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Non Technical Summary

This report results from work undertaken by Cambrian Archaeological Projects Ltd (CAP) for CgMs Consulting Ltd on behalf of their client Black and Veatch Contracting Ltd. Black and Veatch are working on behalf of Dwr Cymru Welsh Water to design a new waste water treatment works at West Aberthaw WWTW, adjacent to the site of a known shrunken medieval settlement. This report draws upon the investigative elements of an archaeological field evaluation carried out prior to any proposed development within the area.

1 Introduction

1.1 Location and scope of work

1.1.1 In June 2005 Cambrian Archaeological Projects (CAP) carried out a pre-determination archaeological evaluation of a proposed Dwr Cymru Welsh Water development site on land adjacent to the shrunken medieval settlement at West Aberthaw immediately north of the power station (Figs 1&2). The site is centred around NGR ST 0240 6680 (E302440 N166710)

1.1.2 Work was carried out in respect of a brief for archaeological assessment set by Neil Maylan, Senior Development Control Officer at GGAT, and an archaeological specification agreed by Jim Hunter (CgMs Consulting).

1.1.3 The development concerns the construction of a new waste water treatment works, improved access and a construction area.

1.2 Geology and topography

1.2.1 The site lies on bedrock of sedimentary Lower Lias Jurassic Period and Mesozoic Era. A geotechnical borehole investigation has recently been carried out in the area although the results are not yet available (Specification for Archaeological Works, CgMs, 2005).

1.2.2 The site lies on a flat plain in between the Severn estuary (approximately 1km to the south) and a shallow rising slope immediately to the north. The site is approximately 10 metres above mean sea level. The river Thaw, the mouth of which was the location of the medieval and post medieval port of Aberthaw, flows to the east of the investigation area (Fig 1).

1.3 Archaeological and historical background

1.3.1 As previously mentioned the area of proposed development is located adjacent to the shrunken medieval settlement of West Aberthaw. This is a scheduled ancient monument. This lies within a narrow strip of St. Athan parish which extends to the shore of the Bristol Channel to include the ancient port site of Aberthaw. Remains of the medieval settlement are located at the foot of a gentle slope south of West Aberthaw farmhouse at 15m AOD. They consist of an embanked croft measuring 20 x 25m (ST 0237 6678), a faint building platform aligned northeast to southwest measuring 15 x 20m (ST 0239 6680) and another building platform aligned northeast to southwest measuring 20 x 25m (ST 0240 6682) (Specification for Archaeological Works, CgMs, 2005). Other features consist of ploughed out earthworks to the southwest of the site (ST 0234 6675) and a small late medieval chapel incorporated into farm outbuildings (ST 0232 6682). The shrunken medieval settlement of West Aberthaw appears to be only one of many such sites within the local landscape. Other recorded shrunken or deserted medieval settlements in the area include three around Llanbethery (ST 033 696, 3.2km away, ST 034 680, 1.8km away and ST 035 682, 2.1km away) and one at Flemingston (ST 020 681, 1.5km away). The field boundary running between the site of the West Aberthaw settlement and the area of the proposed development is currently of unknown date but a count of tree species perhaps suggests a date of around 1500 AD.

2 Aims and Objectives

2.1 Field Evaluation

2.1.1 To establish the presence/absence of archaeological remains within the proposed development area paying particular attention to any medieval activity possibly associated with the shrunken medieval settlement of West Aberthaw.

2.1.2 To determine the extent, condition, nature, character, quality and date of any archaeological remains present.

2.1.3 To appraise the likely impact of the proposed development on any surviving archaeological deposits and if appropriate to make suggestions for a mitigation strategy or, where areas contain archaeology of national importance, for preservation *in situ.*

3 Evaluation Methodology

3.1 Scope of Fieldwork

3.1.1 The evaluation consisted of four machine-excavated trenches (Figs 3&4) measuring 10m in length and 2m in width. The locations of the trenches were scanned for any possible sub-surface services using a CAT scanner before a mechanical excavator (JCB 3CX) fitted with a toothless bucket removed the overburden under close archaeological supervision.

3.1.2 Site director Chris E Smith (AIFA) and project assistant Ian Daintith undertook the evaluation under the overall direction of Kevin Blockley (MIFA). The trenches were cleaned by hand with sample sections being recorded at a scale of 1:10 and plans drawn

at a scale of 1:20 on drafting film. All trenches were photographed using 35mm colour slide film and high resolution digital photography.

3.1.3 A detailed geographic positioning system (GPS) survey was undertaken by Ian Daintith using a Trimble Asset Surveyor TSC1 in order to accurately plot the location of the assessment area and the evaluation trenches.

3.1.4 All works were undertaken in accordance with the IFA's *Standards and Guidance: for an archaeological field evaluation* and current Health and Safety legislation.

3.2 Finds

3.2.1 Finds were recovered by hand during the course of the excavation and bagged by context.

3.3 Palaeo-environmental evidence

3.3.1 No deposits suited to environmental sampling were located during the evaluation.

3.4 Presentation of results

3.4.1 This presentation outlines the results from each trench. An inventory and description of all contexts and each trench matrix is presented in Appendix 1.

4 Evaluation Results

4.1 Soils and ground conditions

4.1.1 The weather conditions were bright, dry and breezy during the initial opening of the trenches using the mechanical excavator (JCB 3CX). Persistent rain and/or overcast conditions prevailed for the remainder of the work however, the rain rendering the clay at the base of the trenches extremely adhesive.

4.2 Distribution of deposits

4.2.1 The topsoil and natural deposits were of a similar consistency and present in all four trenches although their thickness/depth did vary slightly. A thick layer of plasticized clay subsoil was present in trenches one and four with the natural Lias limestone bedrock being located at much deeper levels than in trenches two and three. The natural Lias limestone was located in all four trenches.

4.3 Descriptions

Trench 1 (Figs 3&4) (Plate 1)

4.3.1 Trench 1 was located in the western corner of the temporary enclosure (Fig 1) and was aligned on a northwest – southeast axis. The trench measured 10 x 2m and was excavated to a depth of 1m. Removal of the topsoil (101) yielded no archaeological features and only one piece of pottery, a green glazed medieval fabric. No archaeological features were located during the removal of the orange silty clay subsoil (102). The removal of the subsoil revealed naturally deposited Lias limestone bedrock formations (103).

Trench 2 (Figs 3&4) (Plate 2)

4.3.2 Trench 2 was located in the northernmost corner of the temporary enclosure (Fig 1) and was aligned on a northeast – southwest axis. The trench measured 10 x 2m and was excavated to a depth of between 0.3 and 0.4m. The removal of the topsoil (201) revealed a layer of mid brown silty clay (202), the removal of which soon began to show the same natural lias limestone formations (203) as located in trench 1 although at a considerably shallower level. No archaeological features were recorded in this trench.

Trench 3 (Figs 3&4) (Plate 3)

4.3.3 Trench 3 was located in the eastern corner of the temporary enclosure (Fig 1) and was aligned on a northwest – southeast axis. The trench measured 10 x 2m and was excavated to a depth of between 0.3 and 0.4m. The removal of the topsoil (301) revealed a layer of mid brown silty clay (302), the removal of which soon began to show the same natural lias limestone formation (303) as located in trench 2 and at a similar depth. No archaeological features were recorded in this trench.

Trench 4 (Figs 3&4) (Plate 4)

4.3.4 Trench 4 was located towards the south of the temporary enclosure, immediately east of Trench 1 (Fig 1). The trench was aligned on a northeast – southwest axis and measured 10 x 2m. The trench was excavated to a depth of 1m. Removal of the topsoil (401) revealed a layer of orange silty clay subsoil (402). This was removed by the mechanical excavator until the natural Lias limestone (403) was visible at a similar depth to that located in trench 1. No archaeological features were recorded in this trench.

5 Finds

5.1.1 Throughout the whole of the investigation only a single potsherd was recovered which proved to be a local green glazed medieval earthenware fabric of the 13th – 14th centuries.

6 Discussion and Interpretation

6.1 Reliability of field investigation

6.1.1 The evaluation was largely unhampered by any modern building or agricultural activity. Although ground conditions were not helped by the weather, the adhesive nature of the clay soil hampered neither excavation nor recording.

6.1.2 The evaluation failed to locate any significant archaeological remains which is perhaps surprising given the close proximity of the West Aberthaw shrunken medieval settlement (Fig 2). It should be noted however that only an extremely small percentage of the proposed development area was subject to archaeological investigation.

6.2 **Overall interpretation**

6.2.1 The evaluation revealed no archaeological remains which perhaps hints at the organisation and use of space in and around the West Aberthaw shrunken medieval settlement. The abandoned settlement earthworks appear to spread from the base of the shallow slope adjacent to the assessment area up to and possibly to the west of the farmhouse and its outbuildings with the area of the proposed development possibly being kept for pasture or agriculture.

6.2.2 The depth of the natural solid geology appears to increase towards the west of the site, suggestive of a natural slope which is perhaps mirrored in the profile of the hill to the north on which the farmhouse is constructed.

6.3 **Significance**

6.3.1 The evaluation revealed that the proposed development site is likely to be largely archaeologically sterile. However, this does not rule out the possibility of isolated archaeological features closer to the base of the slope on which the abandoned settlement is located.

7 Acknowledgements

7.1.1 Thanks are due to Ian Daintith for his assistance with the fieldwork and for conducting the GPS survey. Thanks are also due to Neil Maylan (GGAT) and Jim Hunter (CgMs) for their on site visits.

ARCHIVE COVER SHEET

Aberthaw Waste Water Treatment Works

Site Name:	Aberthaw WWTW
Site Code:	ATW /05/EVA
PRN:	-
NPRN :	-
SAM:	-
Other Ref No:	CAP Project no. 619
NGR:	NGR ST 0240 6680
Site Type:	Shrunken Medieval Settlement
Project Type:	Evaluation
Project Officer:	Chris E Smith
Project Dates:	June 2005
Categories Present:	-
Location of Original Archive:	-
Location of duplicate Archives:	None
Number of Finds Boxes:	None
Location of Finds:	-
Museum Reference:	-
Copyright:	CAPLtd
Restrictions to access:	None