

**EAST DUDWELL BARNS, CAMROSE,
PEMBROKESHIRE
ARCHAEOLOGICAL WATCHING BRIEF
(SM9100121161)**

PLANNING APPLICATION NO. 19/0093/PA



Prepared by DAT Archaeological Services
For: Mr Duncan Griffiths



ymddiriedolaeth archaeolegol
DYFED
archaeological trust

DYFED ARCHAEOLOGICAL TRUST

**REPORT NO. 2020-41
EVENT RECORD NO.121958**

September 2020

**EAST DUDWELL BARNS, CAMROSE
ARCHAEOLOGICAL WATCHING BRIEF
(SM9100121161)**

By

Menna Bell

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

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

Ymddiriedolaeth Archaeolegol Dyfed Cyf
Ty Cornel, Stryd Caerfyrddin, Llandeilo, Sir
Gaerfyrddin SA19 6AE
Ffon: Ymholiadau Cyffredinol 01558 823121
Adran Rheoli Treftadaeth 01558 823131
Ebost: info@dyfedarchaeology.org.uk
Gwefan: www.archaeolegdyfed.org.uk

Dyfed Archaeological Trust Limited
The Corner House, Carmarthen Street, Llandeilo,
Carmarthenshire SA19 6AE
Tel: General Enquiries 01558 823121
Heritage Management Section 01558 823131
Email: info@dyfedarchaeology.org.uk
Website: www.dyfedarchaeology.org.uk

Cwmni cyfyngedig (1198990) ynghyd ag elusen gofrestredig (504616) yw'r Ymddiriedolaeth.
The Trust is both a Limited Company (No. 1198990) and a Registered Charity (No. 504616)
CADEIRYDD CHAIR: Jennifer Protheroe-Jones CYFARWYDDWR DIRECTOR: K Murphy BA MCIfA

EAST DUDWELL BARNS, CAMROSE, PEMBROKESHIRE
ARCHAEOLOGICAL WATCHING BRIEF

Client

Duncan Griffiths

Event Record No

121958

Report No

2020-41

Project Code

FS19-078

Report Prepared By

Menna Bell

Fieldwork Undertaken By

Andy Shobbrook

Illustrated By

--

Report Approved By

Phil Poucher

Rev Number	Description	Undertaken	Approved	Date
V1	DRAFT	MB	PP	12/11/20

EAST DUDWELL BARNs, CAMROSE, PEMBROKESHIRE
ARCHAEOLOGICAL WATCHING BRIEF

CONTENTS

EXECUTIVE SUMMARY	1
CRYNODEB GWEITHEREDOL	1
1 INTRODUCTION	2
1.1 Project Proposals and Commission	2
1.2 Scope of the Project	2
1.3 Report Outline	2
1.4 Abbreviations	3
1.5 Illustrations	3
1.6 Timeline	3
2 SITE LOCATION AND TOPOGRAPHY	5
3 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND	8
3.1 Archaeological Background	8
3.2 Historic Mapping	10
4 WATCHING BRIEF METHODOLOGY	12
4.1 Fieldwork	12
4.2 Timetabling of Fieldwork	13
4.3 Post-Fieldwork Reporting and Archiving	13
5 RESULTS AND DISCUSSION	14
6 CONCLUSIONS	23
7. ACKNOWLEDGEMENTS	24
8. SOURCES	24
APPENDIX I	25
APPENDIX II	26

FIGURES

Figure 1:	Location map showing the development area (red square) at East Dudwell, Camrose, Pembrokeshire.	4
Figure 2:	Plan of the agricultural ranges proposed for conversion at East Dudwell (plan supplied by client)	7
Figure 3:	Sites of archaeological interest (red stars) recorded in the DAT HER with 500m radius of East Dudwells	9
Figure 4:	An extract from the Camrose tithe map of 1841 showing East Dudwell farmstead (outlined in red) within the mid-nineteenth century agricultural landscape.	10
Figure 5:	An extract from the 1889 1:2500 1 st edition, Pembrokeshire Ordnance Survey map showing East Dudwells (outlined in red) at the end of the nineteenth-century. Note the "S" acre brace symbol on the later, east-west building.	11
Figure 6:	An extract from the 1907 1:2500 2nd edition Pembrokeshire Ordnance Survey map showing East Dudwells at the turn of the twentieth-century. Note that the acre brace symbol is no longer depicted and the new, smaller building attached to the south eastern corner of the later, east-west orientated building at the northern end of the farmstead.	12

TABLES

Table 1:	Archaeological and historical timeline for Wales	3
Table 2:	Archaeological and historical sites recorded on the Dyfed Historic Environment Record within 500m of East Dudwell	8

PHOTOGRAPHS

Photo 1:	The buildings at East Dudwell proposed for conversion (photo taken from sales particulars from Town, Coast and Country Estates)	5
Photo 2:	The small building (PRN 13246) and conical round chimney thought to be of medieval origins located at the southwestern corner of the farm yard (DAT Photo)	6
Photo 3:	View facing East of the conical round chimney situated at the southern gable of building PRN 13246 (DAT Photo)	6
Photo 4:	The disturbed floor level in Building 1 (DAT Photo)	14
Photo 5:	The central openings in the east facing elevation of Building 1 (DAT Photo)	15
Photo 6:	The southern end of the east facing elevation of Building 1 (DAT Photo)	15
Photo 7:	The exploratory test pit in Building 1. Note the masonry block tumble in the bottom right of the pit and the slate capped drain (DAT Photo)	16
Photo 8:	The east facing section of the test pit in Building 1 showing the truncated slate capped drain (104) and masonry tumble (102) (DAT Photo)	16

Photo 9:	The continued trench in Building 1 (DAT Photo)	17
Photo 10:	A composite image showing the east facing elevation of Building 3 (DAT Photo)	18
Photo 11:	The two wide openings in Building 3	18
Photo 12:	The location of the test pit in Building 3 and infilled opening in the southern gable of Building 3 (DAT Photo)	19
Photo 13:	The central and northern infilled opening on the east facing elevation of Building 2 (DAT Photo)	19
Photo 14:	The southern and central infilled openings in the east facing elevation of Building 2 (DAT Photo)	20
Photo 15:	The internal elevation of the central, infilled opening in the east facing elevation of Building 2 showing the inserted steps and difference between the internal and external ground levels (DAT Photo)	21
Photo 16:	The reduced ground level and truncated water pipe of the central infilled doorway in the east facing elevation of Building 2 (DAT Photo)	21
Photo 17:	The partially widened central opening in the east facing elevation of Building 2	22

**EAST DUDWELL BARNs, CAMROSE, PEMBROKESHIRE
ARCHAEOLOGICAL WATCHING BRIEF****EXECUTIVE SUMMARY**

DAT Archaeological Services were commissioned to undertake an archaeological watching brief in June 2020 during groundworks associated with the conversion of former agricultural buildings at East Dudwell, Camrose, Pembrokeshire (centred on SM91001 21161). The work recorded some earlier internal flooring and gave a brief interpretation of the development and character of the buildings.

CRYNODEB GWEITHEREDOL

Comisiynwyd Gwasanaethau Archeolegol YAD gan y datblygwr i ymgymryd â brîff gwylio ym mis Mehefin 2020 yn ystod gwaith daear sy'n gysylltiedig â trosi adeiladau blaenorol amaethyddol ym East Dudwell, Camrose, Sir Benfro (wedi'i ganoli ar SM 91001 21161). Cofnododd y gwaith rywfaint o lorio mewnol cynharach a rhoddodd ddehongliad byr o ddatblygiad a chymeriad yr adeiladau.

1 INTRODUCTION

1.1 Project Proposals and Commission

1.1.1 DAT Archaeological Services were commissioned by Duncan Griffiths to provide an archaeological watching brief during groundworks associated with the conversion of former agricultural buildings at East Dudwell, Camrose, Pembrokeshire (centred SM 9100121161; Figure 1).

1.1.2 An archaeological condition (Condition No. 7) had been attached to planning permission for the development (19/0093/PA) by Carmarthenshire County Council which stated that:

"The developer shall ensure that a professionally qualified archaeologist is present during the undertaking of any ground works in the development area, so that an archaeological watching brief can be carried out. The archaeological watching brief will be undertaken to the standards laid down by the Chartered Institute for Archaeologists. The Planning Authority will be informed, in writing at least two weeks prior to the commencement of the development, of the name of the said archaeologist."

1.1.3 The condition had been placed upon the planning decision *"to ensure that any archaeological interests are properly recorded and to accord with GN.38 of the Local Development Plan for Pembrokeshire (adopted 28th February 2013).*

1.2 Scope of the Project

1.2.1 A written scheme of investigation (WSI) for a watching brief was prepared by DAT Archaeological Services prior to the commencement of the works, which was approved by Dyfed Archaeological Trust – Development Management (DAT-DM) in their capacity as advisors to the local authority, prior to the commencement of the works (Appendix II). The project objectives were:

- Provision of a written scheme of investigation to outline the methodology by which DAT Archaeological Services will undertake the watching brief.
- To monitor ground works in order to identify the presence/absence of any archaeological deposits.
- To establish the character, extent and date range for any archaeological deposits to be affected by the proposed groundworks.
- To appropriately investigate and record any archaeological deposits to be affected by the groundworks.
- To produce an archive and report of any results.

1.2.2 The overall work was summarised as: *"Archaeological attendance during ground works associated with the conversion of several barns into dwellings at East Dudwell Barns, Camrose, Pembrokeshire which could potentially expose, damage or destroy archaeological remains. Appropriate investigation and recording of any such remains will be undertaken if revealed. A report and archive of the results of the works will be prepared."*

1.3 Report Outline

1.3.1 This report describes the location of the development works 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 (HER) are identified by their Primary Record Number (PRN) and located by their National Grid Reference (NGR). Sites recorded on the National Monument Record (NMR) held by the Royal Commission on the Ancient and Historical Monuments of Wales (RCAHMW) are identified by their National Primary Record Number (NPRN). Scheduled Monument (SM). Altitude is expressed to Ordnance Datum (OD). References to cartographic and documentary evidence and published sources will be given in brackets throughout the text, with full details listed in the sources section at the rear of the report.

1.5 Illustrations

- 1.5.1 Photographic images are to be found within 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.

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 ¹ –	1536 – 1750	
Industrial Period –	1750 – 1899	
modern –	20 th century onwards	

Table 1: Archaeological and historical timeline for Wales

¹ 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

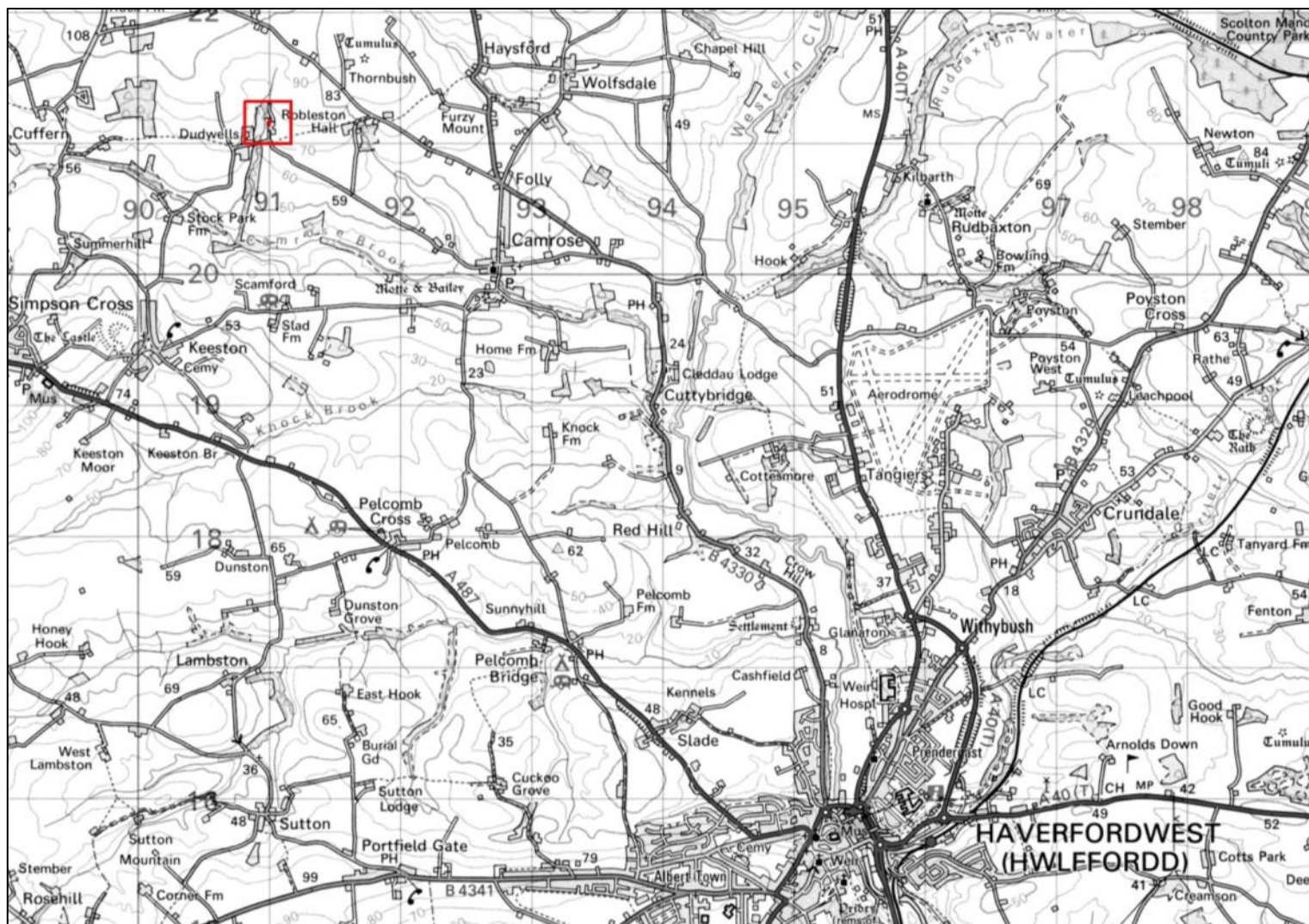


Figure 1: Location map showing the development area (red square) at East Dudwell, Camrose, Pembrokeshire.

Reproduced from the 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 Corner House Shire Hall, Carmarthen Street, Llandeilo, Carmarthenshire SA19 6AE. Licence No. 100020930

2 SITE LOCATION AND TOPOGRAPHY

- 2.1 East Dudwell is located approximately 2km north-west of the hamlet of Camrose, nearest to the town of Haverfordwest in southern Pembrokeshire (SM9100121161). East Dudwell is a post-medieval farmstead which originally comprised a large farm house and an L-shaped range of four conjoined agricultural buildings centred around a grassed yard (PRN 118297). The house and range are now separate plots and the agricultural buildings are being converted into five private dwellings (Photo1; Figure 2). Whilst the farmhouse and ranges originated from either the 18th or 19th centuries, a small building situated at the rear of the house and adjacent to the southwestern access to the range, is considered to be much earlier in date. The building has an interesting conical round chimney and an ogee window and doorway and is likely to have medieval origins (PRN 13246) (Photo 2).



Photo 1: The buildings at East Dudwell proposed for conversion (photo taken from sales particulars from Town, Coast and Country Estates).

- 2.2 The underlying solid geology is trachytic rock, igneous rock of the Treffgarne Volcanic Formation. This igneous bedrock formed approximately 478 to 485 million years ago in the Ordovician Period (Source; British Geological Survey).
- 2.3 Whilst the buildings in this development are referred to as “barns” this is slightly misrepresentative of the true form and function of the agricultural buildings concerned, but is used as a convenient umbrella term. The north-south orientated range comprised three conjoined buildings which are distinct in character and original function. These buildings are constructed from lime mortared rubble stone walls; each with varying heights in rooflines and pitches. Doorways and openings opened into the central yard although there were openings on the west

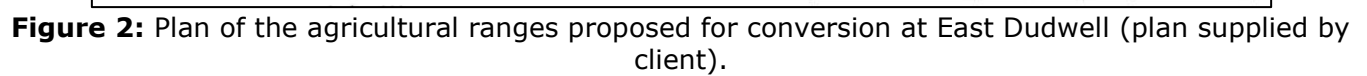
facing elevation. The east-west orientated building is of one phase although divided into two distinct uses.



Photo 2: The small building (PRN 13246) and conical round chimney thought to be of medieval origins located at the southwestern corner of the farm yard (DAT Photo).



Photo 3: View facing East of the conical round chimney situated at the southern gable of building PRN 13246 (DAT Photo).



3 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

3.1 Archaeological Background

3.1.1 East Dudwell is one of a number of post-medieval farmsteads within the Camrose community with origins in much earlier, larger homesteads. Dudwell homestead (PRN 24112), now West Dudwell (PRN 118298), once formed part of the estate of the Earl of Pembroke in the 14th-century and was home to the Tancred family for 11 generations until it passed through marriage to the Warlow family in the late 18th century (Hall and Sambrook, 2012). Four generations of the Barrett family lived at East Dudwell during the late medieval period until this too became subsumed by the Tancred family and eventually fell under the ownership of the Haverfordwest Corporation by the late 18th century (*ibid*). Whilst the present farmhouse and range buildings are of 18th or 19th century origins, the small building with the conical rounded chimney (PRN13246) located at the southwestern corner of the former farm yard, is likely to be a vestige of this earlier homestead.

3.1.2 The Dyfed Historic Environment Record (HER) lists six sites location within a 500m radius of the development site and these are presented in Table 2.

PRN	SITE NAME	TYPE	SUMMARY	PERIOD	NGR
2361	CAMROSE	FINDSPOT	A possible hammer stone from an unknown location, although it may have been from Causeway Farm, Camrose. It was a partially perforated pebble. There are no details of its exact findspot, or its recovery. NAP 2004	Prehistoric	SM9100021000
2441	CAUSEWAY	FINDSPOT	Findspot of Iron Age/ Roman Maul.	Prehistoric	SM9100021000
13246	EAST DUDWELL	BUILDING	Small building of unknown purpose, with a fine round chimney. RPS July 2001	Iron Age; Roman	SM91022113
118297	EAST DUDWELL	FARMSTEAD	Farmstead recorded on 2nd edition, 1:2500 Ordnance Survey map.	Medieval; Post Medieval	SM9101621157
118298	DUDWELLS	FARMSTEAD	Farmstead recorded on 2nd edition, 1:2500 Ordnance Survey map.	Post Medieval	SM9084921081
118313	N/A	FARMSTEAD	Farmstead recorded on 2nd edition, 1:2500 Ordnance Survey map.	Post Medieval	SM9081020985

Table 2: Archaeological and historical sites recorded on the Dyfed Historic Environment Record within 500m of the development site (see Figure 3).

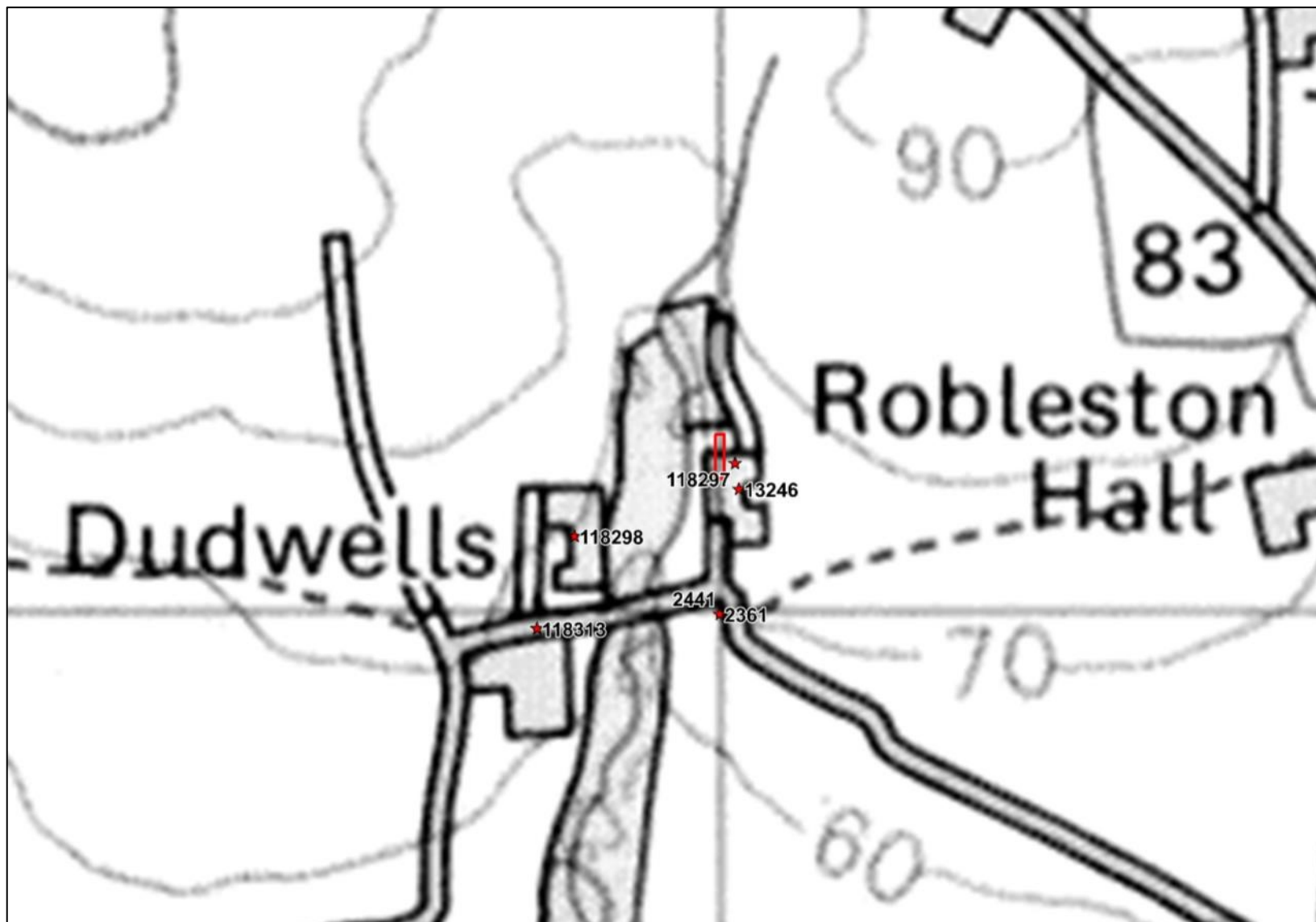


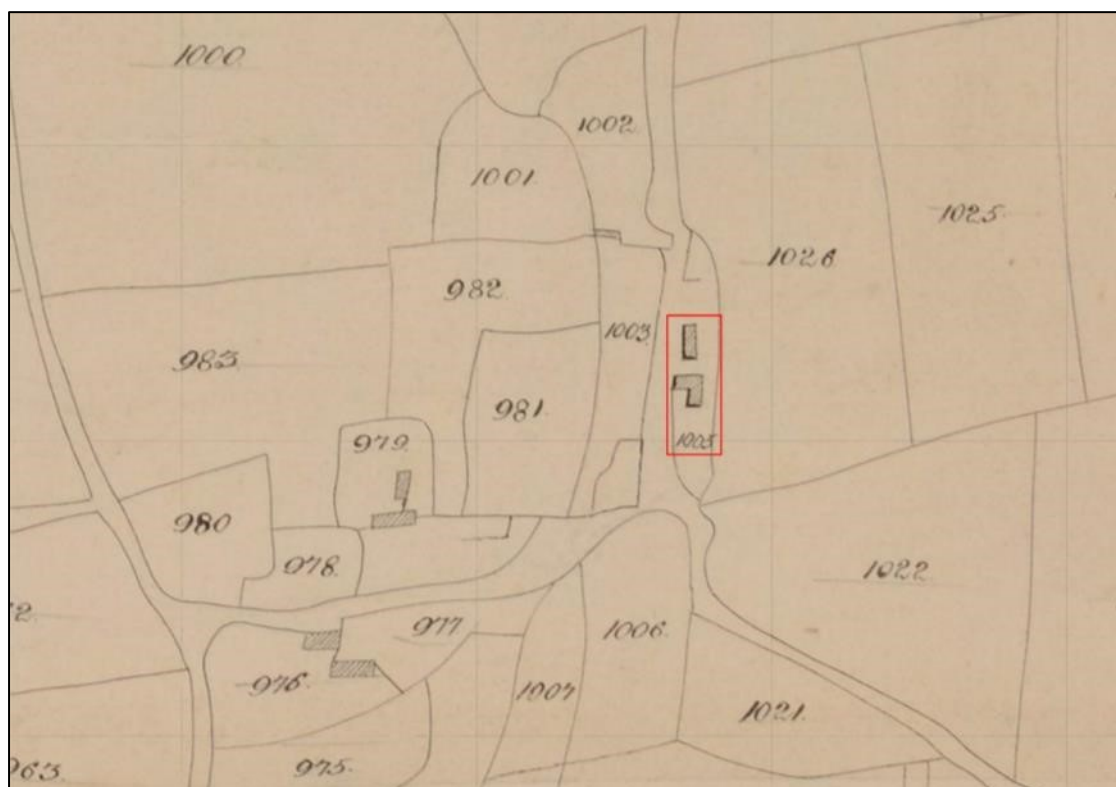
Figure 3: Sites of archaeological interest (red stars) recorded in the DAT HER with 500m radius of East Dudwells

Reproduced from the 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 Corner House, 6 Carmarthen Street, Llandeilo, Carmarthenshire SA19 6AE. Licence No. 100020930

3.2 Historic Mapping

Camrose parish tithe map c.1841

- 3.2.1 The Camrose tithe map shows East Dudwells during the mid-nineteenth century. The map depicts only two buildings on the farmstead; a rectangular building orientated north-south and an L-shaped building, presumably a simplified plan of the farmhouse and building PRN 13246 (depicted as conjoined). It is reasonable to assume that the rectangular building represents an earlier phase of the north-south range of the agricultural buildings being converted (Figure 4). This linear farmstead arrangement likely reflected the contemporary land ownership and access. Indeed the field boundaries show the farmstead as being situated within a north-south track.



Source: Llyfrgell Genedlaethol Cymru – The National Library of Wales

Figure 4: An extract from the Camrose tithe map of 1841 showing East Dudwell farmstead (outlined in red) within the mid-nineteenth century agricultural landscape.

1st edition Pembrokeshire Ordnance Survey map of 1889

- 3.2.2 The 1st edition, Pembrokeshire 1:2500" Ordnance Survey map of 1889 shows East Dudwells towards the end of the nineteenth-century (Figure 5). The farmstead agricultural range is now the L-shaped arrangement that remains at present with the east-west building at the northern end of the yard being a later addition. The north-south range is depicted as 3 individual buildings. The plan of the farmhouse and adjoining building PRN 13246 has also evolved, with the latter being clearly depicted as a distinct building, enclosed to the west by a square courtyard and the main house conjoined at its southeastern extent. The east-western orientated building

is marked with "S" brace symbol which indicates that this is a smaller parcel of land which has been grouped with East Dudwell's acreage.

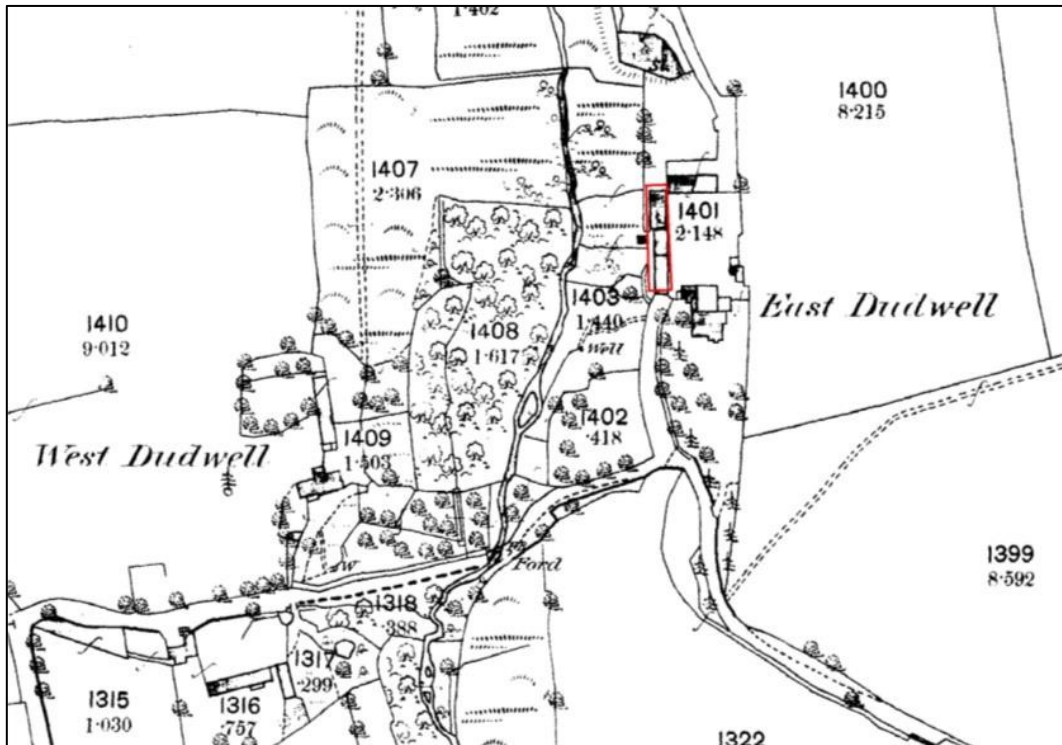


Figure 5: An extract from the 1889 1:2500 1st edition, Pembrokeshire Ordnance Survey map showing East Dudwells (outlined in red) at the end of the nineteenth-century. Note the "S" acre brace symbol on the later, east-west building.

2nd edition Pembrokeshire Ordnance Survey map of 1907

- 3.2.3 The 2nd edition Pembrokeshire 1: 2500" Ordnance Survey map of 1907 shows little change at East Dudwell save for the addition of a small rectangular building orientated east-west, with what appears to be two small pens. This is likely to be a pig sty or other animal accommodation (Figure 6). The acre brace symbol is no longer depicted and this along with the inward facing pens, suggests that the farmstead was self-contained at this time, with access and use orientated from East Dudwell farmhouse.
- 3.2.4 The map regression reveals a nuanced narrative of East Dudwell farmstead. Originally linear in arrangement, the farmstead evolves quite distinctly during the late 19th and early 20th centuries most likely in response to the changing subsistence practices, economies and land ownership. The north-south range may have evolved in a fairly ad hoc manner to accommodate the evolving economy of the farmstead. It is interesting that the later east-west building does appear to have been originally independent to East Dudwell and distinctly obstructs the former north-south access through the farmstead. By the early 20th century, this former access is terminated by the presence of the likely pigsty and effectively transforms the linear arrangement into an L-shaped farmstead.

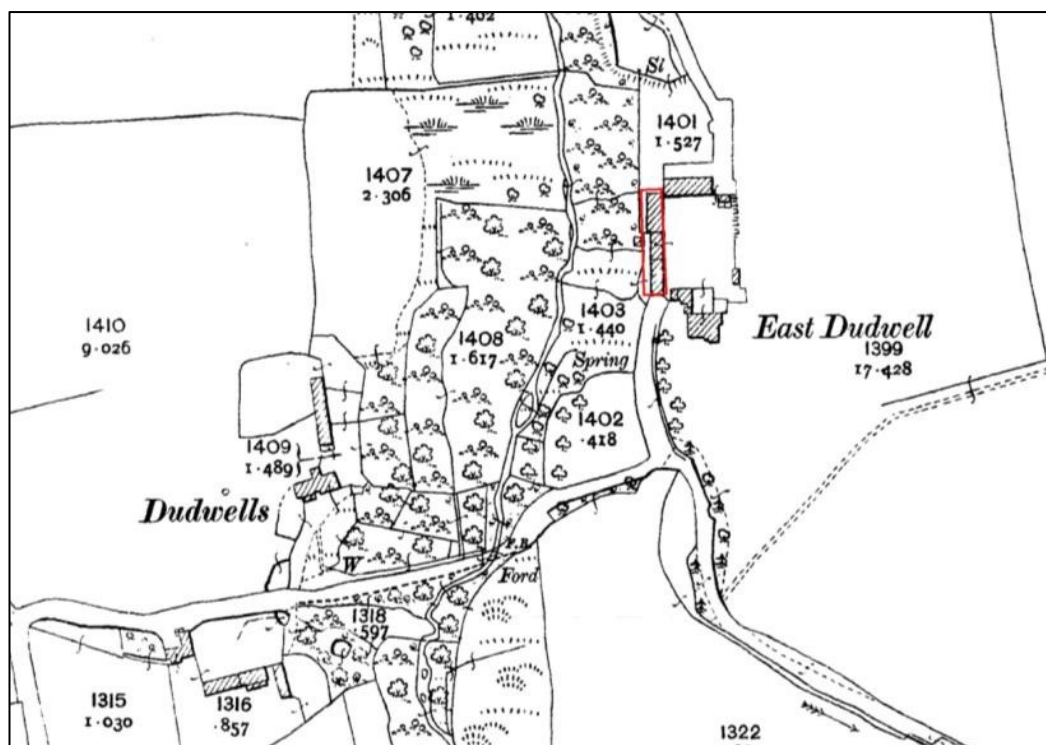


Figure 6: An extract from the 1907 1:2500 2nd edition Pembrokeshire Ordnance Survey map showing East Dudwells at the turn of the twentieth-century. Note that the acre brace symbol is no longer depicted and the new, smaller building attached to the south eastern corner of the later, east-west orientated building at the northern end of the farmstead.

4 WATCHING BRIEF METHODOLOGY

4.1 Fieldwork

- 4.1.1 The watching brief was undertaken in accordance with the Chartered Institute of Archaeologists' (CIfA) *Standard and Guidance for an Archaeological Watching Brief* (2014).
- 4.1.2 A written scheme of investigation was prepared by DAT Archaeological Services detailing the proposed archaeological works, which was approved by DAT-DM in their capacity as advisors to the local planning authority.
- 4.1.3 Recording of all archaeological features or deposits conformed to best current professional practice and was carried out in accordance with the Recording Manual² used by DAT Archaeological Services. A written, drawn and photographic record was maintained throughout this watching brief, a summary of which is presented in Appendix I. All contexts encountered during this watching brief were recorded and assigned a unique context number. These numbers are enclosed in brackets in the following text.
- 4.1.4 This watching brief monitored the groundworks associated with the north-south range of buildings and comprised the mechanical excavation of the floor level and the widening on an existing doorway. A brief photographic record of this range was also recorded during the groundworks.

² DAT Archaeological Services have adopted the Recording Manual developed by English Heritage Centre for Archaeology. A copy will be available on-site for inspection if required.

Mechanical excavation was undertaken by tracked excavator equipped with a toothed bucket. All archaeological deposits revealed during the groundworks were examined and recorded to an appropriate level.

4.2 Timetabling of Fieldwork

- 4.2.1 This watching brief took place on 19th June 2020 during fine weather conditions.

4.3 Post-Fieldwork Reporting and Archiving

- 4.3.1 All data recovered during the fieldwork will be collated into a site archive structured in accordance with specifications in *Archaeological Archives: a guide to best practice in creation, compilation, transfer and curation* (Brown 2011), and the procedures recommended by the National Monuments Record, Aberystwyth.
- 4.3.2 The results of the fieldwork have been assessed in local, regional and wider contexts. The report includes a desk-based research element to ensure that the site is placed within its wider archaeological context.

5 RESULTS AND DISCUSSION

- 5.1 The watching brief monitored the mechanical excavation of the floor levels within two buildings of the north-south orientated range and the widening of an existing doorway. A brief photographic record of these buildings during the ground works was also recorded.
- 5.2 Initial work of the conversions of the agricultural buildings had already begun and the north-south orientated range was roofless on arrival at site, revealing the three distinct, shells of these adjoining buildings. Scaffolding had been erected against the external elevations of both ranges. Work began in the southern most building, "Building 1" within the north-south range where some superficial ground disturbance had already taken place (Photo 4). Buildings are referred to by their building numbers as shown in Figure 2.

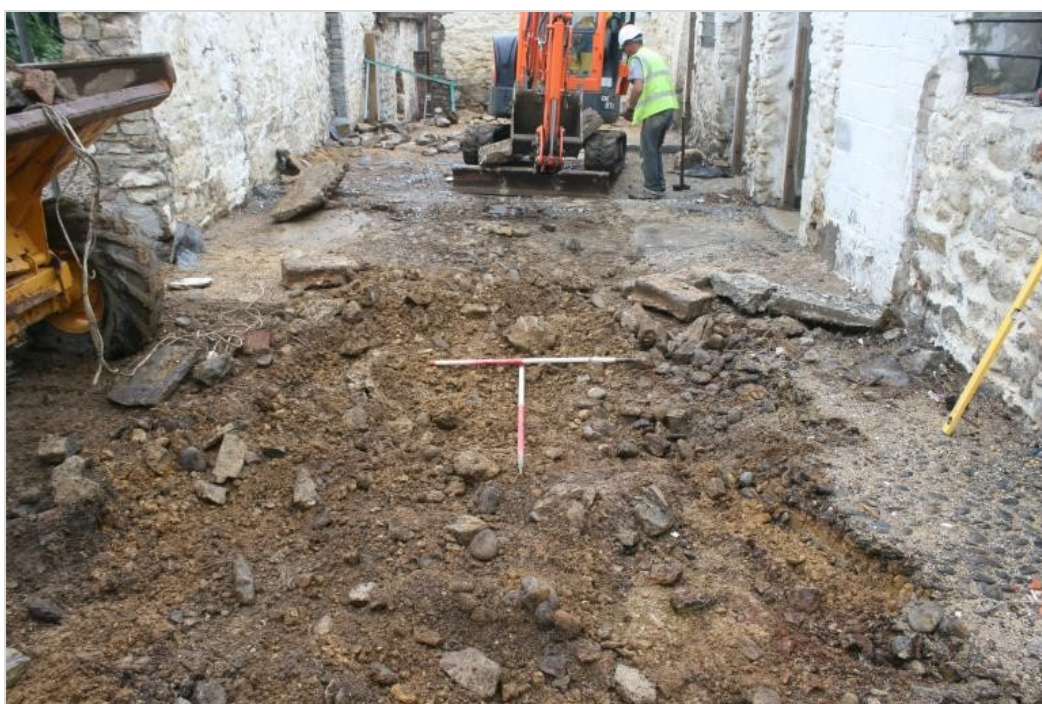


Photo 4: The disturbed floor level in Building 1 (DAT Photo)



Photo 5: The central openings in the east facing elevation of Building 1 (DAT Photo)



Photo 6: The southern end of the east facing elevation of Building 1 (DAT Photo)

- 5.3 Building 1 was approximately 18.85m long with four doorways, two small rectangular windows and a double width opening on the east facing elevation (Photos 5 & 6). Its' original function is unknown although it is likely that it was internally divided into stalls and is likely to have been a cow house. A small, exploratory test pit was mechanically excavated to the depth of the new foundation level. This pit was situated at the southern end of Building 1 and measured approximately 0.4m wide, 1.6m in length and 0.4m in depth (Photo 7). The pit revealed a simple stratigraphy comprising a thin layer of fine cobbling, no more than 0.1m

thick (100) which appeared to be set into a thin layer, again around 0.1m thick, of yellow/orange clay (101). This layer was overlying what appeared to be the redeposited natural subsoils colloquially known as "rab", consisting of unconsolidated and stony, orangey brown clay common to the area (103). At the base of the test pit was a tumble of large masonry, sub angular stones which appeared to have been included within this deposited layer (102). The test pit had truncated a later slate capped drain (104) which was cut through the cobble surface (100) and clay bedding (101) (Photo 8).



Photo 7: The exploratory test pit in Building 1. Note the masonry block tumble in the bottom right of the pit and the slate capped drain (DAT Photo)



Photo 8: The east facing section of the test pit in Building 1 showing the truncated slate capped drain (104) and masonry tumble (102) (DAT Photo)

- 5.4 The test pit was then extended at this depth across the length of the barn which revealed a consistent stratigraphy as seen in the initial test pit. No other features or deposits of archaeological interest were observed (Photo 9). Whilst no surface features remained, the cobble flooring, drain and layout of the doorways and openings does suggest that it may well have been a cow shed.
- 5.5 A likely explanation for the redeposited "rab" (103) and tumble of masonry blocks is that this material originated from the original wall foundation trenches and was used as levelling material for the internal floors. The range is situated on a slight gradient which falls away to the south. Indeed, the slate capped drain located at the southern end of this building is in accordance with this topography.



Photo 9: The continued trench in Building 1 (DAT Photo)

- 5.6 Floor reduction continued in Building 3 where a second initial test pit was dug to the proposed foundation depth. Building 3 was approximately 14.8m long and was the northernmost building in this range. Its' east facing elevation was dominated by a wide, arched double opening flanked by a narrow doorway and rectangular window, all with red brick voussoirs and a slate window lintel (Photo 10). A wide, rectangular opening in the northern gable end of the building provided secondary access into the range from the field without entering the farmyard (Photo 11). The wide, arched opening in the east facing elevation and gable access is more suggestive of use as a cart shed or for the housing of heavy machinery.
- 5.7 The test pit in Building 3 measured approximately 1.7m in length, 0.45m wide and 0.45m deep (Photo 12). Unlike in Building 1, there appeared to be no formal finished floor, just a beaten earth floor which was approximately 0.35m thick and comprised a light orange-brown, silty clay with frequent, small sub-angular stones (200). This layer contained sherd of 19th century glass and red brick fragments. As predicted by the slightly sloping topography, the undisturbed natural "rab" was reached at 0.34m depth (201).



Photo 10: A composite image showing the east facing elevation of Building 3 (DAT Photo)



Photo 11: The two wide openings in Building 3 (DAT Photo).

- 5.8 Casual observations of the phasing of the buildings in this north-south range suggested that Building 3 is the latest building in this range. The significantly raised roof pitch is evident in the northern gable end of Building 2 as well as an infilled, arched window opening (Photo 12).
- 5.9 Building 2 is the central building in the north-south range and appeared to abut Building 1 and was abutted by Building 3. It had a much higher roofline and gentler pitch than its adjoining buildings and is the only building in the range to have a second storey. It has interesting phasing and suggests a change of use. Its east facing elevation comprised of three, wide, evenly sized openings with dressed stone voussoirs and two, unevenly sized rectangular windows situated directly below the roof line. There is a large, elongated opening, now infilled in the northern gable end (See Photo 12) and it is reasonable to infer that this provided external access to the first floor.



Photo 12: The location of the test pit in Building 3 and infilled opening in the southern gable of Building 3 (DAT Photo).



Photo 13: The central and northern infilled opening on the east facing elevation of Building 2 (DAT Photo)

- 5.10 All of three of the openings in the eastern elevation are infilled; the southernmost opening has been infilled most extensively, leaving only a narrow rectangular window. The central opening has been narrowed to a modest doorway and the northern most opening has been half infilled to create a generous window (Photos 13 & 14). It is most likely that the three infilled openings were originally open fronted and that the building served as the original cart shed with most likely a granary above which was accessed via the external entrance in the gable end. On this basis, it

is possible that the infilling of these openings marks the redundancy and change of use of this buildings owing to the construction of Building 3. A thorough phasing of these buildings is beyond the scope of this report and indeed beyond the remit of the watching brief but if this inferred narrative is correct then it does raise the interesting question of where the original barn on the farmstead may be.



Photo 14: The southern and central infilled openings in the east facing elevation of Building 2 (DAT Photo)

- 5.11 The floor level within Building 2 was approximately 0.5m lower than the external ground level and three stone steps had been inserted into the infilled central opening (Photo 15). These steps were removed and the ground level on the external side of the opening was excavated to the level of the internal floor, truncating a modern waste water pipe in the process (Photo 16). The section of this excavated area revealed a depth of around 0.3m of topsoil, comprising frequent sub-angular stones in a dark brown silt (300) which overlay the natural, orangey brown "rab" (301). No other features or deposits of archaeological interest were observed.
- 5.12 The infilling of the central opening, which comprised mortared rubble and occasional brick, was then removed to the opening's original width (Photo 17).



Photo 15: The internal elevation of the central, infilled opening in the east facing elevation of Building 2 showing the inserted steps and difference between the internal and external ground levels (DAT Photo)



Photo 16: The reduced ground level and truncated water pipe of the central infilled doorway in the east facing elevation of Building 2 (DAT Photo)



Photo 17: The partially widened central opening in the east facing elevation of Building 2 (DAT Photo)

6 CONCLUSIONS

- 6.1. This watching brief monitored the groundworks associated with the conversion of the north-south range of 18th- 19th century agricultural buildings at East Dudwell farmstead (PRN 118297). This range comprised three adjoining buildings. The works comprised the reduction of ground level within two of the buildings and the reinstatement of an infilled central opening on the third building.
- 6.2. The condition had been placed upon the planning decision *"to ensure that any archaeological interests are properly recorded and to accord with GN.38 of the Local Development Plan for Pembrokeshire (adopted 28th February 2013)*. Whilst the present farmstead is comprised of 18th – 19th century buildings, a small building adjoining the farmhouse situated at the south western corner of the farm yard boasts a remarkable round conical chimney and an ogee window in its gable end (PRN 13246). This building is likely to originate to the late medieval homestead of Dudwells (PRN 24112) which was in possession of the Earl of Pembroke during the 14th century.
- 6.3. The ground level was reduced in preparation of the new foundations to a depth of around 0.4m in "Building 1"; the southernmost building in the range. This revealed the original cobbled flooring embedded in fine, yellowish clay around 0.1m thick which overlaid what appeared to be redeposited, ubiquitous fragmentary, clayey, orangey yellow "rab", the natural subsoil common to the area. Undisturbed natural subsoils were not reached and the depth of the excavations did not exceed 0.4m. A tumble of large masonry blocks were found within this layer and it is likely that this redeposited material is derived from the upcast of the original wall trenches and was used as levelling material to compensate for the slightly sloping topography. A slate capped drain located at the southern end of the building truncated the cobbles and redeposited layer. No other features or deposits of archaeological interest were observed.
- 6.4. Whilst the buildings are generally referred to as "barns", this is likely to be misrepresentative of the original form and function of the agricultural buildings. Indeed, the form of Building 1 and its cobble floor suggests that it most likely served as a cow shed.
- 6.5. The floor level in the central building in the range, Building 2, was approximately 0.5m deeper than the external ground level. The floor level here did not require reduction. Instead, the external ground level adjacent to a central, infilled doorway was reduced to the corresponding level. A modern waste water pipe was truncated during this process but no features or deposits of archaeological interest were observed. The narrowed doorway, originally a wide, arched opening with dressed stone voussoirs, was widened to its original extent. This central opening was flanked by identical infilled openings on either side and it is likely that these were once open fronted and that the building served as a cart shed. Although no longer extant, this building had a first floor which was most likely accessed via an external entrance, now infilled but still visible in the northern gable end of the building. It is possible that this first floor level was used as a granary.
- 6.6. The third and northern most building in the range, Building 3, appears to be the most recent construction. It abuts Building 2 and has a significantly steeper pitched roof line and red brick voussoirs above its openings. It

boasts a large, wide arched central opening onto the farm yard and a large, rectangular opening in its northern gable. No internal fixtures or features remain but the layout of its openings suggest that this building served as the most recent cart shed leading to the redundancy and change of use of Building 2 and its infilled openings. The ground level here was reduced to 0.4m and revealed an earthen floor overlaying the "rab" natural. No other features or deposits of archaeological interest were observed.

7. ACKNOWLEDGEMENTS

- 7.1 Fieldwork and reporting was undertaken by Andy Shobbrook and reporting undertaken by Menna Bell.

8. SOURCES

Published

British Geological Survey: <http://mapapps.bgs.ac.uk/geologyofbritain/home.html>
(Accessed September 2020)

Cadw, 2006: Traditional and Agricultural Buildings in Wales; Care and Conservation

Unpublished

Hall, J and Sambrook, P. 2012. Heartlands Hub Heritage and Natural Environment Audit : Part B Camrose Community Audit

Cartographic

Camrose tithe map c.1841

Ordnance Survey; Pembrokeshire 1st edition 1:2500 1889

Ordnance Survey; Pembrokeshire 2nd edition 1:2500 1907

Database

Dyfed Archaeological Trust Historic Environment Record, housed with Dyfed Archaeological Trust in The Corner House, Llandeilo, Carmarthenshire, SA19 6AE

RCAHMW Coflein Database: -<http://www.coflein.gov.uk/>

Cof Cymru - National Historic Assets of Wales: -

<http://cadw.gov.wales/historicenvironment/recordsv1/cof-cymru/?lang=en>

Historic Wales: - <http://historicwales.gov.uk>

APPENDIX I**Project Archive**

Project Number: FS19-078

ERN: 121958

1 x Watching Brief Form

65 Digital photographs; JPEGs

1 x MapInfo GIS tables: FS19_078_Development_area

Context Register

Context	Building	Description
100	1	Cobble flooring.
101	1	Yellow/orange clay finishing layer
102	1	Tumble of large masonry blocks in redeposited "rab"
103	1	Redeposited "rab" consisting of unconsolidated and stony, orangey brown clay.
104	1	Slate capped drain
200	3	Light, orange brown, silty clay with frequent, small sub-angular stones beaten earth floor
201	3	Undisturbed, natural "rab"
300	2	Dark brown silt with frequent sub-angular stone topsoil
301	2	Undisturbed, natural "rab"

APPENDIX II**EAST DUDWELL BARNs, CAMROSE, PEMBROKESHIRE**
PLANNING APPLICATION NO. 19/0093/PA
ARCHAEOLOGICAL WATCHING BRIEF
WRITTEN SCHEME OF INVESTIGATION**INTRODUCTION**

This written scheme of investigation (WSI) has been prepared by DAT Archaeological Services in response to a request from Duncan Griffiths to provide an archaeological watching brief during ground works associated with the conversion of five barns at East Dudwell, Camrose, Pembrokeshire (centred on NGR SM 9102 2117) (Figure 1).

East Dudwell is an 18th to 19th century house which consists of 3 conjoined blocks. Behind the house is a small freestanding cottage with a conical round chimney attached to a small stone building with ogee window and doorway, that may have medieval origins (PRN 13246).

An archaeological condition (Condition No 7) has been attached to the planning permission for the development (19/0093/PA) following advice from the Development Management section of Dyfed Archaeological Trust.

The condition placed on the planning permission states:

The developer shall ensure that a professionally qualified archaeologist is present during the undertaking of any ground works, so that an archaeological watching brief can be carried out. The archaeological watching brief will be undertaken to the standards laid down by the Chartered Institute for Archaeologists. The local planning authority will be informed, in writing at least two weeks prior to the commencement of the development, of the name of the said archaeologist.

Reason: to ensure that any archaeological interests are properly recorded and to accord with policy GN.38 of the Local Development Plan for Pembrokeshire (adopted 28 February 2013).

This written scheme of investigation outlines the methodology through which DAT Archaeological Services will undertake an archaeological watching brief during ground works at the site, which have the potential to expose, damage or destroy archaeological remains. The archaeological watching brief will enable any such remains to be archaeologically recorded prior to the development commencing and provides a suitable mitigation strategy. This document has been prepared for the client and is specifically prepared for DAT Archaeological Services to undertake the required archaeological works. The WSI cannot be used by any third party.

The written scheme of investigation is in accordance with the Standard and Guidance for Archaeological Watching Briefs (Chartered Institute for Archaeologists (CIfA, 2014).

DAT Archaeological Services has considerable experience of this type of project and always operates to best professional practice. DAT Archaeological Services is the contractual arm of Dyfed Archaeological Trust that has its own Health and Safety Policy, and all works are covered by appropriate Employer's Liability and Public Liability Insurances. Copies of all are available on request.

Dyfed Archaeological Trust is a CIfA Registered Organisation and all permanent staff are CSCS registered.

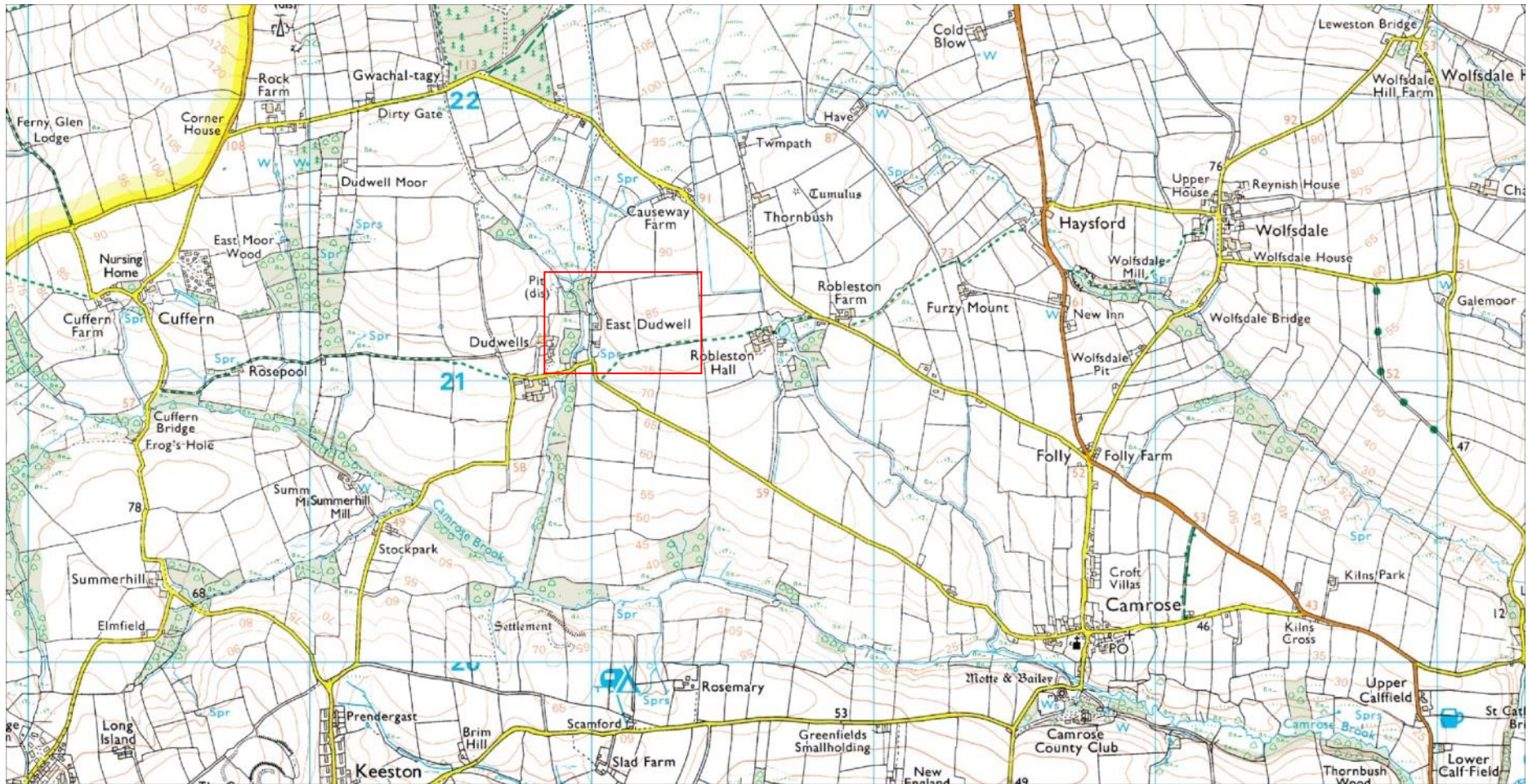


Figure 1: Map extract showing the location of development area (within red box)

Reproduced from the Ordnance Survey 1:25,000 scale Map with the permission of The Controller of Her Majesty's Stationery Office,
© Crown Copyright Dyfed Archaeological Trust, Corner House, 6 Carmarthen Street, Llandeilo, Carmarthenshire SA19 6AE. Licence No 100020930

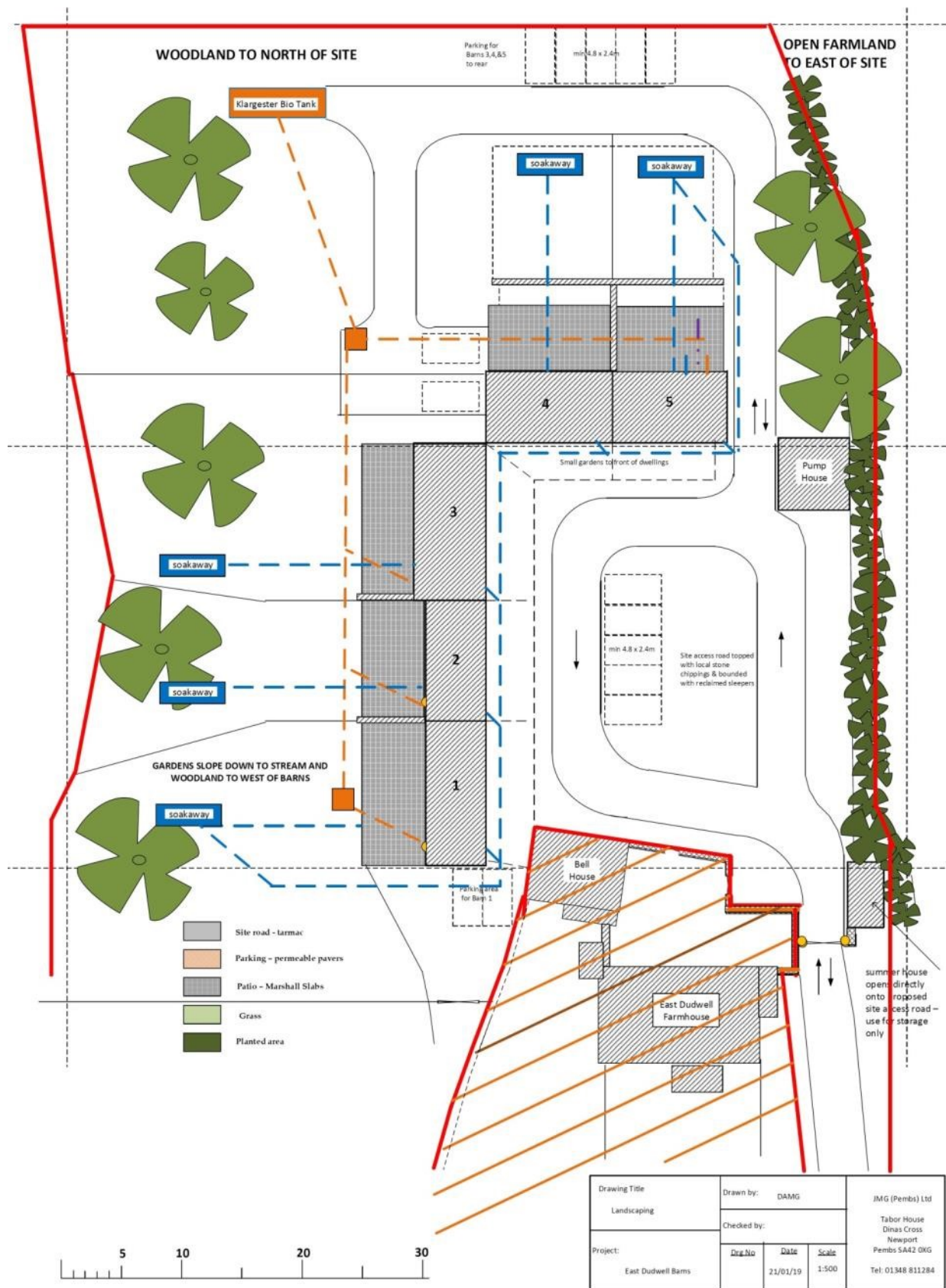


Figure 2: Plan of development (supplied by client) showing position of the five barns in relation to East Dudwell farmhouse.

1. WATCHING BRIEF

- 1.1 The definition of archaeological watching brief, taken from the Chartered Institute for Archaeologists Standards and Guidance: for Archaeological Watching Briefs (CIfA S&G: AWB 2014) is a formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons. This will be within a specified area or site on land, inter-tidal zone or underwater, where there is a possibility that archaeological deposits may be disturbed or destroyed. The programme will result in the preparation of a report and ordered archive.
- 1.2 The purpose of a watching brief, as laid down in the CIfA S&G AWB is:
- to allow, within the resources available, the preservation by record of archaeological deposits, the presence and nature of which could not be established (or established with sufficient accuracy) in advance of development or other potentially disruptive works;*
- to provide an opportunity, if needed, for the watching archaeologist to signal to all interested parties, before the destruction of the material in question, that an archaeological find has been made for which the resources allocated to the watching brief itself are not sufficient to support treatment.*
- 1.3 This document provides a scheme of works for: **Archaeological attendance during ground works associated with the conversion of several barns into dwellings at East Dudwell Barns, Camrose, Pembrokeshire which could potentially expose, damage or destroy archaeological remains. Appropriate investigation and recording of any such remains will be undertaken if revealed. A report and archive of the results of the works will be prepared.**

2. PROJECT OBJECTIVES

- 2.1 Provision of a written scheme of investigation to outline the methodology by which DAT Archaeological Services will undertake the archaeological watching brief.
- 2.2 To monitor ground works in order to identify the presence/absence of any archaeological deposits.
- 2.3 To establish the character, extent and date range for any archaeological deposits to be affected by the proposed ground works.
- 2.4 To appropriately investigate and record any archaeological deposits to be affected by the ground works.
- 2.5 To produce an archive and report of any results.

3. FIELDWORK

- 3.1 The watching brief would entail an archaeologist being present during all ground works where there is a potential for archaeological remains to be exposed, damaged or destroyed. This will be carried out during any removal or reduction in the level of internal floors within the barns, but also includes further ground works such as excavation of foundation or external service trenches.
- 3.2 It is essential coordination between the site contractor's and archaeologist is established at the outset to avoid any potential disturbance to archaeology without an archaeologist being present, or unnecessary visits to the site when works are being carried out that do not require the presence of an archaeologist.

- 3.3 Adequate time must be made available to the visiting archaeologist to ensure that appropriate recording can be undertaken of any archaeological features or deposits exposed during ground works.
- 3.4 Recording of all archaeological features or deposits will conform to best current professional practice and be carried out in accordance with the Recording Manual³ used by DAT Archaeological Services. Significant archaeological features or deposits will be drawn at a suitable scale (no less than 1:20) and photographed in an appropriate format.
- 3.5 All archaeologically significant finds will be retained and, where possible, related to the contexts from which they derived. Finds will be temporarily stored by DAT Archaeological Services in stable conditions. All finds, except those deemed to be Treasure, will remain the property of the landowner.
- 3.6 Under the 1996 Treasure Act, "treasure" can be summarised as:
- Any object other than a coin containing at least 10% gold or silver and at least 300 years old;
 - Any prehistoric assemblage of base metal;
 - Coins found together which contain 10% gold or silver (but no single coins) and groups of at least 10 coins of other metals, provided they are at least 300 years old;
 - Any object found associated with treasure except unworked natural objects; and
 - Any object which would have been Treasure Trove before the 1996 Act but not covered above.
- 3.7 In the event that unforeseen archaeological discoveries are made during the development, or that archaeological remains of high significance are exposed, DAT Archaeological Services shall have the power to halt any ground works and shall inform the site agent/project manager and the curatorial officer, and prepare a written statement with plan detailing the archaeological evidence. Following assessment of the archaeological remains by the curatorial officer, DAT Archaeological Services shall, if required, implement on behalf of the Client a contingency scheme for salvage excavation of affected archaeological features. In these instances it would be necessary to employ extra resources to record such features to an appropriate standard.
- 3.8 In the event that human remains are encountered, the District Coroner's Office and the Police will be notified immediately. All human remains will, where possible, be left *in situ*. If preservation *in situ* is not possible all statutory permissions will be obtained in writing before removal begins.

4. POST-FIELDWORK REPORTING AND ARCHIVING

- 4.1 An archive will be prepared if it meets the requirements of the Dyfed Archaeological Trust archive retention policy (2018). If it does, then data recovered during the evaluation 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 2011), and the procedures recommended by the National Monuments Record, Aberystwyth. The National Standards for Wales for Collecting and Depositing Archaeological Archives produced by the Federation of Museums and Art Galleries of Wales will also be adhered to. Digital archives will be collated using the Royal Commission on the Ancient and Historical Monuments of Wales systems (2015) and deposited

³ DAT Archaeological Services have adopted the Recording Manual developed by English Heritage Centre for Archaeology. A copy will be available on-site for inspection if required.

with the RCAHMS. The Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs) shall be followed.

- 4.2 The results of the fieldwork will be assessed in local, regional and wider contexts.
- 4.3 The results will be used to inform subsequent design considerations of the proposed development so that they can aim to avoid impacts upon any archaeological remains or that further archaeological mitigation can be implemented before such remains are disturbed.
- 4.4 The project archive, including all significant artefacts and ecofacts (excepting those which may be deemed to be Treasure) will be deposited with an appropriate body following agreement with the landowner (if retained and containing more than just digital information).
- 4.5 DAT Archaeological Services will arrange for the deposition of finds, and ascertain the costs of storage and deposition, with an approved body before the project commences and inform the curator of the arrangement which has been made.
- 4.6 A summary of the project results, excluding any confidential information, may be prepared for wider dissemination (e.g. Archaeology in Wales and special interest and period-specific journals).
- 4.7 The report will be prepared to follow the Standard and Guidance for Archaeological Watching Briefs (CIfA S&G: AWB 2014).
- 4.8 Digital copies of the report will be provided to the client, as well as the Dyfed Archaeological Trust - Development Management.
- 4.9 Appropriate specialists to be used by DAT Archaeological Services include:
 - **Industrial Archaeology** – Jennifer Protheroe-Jones, Principal Curator – Industry, National Waterfront Museum, Swansea
 - **Post-medieval / medieval pottery** – Dee Brennan (local independent specialist)
 - **Prehistoric Pottery** – Dr Alex Gibson (formerly of University of Bradford / now Independent pottery specialist)
 - **Prehistoric Flint** – Dr Andrew David (formerly of English Heritage, now independent lithics specialist)
 - **Radiocarbon dating** – Scottish Universities Environmental Research Centre (SUERC)
 - **Animal Bones** – Worcester Archaeology
 - **Fish bones** – Jennifer Browning (University of Leicester Archaeological Services)
 - **Environmental / Pollen analysis** – Worcester Archaeology

5. STAFF

- 5.1 The project will be managed by Fran Murphy.
- 5.2 The on-site works will be undertaken by experienced archaeologists, from DAT Archaeological Services.

6. QUALITY ASSURANCE

- 6.1 DAT Archaeological Services has considerable experience of undertaking all categories of archaeological fieldwork and always operates to best professional practice; adhering to CIfA guidelines where appropriate. The Trust is a Registered

Organisation with CIfA and all staff abide by their code of conduct and adhere to their relevant standards and guidance.

- 6.2 DAT Archaeological Services operate robust internal monitoring procedures that ensure that the standard of each project is maintained from commencement to completion.

7 MONITORING

- 7.1 The watching brief may require monitoring by the archaeological advisor to the planning authority, Dyfed Archaeological Trust – Development Management, who should be told of the commencement of the works. The fieldwork may also need to be monitored by the Head of DAT Archaeological Services.
- 7.2 All parties should be provided with free access to the site at any time during the watching brief works.

8 HEALTH AND SAFETY

- 8.1 All DAT Archaeological Services staff are CSCS⁴ registered.
- 8.2 Service information should be obtained prior to the start of the works.
- 8.3 A health and safety risk assessment must be prepared prior to the works commencing to ensure that all potential risks are minimised.
- 8.4 All relevant health and safety regulations must be followed.
- 8.5 All site inductions, H&S procedures, H&S constraints and site rules of the client or any on-site contractor will be made known to the archaeological contractor at the start of the works.
- 8.6 Safety helmets, safety boots and high visibility vests are to be used by all site personnel as necessary. The site contractors will make all archaeological staff aware of any other PPE that may be required and provide them. Archaeological staff must not enter any area where there is a considered to be a health and safety risk that has not or is not being appropriately mitigated against.
- 8.7 DAT Archaeological Services staff must ensure that their presence on site is communicated to all relevant site staff, especially machine operators.

9 ARBITRATION

- 9.1 Any dispute or disagreement arising out of a contract in relation to this work shall be referred for a decision to the Chartered Institute of Archaeologist's arbitration scheme.

⁴ *Construction Skills Certification Scheme (Health and Safety Tested)*

