Archaeology Wales

1402 Battle of Pilleth
Pilleth, Monaughty, Powys

Battlefield Survey

By
Chris E Smith BA (Hons) MA MIFA

Report No. 1048

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

Archaeology Wales

1402 Battle of Pilleth
Pilleth, Monaughty, Powys

Battlefield Survey

Prepared For: RCAHMW

Edited by:	Authorised by:
Signed:	Signed:
Position:	Position:
Date:	Date:

By
Chris E Smith BA (Hons) MA MIFA

Report No: **1048**

Date: **March 2012**

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

CONTENTS

List of Figures

List of Plates

List of Appendices

Crynodeb Anhechnegol

Y mae'r adroddiad yma ar gyfer Comisiwn Brenhinol Henebion Cymru yn crynhoi a chyflwyno canlyniadau gwaith arolygu ar faes brwydr (1402) dybiedig Bryn Glas, Pilleth, ger Mynachdy, Powys. Y mae'r gwaith yn rhan o ymchwiliad mwy eang sy'n cynnwys pump o feysydd brwydrau Cymru. Amcan y gwaith yw hel tystiolaeth ynglŷn â maint a lleoliad phob safle ar gyfer Rhestr Meysydd Brwydrau Cymru. Ym Mhilleth roedd y gwaith archwilio yn cynnwys cerdded o gwmpas y maes, archwilio canlyniadau gwaith-maes o'r gorffennol, arolygu'r data LiDAR, yn ogystal ag arolygon gwrthedd a datgelydd metel. Er bod yr arolwg LiDAR yn dangos nifer o nodweddion newydd ar ochr ddwyreiniol Bryn Glas, safle tybiedig y frwydr, mae'n bosib fod olion eraill o 1402 wedi diflannu oherwydd bod y tir wedi cael ei aredig yn y gorffennol.

Fe wnaeth yr arolwg gwrthedd ar y twmpath mwyaf gorllewinol o'r tri ar waelod y dyffryn ddangos mae pridd cywasgedig a cherrig sydd yma yn hytrach na feddau torfol. Mae'n bosib mae rhewlifiant sydd yn gyfrifol am y nodweddion yma, ond fe fyddai angen gwaith ychwanegol i gadarnhau hyn.

Fe wnaeth yr arolwg datgelydd metel ar Fryn Glas ddarganfod tri arteffact o'r canol oesoedd ond roedd y rhain y gysylltiedig â cheffylau yn hytrach na'r frwydr yn benodol.

Non-Technical Summary

This report draws upon the results gained by survey work undertaken at the reputed site of the 1402 Battle of Pilleth at Bryn Glas, Pilleth, near Monaughty, Powys, for The Royal Commission on the Ancient and Historical Monuments of Wales (RCAHMW). The work forms part of a larger investigation into five battlefield sites, the objectives of which are to gather evidence that will verify and inform the location and extent of Welsh battlefields and to inform the consideration of each site for inclusion on the Welsh Government proposed Register of Historic Battlefields in Wales.

The work undertaken at Pilleth comprised a site walkover, analysis of LiDAR data, research into previously undertaken fieldwork, a geophysical resistivity survey and a metal detector survey.

The site visit and LiDAR analysis did not reveal any features identifiable with the 1402 battle, although the LiDAR revealed a number of previously unseen features, most notably on the eastern face of Bryn Glas, the hill where the battle was reputed to have taken place. If any features had been left on the hillslope it seems likely to that they would have disappeared as a result of steam ploughing which was undertaken there.

The geophysical survey showed that the westernmost of the three mounds on the valley bottom, supposedly the sites of mass graves, is probably composed of soil with stone or other hard packed material on its slopes and around its edges. It seems most likely that the mounds are natural features, possibly formed by glaciation, although further investigation would be needed to verify this.

The metal detecting survey revealed three medieval finds from the area of Bryn Glas, though these related to the presence of horses rather than specifically to evidence for a battle.

1 Introduction

1.1 Location and scope of work

1.1.1 In February 2012 Archaeology Wales carried out a series of archaeological investigations around Bryn Glas, Pilleth, Powys, NGR SO 25242 68223 (Fig 1).

1.1.2 The work was carried out at the request of Louise Barker of the Royal Commission on the Ancient and Historical Monuments of Wales (Henceforth – The Commission). It forms part of a series of battlefield surveys undertaken by Archaeology Wales Ltd on behalf of The Commission, the primary objective of which is to inform the consideration of each battlefield site for inclusion on a proposed Battlefields Register for Wales.

2 Aims & Objectives

2.1 Outline Requirements

2.1.1 The objective of the work at each battlefield is to gather evidence that will help verify and inform the location, extent and archaeological character of each battlefield. The fundamental criterion is that in order for a battlefield to be protected and for change to be managed, its location and extent must be confidently identified. In addition the battlefield must meet at least one of the following three criteria:

2.1.2 **Be associated with historical events or figures of national importance** (i.e military innovations, direct associations with nationally important figures or events and whether the engagement played a key role in a campaign); and/or

2.1.3 **Have significant physical remains and/or archaeological potential** (i.e include natural or constructed physical features at the time of the engagement, evidence from the engagement or other related buried archaeological evidence); and/or

2.1.4 **Have a clear landscape context that allows the events of the battle to be understood or interpreted** (i.e the initial area of deployment and fighting, wider landscape incorporating earthworks, skirmishes, camps, burial, line of advance and retreat, and detached elements such as memorials)

2.2 Geology and topography

2.2.1 The underlying solid geology of the Pilleth area is primarily made up of the undifferentiated Ludlow Rocks series, composed of mudstone, siltstone and sandstone deposits (British Geological Survey, 2001).

2.2.2 The battle site of Pilleth occupies two distinct soil zones. The upper slopes consist of the typical brown earths of the 541j DENBIGH 1 series, consisting of well drained fine loamy or silty soils overlying Palaeozoic slaty mudstone and siltstone.

2.2.3 Within the lower-lying section of the battlefield (the valley floor of the Upper Lugg) the predominant soil type consists of the typical alluvial gley soils of the 811b CONWAY

series, comprising deep stoneless fine silty and clayey soils variably affected by seasonal groundwater flooding.

2.2.4 The hill of Bryn Glas, on the eastern slope of which the 1402 battle is supposed to have largely taken place, has a steep gradient, rising from 200m OD at its base to an eventual height of 332m OD, although at the top it is comparatively flat . The hill is bounded to the north, west and south by Black Hill (404m OD), Glog Hill (408m OD) and Llan Fawr (387m OD) respectively.

2.2.5 The flat and wet valley bottom, through which the river Lugg runs, is located some 400m to the south and is separated from Bryn Glas by the route of the B4356.

2.3 Archaeological and Historical Background

2.3.1 A complete description of the Battle of Pilleth is contained within the pilot study undertaken by Border Archaeology (2009). The main events, however, can be summarised as follows:

2.3.2 The battle of Pilleth should be viewed against the backdrop of the intensification of Owain Glyndwr's rebellion during the years 1401-2 and the failure of the English Crown (Henry IV) and the Marcher lords to deal effectively with the revolt. At some point during the summer of 1401, Glyndwr's forces appear to have inflicted a defeat on a sizeable English force mustered from Ceredigion and Pembrokeshire at Hyddgen to the north of Plynlimon. It would appear that this success heralded a significant broadening and intensification of the revolt; Glyndwr subsequently appears to have mounted a substantial raid into Radnorshire, storming the castle at New Radnor and massacring the garrison, followed by attacks on the Marcher strongholds of Montgomery and Welshpool in the autumn, while the important royal castles of Aberystwyth and Harlech were placed under siege.

2.3.3 Following attacks on the lordships of Ruthin and Dyffryn Clwyd in April, Glyndwr's attention appears to have turned once again to Radnorshire, dominated by the extensive estates of the Mortimer family which were then in the possession of the Crown during the minority of Edmund, son of the late Roger Mortimer, fourth earl of March (d.1398). There appears to have been a pronounced absence of leadership among the gentry and nobility of the central Marches at the time of Glyndwr's attack in June 1402; which is perhaps reflected in the fact that responsibility for countering the Welsh attack was given (possibly in haste) to the late earl of March's younger brother, Edmund Mortimer, who appears to have been a relative non-entity up to this point, holding a fairly sizeable estate in Herefordshire and Shropshire.

2.3.4 Probably the most detailed contemporary account is that contained in the continuation of the *Vita Ricardi Secundi*, compiled by a monk of Evesham in or shortly after1402. The author of the *Vita* states that Edmund Mortimer, 'at that time present in the town of Ludlow, received news that the said Owain Glyndwr had come down from the Welsh mountains with a small force and that he was upon a mountain next to Pilleth, not far from the town of Ludlow. Edmund therefore hastily sent for his men and tenants of Maelienydd 'that they should not fail to come to his aid in this hard necessity'.

2.3.5 The events of the battle itself are described in several contemporary and near contemporary chronicle sources which differ somewhat in content and level of detail, although they appear to agree broadly on the principal details of the engagement and its aftermath. Probably the most informative account of the battle, given in the continuation of the *Vita Ricardi Secundi*, compiled by a monk of Evesham Abbey either in or shortly after 1402, states that when they (Mortimer's men and the tenants of Maelienydd) came to him (ie. Mortimer), with them and many others in great strength he boldly ascended the hill'.88 From this account, it would appear that Mortimer gathered his forces as he marched from Ludlow toward Glyndwr's position, meeting the contingent of Maelienydd somewhere close to Pilleth (possibly, as Hodges suggests, at nearby Whitton to the N of the River Lugg) before advancing on Glyndwr's forces, which are explicitly stated as occupying a hilltop position.

2.3.6 Significantly, two other contemporary or near-contemporary accounts, which otherwise provide little detail as to the course of the engagement, corroborate the statement in the *Vita* that the battle took place on a hill. Of particular importance is the account given in the Mortimer family chronicle compiled at Wigmore Abbey, only 9 miles due E from Pilleth and therefore in a good position to receive reliable information concerning the battle, which explicitly states that the battle took place 'on a mountain called Bryn Glas within Maelienydd, close to Knighton'.89 The account contained in a prose version of the English *Brut*, probably compiled in about 1437 and including interpolations by someone who clearly had a knowledge of Welsh affairs and particularly the Glyndwr revolt, states that 'this battle was in the Blak Hill beside Pymaren'.

2.3.7 The account of the battle in the *Vita Ricardi* then relates how 'having come together with great impetus, the said Welshmen of Maelienydd, not of the tribe of Judah, but born to be similar traitors, traitorously turned their faces and weapons against their own lord'. It would appear from this passage that the battle commenced with Mortimer advancing with the bulk of his army against Glyndwr's position, presumably intending to overwhelm the Welsh by sheer force of numbers. However it would seem that, in the midst of battle, the contingent of troops from Maelienydd suddenly defected to Glyndwr's cause, which immediately turned the tide of the battle.

2.3.8 The *Vita* further describes how 'ill fortune therefore befell our men, the Lord Edmund was captured immediately and many others with him. Then there came on Owain's part a certain Welshman named Rees a Gytch, who was harsher than the others, he either killed, mutilated or captured all who resisted him'. Following an account of the casualties suffered by the English during the battle (giving the relatively small estimate of 200 dead), the chronicler provides a remarkably vivid description of the carnage of the battlefield, stating that 'the corpses were left lying under the horses hooves, weltering in their own blood, as burial was forbidden for a long time afterwards'.

2.3.9 It is difficult to establish the respective size of the English and Welsh armies at Pilleth, based on the available documentary evidence. The author of the *Vita Ricardi Secundi* described Glyndwr as having come down from the Welsh mountains with a small force (*cum paucis*). Thomas Walsingham, in his *Annales Henrici Quarti*, describes Glyndwr's force as a horde or rabble (turba) of Welshmen, which might imply a large number of

troops, although in the *Historia Anglicana* he uses the more non-committal term of 'comitiva', denoting a band or company.

2.3.10 The size and composition of Edmund Mortimer's army is similarly difficult to establish, however the chronicle sources appear generally to agree that it was a substantial force. The author of the *Vita Ricardi* states that Mortimer 'sent for his men and tenants of Maelienydd', perhaps suggesting that the bulk of Mortimer's force consisted of two distinct elements, comprising his own household retainers and the 'tenants of Maelienydd'.

3 Methodology

3.1 Site Visit

3.1.1 Project Manager Chris E Smith (MIfA) undertook the site visit on 24th January 2012. All of the assessment area was subject to the walkover. All areas were photographed using high resolution (14MP) digital photography.

3.2 LiDAR Data Analysis

3.2.1 LiDAR data, at a resolution of 2m, was LiDAR data was analysed by AW at the Commission. Examination of the ground surface of the assessment area was undertaken using both digital shadow models and digital terrain models.

3.3 Geophysical Resistivity Survey

3.3.1 A geophysical survey, using an RM15 resistivity meter, was undertaken across the most westerly of the mounds on the flat valley bottom, to the south of Bryn Glas (Fig 2). The geophysical survey was undertaken by Chris E Smith (MIfA) and Dr Neil Phillips (Archaeological Perspectives and Analysis Consultancy – Henceforth APAC).

3.3.2 A survey grid measuring a total of 80x40m was laid out over the mound and was composed of eight smaller, 20x20m, grids. The grids were laid out using a Topcon GTS total station and were then tied into surrounding field boundaries to locate the survey.

3.3.3 All geophysical survey data was downloaded into ArcheoSurveyor and collated as .CMP files for processing. All total station files for survey location were downloaded into AutoCAD as DXF files.

3.3.4 All works were undertaken in accordance with the IfA's *Standards and Guidance: for a geophysical survey* (2008) and current Health and Safety legislation.

3.4 Metal Detector Survey

3.4.1 A detailed metal detector survey was undertaken by Chris E Smith and volunteers from the local area and the Swansea Metal Detecting Club. Areas subject to survey included the flat field directly above the eastern hillslope, the area immediately west of the Church of St. Mary, a 10m wide area immediately surrounding a stand of Wellingtonia tress and two corridors down the steep hillslope (Figs 2&3).

3.4.2 The field at the top of the hill was divided into transects of equal width to ensure coverage. Each transect was assigned to a metal detectorist who would scan the area twice, once going up the field and again on the return.

3.4.3 The area to be surveyed on the eastern slope of Bryn Glas was marked with a series of canes defining two separate corridors. The northern corridor, down the centre of the slope, measured 25m in width by a total of 230m in length. The southern corridor, adjacent, measured 20m in width by 300m in length.

3.4.4 Detectorists were arranged into two groups, one within each corridor, and walked parallel traverses down and up the slope so as to gain adequate coverage.

3.4.5 A 10m area around the outside of the stand of Wellingtonias was subject to survey by two detectorists scanning in parallel traverses.

3.4.6 The area immediately west of the Church of St. Mary was subject to survey by a single detectorist scanning in parallel traverses.

3.4.7 All metal detectors were set to 'All Metal' mode so as to include responses from ferrous objects.

3.4.8 When a find was located it was placed *in situ* within a finds bag with a marker flag placed next to it. Subsequently, the finds were collected by the supervising archaeologist. Each find was labelled with an individual find number and each numbered findspot was marked using a handheld Garmin Etrex GPS.

3.4.9 The grid coordinates from each findspot were entered into both an excel spreadsheet detailing all the finds and into a GIS program to show their distribution across the assessment area.

3.4.10 All finds which were clearly of 20^{th} – 21^{st} century date along with all of those which were clearly identifiable as being associated with agriculture/machinery were not retained to form part of the project archive. Non retained finds were removed from site and discarded away from the survey area.

4 Site Visit Results

4.1 Ground and weather conditions

4.1.1 The site visit was undertaken in good light conditions, which was conducive to the identification of more ephemeral features. The weather was overcast, damp and cold. Ground conditions were thus soft.

4.2 Lower slope around Church of St, Mary

4.2.1 This area incorporated all the land to the north, south and east of the Church of St. Mary, up to the area of Pilleth Court. No features were readily identifiable in the area to the south and east of the church. However, the area to the north-east contained several undulations in the topography. These did not appear to take on any recognisable form, such as house platforms. No features evidently associated with the battle were noted.

4.3 **Upper slope including stand of trees (Plates 1-6)**

4.3.1 The upper slope of Bryn Glas, to the west of the church, is a relatively steep gradient. Some features were readily apparent within its surface, these include:

- Two old stone extraction areas immediately north of the church,
- A seemingly terraced path leading from the corner of the stand of Wellingtonia trees (So 25522 68170) to the north of the church,
- Further tracks, seemingly vehicular, skirting the lower north eastern face of the hill,
- Two shallow scoops (SO 25562 68208 & SO 25533 68346) were also visible on the hillslope and may be associated with quarrying activities.

4.3.1 The stand of Wellingtonia trees above the church of St Mary, said to mark the spot where ploughing turned up human bones, has a number of rabbit warrens within it at the base of the trees. The warrens were investigated to see if any fragments of bone had been ejected in the spoil. Whilst no bone was found, the search was somewhat hampered by dense bracken cover.

4.3.2 No features evidently associated with the battle were noted.

4.4 **Flat Hilltop**

4.4.1 The top of Bryn Glas is a comparatively flat field. A tree plantation covering 300x40m, running north south over the top of the hill, masks the break of slope between the eastern face of Bryn Glas and the flat top. No features were noted in this area.

4.5 **Valley Bottom including mounds (Plates 7-12)**

4.5.1 During the walkover of the valley bottom to the south of Bryn Glas the landowner, Peter Hood, was consulted for local knowledge. The area, known as the 'water meadows' has always been very wet despite the fact that the land was drained in the late 19th century. During the site visit the ground was still very wet in places with small patches of localised flooding.

4.5.2 From the path of the B4356 the land slopes downwards at a shallow angle for approximately 150m before giving way to the flat valley bottom. Within the assessment area the valley bottom is approximately 200-250m wide.

4.5.3 Features which were readily apparent in this area included a large number of linear ditches, presumably associated with the drainage of the land during the19th century. Also located in this area were three large mounds which are traditionally associated with the battle as mass graves (Pilot study, 2009).

4.5.4 Each of the mounds was subject to the field walkover. The eastern mound (SO 25450 67600) is ovoid in shape measuring 68m in length by 48m in width. The mound rises to a height of approximately 3.5-4m above its flat surroundings.

4.5.5 Erosion on a small area of the mound showed that it was composed of a mid/dark brown sandy pea grit material with no evident anthropogenic inclusions. Though most of the trees on the mound were not of any great age, based on the large circumference of their trunks, two oak trees on the eastern mound appear to be at least 300 years old.

4.5.6 The middle of the three mounds (SO 24680 67700) is circular in plan and is smaller than the eastern mound, measuring 44m in diameter. The mound rises approximately 4m above its flat surroundings.

4.5.7 The southern edge of the mound appears to have been altered by quarrying. A large hollow scoop in the middle of the mound suggests the same.

4.5.8 The western mound is different in shape and form to the previous two. It measures approximately 78m in length by 39m in width and is aligned roughly east west. It is an elongated ovoid in shape with shallow sloping sides rising to a roughly flat top, approximately 3m higher than its surroundings. Unlike the previous mounds no large trees are present.

4.5.9 A small linear cutting on the south face of its western end attests to some human activity, although the origin of this is unknown.

4.6 Site Visit Summary

4.6.1 The site visit at Pilleth did not reveal any features which were readily identifiable with the 1402 battle. If any features had been left on the hillslope it seems likely that they would have long disappeared as a result of the steam ploughing undertaken there (Hood, Pers. Comm). Similarly, any features immediately north of the church may have been lost to quarrying.

4.6.2 The large mounds on the valley bottom are strange features and would appear to be natural in origin, most likely associated with glaciation. This, however, is by no means certain and further investigation is required.

5 LiDAR Data Analysis

5.1 Digital Shadow Model

5.1.1 The DSM LiDAR data, analysed at 2m resolution, shows the assessment area in good detail (Fig 4).

5.1.2 The small topographic undulations around the east of St Mary's church, noted during the site visit, are shown though do not appear to form any identifiable features. A single linear feature, most likely a defunct field boundary, can be seen running east west from beneath the church track to Pilleth Court.

5.1.3 The LiDAR data does reveal features on the steep eastern face of Bryn Glas though these appear mostly to be ephemeral tracks up the hill invisible to the naked eye. Two further shallow scoops, similar to those identified during the site visit, are shown on the DSM. These are located at SO 25549 68264 & SO 25578 68117.

5.1.4 The DSM shows that the valley bottom has a series of linear drainage ditches and irregular watercourses running across it. The eastern and middle mounds are obscured by trees. The western mound does not appear to have any further identifiable characteristics though the land surrounding it has a lot of drainage and water course features.

5.2 Digital Terrain Model

5.2.1 The DTM LiDAR data, analysed at 2m resolution, shows the assessment area in good detail and removes tree canopy cover to reveal the terrain beneath (Fig 5).

5.2.2 Removal of tree cover on the break of slope between the steep eastern face of Bryn Glas and the flat top revealed no identifiable features in this area. Similarly, no further features were identified from the removal of the stand of Wellingtonias.

5.2.3 Digital removal of tree cover from the easternmost mound on the valley bottom revealed a slight indentation on its eastern edge and possible erosion damage on its southern edge adjacent to the river.

5.2.4 DTM data for the middle mound showed the area of potential quarrying activity clearly, though no further features were revealed.

5.3 LiDAR Summary

5.3.1 The analysis of the LiDAR data has revealed a number of features not previously seen during the site visit, most notably on the eastern face of Bryn Glas, though none are readily identifiable as relating to the 1402 battle.

5.3.2 The removal of tree canopy interference from the brow of the hill and the stand of Wellingtonias has shown that no previously unseen topographic features appear to be located in these areas.

6 Geophysical Survey

6.1 Resistivity Results

6.1.1 After consultation with The Commission, it was decided that the area likely to be the most conducive to geophysical survey was that occupied by the most westerly of the three mounds located on the valley bottom (NGR SO 24442 67703) this being the most intact and least tree covered of the three.

6.1.2 The mound itself measures approximately 78m in length by 39 metres in width and is aligned roughly east west. It is an elongated ovoid in shape with shallow sloping sides rising to a roughly flat top approximately 3m higher than its surroundings.

6.1.3 The results of the geophysical survey, presented in figure 6, indicate that the edges and slopes of the mound gave high resistance readings, suggesting that they are either stone covered or composed of stones and/or other hard packed material. This is particularly apparent on the western and southern faces, though is present all around the mound. The

top of the mound, however, gives low resistance readings suggesting a mainly soil composition.

6.1.4 Within the southern facing slope of the mound, extending onto its top, a linear cut is apparent extending for approximately 20m in a north-east to south-west direction (Fig 5). This appears to be uniform, 2m wide, and anthropogenic in nature.

6.1.5 A curving anomaly, possibly anthropogenic in origin, is also apparent.

6.2 Geophysical Survey Summary

6.2.1 The geophysical survey shows that the mound is composed of a low resistance material (earth) yet with areas of stone or other hard packed material on its slopes and around its edges.

6.2.2 The presence of the linear cut is suggestive of past human activity although, on balance, it still seems most likely that the mound is a natural feature, possibly formed by glaciation. Further investigation would be required to investigate this hypothesis.

7 Metal Detector Survey

7.1 Background

7.1.1 Discussions with local landowner Peter Hood revealed that metal detector surveys in the area at the base of the slope, to the west of Pilleth Court, had previously been undertaken by Mark Walters of the Clwyd Powys Archaeological Trust in 1993.

7.1.2 Areas of Pilleth Court (Frost, 2003) and Peter Hoods house, Pilleth Oaks (Nash,1999), had also been subject to metal detector survey as part of planning conditions. The locations of the previous surveys are shown on figure 7.

7.1.3 The 1993 – 2003 metal detector surveys located nothing which was either medieval in date or seemingly related to the battle. After consultation with The Commission it was decided that, given these negative results, the current detector survey should focus on both the hillslope and the top of the hill. The landowner, Sophie Blain, was not aware of any previous metal detecting in these areas.

7.2 Results – Flat Hill Top (Plate 13)

7.2.1 The metal detector survey of the flat area on the top of Bryn Glas revealed relatively few finds, of iron or otherwise (Figs 3, 8&9). A total of only 12 finds were retained with the vast majority being clearly identifiable as farm vehicle parts, modern nails, plough or harrow fragments. A large amount of shotgun cartridge bases and .22 casings were also found. A single find of interest from this area is a copper alloy loop, a simple cheekpiece from a horses snaffle that may be medieval in date.

7.3 Results – Steep Hillslope (Plate 14)

7.3.1 The prevalence of shotgun cartridge bases and spent .22 casings continued down the survey corridors laid out on the eastern slope of Bryn Glas, though the amount of

agriculturally identifiable iron objects fell dramatically, no doubt due to the gradient of the slope. Fencing wire became a common iron find close to the stand of Wellingtonias.

7.3.2 A total of only six finds were retained from within the two survey corridors (Figs 3, 8&9). Two of these were of interest, both horseshoes of apparently medieval type located in the northern survey corridor in the centre of the slope.

7.4 Results – Area around Wellingtonias

7.4.1 The area around the outside of the stand of Wellingtonias was seemingly littered with iron wire and other debris from previous fences, all of which was discarded.

7.4.2 Though no finds related to the 1402 battle were uncovered in this area (Figs 3, 8&9), a decorated bronze Roman fibula brooch was recovered and retained.

7.5 Results – Area west of Church

7.5.1 The area immediately to the west of the church was surveyed by a single detectorist. A large amount of shotgun cartridge bases and iron fencing debris were identified, though none of these were retained.

8 Finds

8.1 Analysis

8.1.1 The three finds recovered by the metal detector survey which are potentially of medieval date consist of a copper alloy horse cheekpiece and two iron horseshoes.

8.1.2 The copper alloy cheekpiece (Small Find No. 8 - Plate 15) is circular in shape with a 26mm diameter. It appears to be very crudely cast (indeed an area of un-removed flashing is visible).

8.1.3 Clark (1995) includes an example of a horse snaffle with type A cheekpieces (after Ward Perkins (1940) medieval cheekpiece typology and similar to the Pilleth find) recovered from a secure 14th century context, albeit in Scotland.

8.1.4 The two iron horseshoes (small find no. 16&17) (one complete, and one two-thirds complete - Plates 16-17) are medieval in date. Each appears identical in shape, though one is slightly smaller than the other in every dimension (with the exception of the web, measuring 35mm on each example). Despite corrosion each has three, well-defined, rectangular nail holes on each branch.

8.1.5 Though no calkins are apparent on either example, Clark (1995) shows that, unlike earlier medieval horseshoes, by the 14/15th century only 56% of excavated examples bear calkins compared with 91% in the 12/13th century.

8.1.6 Comparative examples given in Clark (1995) are defined as being Type 4 horseshoes, dateable to between 1350 and 1450 (though the given examples most closely resembling Pilleth appear to date from 1350-1400).

8.2 **Finds Summary**

8.2.1 The three medieval finds recovered during the metal detector survey at Pilleth all relate to the presence of horses on Bryn Glas and all appear to date from the 14th to the 15th centuries.

9 Discussion and Interpretation

9.1 **Reliability of field investigation**

9.1.1 The field investigation was initially hampered by snow and frozen ground, leading to the postponement of the metal detector survey.

9.1.2 The gradient of the slope on the eastern face of Bryn Glas hampered proceedings making excavation of findspots tricky though not impossible.

9.1.3 Past agricultural activities, most notably the utilisation of a steam plough, on the hillslope at Pilleth may have done much to remove any extant features relating to the battle. It is also likely that larger finds would have been exposed and removed.

9.2 **Overall interpretation & Evidence for the Battle**

9.2.1 As archers feature so prominently in the historical narrative of the battle it would be expected that arrow heads, more than any other form of weaponry, would be a relatively common find, yet none were revealed (although after a battle the vast majority of these may have been retrieved for reuse (Bartlett, 1995).

9.2.2 Given that previous metal detector surveys on the lower ground, undertaken between 1993 and 2003, had failed to locate any medieval material let alone anything related to the battle, the relative lack of finds from the area is unsurprising. With the exception of the horse cheekpiece and horseshoes, no other items commonly lost in battle (buckles, buttons and other fittings) were located.

9.2.3 It is no doubt of significance, however, that whilst three previously undertaken surveys on the lower ground revealed no evidence of medieval activity, let alone anything relating to the battle, this was not the case with the survey of the higher ground of the hillslope, upon which the battle reputedly took place. Three medieval finds were recovered, all of which related to the presence of horses between approximately 1350 and 1400.

9.3 **Conclusions**

9.3.1 Based on the evidence of the current survey it can be concluded that only the hillslope above the church can be linked to the 1402 battle. Even this is tentative, as the supposition is supported by three finds related to the use of horses in general rather than the battle in particular.

9.3.2 No evidence can, at this stage, link the valley bottom, the three mounds, and the stand of Wellingtonias to the battle. This may be achieved through a phase of further work.

9.3.3 The map presented in figure 10 defines the area that can be linked with the 1402 battle of Pilleth, based on the evidence of the current survey combined with previous knowledge of the site as summarised in the pilot study (Border Archaeology 2009). Further work may serve to increase or otherwise redefine this area.

9.4 Recommendations for further investigations

9.4.1 It is felt that further work in the area should, if at all possible, include the excavation of a series of test pits or small trenches, primarily in two locations.

9.4.2 The first would be within the stand of Wellingtonia trees to search for the human bones their locations are supposed to mark. This should comprise of a series of test pits or small trenches excavated either by hand or mechanical excavator.

9.4.3 The second would be on the western mound and be guided by the results of the geophysics. Investigation of the slopes and the top, including the linear cut feature, would help to ascertain the origin of the mound. Test pitting of the other mounds would help establish whether their origins were the same.

9.4.4 A metal detector should be used during all ground breaking activities.

9.4.5 The battle seems likely to have become a rout after the betrayal of the archers from the commote of Malienydd and may have spread piecemeal across the surrounding landscape including the valley bottom, as is suggested by Border Archaeology (2009). It may, therefore, be worthwhile undertaking a further metal detector survey in this area. However, given the likely depth of soil on the valley floor, this would be best undertaken after ploughing so would require close coordination with the farmer.

9.4.6 Further metal detector surveys in the two fields immediately east of Pilleth Court should also be considered.

9.4.7 Possible investigation of the mound contained within the bailey of Castell Foel Allt to the south east of Pilleth should also be considered. The motte and bailey would most likely have been out of use in 1402 (it is not mentioned in any of the historical accounts of the battle). The abandoned bailey, in which the mound sits, is unlikely to have been in use as agricultural land and may, therefore, have represented a useful place to dispose of the dead after the battle.

10 Acknowledgements

10.1.1 Thanks are due to the landowners of the assessment area, Sophie Blain and Peter Hood, for allowing us onto their land and to Louise Barker and Oliver Davis of the Commission for their very valuable help and for supplying the LiDAR and map data. Special thanks are reserved to those local volunteers and members of the Swansea Metal Detecting Club who gave up their own free time to tramp up and down a very steep hill.

11 Bibliography and references

Bartlett, C. 1995. *English Longbowman 1330-1515.* Osprey Publishing, Oxford

Border Archaeology, 2009 'Welsh Battlefields Project Pilot Study: Historical Research'.

British Geological Survey. 2001, 4th Edition. Solid Geology Map, UK South Sheet.

Clark, J. 1995. *The Medieval Horse and its Equipment c1150-c1450.* Boydell Press, Woodbridge

Frost, P. 2003. Pilleth Court Farm, Pilleth, Whitton, Powys: Metal Detector Survey

Nash, G. 1999. Pilleth, Whitton, Battle Site. *Archaeology in Wales.* **39**, p127

Institute for Archaeologists, 2008. *Standards and Guidance for a Geophysical Survey*

Archaeology Wales

APPENDIX I:

Figures

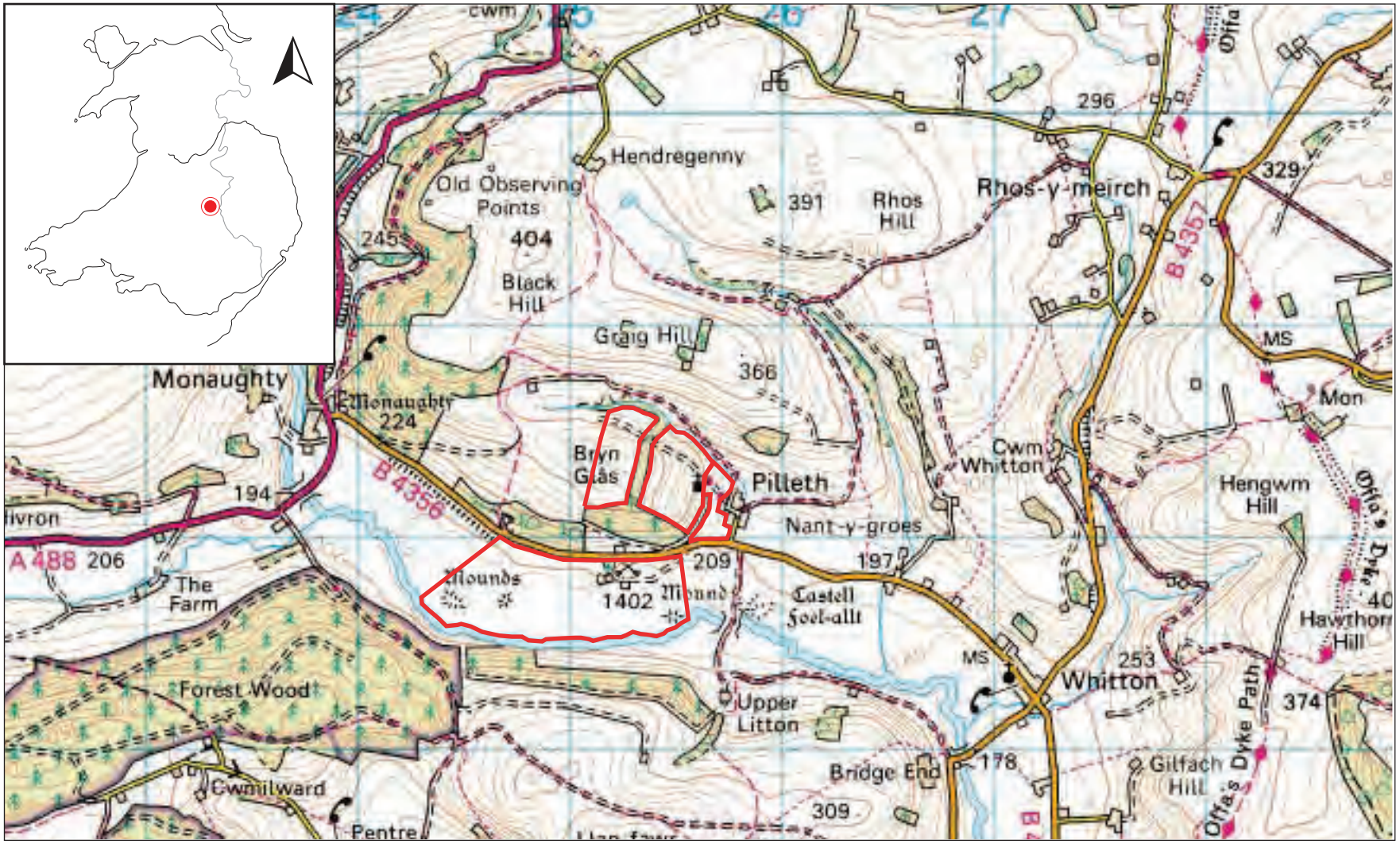
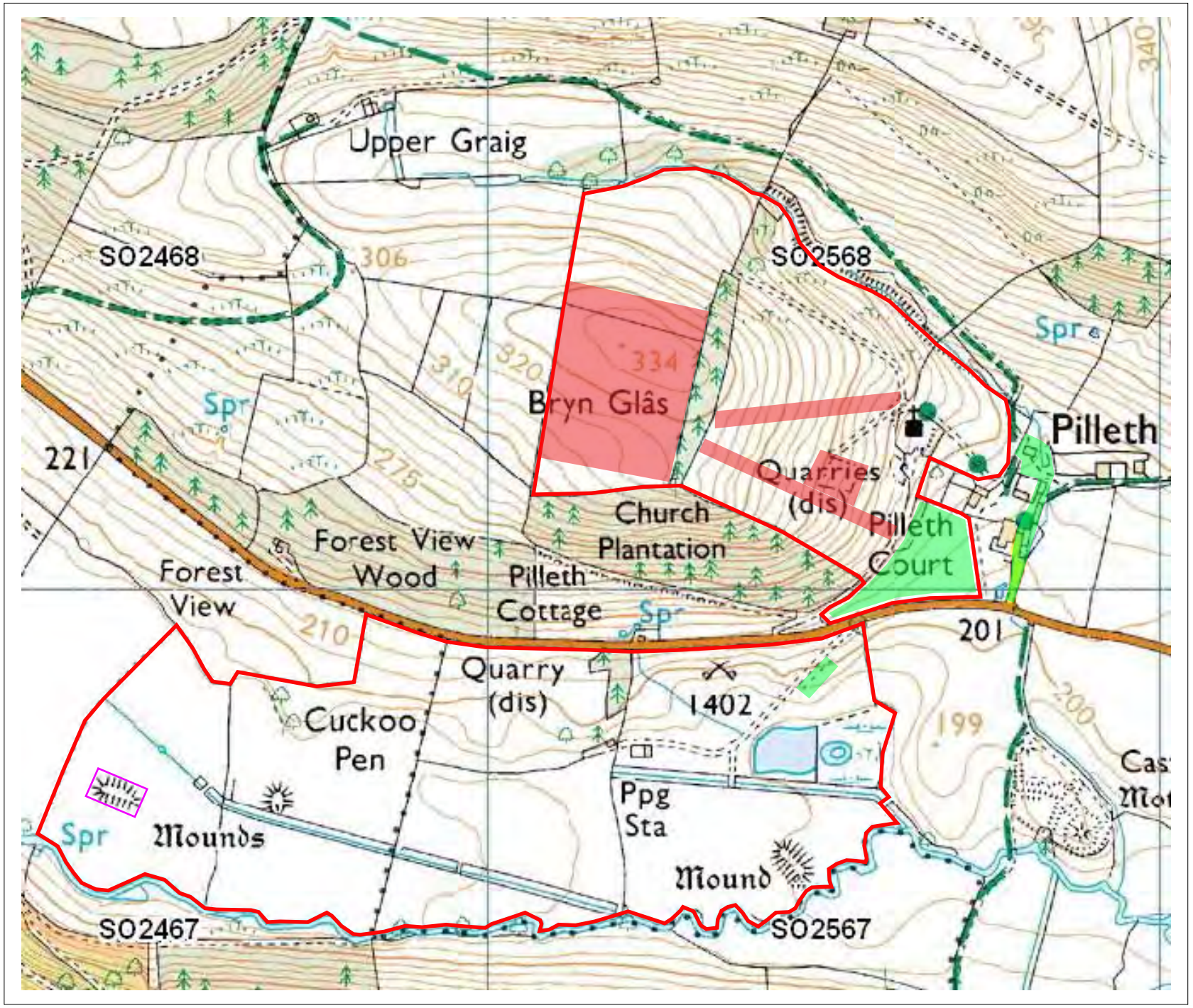


Fig 01: Map showing general location of assessment area



Bounding areas subject to site visit

Area of geophysical survey over western cuckoo mound

Areas covered by metal detector survey

Areas covered by previously undertaken metal detector surveys

Fig 2: Map showing locations of site visit, geophysical survey & metal detector surveys

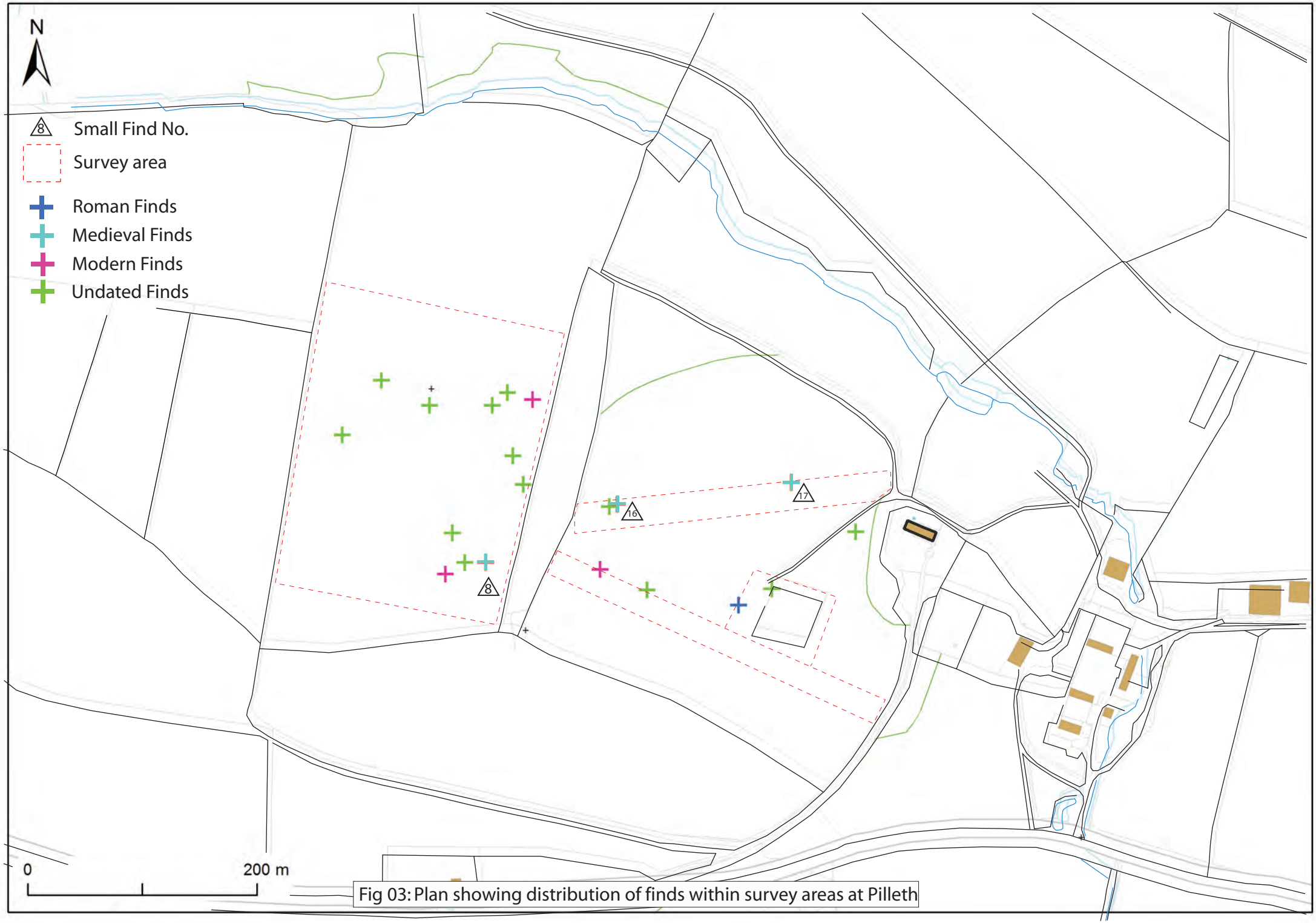


Fig 03: Plan showing distribution of finds within survey areas at Pilleth

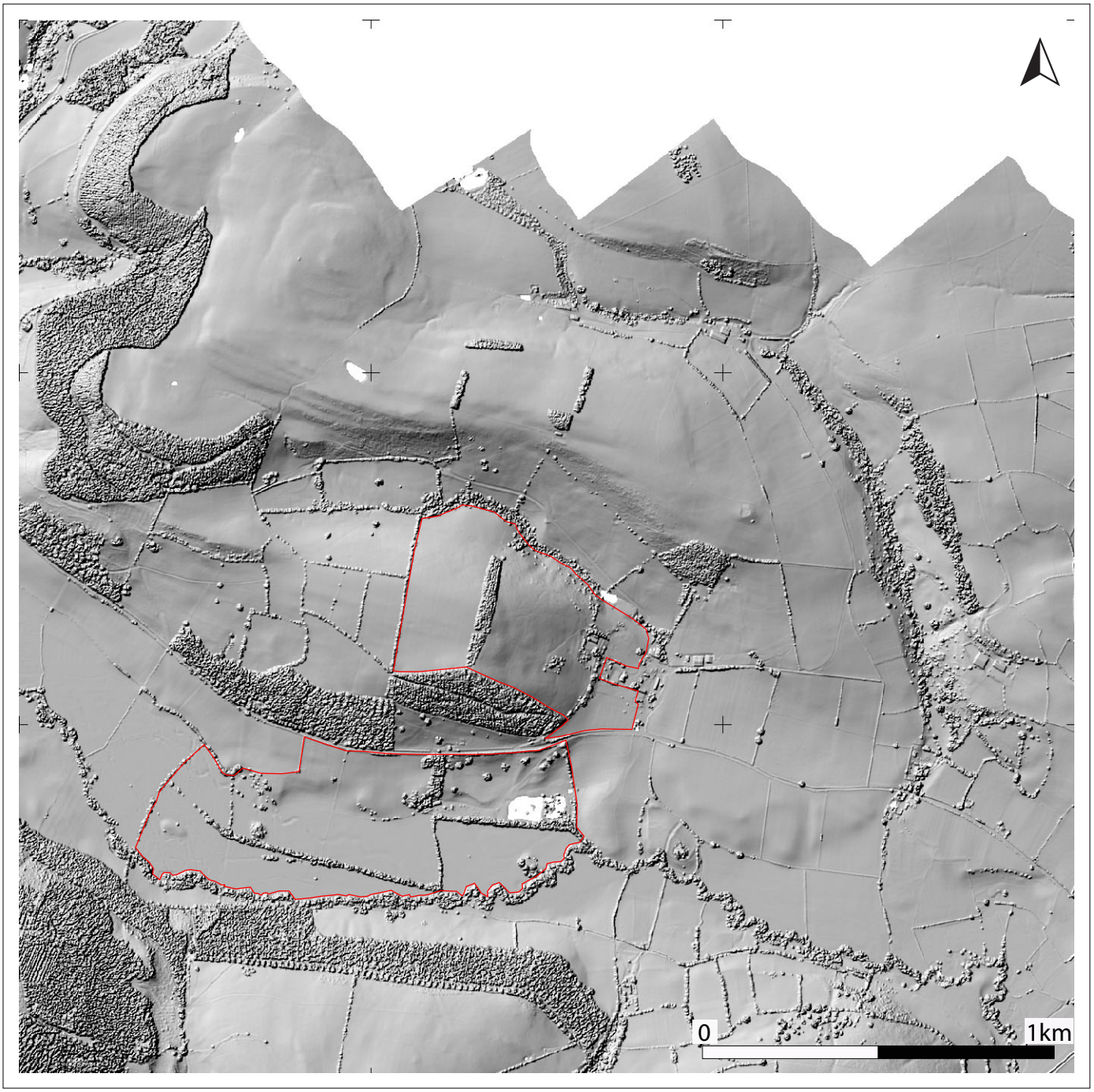


Fig 04: Digital Shadow Model LiDAR data for Pilleth
(Copyright Reserved, Environment Agency Geomatics Group; hillshade *DSM/DTM* view generated by RCAHMW)

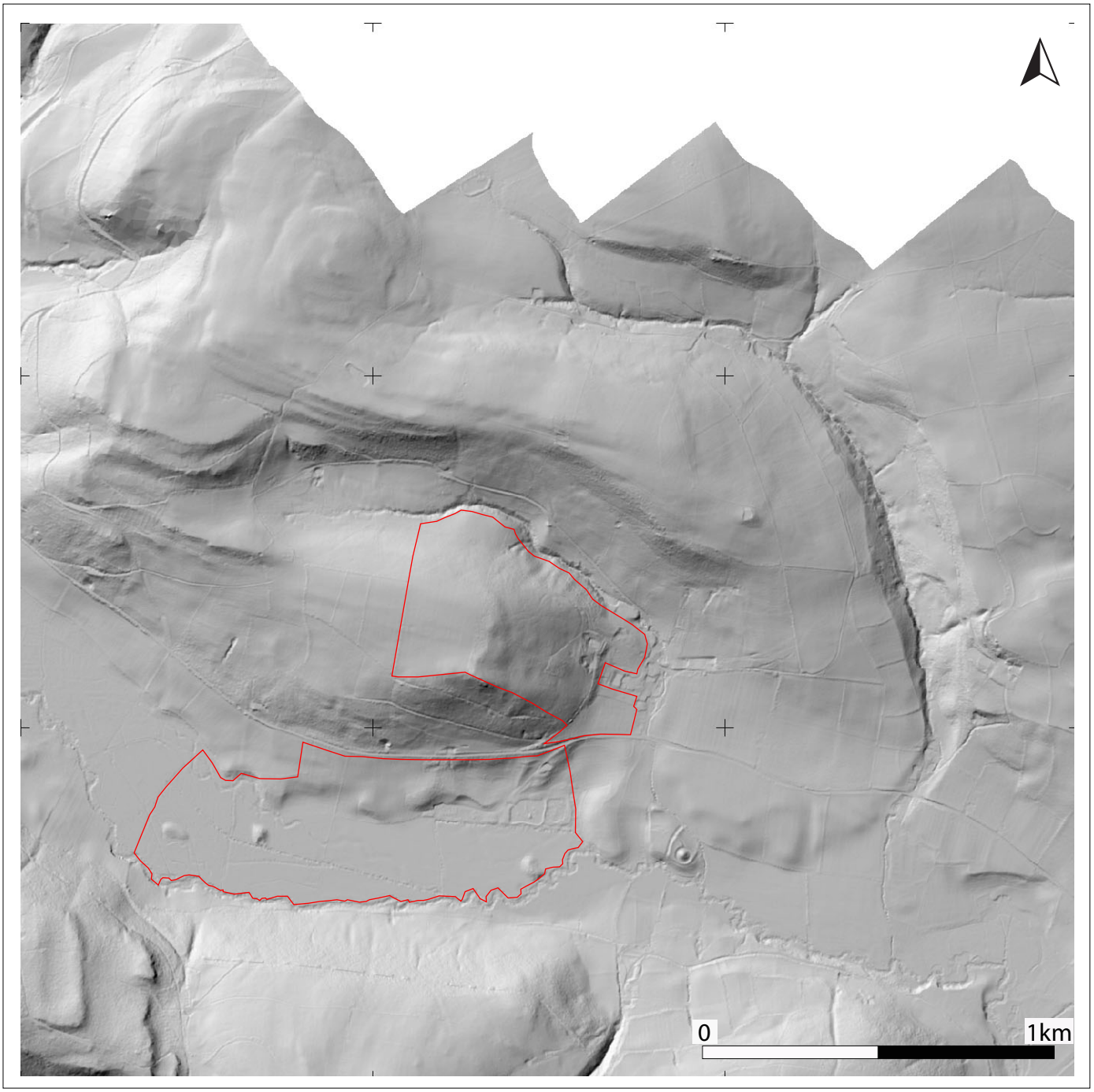
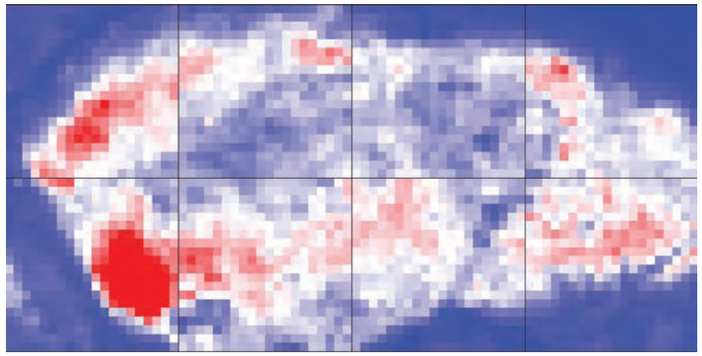
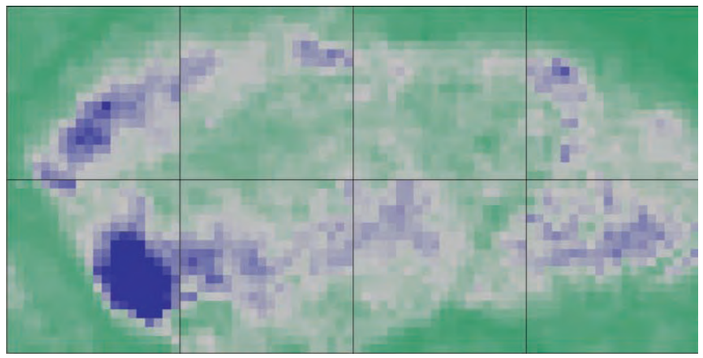


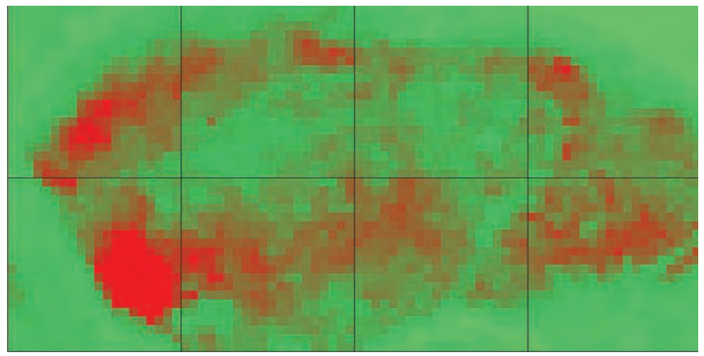
Fig 05: Digital Terrain Model LiDAR data for Pilleth
(Copyright Reserved, Environment Agency Geomatics Group; hillshade
DSM/DTM view generated by RCAHMW)



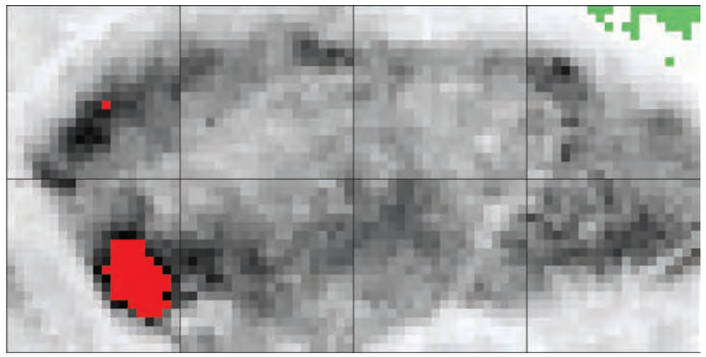
Plot 1: Red = High resistance, blue = low resistance



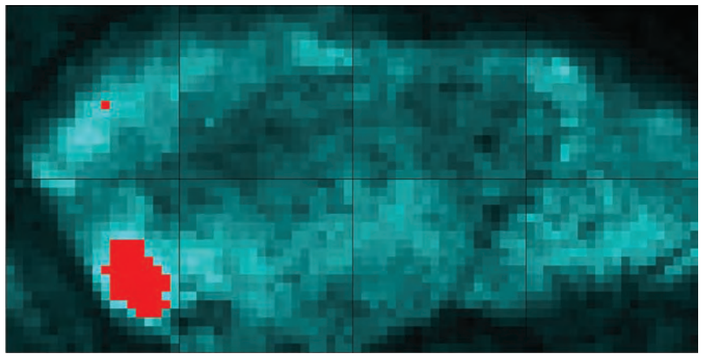
Plot 2: Blue = High resistance, green = low resistance



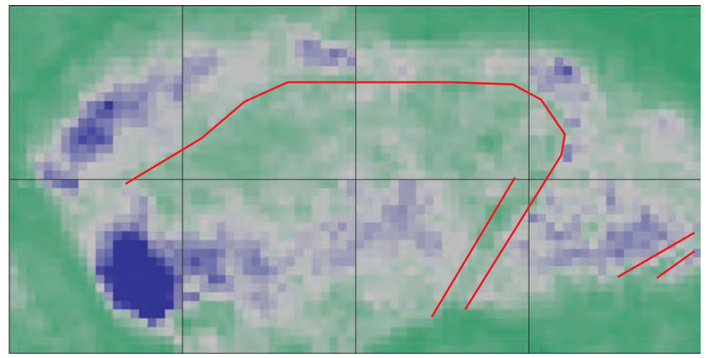
Plot 3: Red = High resistance, green = low resistance



Plot 4: Red = Very high resistance, green = very low resistance



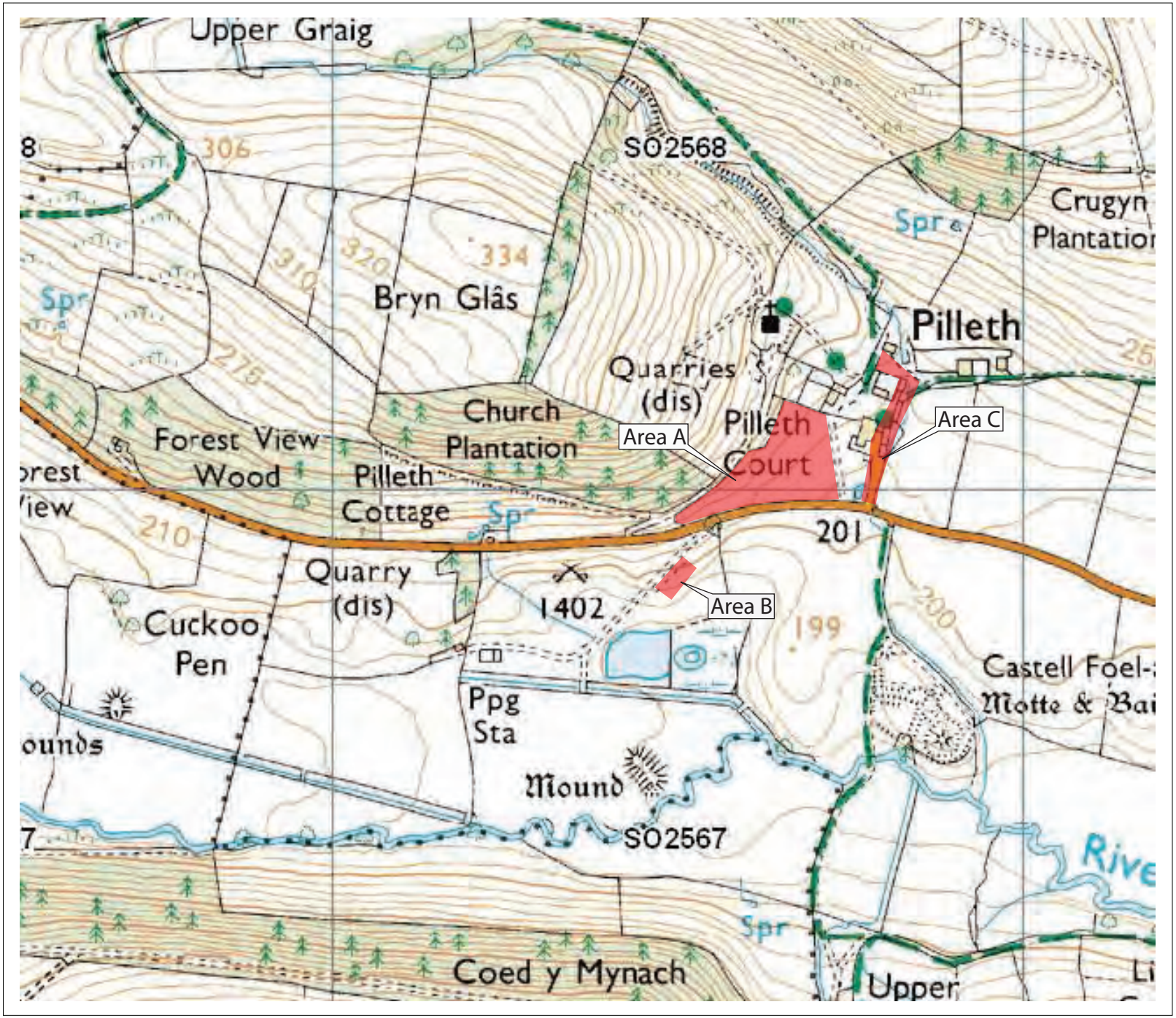
Plot 5: Red = Very high resistance, black = low resistance



Plot 6: Annotated plot showing possible features

Job Title:	**Pilleth Battlefield**
Drawing Title:	**Cuckoo Mound Geophysics**
Date:	**16th March 2012**
Drawn By:	**C E Smith**
Scale:	
Figure 06:	

ARCHAEOLOGY WALES
Revealing the past, informing the future



Area A - M. Walters 1993
Area B - Border Archaeology 1999
Area C - Pat Frost 2003

Fig 07: Map of Pilleth showing areas previously subject to metal detector survey

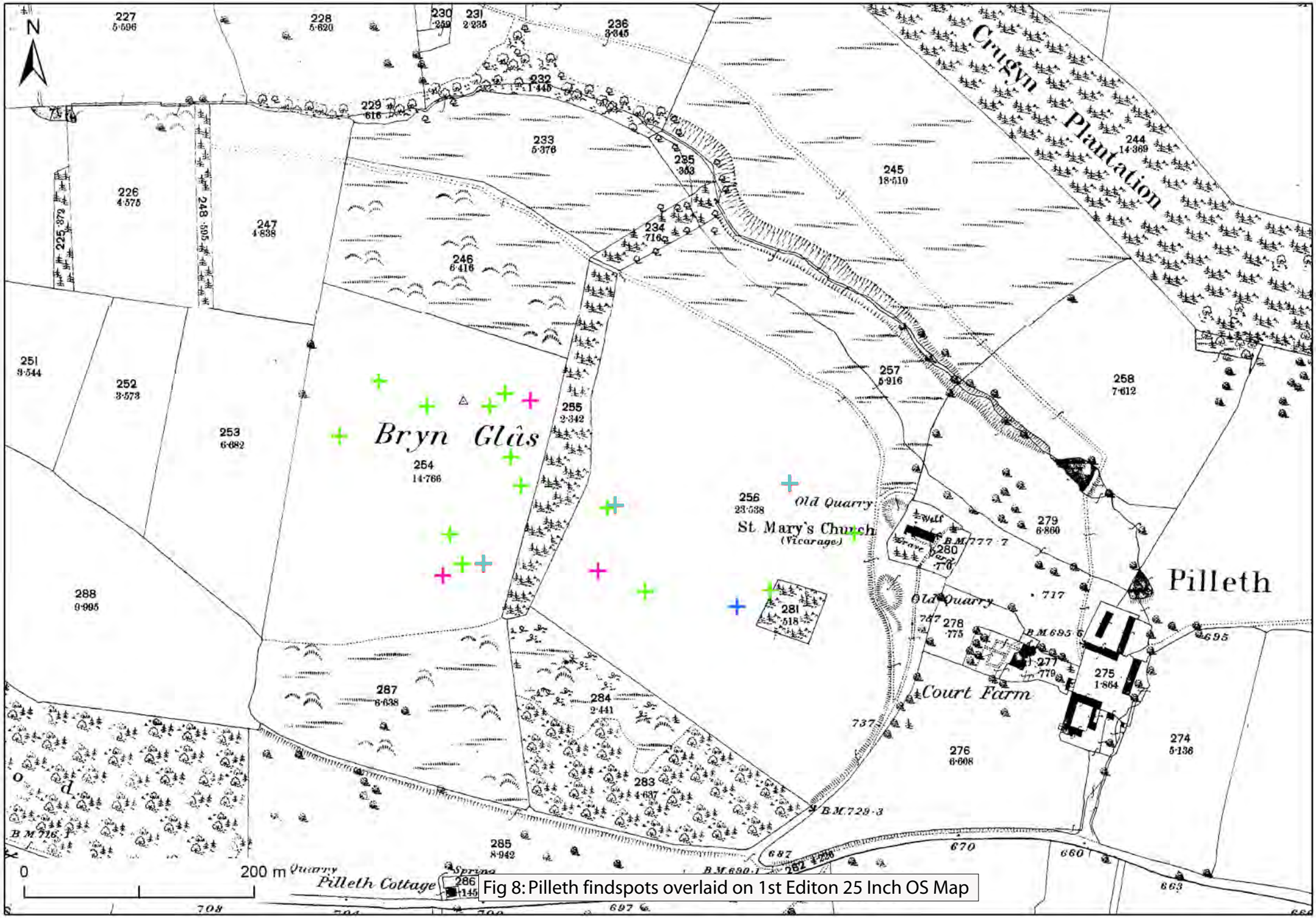


Fig 8: Pilleth findspots overlaid on 1st Editon 25 Inch OS Map

Fig 9: Pilleth findspots overlaid on modern aerial photograph

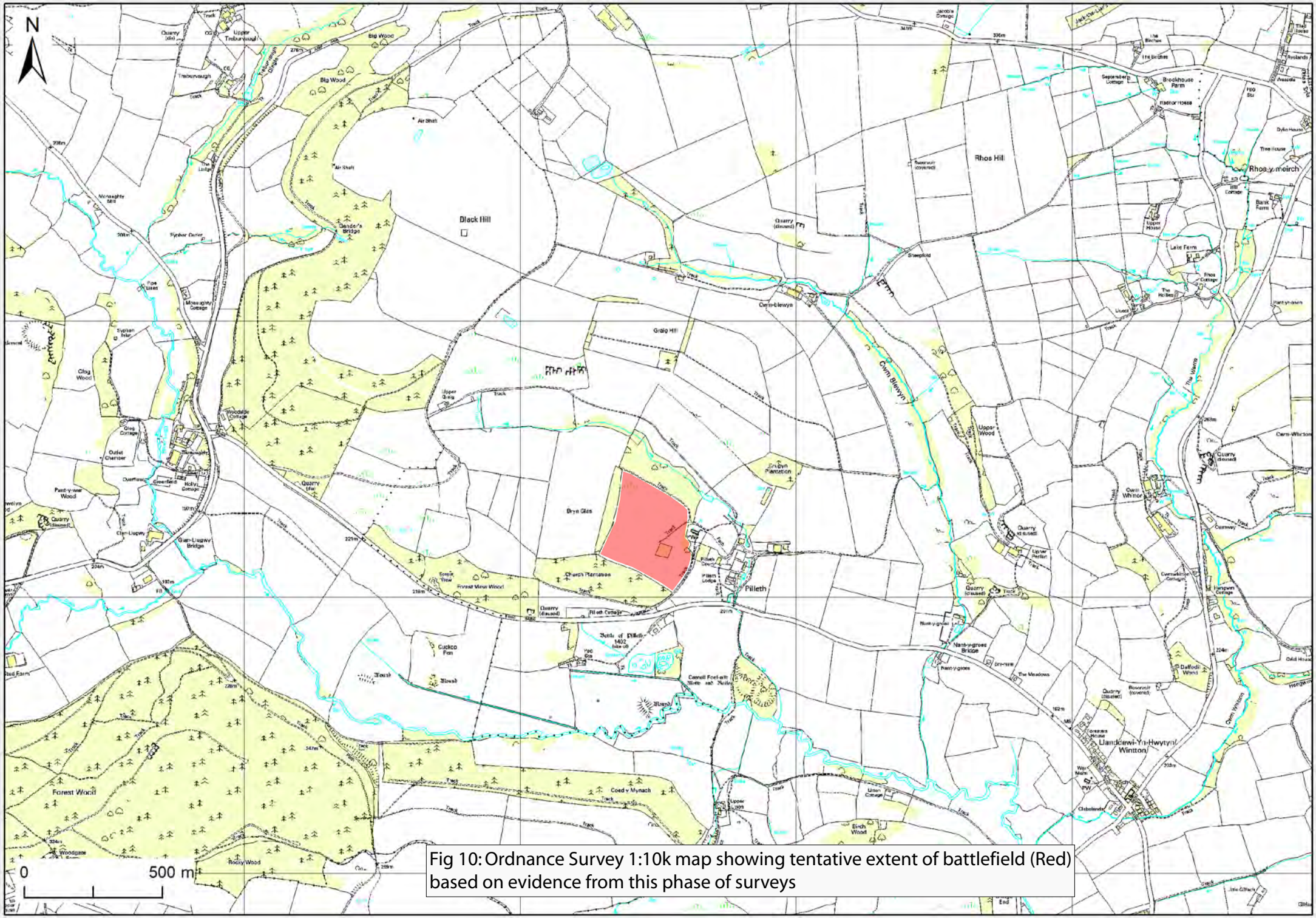


Fig 10: Ordnance Survey 1:10k map showing tentative extent of battlefield (Red) based on evidence from this phase of surveys

Archaeology Wales

APPENDIX II:

Plates

Plate 1: Church of St Mary at Pilleth viewed from east face of Bryn Glas
Looking east

Plate 2: View of trackway from church to stand of trees cut into the hills ide
Looking north east

Plate 3: View up trackway cut into hillside between church and stand of trees. Looking SW

Plate 4: View of shallow scoop on hillslope, Looking north east

Plate 5: Stand of Wellingtonias marking the supposed spot ploughing turned up human bones. Looking east

Plate 6: View up the slope on the eastern face of Bryn Glas to where Owain Glyndwrs forces were encamped

Plate 7: View of easterly mound in valley bottom. Looking south east

Plate 8: View of top of easterly mound. Looking north towards Bryn Glas

Plate 9: View of middle mound on the valley bottom. looking south west

Plate 10: View of possible quarrying damage to south side of middle mound
Looking north east

Plate 11: View of the westerly mound on valley bottom. Looking east

Plate 12: View from the top of the westerly mound. Looking east

Plate 13: View of detectorists on flat top of Bryn Glas

Plate 14: View of detectorists descending eastern slope of Bryn Glas

Plate 15: Small Find No. 8 - Possible Type A Cheekpiece from Horse Snaffle

Plate 16a: Small Find No. 16 - Type 4 Medieval Horseshoe - 1350-1400 (Bearing Surface)

Plate 16b: Small Find No. 16 - Type 4 Medieval Horseshoe - 1350-1400 (Floor Surface)

Plate 17a: Small Find No. 17 - Type 4 Medieval Horseshoe - 1350-1400
(Bearing Surface)

Plate 17b: Small Find No. 17 - Type 4 Medieval Horseshoe 1350-1400
(Floor Surface)

Archaeology Wales

APPENDIX III:
Finds Catalogue

Pilleth Battlefield Metal Detector Survey

Find No.	Description	Date	NGR
1	Copper Coin	George V	SO 25293 68351
2	Iron Object	Unknown	SO 25276 68302
3	Iron 'Ball'	Unknown	SO 25258 68346
4	Iron Object	Unknown	SO 25203 68346
5	Iron Object. plough?	Unknown	SO 25271 68357
6	Iron Object. plough?	Unknown	SO 25127 68320
7	Cu Alloy Finial	19th+	SO 25217 68199
8	Cu Alloy Buckle frag?	Medieval?	SO 25252 68209
9	Iron Object	Unknown	SO 25234 68209
10	Iron Horseshoe Frag	Unknown	SO 25223 68235
11	Iron Buckle Frag	Unknown	SO 25161 68368
12	Iron Object	Unknown	SO 25285 68277
13	Tin? Steel? Button	Modern	SO 25352 68203
14	Cu Alloy loop/ring	Unknown	SO 25393 68185
15	Iron Object	Unknown	SO 25575 68236
16	Iron Horseshoe (Type 3/4)	Medieval	SO 25519 68279
17	Iron Horseshoe (Type 3/4)	Medieval	SO 25367 68260
18	Iron Object	Unknown	SO 25360 68258
19	Bronze Fibula Brooch	Roman	SO 25473 68172
20	Bronze Fragment	Unknown	SO 25502 68186

Archaeology Wales

APPENDIX IV:

Archive Cover Sheet

ARCHIVE COVER SHEET

Pilleth Battlefield, Pilleth, Powys

Site Name:	Pilleth
Site Code:	WBS/11/SUR
PRN:	-
NPRN:	306352
SAM:	-
Other Ref No:	-
NGR:	SO 25242 68223
Site Type:	Battlefield
Project Type:	Survey
Project Manager:	Chris E Smith
Project Dates:	Feb-March 2012
Categories Present:	Roman-Modern
Location of Original Archive:	AW
Location of duplicate Archives:	-
Number of Finds Boxes:	1
Location of Finds:	-
Museum Reference:	-
Copyright:	AW
Restrictions to access:	None

Archaeology Wales

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