planning process.

2 Site description

The proposed site comprises an access track measuring 5m in width by approximately 70m in length, a sub-square crane pad measuring approximately 30x30m and turbine itself.

The site is currently in use as upland pasture within an irregularly shaped field, located at 173m above ordnance datum.

Various archaeological sites exist within the surrounding area. Within a 2km radius of the proposed turbine a total of 17 listed buildings are recorded. A total of three scheduled ancient monuments (SAMs) are also shown within a 2km radius. These comprise two Iron age hillforts (Pant Mawr & Old Warren) and the post-medieval Nanteos Eyecatcher.

3 Site specific objectives

The key objective of the archaeological appraisal is to provide a rapid and informed answer to the question whether there is a historic environment dimension that needs to be considered as part of the planning process, and whether this requirement should be clarified through further assessment or investigation.

The appraisal will consider the potential of all aspects of the historic environment, as defined below, no matter what form or period, including the potential for palaeoenvironmental deposits.

4 Scope of the archaeological work

The proposed archaeological work relates to the whole of the site, i.e. all of the application area.

The historic environment appraisal is required to assess the whole of the indicated development area and should also consider the potential for historic assets outside this area, the significance of which may extend into the immediate search area. The resulting report will provide information which is sufficiently detailed to protect historic environment interests and allow for informed decisions to be made in the on-going planning processes. This work will include the following key elements which will be carried out in the following order:

- Consult and interrogate the Regional Historic Environment Record including the detailed further information files and other readily available sources of information, including the National Monuments Record and early O.S and Tithe maps, aerial photographs, etc. (Stage 1)
- Make a visit to the site to assess the presence/absence and condition of historic assets and their potential. (Stage 2)
- Archive and Reporting (Stage3)

Searches (Stage 1)

The report will consider, *inter alia*, the following aspects of the historic environment, which are given as a checklist. Comment on the potential significance of each significant aspect in relation to the proposed development is required. Where further consideration of an aspect may be required this should be clearly stated and reasons given.

ASPECTS

- a. Scheduled Ancient Monuments (SAMs) and their settings.
- b. Non-scheduled ancient monuments and their settings.
- Listed buildings and their settings.
- d. Non statutory Buildings of Local Importance, where this information is readily available and relevant to the proposed development.
- Registered Parks and Gardens and their essential settings.
- f. Registered Historic Landscapes
- g. Non-registered historic landscapes
- h. Buried archaeological potentials
- Palaeoenvironmental potential

- j. Hedgerows and field patterns
- k. Ancient woodland
- I. Place-name evidence
- m. Cumulative impacts, e.g. wind turbines in close proximity, which will require a separate study.
- n. Newly identified sites of historic importance
- o. Any Tir Gofal interests or requirements
- p. LANDMAP and landscape characterisation information.

Searches for all relevant material will be undertaken at the regional HER (Llandeilo), the National Library and the Royal Commission (Aberystwyth).

5 Site Visit (Stage 2)

A walkover survey will be undertaken of the proposed development area. This will consider the nature, extent and degree of survival of archaeological sites, structures, deposits and landscapes within the study area.

Drawings will comprise measured and sketch plans and elevations at appropriate scales as appropriate.

Photographs will be taken in high-resolution digital photography with the camera set to take TIFF format images with a resolution greater than eight megapixels.

Written records will be made as appropriate.

6 Production of an illustrated report (Stage 3)

The report will be submitted to the planning authority and will consider, *inter alia*, the following:

- a) The report should be fully representative of the information gained from Stages 1-2 above, even if there should be negative evidence.
- b) A concise non-technical summary of the appraisal results.
- c) The report will contain at least one plan showing the site's location in respect to the local topography.
- d) The report should list all the sources consulted.
- e) The report should contain a list and assessment of all sites that may be affected by the proposed development. A gazetteer of all heritage assets, as provided by the HER, need not be included in the report.
- f) Where necessary, the report will also contain suitably selected plans and sections of significant archaeological features. All plans and sections should be related to Ordnance Datum.
- g) Written descriptions of all new heritage assets identified as well as sites observed during the site visit.

- h) Statement of the local and regional context of the historic assets identified. Consideration, where appropriate, of the national Research Agenda.
- An assessment of the relative value or significance of each recognised historic asset. This work should be carried out to an agreed methodology submitted with the detailed specifications.
- j) An impact appraisal of the proposed development on the potential archaeological resource should be presented for consideration.
- k) Once completed, a copy of the report should be submitted to the LPA for the consideration of their archaeological advisers. A further copy of the report should be provided to the Dyfed Archaeological Trust for deposition within the Regional Historic Environment Record (HER).
- Where appropriate, a summary report on any new significant archaeological discovery should be submitted for publication to a national journal (e.g. Archaeology in Wales) no later than one year after the completion of the work.
- m) Although there may be a period during which client confidentiality should be maintained, the report and the archive should normally be deposited in the appropriate repository not later than six months after completion of the work.

Copies of the report will be sent to Mike Ings and Charles Hill (DAT), Gemma Field (Fisher German LLP) and for inclusion in the regional HER. Digital copies will be provided in pdf format if required.

The site archive

A project archive will be prepared in accordance with the National Monuments Record (Wales) / the guidelines of the Institute for Archaeologists agreed structure and be deposited within an appropriate local museum on completion of site analysis and report production. It will also conform to the guidelines set out in 'Management of Archaeological Projects Two, Appendix 3' (English Heritage 1991).

Arrangements will be made with the local museum before work starts. Wherever the archive is deposited, this information will be relayed to the HER.

Although there may be a period during which client confidentiality will need to be maintained, the report and the archive will be deposited not later than six months after completion of the work.

Other significant digital data generated by the survey (ie AP plots, EDM surveys, CAD drawings, GIS maps, etc) will be presented as part of the report on a CD/DVD. The format of this presented data will be agreed with the curator in advance of its preparation.

9 Resources and timetable

Standards

The work will be undertaken by AW staff using current best practice.

All work will be undertaken to the standards and guidelines of the IfA.

<u>Staff</u>

The project will be undertaken by suitably qualified AW staff. Overall management of the project will be undertaken by Chris E Smith (a CV is available upon request).

Equipment

The project will use existing AW equipment.

Timetable of archaeological works

A start date has yet to be considered.

This WSI will be resubmitted if the start of the assessment is deferred by more than 6 months.

Insurance

AW is an affiliated member of the CBA, and holds Insurance through the CBA insurance service.

Health and safety

All members of staff will adhere to the requirements of the *Health & Safety at Work Act*, 1974, and the Health and Safety Policy Statement of AW.

If AW has sole possession of the site, then AW will produce a detailed Risk Assessment for approval by the client before any work is undertaken. If another organisation has responsibility for site safety, then AW employees with be briefed on the contents of all existing Risk Assessments, and all other health and safety requirements that may be in place.

APPENDIX IV: Archive Cover Sheet

ARCHIVE COVER SHEET

Penlanlas Farm, Rhydyfelin, Ceredigion

Site Name:

Penlanlas

Site Code:

PFR/13/APP

PRN:

-

NPRN:

-

SAM:

-

Other Ref No:

NGR:

NGR SN 61052 77034

Site Type:

Green Field

Project Type:

Appraisal

Project Manager:

Chris E Smith

Project Dates:

June-July 2013

Categories Present:

Post-med

Location of Original Archive:

AW

Location of duplicate Archives:

-

Number of Finds Boxes:

-

Location of Finds:

_

Museum Reference:

-

Copyright:

AW

Restrictions to access:

None

