

BIBLIOGRAPHY

APPENDICES

PHOTOGRAPHS

AND

FIGURES

BIBLIOGRAPHY

- Arnold, C, and Davies, J, 2002 *Roman and Early Medieval Wales*. Sutton
Edwards, N, 1990, *The Archaeology of early medieval Ireland*, London
Edwards, N, (ed), 1997 *landscape and Settlement in Medieval Wales*. Oxbow
Monograph **81**
Fenton, R, 1811 *A Historical Tour Through Pembrokeshire*, reprinted by Dyfed
County Council, 1994, p192
Hall, J, and Sambrook, P, 2006 Maenclochog Castle Survey. Unpublished report
by 'Trysor'
Highham, R, and Barker P, 2006 *Timber Castles*. University of Exeter Press
Howells, B, (gen ed) 2002, *Pembrokeshire County History, Vol 2*. Pembrokeshire
Historical Society
HMSO, (date unknown) Calendar of Inquisitions Post Mortem and other analogous
documents preserved in the Public Record Office, Vol. XIV Edward III. London
Johnston et al. 2007 Characterising the Welsh roundhouse, Chronology,
inhabitation and landscape. Internet Archaeology **23**. Available at:
<http://intarch.ac.uk/journal/issue23/1/index.htm>. Accessed 14/12/2007
Jones T (ed) 1941, *Brut y Tywsogion*: Peniarth MS. 20, 192 and 201. University of
Wales Press
Kissock, J, 1997 God made nature and men made towns: Post-conquest and pre-
conquest villages in Pembrokeshire, in Edwards N (ed) 1997 *landscape and
Settlement in Medieval Wales*. Oxbow Monograph 81, p 123-138
Lynn, C J, 1978 Early Christian period structures in a change from round to
rectangular plans. *Ir Archaeol Res Forum* **2.1** 29-36
Murphy, K, 1995 The castle and borough of Wiston, Pembrokeshire, *Arch. Camb.*
CXLIV (1995), 71-102
Murphy, K, 1997 Small Boroughs in South-west Wales, their planning, early
development and defences, in Edwards, N (ed) 1997 *landscape and Settlement in
Medieval Wales*. Oxbow Monograph 81, 139-156
Murphy, K, and Ludlow, N, undated, Preseli Historic Landscape Characterisation,
No 268 Maenclochog, on www.cambria.org.uk
Mytum 1998 *Llawhaden, Dyfed, Excavations on a group of small defended
enclosures, 1980-4*, BAR series 275, 53-64.
Mein, A G, 1992 Excavations at Trostre Castle, Usk, Gwent. *Arch in Wales* **32**, 11
Pembrokeshire Record Office, D/RTP/PIC/71
Picton Castle Map Book 1, National Library of Wales
Pritchard, E, (ed). 1906, *Taylor's Cussion by George Owen*
Redknap, M. 2001 'Trench at hut group at Glyn, Llanbedrgoch' *Arch in Wales* **41**,
143-7
Redknap, M. 2004 'Viking-Age settlement in Wales and the evidence from
Llanbedrgoch' in Hines J, Lane A and Redknap M (eds) *Land Sea and Home*,
Society of Medieval Archaeology Monograph **20**, 139-75

APPENDIX 1

ANALYSIS OF POTTERY FROM MAENCLOCHOG CARPARK

(By Paul Courtney 12/2007)

The pottery from trench 1 consisted of 10 broken pieces of unglazed medieval cooking pots made from Dyfed gravel-tempered pottery (DGTU). This pottery type mostly consists of unglazed cooking pots and storage jars. The clay contains quartz and sedimentary rock fragments. This type of pottery is difficult to date but ranges between the late 12th to early 16th centuries.

A single pottery fragment of Bristol Pottery Type 114 (*BPT114*) from a Hand-made Gloucestershire cooking pot, was recovered from hearth feature 021 and can be dated to the 12th to early 13th centuries. Suggesting the DGTU pottery may also be of this date. Bristol Pottery Type 114, which is also known as proto-Ham Green, was probably produced at Pill near to Ham Green on the Severn estuary. The main distinguishing characteristic of Ham Green cooking pots are the presence of coarser quartz and sandstone fragments in the clay.

Trench 2 produced a single piece of DGTU pottery (dating to between the late 12th and early 16th centuries) from the fill of the construction cut for the castle wall.

The upper fill of the ditch (031) produced two glazed Dyfed gravel-tempered (*DGTG*) jug fragments. This pottery type can be dated from the late 12th to early 16th centuries. However, the context also produced two pieces of North Devon *gravel tempered* pottery (NDGT). *This pottery has* green to brown glaze and coarse, angular quartz inclusions in the clay and was produced at Bamstaple and Bideford in North Devon from the 16th to 19th centuries, though was most common in the 17th to 18th centuries. Two pottery fragments from a *Nottingham-type English Brown* stoneware mug (EBSW) and a grey clay stoneware with salt glaze over iron-oxide wash (*NTSW*) giving a dark-brown finished glaze can be dated from the end of the 17th century to the beginning of the 19th century. A clay-pipe mouth-piece indicates a final depositional date between the 1690s and the early 19th century.

Fabric Series

BPT114 Bristol Pottery type 114.

Hand-made cooking pots in Bristol fabric BPT 114 also known as proto-Ham Green, probably produced at Pill near to Ham Green on the Severn estuary. The main distinguishing feature from Ham Green cooking pots are the presence of coarser quartz and sandstone grains (Papazian and Campbell 1992, 28 and fig. 29; Ponsford 1991). 12th – early 13th century. A single sherd from an oxidised cooking pot/jar in soft fabric with hard reduced inner surface
1 sh; 12g.

DGTG Dyfed Gravel-Tempered Glazed Wares

This fabric group contains the standard local/regional siltstone tempered fabric range used for jugs. Inclusions were rare to moderate rounded to sub-rounded, ill-sorted quartz up to 0.5 mm, and rare to moderate flattened fine sedimentary rock fragments up to 5mm. occur Similar wares across Dyfed and multiple kiln sites are likely. ?late 12th-early 16th century (Papazian and Campbell 1992, 56; O'Mahoney 1995, 9-11).
3 shs; 59g.

DGTU Dyfed Gravel-Tempered un-glazed Wares

This group comprises predominantly unglazed cooking pots/storage jars. The fabric is similar to the jugs include moderate rounded to sub-rounded and ill-sorted quartz under 0.5mm and moderate to abundant sub-rounded and flattened fine-sedimentary rock up to 5mm. ?late 12th-early 16th century (Papazian and Campbell 1992, 56; O'Mahoney 1995, 9-11) 10 shs; 89g

NDGT North Devon gravel tempered ware.

Post-medieval coarse-wares with green to brown glaze and coarse, angular quartz inclusions and biotite flakes Produced at Barnstaple and Bideford in North Devon, 16th century -19th centuries, though most common in 17th-18th centuries (Allan 1984, 129-32; Grant 2005). 2 shs; 52g.

NTSW Nottingham-type English Brown Stoneware.

Grey bodied stoneware with salt glaze over iron-oxide wash giving dark-brown finished glaze. End of 17th- beginning of 19th century (Hildyard 1985). 2 shs; 3g.

Discussion

The medieval pottery from trench 1 comprised 10 sherds of unglazed cooking pots in Dyfed gravel-tempered fabrics (DGTU). These are difficult to date but a single sherd of Bristol Pottery Type 114 from Gloucestershire cooking pot can be dated to the 12th to early 13th centuries. Trench 2 produced a single DGTU sherd from the fill of the construction cut for the castle wall. The the upper fill of the ditch (031) produced two glazed Dyfed gravel-tempered jug sherds. However, the context also produced two North Devon sherds (NDGT), two sherds from a brown stoneware mug (EBSW) and a clay-pipe mouth-piece indicating a final depositional date between the 1690s and the early 19th century.

Trench 1

Context Tr.1 015

Fabric	Sherd Nos	Wt (g)	Form	Decoration
DGTU	2	13	c.pot/jar	1 sh sooted ext.

Context Tr.1 019

Fabric	Sherd Nos	Wt (g)	Form	Decoration
DGTU	2	14	c.pot/jar	1 sh sooted ext.

Context Tr.2 021

Fabric	Sherd Nos	Wt (g)	Form	Decoration
DGTU	1	15	c.pot/jar	
BPT114	1	12	c.pot/jar	

Context Tr.1 022

Fabric	Sherd Nos	Wt (g)	Form	Decoration
DGTU	4	40	c.pot/jars	Bell shaped rim
?burnt daub	1	6		

Trench 2

Context Tr.2 028

Fabric	Sherd Nos	Wt (g)	Form	Decoration
DGTU	1	7	c.pot/jar	

Also corroded fragment of iron sheet or blade

Context Tr.2 031 Latest finds: 18th-early 19th century

Fabric	Sherd Nos	Wt (g)	Form	Decoration
DGTG	3*	59	Glazed jugs	
NDGT	2	52	Handled bowl + ext. gl. shed	
EBSW	2	3	Mug	Engine turned
Clay Pipe	1	1	Mouthpiece of stem	+

2 sherds join (old break)

Bibliography

Allan, J. P. 1984, *Medieval and Post-Medieval finds from Exeter, 1971-1980*.

Exeter.

Grant, A. 2005, *North Devon Pottery*. Bideford.

Hildyard, R. 1985 *Brown Mugs: English Brown Stoneware*. Victoria and Albert Museum, London

O'Mahoney, C. 1995, *Pottery, Ridge Tile and Ceramic water Pipe, Excavations at Carmarthen Greyfriars 1983-1990*. Topic Report 2. Dyfed Archaeological Trust.

Papazian, C. and Campbell, E. 1992, *Medieval Pottery and Roof Tiles in Wales AD 1100-1600*. Medieval and Later Pottery in Wales 13 (special issue).

Ponsford, M. 1991, 'Dendrochronological dates from Dundas Walk, Bristol and the dating of Ham Green, and other medieval pottery', 81-103 in E. Lewis (ed.) *Custom and Ceramics: essays presented to Kenneth Barton*. Wickham, 25-61.

APPENDIX 2

ASSESSMENT OF THE CHARRED PLANT REMAINS

by Wendy Carruthers (20.2.08)

Introduction

A community excavation was carried out by Cambria Archaeology at Maenclochog, Pembrokeshire, in 2007. Evidence of a round house and a 12th century castle was found. In addition, a defensive bank was excavated revealing a buried soil beneath it (Duncan Schlee, pers. com.).

During the excavation soil samples were taken from the buried soil (context 38), the central hearth in the round house (context 21) and the fill of a posthole in Trench 2 (context 26) for the recovery of environmental information. Subsamples of these were sent to the author for processing and assessment. Following the assessment, the remaining soil from context 21 was processed by Cambria Archaeology staff and the flot was sent to the author for analysis.

Methods

Standard methods of bucket floatation were used for the recovery of charred plant remains. The volume of soil was measured, and the soil from each sample was spread between several buckets, before being mixed with hand-hot water to help to disaggregate the lumps. The flots were poured through a 250 micron sieve, and the residues were left in the buckets and repeatedly mixed with clean water to see if any more charred material would float off. Once no more charred material was found to float, the residues were poured into a 1mm mesh sieve and rinsed through with clean water until all of the silt had been washed away. The flot sieve was also gently rinsed through with clean water. The flots and residues were tipped into seed trays lined with newspaper, and they were left to dry slowly in a warm cupboard. When dry, the flots were sorted under an Olympus SZX7 stereoscopic microscope. The residues were scanned by eye for finds and large fragments of charcoal that were too impregnated with minerals or silt to float. In fact, although many of the charred plant remains were stained with silt, very little charred material failed to float after repeated floatation, so mineral impregnation was not a great problem on this site. Large charcoal fragments (>2mm) from the flots were sent to Dana Challinor (see report, this volume) for analysis.

Results

The results of the analysis are presented in Table 1. Nomenclature and much of the habitat information follow Stace (1997).

The sample from context 38, the buried soil beneath the bank, is not included in the table as the flot only contained a few small fragments of charcoal. A small fragment of diffuse porous (cf. *Pomoideae*) charcoal was radiocarbon dated to 880-1020 cal AD (Beta-240208), suggesting that the bank was Early Medieval or later in date. The following discussion concerns contexts 21 and 26 only.

Discussion

Context 21 – fill of the central hearth in the roundhouse, Trench 1

The charred plant remains (including charcoal, see report by Dana Challinor) were frequent in this deposit (23 fragments per litre of soil processed), although the state of preservation was not particularly good. Silt impregnation, physical damage to the ends of grains and high temperature charring (causing vacuolation, or 'puffing up' of the grain, and grain distortion) had taken place,

resulting in a high percentage of the grain (70%) being unidentifiable. This is often the case in hearths, since burnt material in the ash may be repeatedly heated in a hearth that is not cleaned out regularly.

Of the identifiable grain recovered, 55% of grains were oats (*Avena* sp.), 41% were rye (*Secale cereale*) and 3% were bread-type wheat (*Triticum aestivum*-type). A single grain of hulled barley (*Hordeum vulgare*) provided slight evidence for a fourth arable crop that may have only occasionally been used for human consumption. If barley was used primarily for fodder it would have been less likely to have become charred. It is also less well suited to poor, acid soils such as occur in the Maenclochog area.

Only a small number of chaff fragments were recovered, all of which were rye rachis (the section of stem holding the grain) fragments. Weed seeds were also scarce, suggesting that the cereals had been fairly efficiently processed prior to being brought to the hearth. This type of charred waste (i.e. a grain-rich assemblage) is typical of food accidentally burnt during cooking. Some hearth deposits contain the larger weed seeds and chaff fragments that were picked out of the crop during cooking preparations and thrown into the fire as processing waste. However, in this case it is unlikely that the very small chaff fragments and small weed seeds would have been visible amongst the grain. They were more likely present as contaminants. The weeds include common weeds of arable fields and cultivated land such as corn marigold (*Chrysanthemum segetum*), sheep's sorrel (*Rumex acetosella*), common hemp-nettle (*Galeopsis tetrahit*) and ribwort plantain (*Plantago lanceolata*). The first two of these taxa are indicative of fairly acidic, sandy soils, such as occur locally.

The only other evidence for food that was recovered from the hearth was a whole hazelnut (*Corylus avellana*) that had probably been thrown onto the fire because it was too small to contain an edible nut. This suggests that native hedgerow fruits and nuts were still being gathered to add variety to what was probably a fairly monotonous cereal-based diet.

Four rye grains from this assemblage were submitted for AMS dating. A date of 980-1160 cal AD (Beta-240209) was obtained, indicating that the roundhouse had been occupied around the time of the Norman Conquest.

It should be borne in mind that this was only a single sample, so it is impossible to know how representative it was of the diet of the occupants as a whole. However, comparisons with other sites in Wales suggest that it was fairly typical for Dark Age to Medieval rural and urban sites to be consuming predominantly oats. The lack of identifiable chaff from Maenclochog meant that the oats (*Avena* sp.) could not be identified to species level, or even be positively differentiated from wild oats. However, where good preservation has enabled identification to species level to be carried out, such as in the Dark Age samples from Capel Maelog (Caseldine, 1990, p.102) and in a C12th sample from Loughor Castle, West Glamorgan (Carruthers, 1994), both common cultivated oat (*A. sativa*) and bristle oat (*A. strigosa*) were present. The Loughor sample contained most of the weed taxa found in the Maenclochog sample, with corn marigold being by far the most frequent contaminant.

Oats are often grown on poor, acidic soils, and in areas of high rainfall and low summer temperatures. Bristle oat, in particular, was a useful crop in the past for the most infertile soils in Wales and Scotland (de Rougemont, 1989). Oats grow best on water-retentive soils such as loams and clays, and they are often spring-sown because they are not very frost-hardy. Rather than being ripened in the field, they should be harvested in an under-ripe state to avoid the ears shattering prematurely, and then dried indoors, in ovens or over hearths. They are valued

for the high energy fodder they provide to livestock, particularly draught animals. Oats may have been dried in small quantities over the fire to make the moisture content low enough for grinding into flour, or to help remove the outer chaff. Alternatively, they can be used whole in porridge, soups and stews.

Rye is also useful on poor, acid soils, and although it is common on sites of Dark Age to Medieval date, it is not often as frequent in British assemblages as it was in this sample. On the continent, however, it is often the major cereal during this period. The smaller frequency of bread-type wheat could be due to poorer preservation of this cereal, as vacuolation is more of a problem. However, this could also be due to the rural nature of the site and/or the lack of fertile soils in the area, as bread wheat is fairly demanding of nutrients and is often considered to be a higher status crop. Clearly, additional evidence is needed before any meaningful discussions of the relative importance of crops can be made.

Context 26 – fill of post hole in Trench 2

A small number of charred plant remains were present in this sample, along with frequent burnt bone fragments and small amounts of charcoal. The few oat (*Avena* sp.) grains and weed seeds (corn marigold and grass (indeterminate Poaceae)) recovered suggested that similar soils were being cultivated at this time as in the earlier Medieval period. Two oat grains were submitted for AMS dating and a date of 1440-1640 cal AD (Beta-240210) was obtained. This corresponds with the abandonment of the castle (Duncan Schlee, pers. comm.). The burnt cereal remains and bone fragments probably represent a small amount of domestic waste that had been deposited in the post hole after the post had been removed, or had rotted away.

Very little can be said about such a small assemblage, although the presence of a single fragment of hazelnut shell suggests that, as in the earlier period, wild foods were still being gathered from the hedgerows.

Conclusions

Despite being limited to two samples, these remains add valuable information about cereal cultivation in the Early and later Medieval periods, in an area of Wales that is poorly understood.

REFERENCES

Carruthers, Wendy (1994) Charred plant remains. In J.M.Lewis, Excavations at Loughor Castle, West Glamorgan 1969-73. *Arch.Cambrensis* CXLII, p.173-7.

Caseldine, Astrid (1990) *Environmental Archaeology in Wales*. Department of Archaeology, Saint David's University College Lampeter.

de Rougemont, G.M. (1989) *A Field Guide to the Crops of Britain and Europe*. Collins.

Stace, Clive (1997) *New Flora of the British Isles*. Second Edition. C.U.P.

trench	1	2
context	21	26
	C10th-12th hearth	C15th-17th posthole
cereal grains		
<i>Triticum aestivum</i> type (bread-type wheat grain)	4	
<i>Hordeum vulgare</i> L. emend. (hulled barley grain)	1	
<i>Avena</i> sp. (cultivated/wild oat grain)	74	7
<i>Secale cereale</i> L. (rye grain)	56	
Indeterminate cereals	310	
cereal chaff		
<i>Secale cereale</i> L. (rye rachis fragment)	6	
weeds etc.		
<i>Corylus avellana</i> L. (hazelnut shell frag.) HSW	1 whole nut	1
<i>Rumex acetosella</i> L. (sheep's sorrel achene) EGCa	1	
<i>Brassica/Sinapis</i> sp. (mustard, charlock etc. seed) CD	2	
<i>Galeopsis tetrahit</i> L. (common hemp-nettle nutlet) ADWod	1	
<i>Plantago lanceolata</i> L. (ribwort plantain seed) Go	1	
<i>Chrysanthemum segetum</i> L. (corn marigold achene) Ada	4	2
Poaceae (small seeded grass caryopsis) CDG		1
TOTAL	461	11
volume of soil processed (litres)	20	10
charred frags per litre (fpl)	23.05	1.1

HABITAT KEY: A = arable; C = cultivated; D = disturbed; E = heath; G = grassland; H = hedgerow; S = scrub; W = woods; a = acidic, sandy soils; o = open habitats; d = dry soils

Table 1: Assessment of the charred plant remains from Maenclochog

APPENDIX 3

LIST OF FINDS

For descriptions of pottery type see Appendix 1

Trench 1

- 001-** Re-deposited shale layer
- 002-** Buried soil
- 003-** Spread of stones
- 004-** Natural silty clay
- 010-** 'Cut' for 'fill' 020
- 011-** Roundhouse gully cut
- 012-** Cut of dog burial
- 013-** Stake hole
- 014-** Posthole cut, filled by 018
- 015-** Pebble surface. Pottery: (DGTU) x 2
- 016-** Stake hole
- 017-** Fill of dog burial cut 012
- 018-** Posthole fill. Pottery (DGTW) x 1
- 019-** Fill of roundhouse gully cut 011. Pottery: (DGTU) x 2
- 020-** 'Fill' of 'cut 010. 1988 2 pence coin, and Fe object (square-headed nail), both are intrusive.
- 021-** Fill of hearth. Pottery: (DGTU) x 1, (BPT114) x 1
- 022-** Pottery: (DGTU) x 4, ?burnt daub x 1
- 024-** Fill of posthole cut 025
- 025-** Posthole cut, filled by 024
- 044-** Fill of posthole cut 045
- 045-** Posthole cut, filled by 044
- 046-** Fill of posthole cut 047
- 047-** Posthole cut, filled by 046
- 048-** Fill of posthole cut 049
- 049-** Posthole cut, filled by 048
- 050-** Fill of posthole cut 051
- 051-** Posthole cut, filled by 050
- 052-** Cut for hearth fill 021
- 056-** Fill of posthole cut 057
- 057-** Posthole cut, filled by 056
- 058-** Fill of posthole cut 059
- 059-** Posthole cut, filled by 058
- 060-** Fill of posthole cut 061
- 061-** Posthole cut, filled by 060
- 062-** Fill of posthole cut 063
- 063-** Posthole cut, filled by 062
- 064-** Fill of posthole cut 065
- 065-** Posthole cut, filled by 064

Trench 2

- 005-** Topsoil on south side of wall 008
- 006-** Topsoil on north side of wall 008
- 007-** Re-deposited shale layer on north side of wall 008
- 008-** Wall of manorial pound
- 009-** Stone rubble core of castle wall
- 023-** Upper fill of wall construction trench
- 026-** Fill of posthole cut 027. Burnt bone, burnt stone/coal/dinker fragments.
- 027-** Posthole cut, filled by 026 and 033
- 028-** Lower fill of wall construction trench 035. Pottery: (DGTU) x 1

- 029-** Layer of muddy trampled soil within linear feature 030
- 030-** 'Cut' containing Layer of muddy trampled soil 029
- 031-** Upper fill of defensive ditch cut 041. Pottery: (DGTG) x 3, (NDGT) x 2, (ESBW) x 2 Clay pipe mouthpiece x 1, Burnt bone fragments x5
- 032-** Lower fill of defensive ditch cut 041. Pottery (DGTW) x 1
- 033-** Fill of 'post pipe' within fill 026 of posthole 027
- 034-** Facing stones of castle wall (part of 009)
- 035-** Cut of construction trench for castle wall 034/009
- 036-** Re-deposited yellow clay bank material
- 037-** Re-deposited grey clay ?bank material
- 038-** Buried soil beneath bank 036
- 039-** Natural clay below buried soil 038
- 040-** Buried soil below shale 007
- 041-** Cut of defensive ditch
- 042-** Fill of post-hole cut 043
- 043-** Posthole cut containing fill 042
- 053-** Fill of posthole 054
- 054-** Posthole cut filled by 053
- 055-** Repair to pound wall 008

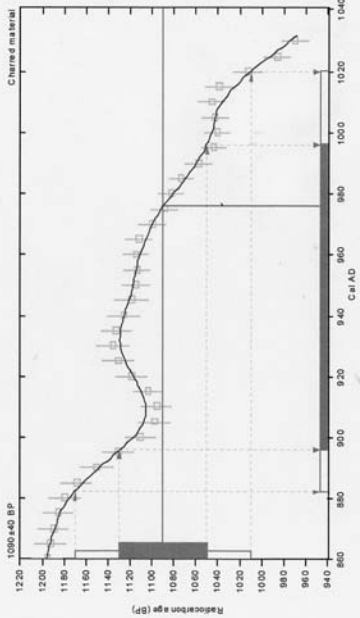
CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

(Variables: C13/C12=23.6;lab, mult=1)

Laboratory number: Beta-240208
 Conventional radiocarbon age: 1090±40 BP
 2 Sigma calibrated result: Cal AD 880 to 1020 (Cal BP 1070 to 930)
 (95% probability)

Intercept data

Intercept of radiocarbon age with calibration curve: Cal AD 980 (Cal BP 970)
 1 Sigma calibrated result: Cal AD 900 to 1000 (Cal BP 1050 to 950)
 (68% probability)



References:
 Database used: INTCAL14
 Calibration Database: INTCAL14 Radiocarbon Age Calibration
 Mathematisches Institut: Calibration Line of Radiocarbon (Volume 46, nr.3, 2004).
 A Simplified Approach to Calibrating C14 Dates
 Taylor, A.S., Vogel, J.C., 1993, Radiocarbon 35(2), p17-222

Beta Analytic Radiocarbon Dating Laboratory

4993 S.W. 74th Court, Miami, Florida 33158 • Tel: (305)662-3167 • Fax: (305)663-9964 • E-Mail: beta@radiocarbon.com

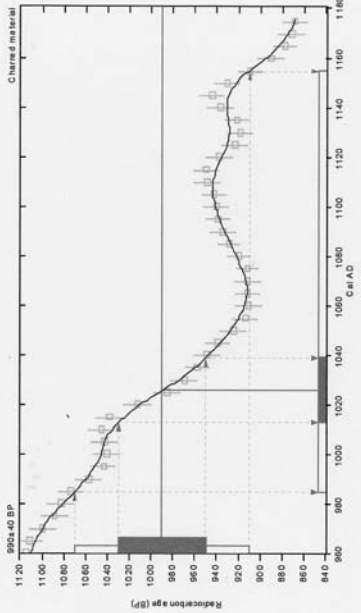
CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

(Variables: C13/C12=22.5;lab, mult=1)

Laboratory number: Beta-240209
 Conventional radiocarbon age: 990±40 BP
 2 Sigma calibrated result: Cal AD 980 to 1160 (Cal BP 960 to 800)
 (95% probability)

Intercept data

Intercept of radiocarbon age with calibration curve: Cal AD 1030 (Cal BP 920)
 1 Sigma calibrated result: Cal AD 1010 to 1040 (Cal BP 940 to 910)
 (68% probability)



References:
 Database used: INTCAL14
 Calibration Database: INTCAL14 Radiocarbon Age Calibration
 Mathematisches Institut: Calibration Line of Radiocarbon (Volume 46, nr.3, 2004).
 A Simplified Approach to Calibrating C14 Dates
 Taylor, A.S., Vogel, J.C., 1993, Radiocarbon 35(2), p17-222

Beta Analytic Radiocarbon Dating Laboratory

4993 S.W. 74th Court, Miami, Florida 33158 • Tel: (305)662-3167 • Fax: (305)663-9964 • E-Mail: beta@radiocarbon.com

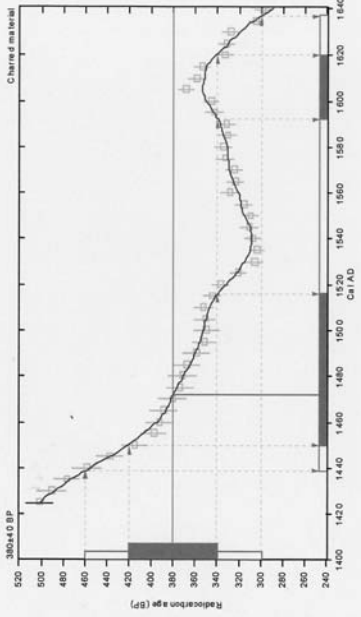
CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

(Variables: C13/C12=25.7;lab, mult=1)

Laboratory number: Beta-240210
 Conventional radiocarbon age: 380±40 BP
 2 Sigma calibrated result: Cal AD 1440 to 1640 (Cal BP 510 to 310)
 (95% probability)

Intercept data

Intercept of radiocarbon age with calibration curve: Cal AD 1470 (Cal BP 480)
 1 Sigma calibrated result: Cal AD 1450 to 1520 (Cal BP 500 to 430) and
 Cal AD 1590 to 1620 (Cal BP 360 to 330)
 (68% probability)

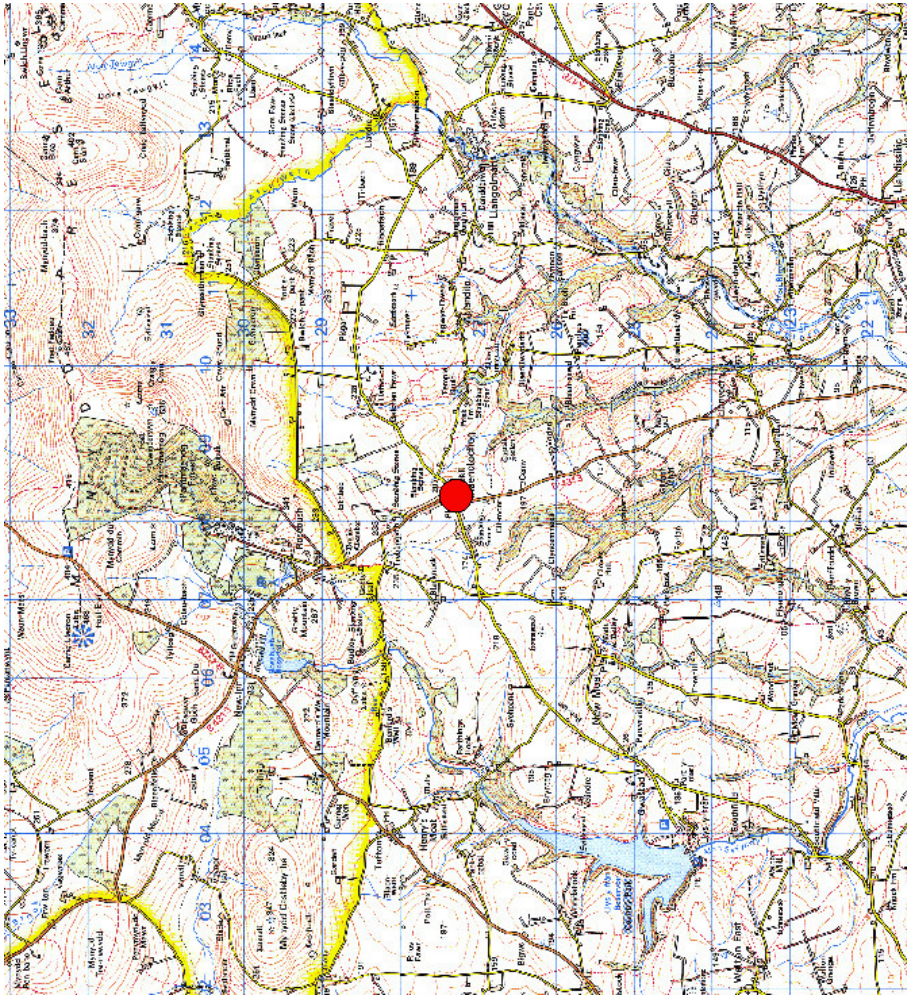
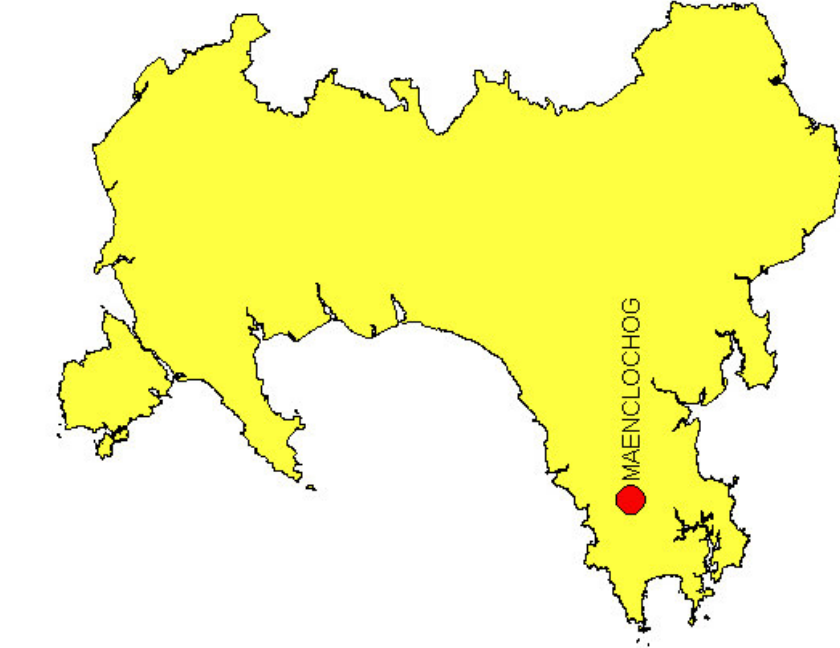


References:
 Database used: INTCAL14
 Calibration Database: INTCAL14 Radiocarbon Age Calibration
 Mathematisches Institut: Calibration Line of Radiocarbon (Volume 46, nr.3, 2004).
 A Simplified Approach to Calibrating C14 Dates
 Taylor, A.S., Vogel, J.C., 1993, Radiocarbon 35(2), p17-222

Beta Analytic Radiocarbon Dating Laboratory

4993 S.W. 74th Court, Miami, Florida 33158 • Tel: (305)662-3167 • Fax: (305)663-9964 • E-Mail: beta@radiocarbon.com

APPENDIX 4: Carbon 14 dating



Reproduced from the 1995 Ordnance Survey 1:50,000 scale Landranger Map with the permission of The Controller of Her Majesty's Stationery Office, © Crown Copyright Cambria Archaeology. Licence No L51842A

Figure 1: Location map, based on the Ordnance Survey.

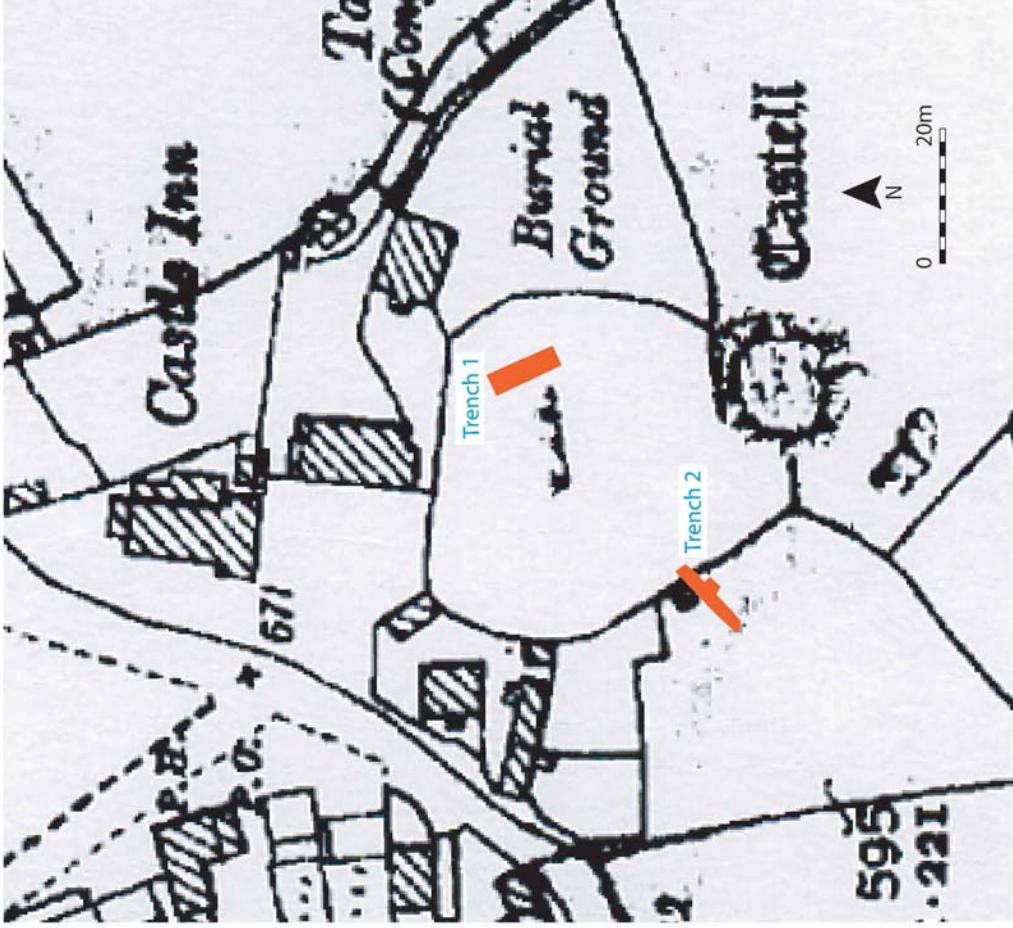


Figure 2: Location of trenches within Car park area.

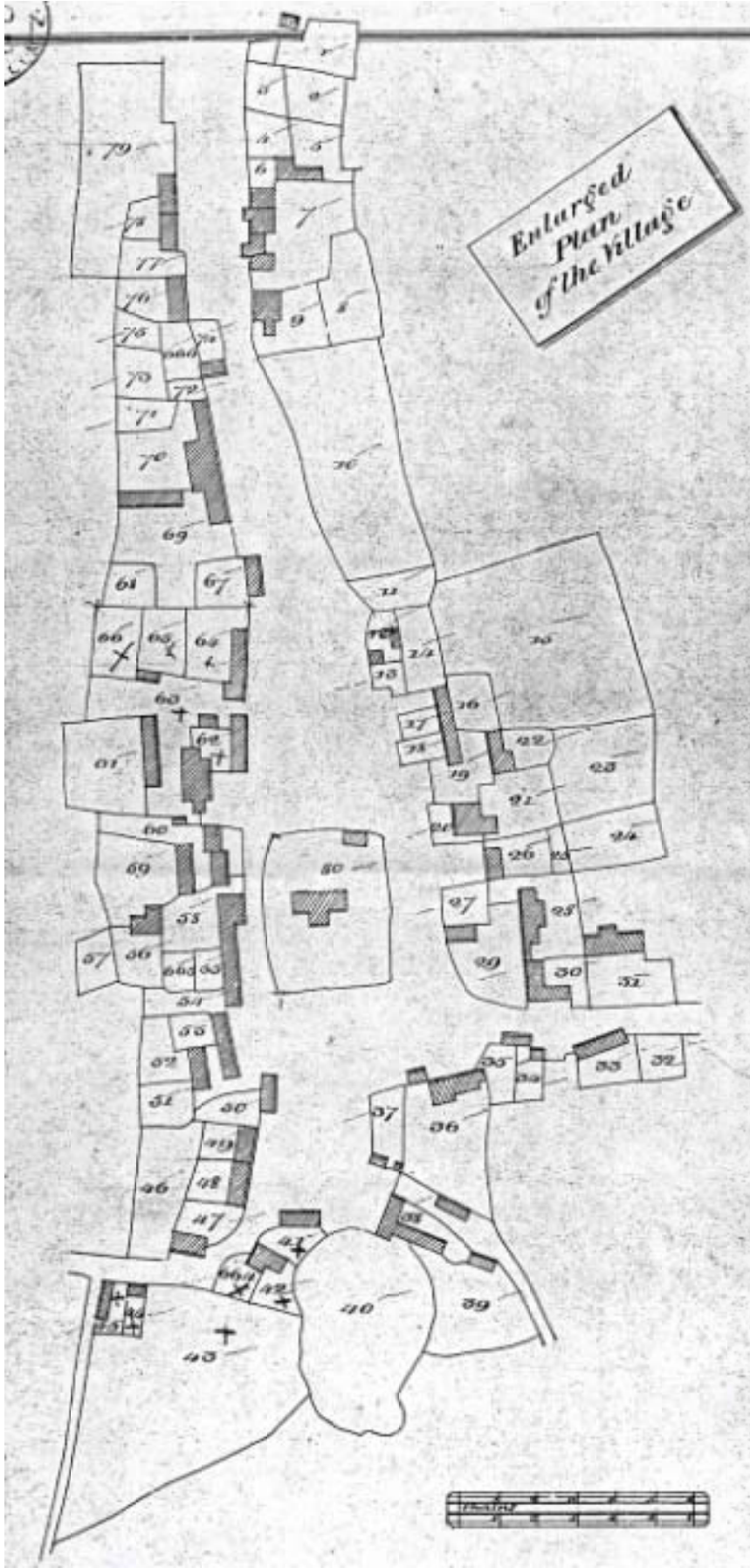


Figure 3: Tithe map of Maenclochog village showing the castle site (plot 40), church (80) and the layout of the village in 1839.

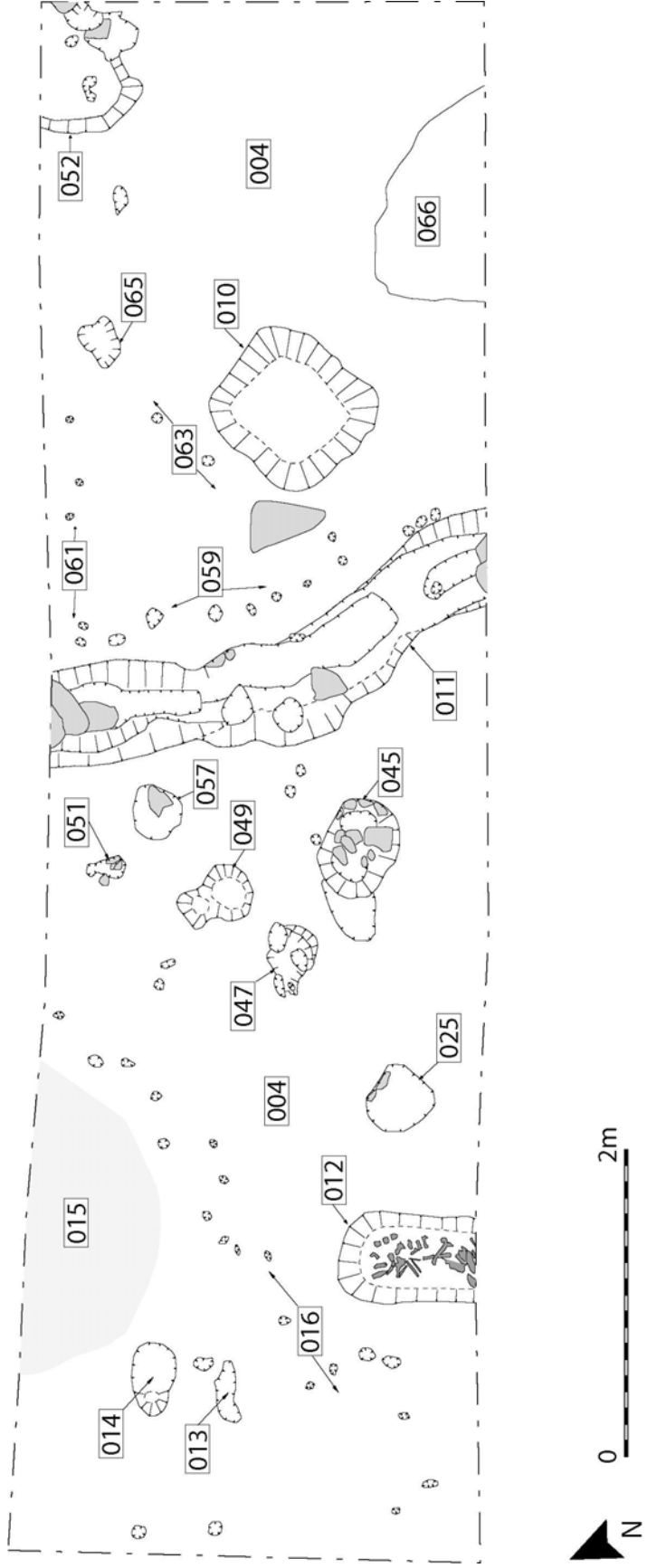


Figure 4: Plan of Trench 1 after excavation.

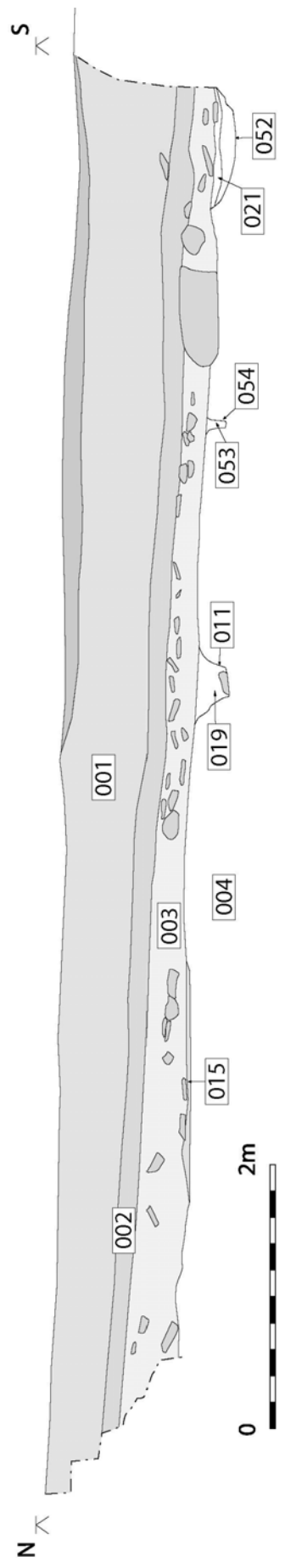


Figure 5: Section through layers in Trench 1.

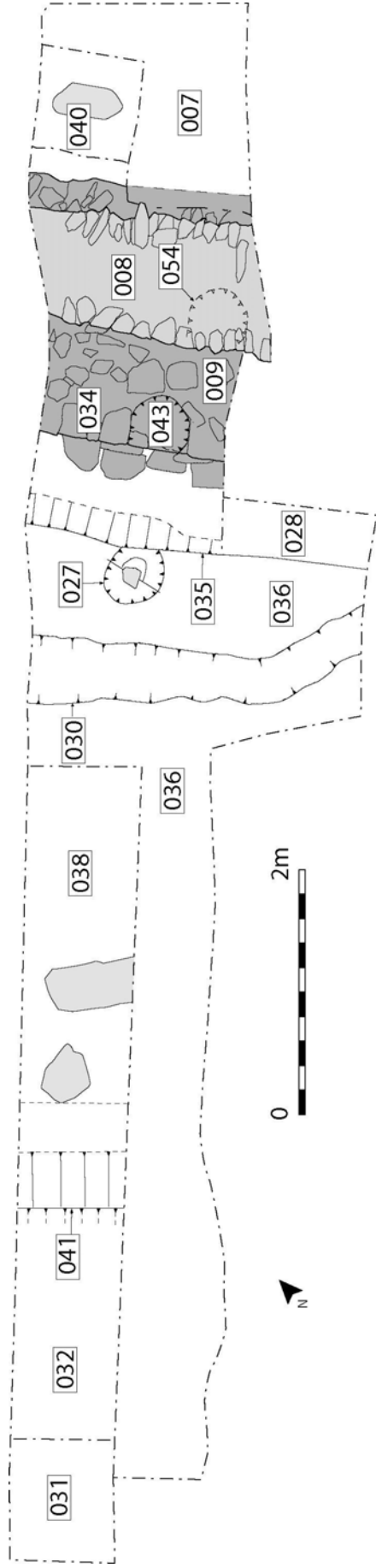


Figure 6: Plan of features in Trench 2. Pound wall 008 is built on top of castle wall 034/009. 041 is the edge of the defensive ditch. 036 is the defensive bank and 038 is the buried soil beneath the bank. Other features are discussed in the text.

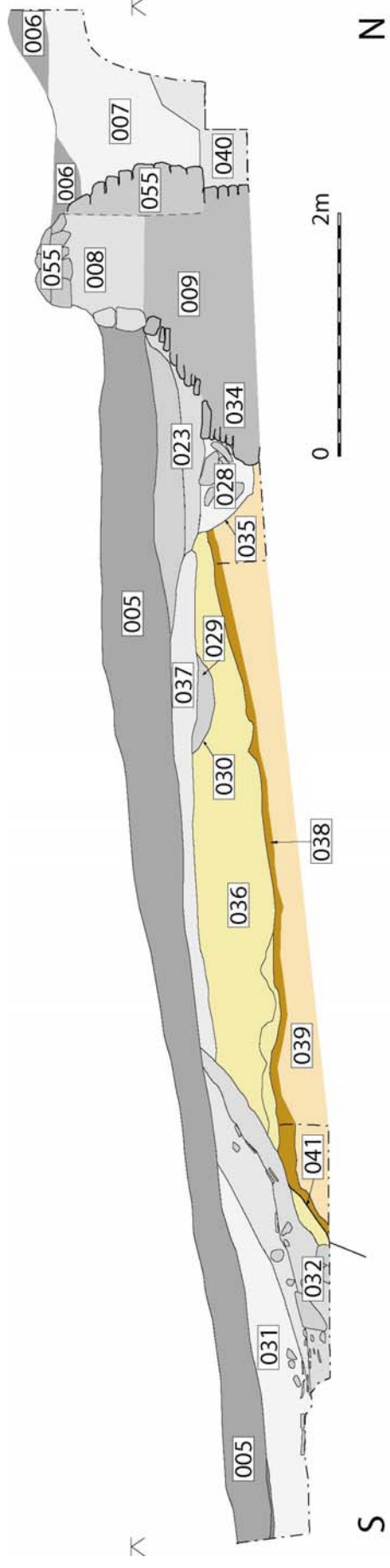
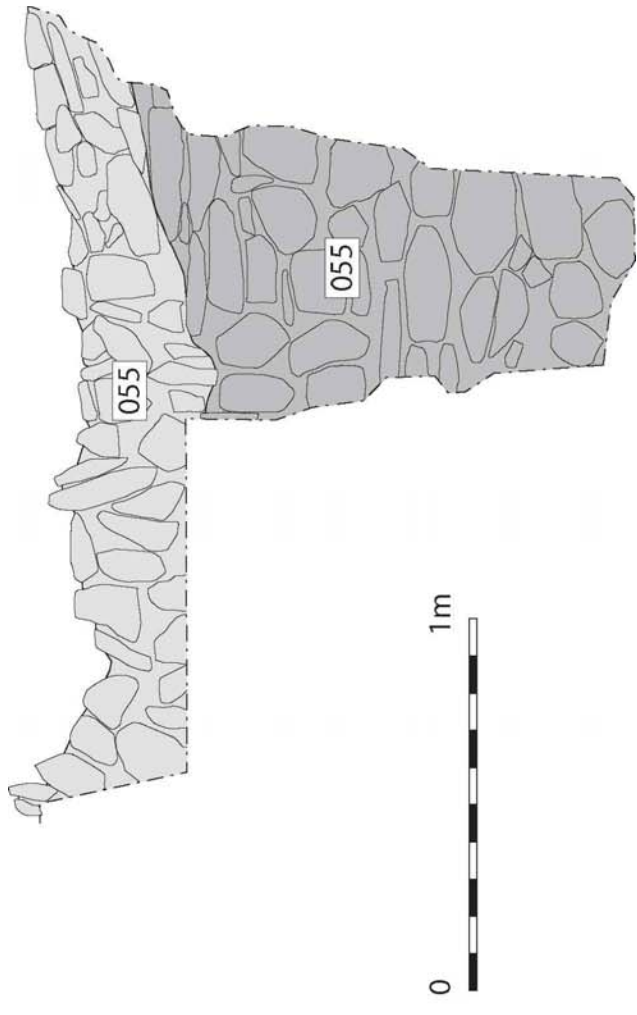
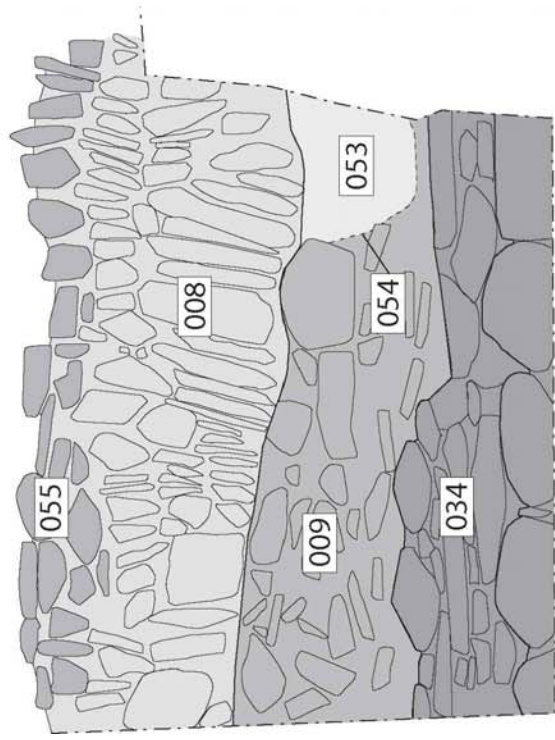


Figure 7: South facing section through Trench 2, showing how the different excavated layers are related to each other. The defensive bank 036, buried soil 038 and natural silt 039, have been coloured to make the drawing clearer.



North face of castle and pound wall

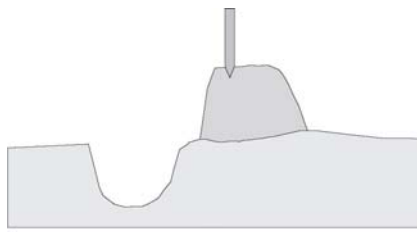
Ymyl gogledd wal y castell a'r ffordd



South face of castle and pound wall

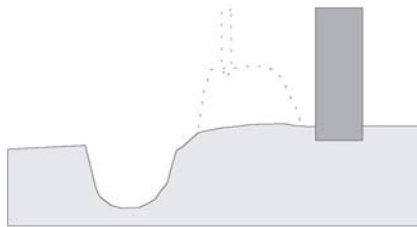
Ymyl deheuol wal y castell a'r ffordd

Figure 8: Drawing showing the different stonework in the pound wall and castle wall



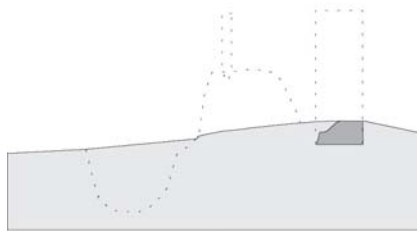
Phase 1

An earthen bank and ditch (probably with a wooden palisade), surrounds the settlement.



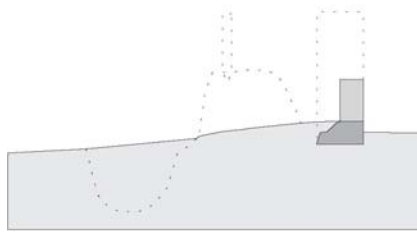
Phase 2

The bailey wall is built in stone. The bank is demolished because it is no longer needed. The ditch may have been kept, or even enlarged.



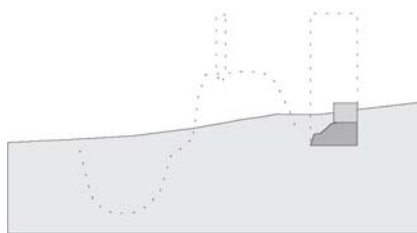
Phase 3

The castle is abandoned and the walls demolished or re-used for buildings in the village.



Phase 4

The surviving foundations of the castle wall are re-used as the base for the pound wall.



Phase 5

The pound wall falls out of use.

Figure 9: The different building phases discovered in Trench 2

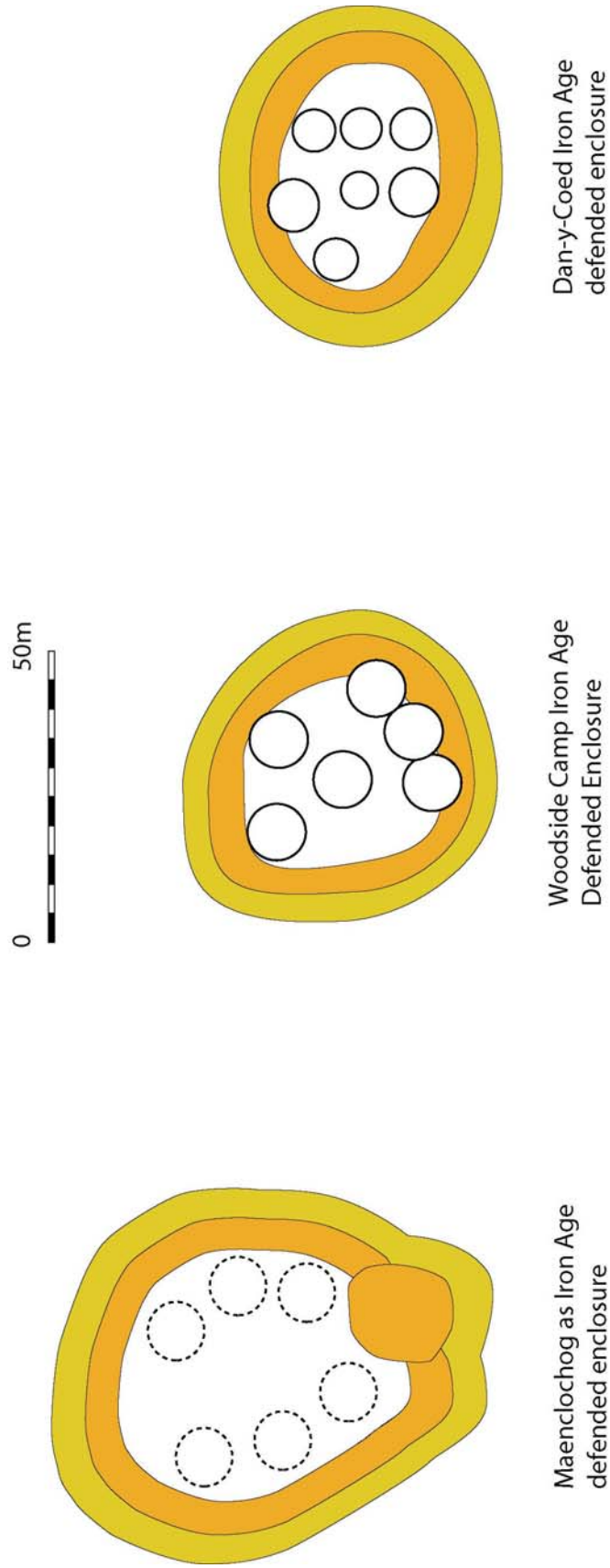
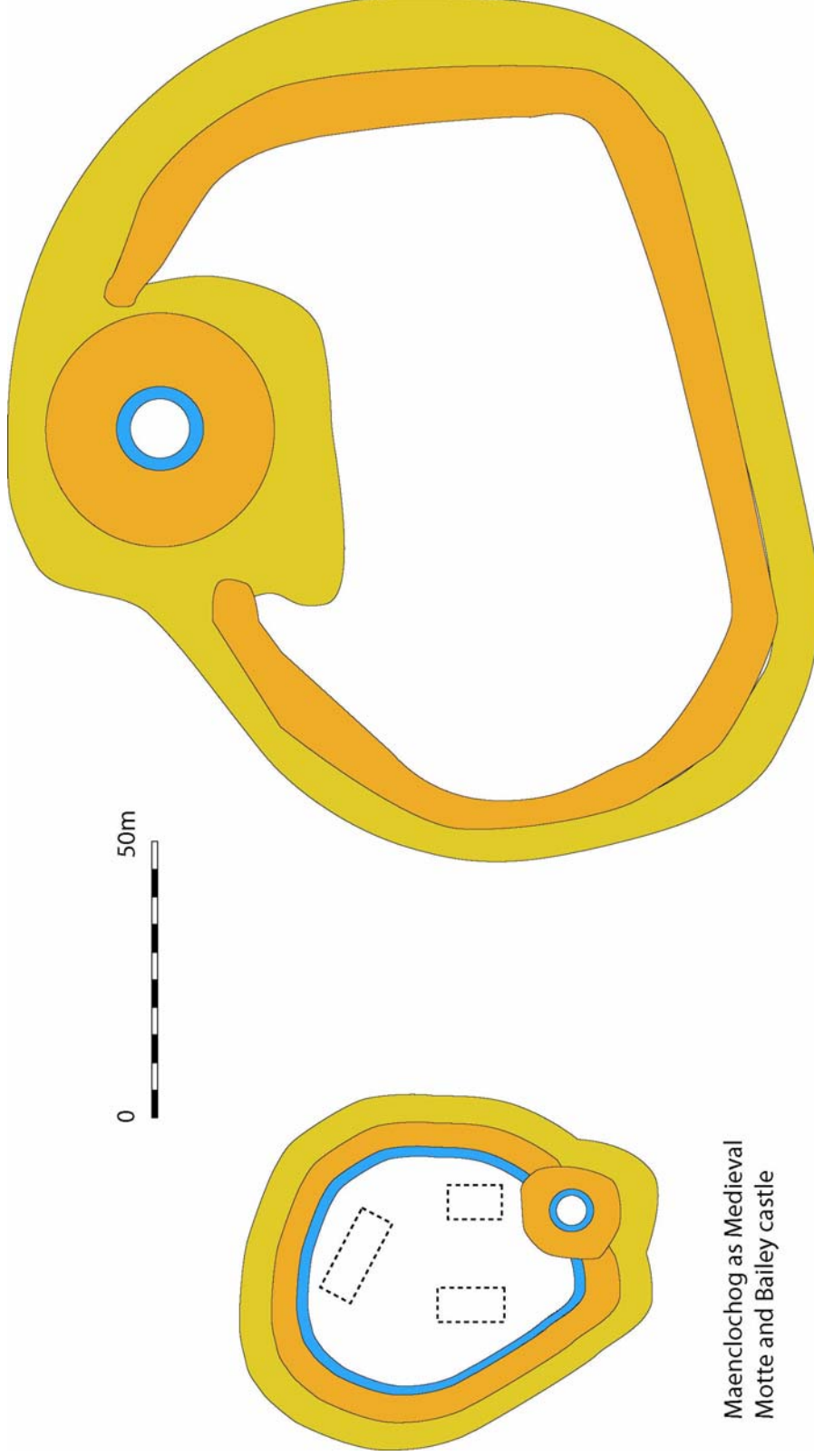


Figure 10: Comparison of the probable size of Maenclochog defended enclosure compared to two others excavated at Llawhaden



Maenclochog as Medieval Motte and Bailey castle

Wiston Motte and Bailey castle

Figure 11: Comparison of Maenclochog as a motte and bailey castle compared with the castle at Wiston



Photo 1: Maenclochog from the air. Looking northwest. The castle site is in the bottom left quarter.
Note the straight linear medieval field boundaries

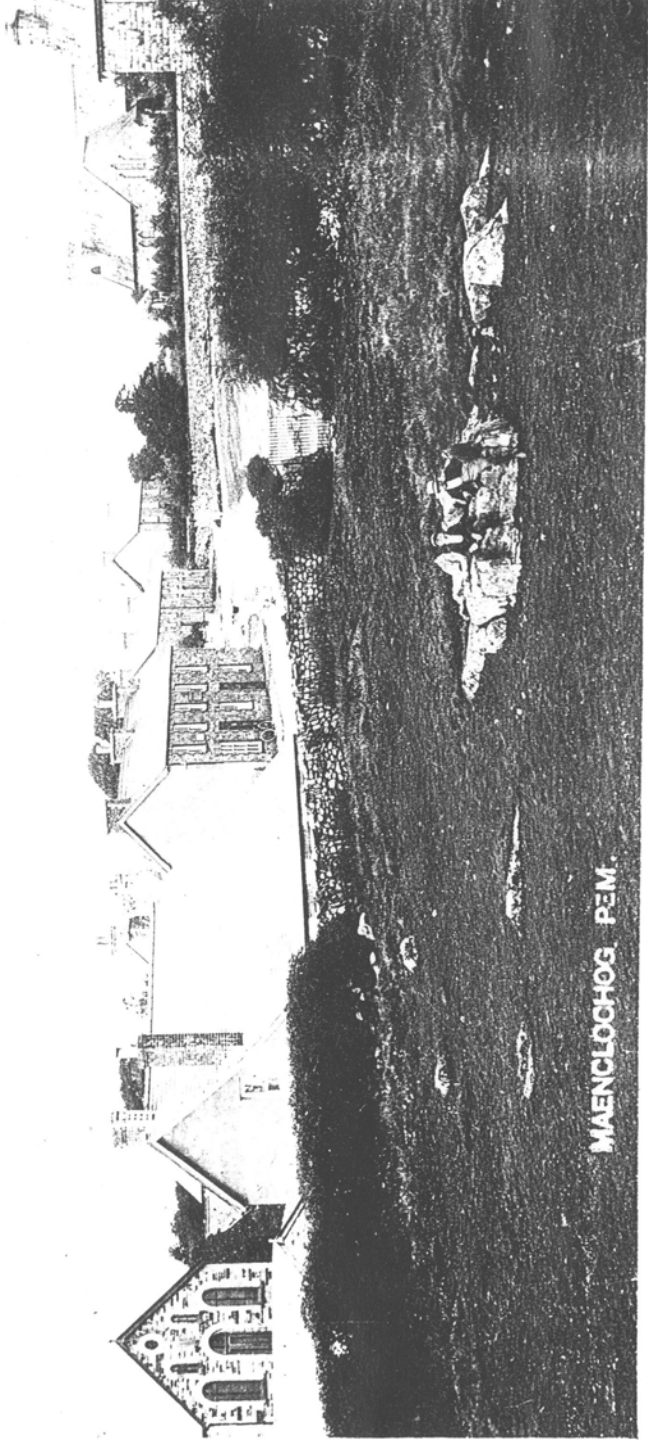


Photo 2: A photo of the pound in the early 20th century. Note the large rock, buried when the ground was leveled up to make the car park.

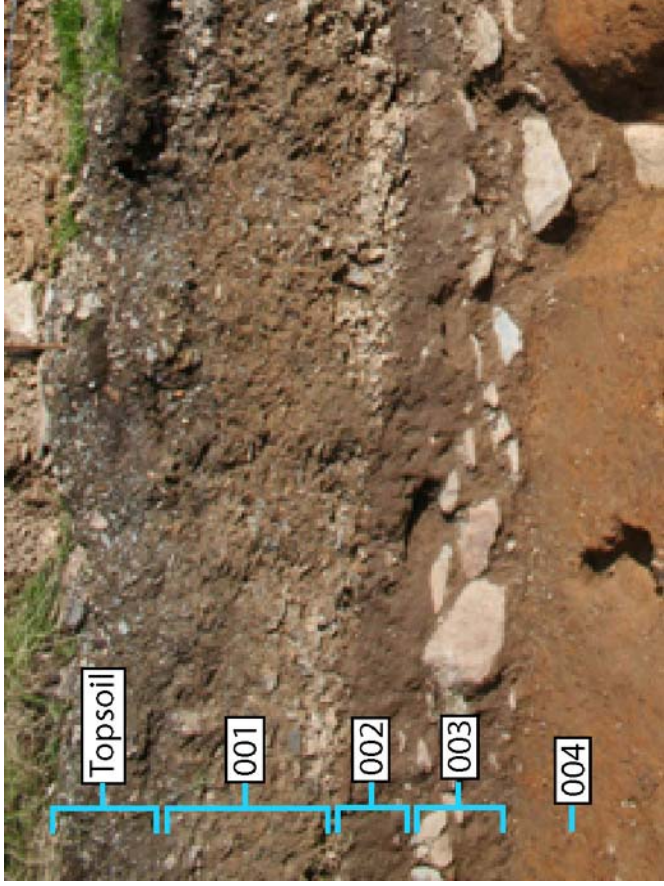


Photo 3: The different layers of soil in Trench 1 (see Figure 5)



Photo 4: Cleaning up to find features in Trench 1.



Photo 5: Excavating features in Trench 1.



Photo 6: The double dog burial 012 in Trench 1.



Photo 7: Hearth 052 in Trench 1 before excavation. Looking east.
Note the burnt soil around the edge of the feature.



Photo 8: Hearth 052 in Trench 1 after excavation. Looking east. Note
the burnt soil around the edge of the feature.



Photo 9: Posthole 045 in Trench 1, looking east. Note packing stones.



Photo 10: Roundhouse wall foundation ditch in Trench 1 (looking east) during excavation. Note packing stones for a post in the ditch.



Photo 11: Trench 1, looking east. Roundhouse ditch 011, with inner ring of stakeholes 059 and stakehole rows 061 and 063.



Photo 12: Trench 1 looking west, showing post holes 025, 047, 049, 057 and 051, with stakeholes 061 and surface 015 in bottom right hand corner.



Photo 13: Trench 1 looking southeast showing pebble surface 015 and stakeholes 061 in relation to other features.



Photo 14: Trench 1 looking northwest, showing pebble and stakeholes 061.



Photo 15: Trench 1 looking east, showing line of possible fence



Photo 16: Trench 1 looking northwest, showing interior of roundhouse



Photo 17: Trench 2, looking southwest, showing north face of the castle/pound wall.



Photo 18: Trench 2 facing north showing the components of the castle and pound walls and locations of post holes 027, 043 and 054.



Photo 19: Trench 2. Showing face and core of castlewall, with pound wall to right.



Photo 20: Trench 2 looking north, showing dark soil 005 and yellowbank soil 036. Note layers dropping down to left into ditch 041.



Photo 21: Trench 2, looking north, showing possible trampled pathway 030.



Photo 22: Trench 2 looking northeast, showing post hole 027 during excavation.



Photo 23: Trench 2 looking southwest, showing post hole 027 empty. Note dark band of buried soil 038 in side of post hole.

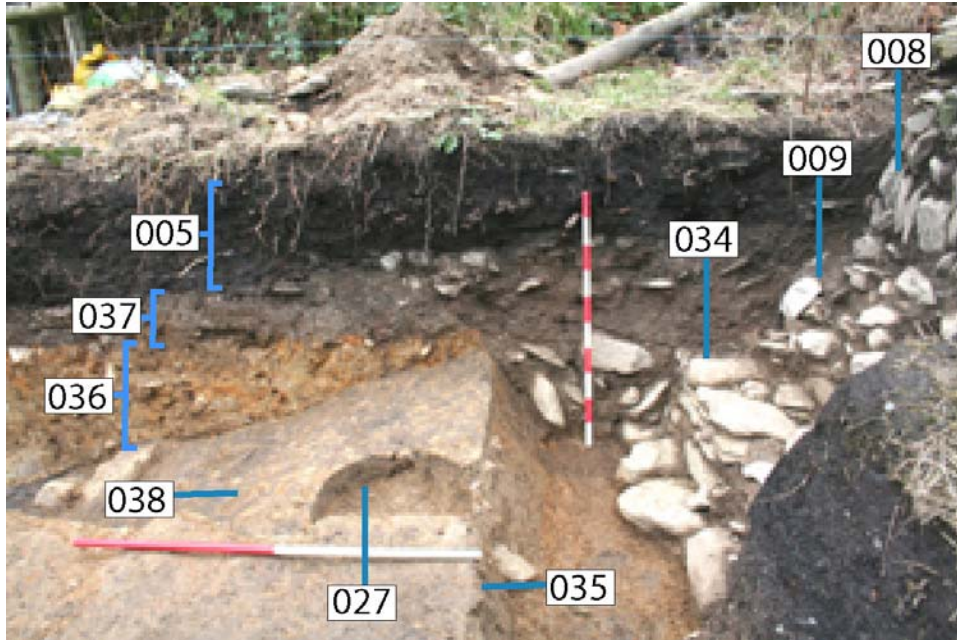


Photo 24: Photo of the north end of Trench 2, looking north, showing main features and deposits.



Photo 25: Trench 2 looking southwest during removal of bank 036.



Photo 26: Trench 2 looking northeast, showing dark buried soil 038 after removal of yellow bank soil 036.

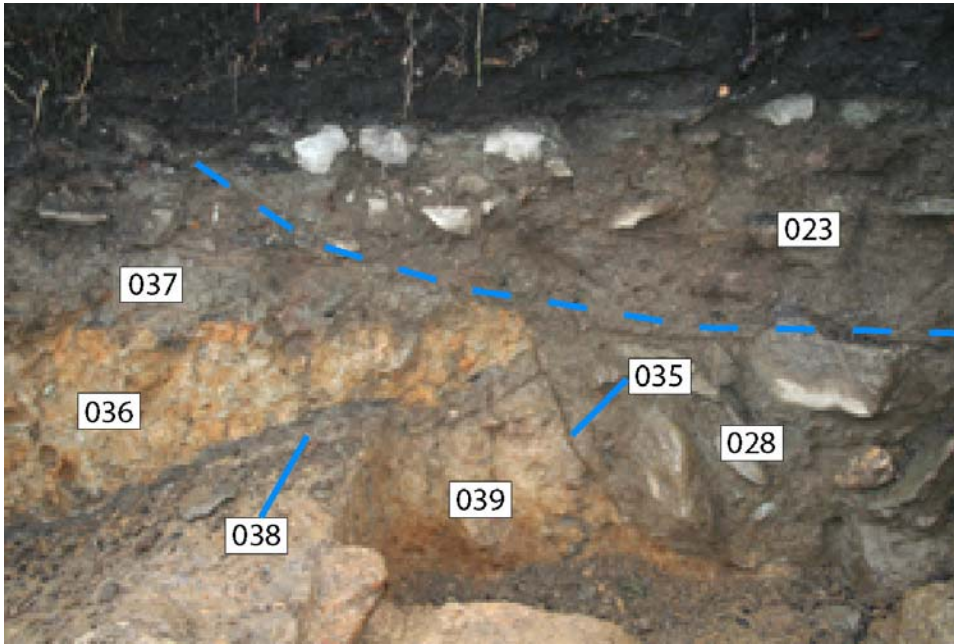


Photo 27: Trench 2 showing deposits at the north end.

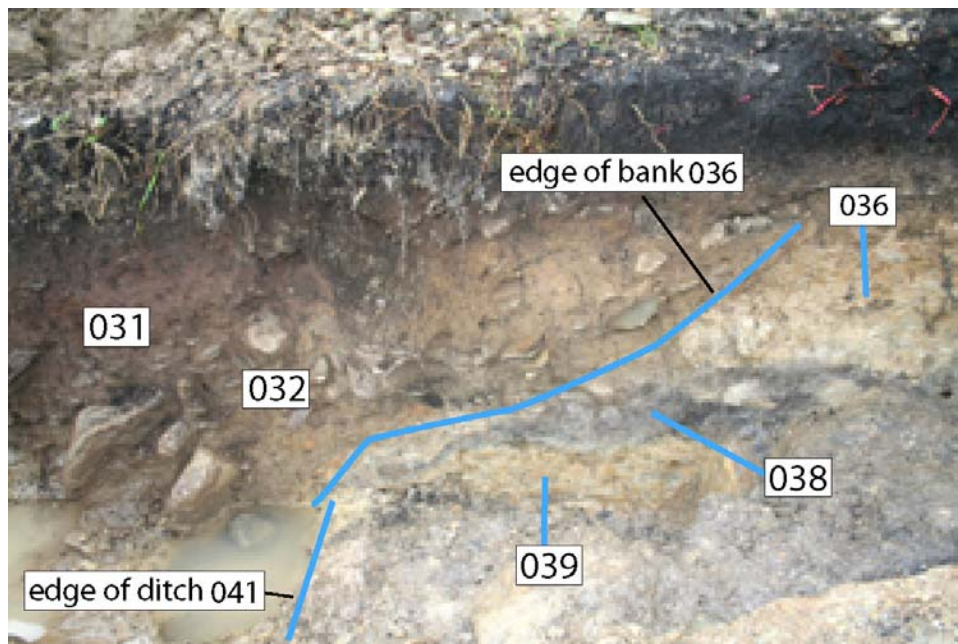


Photo 28: Trench 2 showing deposits at the north end.



Photo 29: Busy work cleaning Trench 2 for a photograph.



Photo 30: Community volunteers learning how to draw an archaeological plan.



Photo 31: Explaining the archaeology in Trench 1 to the local school children.



Photo 32: Introducing volunteers to archaeological building recording.